

# Bechtel

401 West A Street  
Suite 1000  
San Diego, CA 92101-7905

CLEAN II Program  
Bechtel Job No. 22214  
Contract No. N68711-92-D-4670  
File Code: 0222.1/0216  
**IN REPLY REFERENCE: CTO-0155/0062**

January 27, 1998

Contracting Officer  
Naval Facilities Engineering Command  
Southwest Division  
Mr. Richard Selby, Code 57CS1.RS  
Building 127, Room 112  
1220 Pacific Highway  
San Diego, CA 92132-5190

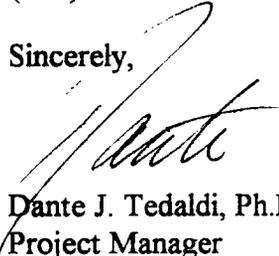
Subject: Response to Comments - Draft Proposed Plan Station Landfills  
Operable Units 2B and 2C - Sites 2, 3, 5, and 17,  
Marine Corps Air Station El Toro, California

Dear Mr. Selby:

It is our pleasure to submit the Response to Comments - Draft Proposed Plan Station Landfills, Operable Unit 2B and 2C - Sites 2, 3, 5 and 17, for the Marine Corps Air Station (MCAS) El Toro, California, prepared under Contract Task Order (CTO) 0155 and Contract No. N68711-92-D-4670. The purpose of this document is to present the Department of the Navy's responses to comments received on the Draft Proposed Plan. Comments were submitted by the U.S. Environmental Protection Agency and the California Environmental Protection Agency's Department of Toxic Substances Control and the Integrated Waste Management Board. Comments received were taken into consideration and were incorporated into the Draft Final Proposed Plan as deemed appropriate.

We have submitted the appropriate number of copies of this document to individuals listed on the attached transmittal. If you have any questions or would like further information, please contact Bob Coleman at (619) 687-8772, or myself at (619) 687-8780.

Sincerely,



Dante J. Tedaldi, Ph.D., P.E.  
Project Manager

DJT/sp

Enclosure: Response to Comments - Draft Proposed Plan Station Landfills  
Operable Units 2B and 2C - Sites 2, 3, 5, and 17



**Bechtel National, Inc.** Systems Engineers-Constructors

**RESPONSE TO COMMENTS  
DRAFT PROPOSED PLAN FOR CLOSURE OF  
INACTIVE LANDFILLS, SITES 2, 3, 5 & 17  
MCAS EL TORO, CALIFORNIA**

<p><b>Originator:</b> Glenn R. Kistner, RPM U.S. EPA</p> <p><b>To:</b> Joseph Joyce, BRAC Environmental Coordinator MCAS El Toro</p> <p><b>Date:</b> November 3, 1997</p>	<p style="text-align: right;"><b>CLEAN II Program</b> Contract No. N68-711-92-D-4670 CTO-0155 File Code: 0222</p>
<p><b><u>GENERAL COMMENTS</u></b></p> <p>While the Proposed Plan is generally well-written, easy to understand and contains sufficient information for meaningful public comment, there are some areas that could be clarified.</p> <p>EPA generally agrees with the Navy's selection of Alternative 3 for the 4 landfill Sites, as long as the alternative is consistent with reuse. EPA also would support Alternative 4D for Site 5 if the reuse is a golf course (Alternative 4D would reduce water infiltration in conjunction with irrigation), and Alternatives 5 or 6 for Site 3 which would potentially expand reuse options.</p> <p>The additional costs associated with these alternatives are also not much more than the costs estimated for Alternative 3.</p>	<p><b><u>RESPONSES TO GENERAL COMMENTS</u></b></p> <p><b>RESPONSE:</b> The Department of Navy (DON) has carefully considered reuse issues associated with Sites 3 and 5. Alternative 3, a monolithic native soil cap, is the appropriate alternative for both of these sites.</p> <p>Alternative 3 is compatible with the proposed reuses of Sites 3 and 5. The reuse plan developed by the LRA represents an initial phase in the planning process. The community reuse plan is itself conceptual. The planning process will continue with the preparation of a master plan which will provide more site-specific detail. DON has provided a conceptual design for the landfill caps in a timely manner so that the capped landfill areas can be integrated into the master plan for reuse. For example, if a golf course is the chosen reuse of Site 5, the landfill area could be integrated into the design as a non-irrigated portion of the course or Site 3 could be incorporated as open space in commercial development.</p> <p>The costs as presented are not drastically different. However, they do not include costs for waste disposal, drainage, or administrative costs if Site 5 is built to a grade level or if portions of Site 3 have deep foundations for structures.</p>
<p><b><u>SPECIFIC COMMENTS</u></b></p> <p>1. <b><u>Page 1, first paragraph;</u></b> we suggest adding language that explains the process in more detail such as; "A final remedy for the sites will be selected only after the public comment period has ended and all comments have been reviewed and considered. The final remedy will be documented in the Record of Decision (ROD)."</p>	<p><b><u>RESPONSES TO SPECIFIC COMMENTS</u></b></p> <p><b>RESPONSE 1:</b> Noted; will add suggested wording, it provides further clarification.</p>
<p>2. <b><u>Page 1, 4th paragraph;</u></b> Please add "approximately" before "30 years".</p>	<p><b>RESPONSE 2:</b> Noted; will add suggested wording.</p>

**RESPONSE TO COMMENTS  
DRAFT PROPOSED PLAN FOR CLOSURE OF  
INACTIVE LANDFILLS, SITES 2, 3, 5 & 17  
MCAS EL TORO, CALIFORNIA**

<p><b>Originator:</b> Glenn R. Kistner, RPM U.S. EPA</p> <p><b>To:</b> Joseph Joyce, BRAC Environmental Coordinator MCAS El Toro</p> <p><b>Date:</b> November 3, 1997</p>	<p><b>CLEAN II Program</b> Contract No. N68-711-92-D-4670 <b>CTO-0155</b> File Code: 0222</p>
<p><b>3.</b> <u>Page 1, "Opportunities for Community Involvement", 1st paragraph - last sentence</u>; please add the word "formally" before "comments on the alternatives."</p>	<p><b>RESPONSE 3:</b> Noted; will add suggested wording</p>
<p><b>4.</b> <u>Page 1, "Opportunities for Public Comment", last paragraph - last sentence</u>; please add "or in person at the Public Meeting mentioned above." to the end of the sentence.</p>	<p><b>RESPONSE 4:</b> Noted; will add suggested wording</p>
<p><b>5.</b> <u>Page 2. Site 2</u>; suggest changing "bisected" to "crossed".</p>	<p><b>RESPONSE 5:</b> Noted; will add suggested wording which is technically more accurate. Text will read, "crosses through the central portion of the landfill (Areas A and B)."</p>
<p><b>6.</b> <u>Page 2, Site 2</u>; the middle of the paragraph states that Site 2 is bisected by an unlined constructed drainage channel that is located between the two landfill areas. Which two landfill areas?</p>	<p><b>RESPONSE 6:</b> Noted; may be best to simply refer the reader to the map on page 3, will add: "see map on page 3" if space permits.</p>
<p><b>7.</b> <u>Page 2, "Landfill Investigations" - 2nd paragraph</u>; suggest replacing the word "conduit" with "means".</p>	<p><b>RESPONSE 7:</b> Noted; will make the change, less technical for general public and will use the word "pathway".</p>
<p><b>8.</b> <u>Page 3</u>; suggest removing "fate and transport" and use "modeling analysis" or just "analysis".</p>	<p><b>RESPONSE 8:</b> Noted; will say "computer modeling analysis . . ." in the first reference and may use "computer modeling" or "analysis" when mentioned later, if appropriate.</p>
<p><b>9.</b> <u>Page 3; 2nd paragraph</u>; suggest replacing, "biodegradation" with "biological breakdown".</p>	<p><b>RESPONSE 9:</b> Noted; will use suggested wording, less technical for general public.</p>
<p><b>10.</b> <u>Page 3, 2nd paragraph</u>; suggest adding, "(where drinking water is taken)" after, "do not impact regional groundwater."</p>	<p><b>RESPONSE 10:</b> Noted, may be best to add the following at the end of the sentence: "in areas where potential drinking water could be extracted."</p>
<p><b>11.</b> <u>Page 3</u>; the last sentence states that monitored Natural Attenuation (NA) is recognized by US EPA as a viable method for cleanup of groundwater. While this is true, it is misleading to include this with a "presumptive remedy". EPA does <i>not</i> consider NA to be a presumptive remedy. The Proposed Plan appears to be</p>	<p><b>RESPONSE 11:</b> Comment noted. DON agrees that natural attenuation is not a presumptive remedy. The discussion of natural attenuation on Page 3 will be moved to Page 6 where it is more appropriate. It will also be clarified that natural attenuation is not a presumptive remedy but is a component of the remedies that have been evaluated. The phrase "it is expected to reduce</p>

**RESPONSE TO COMMENTS  
DRAFT PROPOSED PLAN FOR CLOSURE OF  
INACTIVE LANDFILLS, SITES 2, 3, 5 & 17  
MCAS EL TORO, CALIFORNIA**

<p><b>Originator:</b> Glenn R. Kistner, RPM U.S. EPA</p> <p><b>To:</b> Joseph Joyce, BRAC Environmental Coordinator MCAS El Toro</p> <p><b>Date:</b> November 3, 1997</p>	<p><b>CLEAN II Program</b> Contract No. N68-711-92-D-4670 <b>CTO-0155</b> File Code: 0222</p>
<p>recommending 2 remedies: 1) capping as a presumptive remedy and, 2) NA. If this is so, then it should be clearly stated at the beginning of the document. After referencing NA, the phrase "it is expected to reduce contaminant levels in groundwater within a reasonable time frame." should be added.</p>	<p>contaminant levels in groundwater within a reasonable time frame" will be added.</p>
<p>12. <u>Page 4</u>; after the discussion of Site 17, recommend adding a sentence stating "Details of the removals conducted at Sites 2 and 17 are on page 8."</p>	<p><b>RESPONSE 12:</b> Noted already covered with "(see page 8)" but will add additional, clearer reference if space permits.</p>
<p>13. <u>Page 4</u>; in the middle of the first paragraph under "Human Health and Ecological Risk Assessments," the sentence starting with "Although the risk assessments are based on very conservative assumptions, only the soils surrounding ...." is a little hard to follow. In other words, what does the first part of the statement about risk assessments based on a very conservative assumption have to do with the second part of the sentence, i.e., that only the soils surrounding the buried wastes were sampled?</p>	<p><b>RESPONSE 13:</b> Noted; this sentence will be clarified. The sentence was intended to clarify that the soils surrounding the wastes, not the wastes themselves were sampled. To clarify will remove, "Although . . . assumptions," and change the rest of the sentence so it begins as a new paragraph: "During the remedial investigations, only the environmental media (soils, air and groundwater) surrounding the buried wastes, and not the actual wastes were sampled for analysis."</p>
<p>14. <u>Page 4</u>; the sentences beginning with "This approach is typical for landfills".... and "Sampling of landfill materials".... and "Drilling into the landfills" .... are repeated from page 2 and should be deleted to make the Risk Assessment section briefer.</p>	<p><b>RESPONSE 14:</b> These statements are considered very important in clarifying uncertainties associated with the risks at the landfill sites (see Response 13) and will be retained.</p>
<p>15. <u>Page 4</u>; please add the Regional Water Quality Control Board to the paragraph underlying "Identifying Exposure Pathways".</p>	<p><b>RESPONSE 15:</b> Noted; will need to clarify and add DTSC since DTSC and RWQCB are both part of Cal-EPA to make it consistent with previous Proposed Plans.</p>
<p>16. <u>Page 5</u>; suggest deleting the first two sentences under the heading "Estimating Human Health and Ecological Risks" as they basically say the same thing as the sentences that follow.</p>	<p><b>RESPONSE 16:</b> Noted; to eliminate redundancy the first sentence will be deleted. The paragraph will start with the third and fourth sentences. The second sentence presents a strong piece of information regarding an overestimation of potential risk. This sentence has been rewritten and becomes</p>

**RESPONSE TO COMMENTS  
DRAFT PROPOSED PLAN FOR CLOSURE OF  
INACTIVE LANDFILLS, SITES 2, 3, 5 & 17  
MCAS EL TORO, CALIFORNIA**

<p><b>Originator:</b> Glenn R. Kistner, RPM U.S. EPA</p> <p><b>To:</b> Joseph Joyce, BRAC Environmental Coordinator MCAS El Toro</p> <p><b>Date:</b> November 3, 1997</p>	<p style="text-align: right;"><b>CLEAN II Program</b> Contract No. N68-711-92-D-4670 <b>CTO-0155</b> File Code: 0222</p>
	<p>the third and last sentence in the paragraph, it reads: The assumptions made during the risk assessment process lead to an overestimation of potential risk and provide a margin of safety to protect public health and the environment.</p>
<p><b>17. Page 5; the paragraph under the same heading should be revised to state; "To manage risks and protect human health from known or suspected carcinogens, U. S. EPA has established acceptable exposure levels at general concentration levels that represent an excess upper bound lifetime cancer risk to an individual of between 10<sup>-4</sup> (1 additional case in a population of 10,000) and 10<sup>-6</sup> (1 additional case in a population of 1,000,000) using information between dose and response. Various site specific factors such as exposures, types of contaminants and potential future uses are factored into the selection of a remedy that protects human health."</b></p>	<p><b>RESPONSE 17:</b> Comment noted. This paragraph will be changed as suggested.</p>
<p><b>18. Page 5; suggest inserting icons in "Soil", "Groundwater", and "Ecological" headings.</b></p>	<p><b>RESPONSE 18:</b> Noted; will do if space permits and appropriate icons are available.</p>
<p><b>19. Page 5; "Soil," Is "100,000,000" correct?</b></p>	<p><b>RESPONSE 19:</b> Yes, this is correct. Also, this section will be rewritten in a similar fashion as the "groundwater" section below. Also, the "child" and "industrial worker" will be put in the same bracket. The paragraph under the "Soil" subhead will read: The chance of a child contracting cancer from exposure to soils while playing at Sites 2 and 17 and for an industrial worker at Site 3 is between 1 in 10,000 and 1 in 1,000,000. At Sites 3 and 5 the chance of a child contracting cancer from exposure to soils while playing is less than 1 in 1,000,000. The cancer risks at all the sites are within the range considered acceptable by U.S. EPA. Noncancer risks from exposure to soils are below the levels considered acceptable by the U.S. EPA.</p>
<p><b>20. Page 5. suggest inserting, (e.g., insects) between invertebrate and diet in last sentence.</b></p>	<p><b>RESPONSE 20:</b> Noted; this paragraph has been rewritten and the word "insects" replaces "invertebrate". The text under the "Ecological" subheading has been rewritten to read: Ecological risk assessments performed at Sites 2, 5,</p>

**RESPONSE TO COMMENTS  
DRAFT PROPOSED PLAN FOR CLOSURE OF  
INACTIVE LANDFILLS, SITES 2, 3, 5 & 17  
MCAS EL TORO, CALIFORNIA**

<p><b>Originator:</b> Glenn R. Kistner, RPM U.S. EPA</p> <p><b>To:</b> Joseph Joyce, BRAC Environmental Coordinator MCAS El Toro</p> <p><b>Date:</b> November 3, 1997</p>	<p style="text-align: right;"><b>CLEAN II Program</b> Contract No. N68-711-92-D-4670 CTO-0155 File Code: 0222</p>
	<p>and 17 and at the reference site exceeded the hazard index of 1. The risk assessments concluded that ecological risks at Sites 2 and 17 are slightly elevated for animals which are dependent on a plant and insect diet such as the California gnatcatcher. However, these risks are not elevated for predators such as the coyote or red-tailed hawk.</p> <p>Note: additional text will be included in the ecological risk assessment explanation paragraph (the last paragraph under the subhead "Estimating Human Health and Ecological Risks"). After the last sentence two new sentences will be added that read: "At Sites 2 and 17, plants, mice, and soil were collected and analyzed to determine the actual intake of potential contaminants by birds to assess impacts to the California gnatcatcher. For comparison purposes, samples were also taken from a nearby uncontaminated reference site."</p>
<p>21. <u>Page 6</u>; please bold or italicize words describing the various remedies.</p>	<p><b>RESPONSE 21:</b> Noted; this text is already bolded, will try italics to see if remedy descriptions stand out more.</p>
<p>22. <u>Page 6, 2nd paragraph</u>; please add (dilution, etc.) after monitored natural attenuation.</p>	<p><b>RESPONSE 22:</b> Noted; in response to comment no. 11, more discussion of natural attenuation will be added to this section from page 3.</p>
<p>23. <u>Page 6</u>; suggest using different coloring, fonts &amp; hatching, etc., to Alternative 3 or any other alternative chosen, to distinguish between the alternatives.</p>	<p><b>RESPONSE 23:</b> Noted; will use different color ink for font in Alt. 3 or another method to highlight wording.</p>
<p>24. <u>Page 7</u>; suggest deleting the first full paragraph since it does not really add value to such a lengthy document.</p>	<p><b>RESPONSE 24:</b> Noted; purpose of including was to demonstrate community involvement in FS process, best to keep in. It shows that two-way communication is ongoing.</p>
<p>25. <u>Page 7</u>; the illustration on this page should be titled or labeled.</p>	<p><b>RESPONSE 25:</b> Noted; see response #26. If response #26 is not appropriate then will include wording with "Alternative 3".</p>
<p>26. <u>Page 7</u>; more should be done to highlight the preferred alternative.</p>	<p><b>RESPONSE 26:</b> Noted, will check with Graphics Staff. May be able to put light 5% screen (shading) light blue behind text, will test to what works best.</p>

**RESPONSE TO COMMENTS  
DRAFT PROPOSED PLAN FOR CLOSURE OF  
INACTIVE LANDFILLS, SITES 2, 3, 5 & 17  
MCAS EL TORO, CALIFORNIA**

<p>27. <b>Page 7; suggest replacing 2:1 with some other description (e.g. double, twice as much, etc.).</b></p>	<p><b>RESPONSE 27:</b> Noted will remove “2:1 ratio” use “with twice as many plants”</p>
<p>28. <b>Page 9; “Postclosure Maintenance” - first sentence: change “are begun” to “will begin.”</b></p>	<p><b>RESPONSE 28:</b> Noted; will make recommend change.</p>
<p>29. <b>Page 10; Compliance with ARARs - states that the preferred alternative meets all ARARs. What about the other alternatives (excluding including Alternative 1 (no action)? Also on this page, under “Reduction of TMV,” the statement “all alternatives are expected to achieve reduction in TMV” should be qualified by adding the phrase “except alternative 1.”</b></p>	<p><b>RESPONSE 29:</b> Noted; Alternatives 1 and 2 do not meet ARARs, will add phrase stating this. For TMV comment, will clarify and say ,”Alternatives 3, 4, 5 and 6 . . .” will be used instead of “All alternatives . . .”</p>
<p>30. <b>Page 10; add “Alternative 3” after “Evaluation of” in the heading.</b></p>	<p><b>RESPONSE 30:</b> Noted, will add suggested wording.</p>
<p>31. <b>Page 10; suggest changing the font (Times Roman with italics?) of the paragraph under the page heading.</b></p>	<p><b>RESPONSE 31:</b> Noted; will reverse font to enhance graphic presentation.</p>
<p>32. <b>Page 11; delete the first two rows from the Table entitled “Comparative Analysis of Alternatives” since these two are threshold criteria that must be met. In other words, an alternative that does not meet both criteria does not even get to this point of being compared to other alternatives.</b></p>	<p><b>RESPONSE 32:</b> Noted; if first two rows of criteria are deleted from the Comparative Analysis Chart of Alternatives (summary chart) then need to include explanation/brief reminder about primary balancing criteria and modifying criteria, also state that since Alternatives 1 and 2 do not meet threshold criteria, they are not included in the summary chart -OR- simply state that the Chart shows whether alternatives meet the threshold and modifying and balancing criteria. The above option will be considered and implemented if space becomes limited and effects the current 16-page format.</p>
<p>33. <b>Page 11; add the number of the preferred alternative when discussing it.</b></p>	<p><b>RESPONSE 33:</b> Noted, if this is done it will be consistent throughout. (Note: it was not done in the draft due to space constraints.)</p>
<p>34. <b>Page 13; suggest using a different font in color box to make type easier to read.</b></p>	<p><b>RESPONSE 34:</b> Noted, will either lighten the screen, remove bold, or use different font to improve readability.</p>
<p>35. <b>Page 14; ARARs: First, the statement that remedial actions at sites listed on the NPL must meet ARARs is not completely accurate. All remedial actions necessary to carry out sections 104 (Response Authorities) and 106(Abatement Actions), regardless of whether the site is on the NPL, shall be carried out in accordance with section 121, including the requirement to comply with ARARs. Section 121 applies to federal facilities through section 120.</b></p> <p><b>Second, the organization of the ARARs is very confusing. For</b></p>	<p><b>RESPONSE 35:</b> First comment - suggested solution: delete “Section 121(d) of” and start with “The federal . . .”</p> <p>If possible, the ARARs will be reformatted in tabular form to make them more concise and readable or a bulleted list format. However, if the reformatted tabular format impacts the layout/design of the 16-page format, it will be scaled back and edited to fit in the format originally presented. For completeness, the agencies responsible for the ARARs have been retained. Title 14 and 23</p>

**RESPONSE TO COMMENTS  
DRAFT PROPOSED PLAN FOR CLOSURE OF  
INACTIVE LANDFILLS, SITES 2, 3, 5 & 17  
MCAS EL TORO, CALIFORNIA**

<p>instance, the State ARARs are listed under each State Agency. We suggest that the ARARs section be reorganized in the following manner: First, the ARARs should begin with the Federal ARARs, listing these according to location-specific, chemical specific and action-specific requirements. Then, this should be followed by a listing of State ARARs, again by location-specific, chemical-specific and action-specific requirements. This could be done through an ARARs Table, which should have the following: specific citation to the Federal or State law or regulation, description of the specific requirement that must be complied with, whether the requirement is applicable or relevant and appropriate, and the site to which the requirement applies. Please note that the state regulations for municipal solid waste landfills (which these sites appear to be) are now in Title 27 although there are still some requirements in Title 23 Chapter 15 that may be potential ARARs. The distinction between these two apparently is this: Title 27 contains all the permitting requirements for solid waste landfills while Title 23 Chapter 15 regulates remediation of waste management units (landfills) regardless of whether they are permitted or not. If the waste in these landfills are hazardous waste, the appropriate regulations are Title 22 (RCRA Subtitle C). In that instance, Title 27 and Title 23 (Chapter 15) should only be cited as ARARs if these contain more stringent requirements than Title 22.</p>	<p>requirements have been replaced with Title 27 requirements, as appropriate.</p>
<p>36. <u>Page 15</u>; last sentence in first paragraph refers to this as the IRP process. Isn't this more appropriately known as the CERCLA process?</p>	<p><b>RESPONSE 36:</b> Noted; IRP process is used since it is the DON program that incorporates CERCLA. This is consistent with all other MCAS El Toro Proposed Plans and fact sheets that have been published.</p>
<p>37. <u>Page 15</u>; the information in the text concerning the various OUs is very "busy". Can the information be portrayed in another manner such as using bullets or by categorizing the individual site OUs?</p>	<p><b>RESPONSE 37:</b> Noted; due to space constraints information pertaining to Operable Units was not done in a bulleted fashion. Text with bullets will be tested and reconfigured if space allows.</p>
<p>38. <u>Page 16</u>; Mr. Andrew Bain is in the Superfund Division not in the Office of Haz. Waste.</p>	<p><b>RESPONSE 38:</b> Noted: will correct Mr. Bain's address.</p>

**RESPONSE TO COMMENTS  
DRAFT PROPOSED PLAN FOR OPERABLE UNIT (OU)-2B  
SITES 2 & 17 AND OU-2C SITES 3 & 5  
MCAS EL TORO, CALIFORNIA**

<p><b>Originator:</b> Tayseer Mahmoud, RPM DTSC</p> <p><b>To:</b> Joseph Joyce, BRAC Environmental Coordinator MCAS El Toro</p> <p><b>Date:</b> November 17, 1997</p>	<p style="text-align: right;"><b>CLEAN II Program</b> Contract No. N68-711-92-D-4670 CTO-0155 File Code: 0222</p>
<p><b><u>GENERAL COMMENTS</u></b></p> <p>Overall, DTSC agrees with the Marine Corps' selection of Alternative 3 for Landfill Sites 2 and 17. However, we have serious concern that this remedy is not compatible with the draft Reuse Plan for future land use as proposed by the Local Redevelopment Authority (LRA) for landfill sites 3 and 5. We request the submittal of a separate Proposed Plan (PP) for Sites 3 and 5.</p> <p>Both the National Oil and Hazardous Substance Contingency Plan (NCP) and U.S. EPA's May 25, 1995 Directive "Land Use in the CERCLA Remedy Selection Process" discuss the selection of a remedy based on realistic assumptions regarding future land uses. As stated in the U.S. EPA memorandum, "... In general, remedial action objectives should be developed in order to develop alternatives that would achieve cleanup levels associated with the reasonably anticipated future use over as much of the site as possible." At MCAS El Toro, the Local Redevelopment Authority (LRA) approved the Reuse Plan for the installation in December 1996. This Reuse Plan will be the basis for the land use assumptions DoD will consider during the development of the Environmental Impact Study. Therefore, this Reuse Plan should be the basis for determination of "reasonably anticipated future use" during the remedy selection process. The Reuse Plan specifies that an industrial/commercial center is planned at the Site 3 landfill, and a golf course at the Site 5 landfill. DTSC does not agree that these future uses could be accommodated by Alternative 3, a native soil cap at these two landfills.</p> <p>DTSC requests that the LRA be consulted to reconcile environmental priorities with community reuse priorities prior to finalization of remedy selection. DTSC also recommends that the Base Transition Coordinator (BTC) work with the LRA and the Restoration Advisory Board (RAB) to</p>	<p><b><u>RESPONSES TO GENERAL COMMENTS</u></b></p> <p><b>RESPONSE:</b> The Department of Navy (DON) has carefully considered reuse issues associated with Sites 3 and 5. Alternative 3, a monolithic native soil cap, is the appropriate alternative for all four landfill sites.</p> <p>The Local Redevelopment Authority (LRA) has recognized the constraints on reuse posed by the landfills in the document entitled, "Final MCAS El Toro Community Reuse Plan, December 1996" published by the LRA. Landfill sites "that have been used since the early years of military operations, are constraints for reuse." [Community Reuse Plan, Section 2.7, page 29] Furthermore, "the most evident potential constraint to future uses would be associated with landfills, particularly the Original Landfill (Installation Restoration Site 3) and the Perimeter Road Landfill (Installation Restoration Site 5)." [Community Reuse Plan, Section 4.2, page 63]</p> <p>The Community Reuse Plan also states that "recreational uses are planned to buffer airport activities" and "it is anticipated that the existing golf course would be expanded." [Community Reuse Plan, Section 3.2, page 32] This document also states that "recreational areas would include active recreation such as golf ... but may also include open space activities that create a natural transition to the habitat area." [Community Reuse Plan, Section 3.2, page 32]</p> <p>DON's primary responsibility is to provide a remedy that is protective of public health and the environment. The monolithic soil cap is protective of human health and offers equivalent water quality protection under a non-irrigated scenario. In its memorandum dated 29 October 1996, the Regional Water Quality Control Board also recommended a monolithic cover for semiarid climates such as MCAS El Toro provided that such a cover can be demonstrated to offer equivalent water quality protection to the Title 23 prescriptive cover.</p> <p>Alternative 3 can be compatible with the proposed reuses of Sites 3 and 5. The</p>

**RESPONSE TO COMMENTS  
DRAFT PROPOSED PLAN FOR OPERABLE UNIT (OU)-2B  
SITES 2 & 17 AND OU-2C SITES 3 & 5  
MCAS EL TORO, CALIFORNIA**

<p><b>Originator:</b> Tayseer Mahmoud, RPM DTSC</p> <p><b>To:</b> Joseph Joyce, BRAC Environmental Coordinator MCAS El Toro</p> <p><b>Date:</b> November 17, 1997</p>	<p style="text-align: right;"><b>CLEAN II Program</b> Contract No. N68-711-92-D-4670 CTO-0155 File Code: 0222</p>
<p><b>ensure that the community is aware of the PP, and is aware that major costs and modification of the ROD would be necessary to change this decision so as to make the environmental condition of the property suitable for the proposed reuse. If the reuse objectives cannot be achieved due to economic or technical considerations, this determination should be discussed and clarified with the LRA so that land use planners can revise the Reuse Plan accordingly.</b></p>	<p>community reuse plan developed by the LRA represents an initial phase in the reuse planning process and is itself conceptual. Site 5 includes 1.8 acres within approximately 100 acres conceptually presented in the community reuse plan as golf course/recreation. Assuming this acreage will actually be irrigated is speculative. The planning process will continue with the preparation of a master plan which will provide more site-specific reuse detail. DON has provided a conceptual design for the landfill caps in a timely manner to the LRA so that the capped landfill areas can be integrated into the master reuse plan.</p> <p>Alternative 3 is not incompatible with recreational or commercial use of the land surface. For example, if a golf course is the chosen reuse of Site 5, the landfill area could be integrated into the design as a non-irrigated portion of the course. At Site 3, the landfill area can be integrated as an open site area in a commercial development. If the landfill area must be irrigated for a golf course or modified to accommodate commercial activities, the monolithic cap would have the fewest obstacles of the conceptual capping designs to overcome for modifications. Modifications for any remedy selected could only occur once the DON and the regulatory agencies accept the modifications.</p> <p>In order to protect the landfill caps both institutional and engineering controls may be used. Institutional controls contain provisions to allow engineering controls to be removed (i.e., fence) and the landfill cap to be modified as long as it can be demonstrated that the modifications will continue to protect the public and maintain the integrity of the CERCLA remedy. Although Sites 3 and 5 have conceptual reuse designations, no detailed plans exist for these properties. At such a time that the future landowner determines the details of its reuse for these properties, the agencies and DON must approve potential alterations to the remedy, as stated in the Feasibility Study and Proposed Plan, to ensure protection of human health and the environment. Alterations to any remedy or component of a remedy are the responsibility of the future landowner who requests approval from the agencies and DON.</p>

**RESPONSE TO COMMENTS  
DRAFT PROPOSED PLAN FOR OPERABLE UNIT (OU)-2B  
SITES 2 & 17 AND OU-2C SITES 3 & 5  
MCAS EL TORO, CALIFORNIA**

<p><b>Originator:</b> Tayseer Mahmoud, RPM DTSC</p> <p><b>To:</b> Joseph Joyce, BRAC Environmental Coordinator MCAS El Toro</p> <p><b>Date:</b> November 17, 1997</p>	<p style="text-align: right;"><b>CLEAN II Program</b> Contract No. N68-711-92-D-4670 CTO-0155 File Code: 0222</p>
	<p>The Marine Corps BRAC office has ongoing meetings with the LRA staff to discuss environmental remediation and focus on land use and reuse priorities. The BRAC office has experienced an excellent working relationship with the LRA and expects this relationship to continue in the future. With regard to public participation, the DON prefers to resolve outstanding issues and obtain agency concurrence with the proposed alternative before sharing the alternative with the public. The DON is convinced this is the most expeditious way to move forward and present to the public the Marine Corps' proposal for landfill remediation that is protective of human health and the environment.</p>
<p><b>Landfill Site 3 - Alternatives 5B or 6B, asphalt caps, would have a better likelihood of supporting a future light industrial/commercial reuse at Site 3. Also, Alternatives 5 and 6 provide the highest degree of long-term effectiveness because they provide the greatest reduction in rainfall infiltration of all activities as mentioned in Section 6.3 of the FS, Comparative Analysis of Alternatives. The statement in the PP that Alternative 3 is "easy to modify" and "allows flexibility for future site use" is misleading. Changes to the remedy would require a modification of the Record of Decision (ROD). Also, the LRA's request to modify the remedy could be denied by the Marines and/or the regulatory agencies. Issues regarding future liability, cost to modify the cover, and cost to modify the ROD to allow construction of a new remedy need to be clarified.</b></p>	<p><b>RESPONSE:</b> Because reuse plans for MCAS El Toro are at a conceptual stage, any alternative that is chosen for Sites 3 and 5 may require modification at a future time.</p> <p>DON agrees that it will not be "easy to modify" any landfill cap. However, of the landfill caps considered for Site 3. The monolithic cap has the fewest obstacles to redesign because modification of this cap involves moving soil, not removing concrete or asphalt or interfacing with an FML or bentonite liner.</p> <p>Until detailed reuse plans are finalized, no parties currently involved know that Alternative 5B or 6B are appropriate for Site 3. Either of these designs could require modification to support site reuses and such modification is expected to be more costly than modifying the monolithic cap. It is DON's intent to provide a conceptual design for the landfill caps early enough in the planning process so that the capped landfill areas can be integrated into the master reuse plan for Site 3 with a minimum of modification. All alterations to the remedy, including gaining approval from the agencies and DON, is the responsibility of the future landowner.</p>
<p><b>Landfill Site 5 - Alternative 4D, synthetic flexible membrane liner (FML), appears to be more appropriate for a future recreational use scenario,</b></p>	<p><b>RESPONSE:</b> The amount of infiltration allowed by a landfill cap is only one factor in long-term effectiveness. As noted in Section 5 of the feasibility study</p>

**RESPONSE TO COMMENTS  
DRAFT PROPOSED PLAN FOR OPERABLE UNIT (OU)-2B  
SITES 2 & 17 AND OU-2C SITES 3 & 5  
MCAS EL TORO, CALIFORNIA**

<p><b>Originator:</b> Tayseer Mahmoud, RPM DTSC</p> <p><b>To:</b> Joseph Joyce, BRAC Environmental Coordinator MCAS El Toro</p> <p><b>Date:</b> November 17, 1997</p>	<p style="text-align: right;"><b>CLEAN II Program</b> Contract No. N68-711-92-D-4670 CTO-0155 File Code: 0222</p>
<p>such as the golf course at Site 5. The FML can be designed to allow irrigation to support vegetation compatible with an irrigated golf course for Site 5. According to the Section 6.3 of the FS, Comparative Analysis of Alternatives, alternatives 4C, 4D, 5A, 5B, 6A, and/or 6B would provide the highest degree of long-term effectiveness because they would provide the greatest reduction in rainfall infiltration of the landfills. Also, the FML liners can withstand large tensile strains.</p> <p>Alternative 3 requires the installation of a 4-foot-thick layer soil cap on top of the landfill, making the elevation of the landfill higher than that of the surrounding golf course. It would be difficult for the LRA to modify Alternative 3 and make the landfill site suitable for reuse as an irrigated golf course because of the additional grading and liners needed; these would make the elevation of the site even higher than that of the surrounding golf course. In addition, Section 6.4 of the FS states that Alternative 3 under the irrigation scenario would <i>not</i> minimize potential leaching of the landfill. DTSC recommends that discussions be held between the BCT and the LRA, which may lead to a compromise between maintaining the protectiveness of the landfill cover and designing the landscaping for a golf course scenario.</p>	<p>(FS) reports for all landfill sites, “factors considered in the long-term effectiveness and permanence of presumptive remedies for landfills include the degree to which the cap inhibits mobility of landfill contents and the ability of the landfill cap to maintain its integrity.” (U.S. EPA 1991). While an FML liner does appear to be more effective in limiting infiltration, a monolithic soil cap is a superior alternative for Sites 3 and 5 because: (1) there is little evidence that infiltration is impacting groundwater at these sites (i.e., risks from groundwater are due to metals which may be naturally occurring and risks are, in any case, within the range considered generally acceptable by the U.S. EPA); and (2) because the monolithic cap has the greatest likelihood to maintain its integrity with minimal maintenance. In addition, the RWQCB concurs as evidenced by this agency’s recommendation of considering the monolithic soil cap for the landfill sites in semiarid climates (see first comment under General Comments).</p> <p>Discussion of the appropriateness of a synthetic liner at Site 5 suggest this specific area will require irrigation. There are no detailed golf course plans. The DON is presenting detailed information early in the LRA’s conceptual planning stage to incorporate the proposed remedy into the subsequent detailed design. Irrigation on the area above Site 5 is possible. The future landowner or LRA could submit a detailed plan to the agencies and DON for approval. The alteration to the proposed remedy would then be the responsibility of the future landowner or the LRA.</p> <p>The elevation of the landfill is a secondary consideration which could be factored into the landscape design of the golf course.</p> <p>In the conclusion of this comment, DTSC appears to be suggesting that it may be necessary to compromise protectiveness of the landfill cover in order to design the landscaping for a golf course scenario. Such a compromise is inappropriate.</p>

**RESPONSE TO COMMENTS  
DRAFT PROPOSED PLAN FOR OPERABLE UNIT (OU)-2B  
SITES 2 & 17 AND OU-2C SITES 3 & 5  
MCAS EL TORO, CALIFORNIA**

<p><b>Originator:</b> Tayseer Mahmoud, RPM DTSC</p> <p><b>To:</b> Joseph Joyce, BRAC Environmental Coordinator MCAS El Toro</p> <p><b>Date:</b> November 17, 1997</p>	<p style="text-align: right;"><b>CLEAN II Program</b> Contract No. N68-711-92-D-4670 CTO-0155 File Code: 0222</p>
<p><b><u>SPECIFIC COMMENTS</u></b></p> <p>1. <b><u>Page 4, Identifying Exposure Pathways</u></b> - Please clarify the statement that construction of residential housing units at the landfills is not permitted under California regulations by specifying the regulatory citations to which you refer. Does this refer to risk assessments? Are you saying that appropriate cleanup levels must be met to allow for residential use? Does this refer to institutional controls needed for this site? DTSC agrees that construction of residential housing at the landfills is not appropriate because of the requirements for methane gas monitoring, effect of differential settlement, prohibition of enclosed basements, utilities, pilings, etc.</p>	<p><b><u>RESPONSES TO SPECIFIC COMMENTS</u></b></p> <p><b>RESPONSE 1:</b> This reference to the risk assessment comes from Section 21190 of Title 27 on postclosure land use which requires the enforcement agency to approve uses within 1,000 feet of the disposal area. This risk assessment statement is a conservative assumption and will be rewritten to read “future construction of residential units at the landfills was considered to be a remote possibility because development within 1,000 feet would likely require extensive construction elements for protection of human health as required under California Code of Regulations, Title 27, Section 21190.”</p> <p>In addition, John Broderick from Cal-EPA’s Regional Water Quality Control Board (RWQCB), stated at the December 3, 1997 MCAS El Toro Restoration Advisory Board meeting, that various facilities, except for residential housing (and daycare centers), could conceivably be constructed on landfills. Constructing buildings, parking lots and other facilities would require consideration of and addressing all additional engineering factors and concerns. If a future property owner wanted to determine what the property could be used for, a specific proposal that includes all engineering factors would have to be generated and presented to the signatories of the Federal Facilities Agreement (FFA) for review. FFA signatories include the DON, U.S. EPA, DTSC, and the RWQCB.</p>
<p>2. <b><u>Page 7, Alternative 2 - Institutional Controls and Monitoring</u></b> - DTSC disagrees with the statement that land use restrictions could be negotiated at the time the property is leased or transferred. How can a portion of the remedy be negotiated after the ROD is signed?</p> <p><b>Institutional controls are used to support the remedy to assure the protection of human health or the environment. As such,</b></p>	<p><b>RESPONSE 2:</b> The second and third sentences of this section will be rewritten as follows: “For Alternative 2, land-use restrictions or lease conditions would be placed on the property to prohibit excavation, construction of homes, or use of groundwater. Wording of these restrictions and conditions would be finalized at the time the property is transferred for all four sites, and be consistent with the general language in the Marine Corps’ Record of Decision for the sites.” As stated in the FS reports, the DON policy is that</p>

**RESPONSE TO COMMENTS  
DRAFT PROPOSED PLAN FOR OPERABLE UNIT (OU)-2B  
SITES 2 & 17 AND OU-2C SITES 3 & 5  
MCAS EL TORO, CALIFORNIA**

<p><b>Originator:</b> Tayseer Mahmoud, RPM DTSC</p> <p><b>To:</b> Joseph Joyce, BRAC Environmental Coordinator MCAS El Toro</p> <p><b>Date:</b> November 17, 1997</p>	<p style="text-align: right;">CLEAN II Program Contract No. N68-711-92-D-4670 CTO-0155 File Code: 0222</p>
<p>institutional controls are as vital to the remedy as any engineering control or technology. As noted in the July 25, 1997 "Responsibility for Additional Environmental Cleanup after Transfer of Real Property" Policy issued by DoD, "...for a remedy that will require restrictions on future use of the land, the proposed plan and record of decision (ROD) or other decision documents must identify the future land use assumption that was used to develop the remedy, specific land use restrictions necessitated by the selected remedy, and possible mechanisms for implementing and enforcing those use restrictions."</p> <p>To state that land use restrictions will be "negotiated" at the time of property transfer suggests that the effectiveness of the remedy could be compromised at a later date without disclosure or involvement of the public and regulatory agencies. The statement also suggests that land use restrictions may not be evaluated with the same scrutiny as the engineering alternatives.</p> <p>(At the time of transfer of BRAC properties, DTSC requests that the Marines enter into a Land Use Covenant with DTSC so as to provide DTSC with a mechanism to enforce deed restrictions after property transfer.)</p>	<p>wording of such restrictions can only be established at the time of BRAC transfer. Examples of institutional controls (which were provided by the DTSC and presented in the FS reports) will be included in the RODs.</p> <p>The regulatory agencies will be involved with the BRAC transfers. Any restrictions will be thoroughly reviewed by the regulatory agencies, Navy, and future owner.</p> <p>With regard to DTSC's parenthetical comment, DON will continue to have a role in oversight of the CERCLA sites after property transfer (e.g., DON will continue to monitor the sites with oversight by the FFA signatories). DON is not prepared at this time to enter into any other agreements such as a Land Use Covenant with DTSC.</p>
<p>3. <u>Page 7, Alternative 3 - Preferred Alternative - Single Layer Soil Cap with Institutional Controls and Monitoring - Alternative 3</u> appears to limit the redevelopment potential of Sites 3 and 5 as described in the approved reuse plan. The PP states that access to the landfill sites would be controlled using institutional controls similar to Alternative 2. One of the institutional controls listed in Alternative 2 would restrict physical access by use of fences and appropriate signs. How is this compatible with future land uses for Sites 3 and 5? A fenced landfill cap constructed of native soil and vegetated with drought-resistant annual grasses would not be</p>	<p><b>RESPONSE 3:</b> Both institutional and engineering controls may be used to prohibit access in order to comply with the ARARs for Sites 3 and 5 and to protect the public. However, as discussed on Page 13 of the Proposed Plan, land-use restrictions will contain a provision allowing for modification of the remedy as long as it can be demonstrated that such modification is protective of human health and the environment. For example, a fence might not be required around the landfill site if access to the site were controlled by other means (e.g., by a fence around the entire golf course, or by signs prohibiting subsurface digging in this area).</p>

**RESPONSE TO COMMENTS  
DRAFT PROPOSED PLAN FOR OPERABLE UNIT (OU)-2B  
SITES 2 & 17 AND OU-2C SITES 3 & 5  
MCAS EL TORO, CALIFORNIA**

<p><b>Originator:</b> Tayseer Mahmoud, RPM DTSC</p> <p><b>To:</b> Joseph Joyce, BRAC Environmental Coordinator MCAS El Toro</p> <p><b>Date:</b> November 17, 1997</p>	<p><b>CLEAN II Program</b> Contract No. N68-711-92-D-4670 CTO-0155 File Code: 0222</p>
<p>compatible with either industrial/commercial or recreational (golf) uses.</p> <p>DTSC also disagrees with the Marines' response to comments on the FS that the remedial actions at these two sites will be completed before the reuse is implemented. In our opinion, the remedial action may not be implemented until after 1999 when the base is to be closed and transferred to the LRA. The landfill cap alternatives for Sites 3 and 5 should be reevaluated to determine whether or not another remedy would provide a better nexus between the Reuse Plan and the Cleanup Plan.</p>	<p>As stated in the response to general comments, DON believes that the conceptual landfill cap designs are being provided early enough in the planning process to allow the non-irrigated landfill area to be integrated into the design of the golf course (Site 5) and the commercial area (Site 3).</p> <p>Although the landfill caps may not be completed before base closure, remedial actions at the landfill sites will be completed before transfer. It is unlikely that the LRA would accept the landfills in their current condition. In either case, the BRAC office will continue to work with the LRA on the issue of reuse priorities. The schedules for base closure and BRAC transfer do not coincide with one another.</p>
<p>4. <u>Page 10, A. Threshold Criteria, Number 2</u> - The statement that Alternative 3 meets all ARARs is not entirely accurate. Please clarify that Alternative 3 meets all ARARs for Site 5 as long as institutional controls preventing irrigation are included as a component of the alternative (see Section 5.2.3.2 page 5-11 of the FS).</p>	<p><b>RESPONSE 4:</b> Institutional controls, including the prohibition on irrigation, are an integral component of Alternative 3. It is not necessary to add this clarification.</p>
<p>5. <u>Page 10, B. Primary Balancing Criteria, Number 3</u> - This section states that Alternative 3 is "easy to modify" and "allows flexibility for future site use". This statement is misleading in that changes to the remedy would require a modification of the ROD. The LRA's request to modify the remedy may also be denied by the Marines and/or the regulatory agencies. Issues regarding future liability, cost to modify the cover, and cost to modify the ROD to allow construction of a new remedy need to be clarified.</p>	<p><b>RESPONSE 5:</b> DON will remove the phrase "easy to modify." The intent of this phrase was that, compared to any other landfill cap, the monolithic cap has the fewest obstacles when and if modification is needed.</p> <p>As previously presented and stated in the FS reports and in discussions with the LRA, the cost to modify the cover and the cost to modify the ROD are the responsibility of the future landowner. The future landowner also assumes some liability for the remedy after implementing an approved modification.</p>
<p>6. <u>Page 10, B. Primary Balancing Criteria, Number 3, Long-Term Effectiveness</u> - The text should include a discussion regarding the long-term effectiveness of Alternative 4 (FML) for Site 5. Section 6 of the FS, Comparative Analysis of Alternatives, states that</p>	<p><b>RESPONSE 6:</b> This comment appears to presuppose that the Site 5 landfill will be an irrigated golf course. DON intends to institute deed restrictions preventing golf course irrigation at the site. Under the non-irrigated scenario, the monolithic cap is considered the most effective for Site 5 because it reduces</p>

**RESPONSE TO COMMENTS  
DRAFT PROPOSED PLAN FOR OPERABLE UNIT (OU)-2B  
SITES 2 & 17 AND OU-2C SITES 3 & 5  
MCAS EL TORO, CALIFORNIA**

<p><b>Originator:</b> Tayseer Mahmoud, RPM DTSC</p> <p><b>To:</b> Joseph Joyce, BRAC Environmental Coordinator MCAS El Toro</p> <p><b>Date:</b> November 17, 1997</p>	<p style="text-align: right;"><b>CLEAN II Program</b> Contract No. N68-711-92-D-4670 CTO-0155 File Code: 0222</p>
<p><b>Alternatives 4C, 4D, 5A, 5B, 6A, and 6B provide the highest degree of long-term effectiveness because they provide the greatest reduction in rainfall infiltration of all alternatives.</b></p> <p><b>Based on the detailed analysis of alternatives in Section 5.2.3.2 of the FS, the FML is not subject to desiccation in semiarid to arid climates and can withstand large tensile strains resulting from stretching and settlements. Thus, FML is both reliable and an adequate option for long-term effectiveness and permanence. Based on the document's findings, the FML cover would be most compatible with an irrigated golf course. Also, since this design would be virtually impermeable to water infiltration, the FML would greatly minimize any potential environmental and public health and safety problems related to landfill gas generation. Because of its longevity and durability, the FML would also reduce maintenance costs and reduce interruptions in functioning of future facilities such as a golf course. Alternative 4D is favored over Alternative 3 for a golf course.</b></p>	<p>the amount of infiltration by 90 percent and is easiest of all landfill cap designs to maintain.</p> <p>The underlying assumptions to the comments regarding an FML component of a cover remedy are 1) the area above Site 5 will acutally be irrigated, and 2) the Alternative 4 (cover w/FML) outlined in the FS report is equivalent to a cover (w/FML) under an irrigated golf course.</p> <p>As previously discussed, there are no detailed plans for the approximately 100 acres of designated recreation/golf course property outlined in the LRA's reuse plan. The area above Site 5 may not require irrigation, and the DON is presenting the proposed remedy early in the planning stages of redevelopment, which will allow the LRA to consider the restrictions on the site during the more detailed second phase of planning.</p> <p>The Alternative 4 presented and discussed in the FS report is not a component of a golf course design. It does not include specific grading plans for a potential golf course that has yet to be designed, nor a drainage collection system for the irrigation that may occur in that area, nor consideration of a multitude of trees and vegetation that may be placed in that area if a golf course is placed directly over the site, nor any other special design features of a specific golf course design. These special and specific features that may require some modification to a landfill cover remedy are not the responsibility of the DON; however, a future landowner could present the agencies and the DON with site-specific details of a design for a desired reuse of the property, which must include design feaures that maintain protection of human heath and the environment and assurances that the remedy and approved modifications will be maintained during the new use of the property.</p> <p>Extensive investigation of Site 5 was conducted during the Remedial Investigation phase of the project, which included landfill gas sampling. Approximately 30 years have passed since landfill operations were ceased at the site and landfill gas generation was not expected to be a significant factor.</p>

**RESPONSE TO COMMENTS  
DRAFT PROPOSED PLAN FOR OPERABLE UNIT (OU)-2B  
SITES 2 & 17 AND OU-2C SITES 3 & 5  
MCAS EL TORO, CALIFORNIA**

<p><b>Originator:</b> Tayseer Mahmoud, RPM DTSC</p> <p><b>To:</b> Joseph Joyce, BRAC Environmental Coordinator MCAS El Toro</p> <p><b>Date:</b> November 17, 1997</p>	<p style="text-align: right;"><b>CLEAN II Program</b> Contract No. N68-711-92-D-4670 CTO-0155 File Code: 0222</p>
	<p>Actual data collected from the site confirms this expectation. As documented in the FS report, landfill gas controls are not necessary as part of the landfill remedy.</p> <p>The DON considered Alternative 3, at the suggestion of the Regional Water Quality Control Board, the State of California experts regarding landfill closure and groundwater protection. Site-specific documentation of various sites reviewed during FS report preparation, as well as the Board's experience with numerous sites, seriously questions the longevity and durability of FMLs in semiarid climates. These were significant factors in selecting Alternative 3 for the Proposed Plan.</p>
<p>7. <u>Page 11, Chart, Comparative Analysis of Alternatives, Item 3, Long-Term Effectiveness and Performance</u> - The relative performance of Alternative 3 should be less than that of Alternative 4D (FML) for Site 5 (Alternative 4D is best not least). See comment #7 above. To solve the problem with the chart, DTSC requests that a separate column for Site 5 be provided so as to compare Alternatives 3 &amp; 4.</p>	<p><b>RESPONSE 7:</b> In the FS reports, Long-Term Effectiveness and Permanence are based on factors from U.S. EPA landfill presumptive remedies: the degree to which the cap inhibits mobility of landfill contents; and, 2) the ability of the cap to maintain its integrity. For Alternatives 3, 5a, 5b, 6a, and 6b, the caps were evaluated as satisfying these criteria. However, the chart has been altered to reflect scoring in the FS report. Information stated above will be incorporated into the chart as an explanatory footnote.</p>
<p>8. <u>Page 11, Chart, Comparative Analysis of Alternatives, Item 4, Reduction of Toxicity, Mobility etc.</u> - The relative performance of Alternative 3 should be less than that of Alternative 4D (FML) for Site 5 (Alternative 4D is best not equal to Alternative 3). See Table 6-4 of the FS. This comment also applies to Alternatives 5 and 6 which are rated better than Alternative 3.</p>	<p><b>RESPONSE 8:</b> The chart has been changed to reflect scoring in the FS reports.</p>
<p>9. <u>Page 11, Chart, Comparative Analysis of Alternatives, Item 3, Long-Term Effectiveness and Performance</u> - The relative performance of Alternative 3 should be less than that of Alternatives 5 or 6 for Site 3 (Alternatives 3, 5, &amp; 6 are not equal). See Section 6.3 of the FS. To solve the problem with the chart, you need to provide a separate column for Site 3 to compare</p>	<p><b>RESPONSE 9:</b> See response to comment 7. The chart has been changed to reflect scoring in the FS reports.</p>

**RESPONSE TO COMMENTS  
DRAFT PROPOSED PLAN FOR OPERABLE UNIT (OU)-2B  
SITES 2 & 17 AND OU-2C SITES 3 & 5  
MCAS EL TORO, CALIFORNIA**

<p><b>Originator:</b> Tayseer Mahmoud, RPM DTSC</p> <p><b>To:</b> Joseph Joyce, BRAC Environmental Coordinator MCAS El Toro</p> <p><b>Date:</b> November 17, 1997</p>	<p><b>CLEAN II Program</b> Contract No. N68-711-92-D-4670 CTO-0155 File Code: 0222</p>
<p><b>Alternatives 3 &amp; 5, &amp; 6.</b></p>	
<p><b>10. <u>Page 11, Chart, Comparative Analysis of Alternatives, Item 4, Reduction of Toxicity, Mobility etc.</u> - The relative performance of Alternative 3 should be less than that of Alternative 6 for Site 3 (Alternative 6 is best not equal to Alternative 3). See Table 6-4 of the FS.</b></p>	<p><b>RESPONSE 10:</b> The chart has been changed to reflect scoring in the FS reports.</p>
<p><b>11. <u>Page 12, Conceptual Design of Alternative 3</u></b></p> <p>a) <b>The text describing Sites 2 and 17 states that the remedy would have institutional controls, including deed restrictions, on development and groundwater use. Since the transfer of Sites 2 and 17 is intended as a federal-to-federal transfer, please clarify how the federal government will record deed restrictions on the property since no "deed" exists.</b></p>	<p><b>RESPONSE 11(a):</b> Deeds are not required for federal-to-federal transfers because the owner before and after the transfer is the same. In the case of the landfill sites, the new operator of the sites will be advised of the controls necessary to protect the landfill remedy at the time of transfer.</p>
<p>b) <b>The figures on page 12 appear to only show the footprint of the landfills. The PP should also include information regarding the dimensions of the landfill covers because they will most likely extend beyond the footprint of the landfills. This will assist the LRA to evaluate the impact of the landfill covers and plan for adjacent uses.</b></p>	<p><b>RESPONSE 11(b):</b> The figures on Page 12 show the landfill caps themselves, not the footprints of the landfills. The two items (i.e., caps, footprints) are very similar in shape. DON disagrees that such information as the dimensions of the landfill caps should be included in the Proposed Plan, which is meant to be a conceptual-level document. A reader that has a need for such level of detail should consult the FS reports for the landfills which provide scaled figures showing dimensions and elevations.</p>
<p><b>12. <u>Page 13, Land-Use Restrictions</u> - Third bullet item: With the knowledge that the intended future use of Site 5 will be for recreational purposes such as a golf course, how can restricting the planting and irrigation of any type of vegetation be compatible with this proposed use?</b></p> <p><b>For all sites requiring deed restrictions, the restrictions should be appropriate for the intended reuse, and should be specific to that site. The restrictions should state the length of time for the</b></p>	<p><b>RESPONSE 12:</b> As discussed in the response to general comments, reuse planning is currently at a conceptual, not detailed stage. By providing the conceptual design for the landfill caps at this stage, DON hopes to allow time for the capped landfill areas to be integrated into the detailed design as non-integrated portions of the golf course.</p>

**RESPONSE TO COMMENTS  
DRAFT PROPOSED PLAN FOR OPERABLE UNIT (OU)-2B  
SITES 2 & 17 AND OU-2C SITES 3 & 5  
MCAS EL TORO, CALIFORNIA**

<b>Originator:</b> Tayseer Mahmoud, RPM DTSC  <b>To:</b> Joseph Joyce, BRAC Environmental Coordinator MCAS El Toro  <b>Date:</b> November 17, 1997	<b>CLEAN II Program</b> Contract No. N68-711-92-D-4670 CTO-0155 File Code: 0222
<b>restriction, who will monitor the restrictions, and how the restrictions will be enforced, especially after any transfers occur. As noted in the July 25, 1997 DOD Policy re: "Responsibility for Additional Environmental Cleanup after Transfer of Real Property", "...The community and local government should be involved throughout the development of those implementation and enforcement mechanisms."</b>	

**RESPONSE TO COMMENTS  
DRAFT PROPOSED PLAN FOR OPERABLE UNIT (OU)-2B  
SITES 2 & 17 AND OU-2C SITES 3 & 5  
MCAS EL TORO, CALIFORNIA**

<p><b>Originator:</b> Marsha Mingay, Public Participation Specialist DTSC</p> <p><b>To:</b> Tayseer Mahmoud, RPM DTSC</p> <p><b>Date:</b> November 23, 1997</p>	<p style="text-align: right;"><b>CLEAN II Program</b> Contract No. N68-711-92-D-4670 <b>CTO-0155</b> File Code: 0222</p>
<p><b><u>GENERAL COMMENTS</u></b></p> <p>1. <b><u>Page 1, first paragraph (and various other places throughout document)</u></b> -- Define the word "inactive". Since you are describing hazardous waste sites, this word could have dual meanings (i.e., the wastes are inactive now versus the landfill no longer receives wastes and therefore is inactive).</p>	<p><b><u>RESPONSES TO GENERAL COMMENTS</u></b></p> <p><b>RESPONSE 1:</b> Noted; follow the first sentence in the paragraph with another sentence that reads: Inactive landfills are non-operational and no longer receive wastes for disposal.</p>
<p>2. <b><u>Page 1, first and second paragraph</u></b> -- Delete the word "also" since it could be interpreted that you are placing public notification secondary to requesting comments. A suggestion is made to modify and move the last sentence in the first paragraph to the introduction sentence in the second paragraph. The sentence would read, "This Proposed Plan notifies the public of opportunities to comment on these alternatives and provides an overview ..."</p>	<p><b>RESPONSE 2:</b> Noted; these suggestions will be incorporated.</p>
<p>3. <b><u>Page 1, third paragraph, first sentence</u></b> -- A suggestion is made to delete the word "adequately" since it may be misread as the Marine Corps intent to only adequately protect versus "protect".</p>	<p><b>RESPONSE 3:</b> Noted; will delete "adequately".</p>
<p>4. <b><u>Page 1, third paragraph, second sentence</u></b> -- Expand the sentence by including the word "environment". This sentence also contains two points that need further elaboration. One, since the groundwater is already contaminated at some sites, the phrase, "prevent groundwater degradation" needs to be clarified. Two, the document later states that the purpose of eliminating or reducing infiltration of surface water is to reduce leachate from occurring. Ultimately, the paragraph needs to first define leachate and then summarize how leachate effects the groundwater and surrounding landfill soils.</p>	<p><b>RESPONSE 4:</b> Noted; both suggestions will provide better clarity for readers. This is best achieved by breaking the sentence into two parts that reads: Meeting this objective involves preventing people from coming in contact with landfill materials, and protecting the environment by reducing infiltration of surface water into the landfills to prevent the formation of leachate. Leachate is formed when surface water mixes with landfill materials and creates liquid wastes that could migrate downward and impact groundwater.</p>
<p>5. <b><u>Page 1, fourth paragraph</u></b> -- Since there is community interest in consolidation of wastes, it is strongly advised that this paragraph includes a statement that consolidation will occur at three of the</p>	<p><b>RESPONSE 5:</b> Noted; community interest has focused on moving the wastes from one site to another (clean closure). The draft final FS reports evaluated clean closure alternatives as a potential technology but there are no clean</p>

**RESPONSE TO COMMENTS**  
**DRAFT PROPOSED PLAN FOR OPERABLE UNIT (OU)-2B**  
**SITES 2 & 17 AND OU-2C SITES 3 & 5**  
**MCAS EL TORO, CALIFORNIA**

<p><b>Originator:</b> Marsha Mingay, Public Participation Specialist DTSC</p> <p><b>To:</b> Tayseer Mahmoud, RPM DTSC</p> <p><b>Date:</b> November 23, 1997</p>	<p><b>CLEAN II Program</b>  <b>Contract No. N68-711-92-D-4670</b>  <b>CTO-0155</b>  <b>File Code: 0222</b></p>
<p>landfill sites. A reference to the map on page 12 would be helpful to fully inform the reader of this aspect of the proposed plan.</p>	<p>closure alternatives in the final alternatives because of costs.</p> <p>Consolidation activities proposed for Sites 2 and 17 involve moving wastes from the periphery of each site into the main body of the landfill so the size of the landfill cap is minimized. DON is not planning to conduct clean closure of the landfills.</p> <p>The fifth paragraph of the "Summary of Landfill Closure Alternatives" article explains the RAB's role in regard to closure options in the FS process.</p>
<p>6. <b>Page 2, all site background descriptions</b> -- In the introduction, add information which states why the lead agency can only "suspect" the types of waste contained within each landfill. To further educate the reader, state the process used to suspect these types of wastes (e.g., records, interviews with former employees).</p>	<p><b>RESPONSE 6:</b> Noted; insert new sentence after "Suspected types of wastes . . . transforms." that reads:  Investigators conducted record searches and interviews of former employees to initially determine waste types.</p>
<p>7. <b>Page 2, Site 2, second sentence</b> -- The description of the landfill is difficult to understand. The phrase, "between the two landfill areas" could lead the reader to ask, "what two landfills?". To clarify for the reader, insert, "see map on page 3", at the end of the sentence.</p>	<p><b>RESPONSE 7:</b> Noted; will incorporate suggestion and add parenthetically Areas A and B.</p>
<p>8. <b>Page 2, Site 3</b> -- In the beginning of the paragraph, it states, "wastes that are likely to have ..." and then later it states, "The site contains concrete and asphalt pads ...". Please clarify this conflicting information.</p>	<p><b>RESPONSE 8:</b> Noted; to clarify will rephrase the last sentence of the paragraph by deleting, "The site contains" and replacing with: Presently, infrastructure at the site consists of . . . activities."</p>
<p>9. <b>Page 2, Landfill Investigations</b> -- Clarify by eliminating the conflicting information contained within the first and second paragraphs. The first paragraph states, "Only the soils surrounding the buried landfill materials were sampled ..." and the second paragraph states, "Subsurface soil sampling was conducted to determine ..."</p>	<p><b>RESPONSE 9:</b> Noted; to clarify will delete sentence in the first paragraph and add the word "buried" in the next sentence after "sampling of..." The sentence in the second paragraph will read: Subsurface sampling of soils surrounding the buried landfill materials was conducted . . . toward groundwater.</p>
<p>10. <b>Page 2 and 3</b> -- Please state, either under "Landfill Investigations"</p>	<p><b>RESPONSE 10:</b> Noted; depth of wells will be stated under Landfill</p>

**RESPONSE TO COMMENTS  
DRAFT PROPOSED PLAN FOR OPERABLE UNIT (OU)-2B  
SITES 2 & 17 AND OU-2C SITES 3 & 5  
MCAS EL TORO, CALIFORNIA**

<p><b>Originator:</b> Marsha Mingay, Public Participation Specialist DTSC</p> <p><b>To:</b> Tayseer Mahmoud, RPM DTSC</p> <p><b>Date:</b> November 23, 1997</p>	<p><b>CLEAN II Program</b> Contract No. N68-711-92-D-4670 CTO-0155 File Code: 0222</p>
<p>or “Investigation Results”, the depth of the groundwater samples and the relationship of this aquifer to the drinking water aquifer.</p>	<p>Investigations and include information stating that depth to groundwater varies from site to site from 25 to 230 feet. In regard to the relationship of groundwater sampling results to the aquifer, currently, groundwater in the region of MCAS El Toro is not used for drinking water purposes and this will be stated under Investigation Results.</p>
<p><b>11. <u>Page 2, second paragraph, second sentence</u> -- State the number of soil gas samples which were taken.</b></p>	<p><b>RESPONSE 11:</b> Noted; if number of samples for soil gas is provided then number of air, water, soil, etc. samples would also be provided. This information is not needed in order to present the investigation approach and results.</p>
<p><b>12. <u>Page 2, second paragraph, third sentence</u> -- State if chemical of concerns were found outside of the landfill perimeter.</b></p>	<p><b>RESPONSE 12:</b> Noted, no chemicals of concern that would be derived from the landfills were found outside of site boundaries. This will be included in the text as the second sentence in the first paragraph under “Investigation Results” on page 2. The sentence will read: Investigation results show that no chemicals that would be derived from landfill contents were found outside of site boundaries.</p>
<p><b>13. <u>Page 2, second paragraph, fourth sentence</u> -- To refresh the reader s mind, restate the definition of leachate.</b></p>	<p><b>RESPONSE 13:</b> Noted; already included in second paragraph, Landfill Investigations.</p>
<p><b>14. <u>Page 3, first partial paragraph, last sentence</u> -- State what happens to the metals after they precipitate out of the water solution.</b></p>	<p><b>RESPONSE 14:</b> Noted; will add text that says: After metals precipitate out of the water solution, they form as a solid on the surface of soil particles.</p>
<p><b>15. <u>Page 3, first full paragraph, third sentence</u> -- Add information which clarifies the shape of the plume since “downgradient” and “regional groundwater” are technical terms and may not have clear meaning to the reader. The shape could also be defined by adding it to one of the existing maps in the Proposed Plan.</b></p>	<p><b>RESPONSE 15:</b> Noted; plume is explained as being quite small, a representation on a map would exaggerate its actual size and could cause undue alarm. May be helpful to further describe “one pound of these solvents” which equates to “approximately one cup of solvents.”</p>
<p><b>16. <u>Page 3 and 4</u> -- The area beginning with, “When TCE and PCE dissolve into groundwater, several ...” and including all text up until the next article, contains information that is outside of this article s heading. It is believed that this information is important but is</b></p>	<p><b>RESPONSE 16:</b> Noted; this information on natural attenuation will be moved and included on page 6 where it is more appropriate.</p>

**RESPONSE TO COMMENTS**  
**DRAFT PROPOSED PLAN FOR OPERABLE UNIT (OU)-2B**  
**SITES 2 & 17 AND OU-2C SITES 3 & 5**  
**MCAS EL TORO, CALIFORNIA**

<p><b>Originator:</b> Marsha Mingay, Public Participation Specialist DTSC</p> <p><b>To:</b> Tayseer Mahmoud, RPM DTSC</p> <p><b>Date:</b> November 23, 1997</p>	<p><b>CLEAN II Program</b>  <b>Contract No. N68-711-92-D-4670</b>  <b>CTO-0155</b>  <b>File Code: 0222</b></p>
<p>misplaced. Perhaps a new article heading for this material would be beneficial in bringing the information to the reader s attention.</p>	
<p>17. <b>Page 4, Other Site Conditions, Site 2 --</b> This first paragraph is missing information. For example, the summary leaves one to believe that the removed material is still in a staging area. (Note, the same is true for the description of Site 17). Since this is not correct, additional information is needed.</p>	<p><b>RESPONSE 17:</b> Noted: to improve readability in first sentence, move “in 1993” to the end of the sentence.</p> <p>For Site 2: provide clarification by adding additional text after the phrase “moving landfill wastes from Borrego Canyon Wash to a staging area” (new text) “where materials were recycled or placed in the main body of the landfill and covered,”.</p> <p>For Site 17: provide clarification by adding additional text after the phrase “removing . . . containers,” (new text) “sample drum contents and dispose of these containers in appropriate off-Station facilities,”.</p>
<p>18. <b>Page 4, Other Site Conditions, Site 2, 3 and 5 --</b> If correct, please add information which states that the landfills are, or will be, fenced to restrict access. This is especially important for Site 5 since the document provides a scenario of an individual digging into the soil.</p>	<p><b>RESPONSE 18:</b> Noted; this section of the Proposed Plan provides information on other current conditions at the sites.</p> <p>New fencing was installed at Sites 2 and 17 and existing fences at Sites 3 and 5 are used to control access. These clarifications will be included.</p>
<p>19. <b>Page 4, Human Health and ..., first paragraph, third sentence --</b> Please clarify this sentence. How can the laws and regulations designed to protect public health and the environment be applied if the risk to public health is not defined?</p>	<p><b>RESPONSE 19:</b> Noted; will delete third sentence. The fourth sentence will start a new paragraph and the phrase, “Although the risk assessments are based on very conservative assumptions, only the soils” will be deleted. Thus, the fourth sentence will read: During the remedial investigations, only the environmental media (e.g., soils, air and groundwater) surrounding the buried wastes, and not the actual wastes, were sampled for analysis.</p>
<p>20. <b>Page 4, Human Health and ..., first paragraph, last sentence --</b> Delete the word “However”.</p>	<p><b>RESPONSE 20:</b> Noted; will delete the word “however.”</p>
<p>21. <b>Page 4, Human health and ..., second paragraph, last sentence --</b> To clarify the information, reword to read, “No ecological risk assessment was performed ... or pavement and therefore does not support wildlife habitat. The area is used as a staging and office</p>	<p><b>RESPONSE 21:</b> Noted; will reword as suggested but without the last sentence that discusses the staging and and office area.</p>

**RESPONSE TO COMMENTS**  
**DRAFT PROPOSED PLAN FOR OPERABLE UNIT (OU)-2B**  
**SITES 2 & 17 AND OU-2C SITES 3 & 5**  
**MCAS EL TORO, CALIFORNIA**

<p><b>Originator:</b> Marsha Mingay, Public Participation Specialist DTSC</p> <p><b>To:</b> Tayseer Mahmoud, RPM DTSC</p> <p><b>Date:</b> November 23, 1997</p>	<p><b>CLEAN II Program</b>  <b>Contract No. N68-711-92-D-4670</b>  <b>CTO-0155</b>  <b>File Code: 0222</b></p>
<p>area for the cleanup contractor at MCAS El Toro.”</p>	
<p>22. <u>Page 5, first full paragraph, second sentence</u> -- Add the word “adjacent” immediately before “habitat reserves”.</p>	<p><b>RESPONSE 22:</b> Noted; will reword as suggested.</p>
<p>23. <u>Page 5, first full paragraph, last sentence</u> -- Since landfill sites are to be fenced, please clarify why children may be playing in the soil. If this was a conservative scenario developed for the health risk, please add information which eliminates the possible misinterpretation.</p>	<p><b>RESPONSE 23:</b> For the purposes of conducting the risk assessment, it was assumed children could play in the soil even though the site is fenced and access is restricted. This will be clarified in the proposed plan. This assumption was made as part of the risk assessment’s conservative approach.</p>
<p>24. <u>Page 5, Groundwater</u> -- Delete the word, “however”.</p>	<p><b>RESPONSE 24:</b> Noted; the word “however” will be deleted.</p>
<p>25. <u>Page 5, Ecological</u> -- Provide additional information. What is the risk to ecological receptors? Special mention should be made to the California gnatcatcher.</p>	<p><b>RESPONSE 25:</b> The text under the “Ecological” subheading has been rewritten to read: Ecological risk assessments performed at Sites 2, 5, and 17 and at the reference site exceeded the hazard index of 1. The risk assessments concluded that ecological risks at Sites 2 and 17 are slightly elevated for animals which are dependent on a plant and insect diet such as the California gnatcatcher. However, these risks are not elevated for predators such as the coyote or red-tailed hawk.</p> <p>Note: additional text will be included in the ecological risk assessment explanation paragraph (the last paragraph under the subhead “Estimating Human Health and Ecological Risks”). After the last sentence two new sentences will be added that read: “At Sites 2 and 17, plants, mice, and soil were collected and analyzed to determine the actual intake of potential contaminants by birds to assess impacts to the California gnatcatcher. For comparison purposes, samples were also taken from a nearby uncontaminated reference site.”</p>
<p>26. <u>Pages 6 to 8, Summary of ... Alternatives</u> -- Add information which states; 1) how the alternatives are protective to ecological receptors, 2) how implementation of the remedial action will impact the gnatcatcher, and 3) maintenance required. (Note that this last item will substantiate the statement on Page 10 which states, “Alternatives 5 and 6 (Sites 3 and 5) are also protective of human</p>	<p><b>RESPONSE 26:</b> Noted; in description of Alt. 3 on p.7, text states that revegetation would provide a significant net gain in habitat for the gnatcatcher. Maintenance is described (initially mowing of annual grasses at all four sites would done to inspect the cap and drainage system) and revegetation and invasion of natural plants is included. Alternatives 5 and 6 pavement designs at Sites 3 and 5 will need to be repaired to prevent leaking through pavement</p>

**RESPONSE TO COMMENTS  
DRAFT PROPOSED PLAN FOR OPERABLE UNIT (OU)-2B  
SITES 2 & 17 AND OU-2C SITES 3 & 5  
MCAS EL TORO, CALIFORNIA**

<p><b>Originator:</b> Marsha Mingay, Public Participation Specialist DTSC</p> <p><b>To:</b> Tayseer Mahmoud, RPM DTSC</p> <p><b>Date:</b> November 23, 1997</p>	<p><b>CLEAN II Program</b> Contract No. N68-711-92-D-4670 CTO-0155 File Code: 0222</p>
<p><b>health and the environment, but require more maintenance to preserve their effectiveness than the single-layer soil cap.”)</b></p>	<p>cracks; this statement will be incorporated into the text on page 9 Alternatives 5 and 6 for Sites 3 and 5, and on page 10 under Long-Term Effectiveness and Permanence.</p> <p>On page 9 added the following sentence to both Alternative 6 and Alternative 6 descriptions, becoming the next to last sentence in each description, that reads: Both of these cap options will require maintenance and repair of cracks to prevent leaks.</p> <p>On page 10, in the section titled “3. Long-Term Effectiveness and Permanence”, added two phrases to the next to last sentence. The complete sentence now reads: Alternatives 5 and 6 (Sites 3 and 5) are also protective of human health and the environment, but require more maintenance (repair of cracks to prevent leaks) to preserve their effectiveness than the single-layer soil cap of Alternative 3, the preferred alternative.</p>
<p><b>27. <u>Page 6, first paragraph, last sentence</u> -- Reword to read, “Presumptive remedies can be cleanup activities, control technologies or ...”.</b></p>	<p><b>RESPONSE 27:</b> Noted, will reword as suggested.</p>
<p><b>28. <u>Page 6, second paragraph, last two sentences</u> -- Clarify if the last sentence provides the rational for the second to the last sentence. If so, restructure the sentences to establish this relationship.</b></p>	<p><b>RESPONSE 28:</b> Noted, by moving sections from page 3 on natural attenuation to page 6, this concept will be clarified.</p>
<p><b>29. <u>Page 6, last partial paragraph on page</u> -- To clarify, add “(not presented in this Proposed Plan)” immediately after “Other technologies”.</b></p>	<p><b>RESPONSE 29:</b> Noted, will add “(not presented in this Proposed Plan)”.</p>
<p><b>30. <u>Page 7, Alternative 3</u> -- The description should also include consolidation of wastes and location and purpose of riprap.</b></p>	<p><b>RESPONSE 30:</b> Noted, will need to add wording on consolidation of wastes in a general statement that covers all four landfills, suggest adding:</p> <p>At each of the sites, wastes on the periphery will be consolidated to minimize the size of the cap (see page 12).</p> <p>To address riprap comment, suggest breaking existing sentences into two and</p>

**RESPONSE TO COMMENTS  
DRAFT PROPOSED PLAN FOR OPERABLE UNIT (OU)-2B  
SITES 2 & 17 AND OU-2C SITES 3 & 5  
MCAS EL TORO, CALIFORNIA**

<p><b>Originator:</b> Marsha Mingay, Public Participation Specialist DTSC</p> <p><b>To:</b> Tayseer Mahmoud, RPM DTSC</p> <p><b>Date:</b> November 23, 1997</p>	<p style="text-align: right;"><b>CLEAN II Program</b> Contract No. N68-711-92-D-4670 <b>CTO-0155</b> File Code: 0222</p>
	<p>adding wording to the second sentence, so it reads:</p> <p>The top of the cap would be graded to prevent ponding. Drainage channels constructed of riprap (boulder-sized rocks) or concrete would be designed for placement at the perimeter of the cap and, if necessary, within the cap surface to control runoff to prevent erosion of landfill materials. Riprap will also be used to protect slopes exposed to flood events at Sites 2, 3, and 17.</p>
<p><b>31. <u>Page 8, Erosion Control ..., first paragraph</u> -- Add the following sentence to the end of this paragraph, "However, depending upon public comments received, additional work may be performed."</b></p>	<p><b>RESPONSE 31:</b> Noted; comment is not applicable. Public comment periods already held for these removal actions, and any input received has already been included in design and work activities.</p>
<p><b>32. <u>Page 8, Erosion Control ..., 2nd bullet</u> -- Clarify if debris placed in "central locations within each landfill site" is exposed or covered.</b></p>	<p><b>RESPONSE 32:</b> Noted; wastes will be covered. Bullet modified to read:</p> <ul style="list-style-type: none"> <li>• removing eroded landfill materials and debris from Borrego Canyon Wash and placing these wastes in the main body of each landfill site and covering the wastes with native soil.</li> </ul>
<p><b>33. <u>Page 9, Alternative 5, first sentence</u> -- To correct information, reword to, "... with either a concrete pavement cap (alternative 5A) or a crushed aggregate based covered by an asphalt pavement cap (Alternative 5B)."</b></p>	<p><b>RESPONSE 33:</b> Noted; the crushed aggregate base beneath the asphalt is a standard construction material used with asphalt. Therefore, it is more appropriate to refer to the asphalt pavement cap. To assist the reader, will add (Option 5A) and (Option 5B) in the appropriate locations in the text. If needed, phrasing stating "see below for cap construction" will be included.</p>
<p><b>34. <u>Page 9, Alternative 6, first sentence</u> -- To correct information, reword to, "In summary, Alternative 6 ... (plastic) and either a concrete pavement cap (Alternative 6A) or a crushed aggregate base covered with an asphalt pavement cap (Alternative 6B). (See diagram below)"</b></p>	<p><b>RESPONSE 34:</b> Noted; see response to comment no. 33.</p>
<p><b>35. <u>Page 9, diagram for Option 6B</u> -- Insert, in the diagram, the term</b></p>	<p><b>RESPONSE 35:</b> Noted; will incorporate suggested wording.</p>

**RESPONSE TO COMMENTS  
DRAFT PROPOSED PLAN FOR OPERABLE UNIT (OU)-2B  
SITES 2 & 17 AND OU-2C SITES 3 & 5  
MCAS EL TORO, CALIFORNIA**

<p><b>Originator:</b> Marsha Mingay, Public Participation Specialist DTSC</p> <p><b>To:</b> Tayseer Mahmoud, RPM DTSC</p> <p><b>Date:</b> November 23, 1997</p>	<p><b>CLEAN II Program</b> Contract No. N68-711-92-D-4670 <b>CTO-0155</b> File Code: 0222</p>
<p>“Asphalt concrete pavement” and an arrow leading to the appropriate area.</p>	
<p><b>36. <u>Page 10, Evaluation of the Preferred Alternatives, introductory paragraph</u> -- After the fourth sentence, insert the following to complete the regulatory requirements. “Public comments are reviewed with the State in order to determine if the alternative remains the most appropriate remedial action” (40 CFR, Section 300.430 (e)(9)(iii)(I)(i)(C)(ii)).</b></p>	<p><b>RESPONSE 36:</b> Noted; language used is from U.S. EPA. DON feels that this issue is already addressed. The text under Modifying Criteria on page 11 that is already included addresses this comment and informs readers of the role of comments from the State and the community. However, the replacement sentence below helps provide further clarification.</p> <p>Replace the fifth sentence with these new sentence that reads:</p> <p>Generally, the modifying criteria are taken into account after public comment is received on the Proposed Plan and reviewed with the various State regulatory agencies to determine if the preferred alternative remains as the most appropriate remedial action</p>
<p><b>37. <u>Page 10, Primary Balancing Criteria, Number 3, Long Term Effectiveness and Permanence, second paragraph, third and fourth sentences</u> -- Clarify that these sentences are true for all alternatives and not just Alternative 3.</b></p>	<p><b>RESPONSE 37:</b> Noted; sentences are appropriate for all alternatives. The sentence will lead off with: “For all sites, . . . .”</p>
<p><b>38. <u>Page 10, Primary Balancing Criteria, Number 3, Long Term Effectiveness and Permanence, second paragraph, fifth sentence</u> -- Provide information which supports the statement, “The single-layer soil cap is easy to modify and allows flexibility for future site use”. In order to provide equal information for all alternatives, for each site separately, please state how the other alternatives compare on these characteristics .</b></p>	<p><b>RESPONSE 38:</b> Noted; to address other DTSC comments, DON will remove the words “easy to modify...” and state that the single-layer soil cap presents the fewest obstacles if modification is needed. At the end of the paragraph add the sentence: “Alternatives 4, 5, and 6 would require considerable reconstruction efforts if they need to be modified by future owners or users.</p>
<p><b>39. <u>Page 10, Primary Balancing Criteria, Number 3, Long Term Effectiveness and Permanence, second paragraph, sixth sentence</u> -- The sentence states that clay and soil/bentonite barriers are subject to drying and cracking in semiarid climates. To support this conclusion, add information which clarifies if this effect will occur when the material is below the ground surface.</b></p>	<p><b>RESPONSE 39:</b> Noted; no need to change text. The complete, comprehensive analysis pertaining to clay caps specifically in California is presented in the FS reports. The Regional Water Quality Control Board also stated a preference for Alternative 3.</p>

**RESPONSE TO COMMENTS**  
**DRAFT PROPOSED PLAN FOR OPERABLE UNIT (OU)-2B**  
**SITES 2 & 17 AND OU-2C SITES 3 & 5**  
**MCAS EL TORO, CALIFORNIA**

<p><b>Originator:</b> Marsha Mingay, Public Participation Specialist DTSC</p> <p><b>To:</b> Tayseer Mahmoud, RPM DTSC</p> <p><b>Date:</b> November 23, 1997</p>	<p><b>CLEAN II Program</b>  <b>Contract No. N68-711-92-D-4670</b>  <b>CTO-0155</b>  <b>File Code: 0222</b></p>
<p>40. <u>Page 11, Modifying Criteria, Number 9, Community Acceptance, second paragraph</u> -- Substitute "request" to "invitation".</p>	<p><b>RESPONSE 40:</b> Noted; will use "invitation" instead of "request".</p>
<p>41. <u>Page 11, chart, Item 6, Sites 2 and 17, Alternative 5b</u> -- The square is in black ink versus blue. Please change for consistency.</p>	<p><b>RESPONSE 41:</b> Noted; this correction will be made. Also, chart was prepared in this fashion for faxing purposes during this review cycle. Final product will have O as a shaded box in light blue.</p>
<p>42. <u>Page 13, Institutional Controls</u> -- Add the word "Proposed" to the title. The title should read, "Proposed Institutional Control - MCAS El Toro Landfills".</p>	<p><b>RESPONSE 42:</b> Noted; will add the word "Proposed".</p>
<p>43. <u>Page 13, Land-Use Restrictions, first paragraph</u> - Add the following words to begin the first paragraph, "If the Proposed Plan is adopted as outlined in this document, the future landowners or users of ...".</p>	<p><b>RESPONSE 43:</b> Noted; no need to incorporate suggestion since these restrictions will apply whether this plan or other plans are adopted.</p>
<p>44. <u>Page 13, Land-use Restrictions, third bullet</u> -- Add information which eliminates possible confusion as to why prior approval is needed for planting and irrigation when part of the Proposed Plan is to vegetate the landfill area.</p>	<p><b>RESPONSE 44:</b> Noted; this needs better clarification. Suggest adding wording added at end of the third bullet, so it will read:</p> <ul style="list-style-type: none"> <li>• planting of deep-rooted plants and irrigation beyond the amount to establish the proposed grass on the landfill cap.</li> </ul>
<p>45. <u>Page 13, Site Access Restrictions</u> -- To fully address the contents of this section, re-title the article to, "Site Access Restrictions, Monitoring and Maintenance".</p>	<p><b>RESPONSE 45:</b> Noted; will add the wording suggested in comment.</p>
<p>46. <u>Page 13, Site Access Restrictions</u> -- Begin the paragraph with the words, "The proposed remedial action ...".</p>	<p><b>RESPONSE 46:</b> Noted; will add the wording suggested in comment.</p>
<p>47. <u>Page 13, Groundwater</u> -- Similar to item 46 above, begin the paragraph with, "DON proposes that the future landowners and users ...".</p>	<p><b>RESPONSE 47:</b> Noted; however future owners/users shall be restricted by deed covenants or lease restrictions. This will be incorporated into the first sentence. The words: "by deed covenants or lease restrictions" will be inserted between "shall be restricted" and "from conducting subsurface . . . ."</p>

**RESPONSE TO COMMENTS  
DRAFT PROPOSED PLAN FOR OPERABLE UNIT (OU)-2B  
SITES 2 & 17 AND OU-2C SITES 3 & 5  
MCAS EL TORO, CALIFORNIA**

<p><b>Originator:</b> Marsha Mingay, Public Participation Specialist DTSC</p> <p><b>To:</b> Tayseer Mahmoud, RPM DTSC</p> <p><b>Date:</b> November 23, 1997</p>	<p style="text-align: right;"><b>CLEAN II Program</b> Contract No. N68-711-92-D-4670 CTO-0155 File Code: 0222</p>
<p><b>48. <u>Page 14 and 15, Applicable or Relevant ...</u> -- According to US EPA's <u>Community Relations in Superfund: A Handbook</u>, the proposed plan is to be written in lay person s terminology. The legal information presented does not conform to the guidance. Since the Proposed Plan has satisfied the ARAR component of the nine criteria, (in a similar manner to previous Proposed Plans, see page 10 of this draft) it is suggested that the information be deleted.</b></p>	<p><b>RESPONSE 48:</b> Noted; this section will remain in the document because the DON wants to accurately convey to the readers that all ARARs have been evaluated and are being adhered to. This also demonstrates that regulations from each of the regulatory agencies are being addressed. This section will be reformatted to a table-style format if space permits. If a table format is not feasible for keeping the document in a 16-page format, this section will be edited and presented in a more readable style similar to the SCAQMD section, or in a bulleted list format.</p>

**RESPONSE TO COMMENTS  
DRAFT PROPOSED PLAN FOR CLOSURE OF  
INACTIVE LANDFILLS, SITES 2, 3, 5 & 17  
MCAS EL TORO, CALIFORNIA**

<p><b>Originator:</b> Michael B. Wochnick, P.E. Manager Cal/EPA Integrated Waste Management Board</p> <p><b>To:</b> Joseph Joyce, BRAC Environmental Coordinator MCAS El Toro</p> <p><b>Date:</b> November 21, 1997</p>	<p style="text-align: right;"><b>CLEAN II Program</b> Contract No. N68-711-92-D-4670 CTO-0155 File Code: 0222</p>
<p><b><u>GENERAL COMMENTS</u></b></p> <p>1. The monolithic native soil final cover, which in this plan is presented as a “preferred alternative” for all four landfills (Sites 2, 17, 3, and 5), appears to be adequate for all four sites under a non-irrigated open space postclosure land use scenario (after the effectiveness of such cover has been demonstrated through appropriate modeling or other analyses). However, in the event a different postclosure land use is or will be considered in the future, it may be more feasible economically to take such a postclosure land use into consideration during the landfill closure.</p> <p>At Site 5, which previously was considered as a golf course expansion, the additional cost associated with the installation of a flexible membrane liner (FML) is 500,000 dollars which appears to be considerably lower than future final cover modifications which may be required should a golf course or other irrigated uses be proposed in the future. Not only would installation of a FML cover during the closure be more feasible economically but since the height of a FML cover would be less than of a monolithic native soil cover, it would be much easier to match the elevation of the adjacent golf course.</p> <p>Similarly, for Site 3, which was previously identified as a future commercial/warehousing area, additional costs associated with the final cover upgrade from native soil monolithic to a concrete or asphalt cap are 200,000 and 1,000,000 dollars, respectively. Once again, we recommend that the feasibility of the final cover upgrade be evaluated, especially since this postclosure land use was identified in the community redevelopment plan.</p>	<p><b><u>RESPONSES TO GENERAL COMMENTS</u></b></p> <p><b>RESPONSE 1:</b> The Department of Navy (DON) has carefully considered reuse issues associated with Sites 3 and 5. Alternative 3, a monolithic native soil cap, is the appropriate alternative for both of these sites.</p> <p>The Local Redevelopment Authority (LRA) has recognized the constraints on reuse posed by the landfills in the document entitled, “Final MCAS El Toro Community Reuse Plan, December 1996” published by the LRA. Landfill sites “that have been used since the early years of military operations, are constraints for reuse.” [Community Reuse Plan, Section 2.7, page 29] Furthermore, “the most evident potential constraint to future uses would be associated with landfills, particularly the Original Landfill (Installation Restoration Site 3) and the Perimeter Road Landfill (Installation Restoration Site 5).” [Community Reuse Plan, Section 4.2, page 63]</p> <p>The Community Reuse Plan also states that “recreational uses are planned to buffer airport activities” and “it is anticipated that the existing golf course would be expanded.” [Community Reuse Plan, Section 3.2, page 32] This document also states that “recreational areas would include active recreation such as golf ... but may also include open space activities that create a natural transition to the habitat area.” [Community Reuse Plan, Section 3.2, page 32]</p> <p>DON’s primary responsibility is to provide a remedy that is protective of public health and the environment. The monolithic soil cap is protective of human health and the environment and, specifically offers equivalent water quality protection under a non-irrigated scenario. In its memorandum dated 29 October 1996, the Regional Water Quality Control Board recommended a monolithic cover for semiarid climates such as MCAS El Toro provided that such a cover can be demonstrated to offer equivalent water quality protection to the Title 23 prescriptive cover.</p> <p>Alternative 3 can be compatible with the proposed reuses of Sites 3 and 5. The</p>

**RESPONSE TO COMMENTS  
DRAFT PROPOSED PLAN FOR CLOSURE OF  
INACTIVE LANDFILLS, SITES 2, 3, 5 & 17  
MCAS EL TORO, CALIFORNIA**

<p><b>Originator:</b> Michael B. Wochnick, P.E. Manager Cal/EPA Integrated Waste Management Board</p> <p><b>To:</b> Joseph Joyce, BRAC Environmental Coordinator MCAS El Toro</p> <p><b>Date:</b> November 21, 1997</p>	<p style="text-align: right;"><b>CLEAN II Program</b> Contract No. N68-711-92-D-4670 CTO-0155 File Code: 0222</p>
	<p>community reuse plan developed by the LRA represents an initial phase in the planning process and is in itself conceptual. The LRA planning process will continue with the preparation of a master plan which will provide more site-specific reuse detail. DON has provided a conceptual design for the landfill caps in a timely manner to the LRA so that the capped landfill areas can be integrated into the master reuse plan.</p> <p>Alternative 3 is not incompatible with recreational or commercial use of the land surface. For example, if a golf course is the chosen reuse of Site 5, the landfill area could be integrated into the design as a non-irrigated portion of the course. At Site 3, the landfill area can be integrated as an open space area in a commercial development. If the landfill area must be irrigated or modified for commercial activities, the monolithic cap would have the fewest obstacles of the conceptual capping designs to overcome for modifications. Modifications for any remedy selected could occur once the DON and the regulatory agencies accept the modifications.</p> <p>Even though the cost differences as presented are not drastically different, they do not include additional disposal, drainage, and administrative costs if the caps need to be constructed to grade or need to support deep structure foundations.</p>

**RESPONSE TO COMMENTS  
DRAFT PROPOSED PLAN FOR CLOSURE OF  
INACTIVE LANDFILLS, SITES 2, 3, 5 & 17  
MCAS EL TORO, CALIFORNIA**

<p><b>Originator:</b> Michael B. Wochnick, P.E. Manager Cal/EPA Integrated Waste Management Board</p> <p><b>To:</b> Joseph Joyce, BRAC Environmental Coordinator MCAS El Toro</p> <p><b>Date:</b> November 21, 1997</p>	<p style="text-align: right;"><b>CLEAN II Program</b> Contract No. N68-711-92-D-4670 CTO-0155 File Code: 0222</p>
<p><b>2.</b> The institutional controls as stated in the plan, make a reference to negotiations to be conducted during the MCAS El Toro transfer. In the past, Board staff repeatedly requested that this approach be changed to include these controls as an integral part of the design, specifically tailored to the proposed final cover design and anticipated postclosure land use. For example, should the postclosure land use include public recreational activities such as a golf course or commercial use, site access restrictions would not be applicable. Please note that the Department of Toxic Substances Control had already provided you with acceptable institutional control language during the feasibility study project review stage.</p>	<p><b>RESPONSE 2:</b> The DTSC did provide language on institutional controls for the FS reports which was adopted and incorporated into the reports. Institutional controls, in particular physical site restrictions, will be developed in the final remedial design. Land-use restrictions or lease conditions are negotiated by the DON with future owners or users.</p>



BECHTEL NATIONAL INC.

CLEAN II TRANSMITTAL/DELIVERABLE RECEIPT

Contract No. N-68711-92-D-4670

Document Control No.: CTO-0155/0062

File Code: 0222.1/0216

TO: Contracting Officer
Naval Facilities Engineering Command
Southwest Division
Mr. Richard Selby, Code 57CS1.RS
Building 127, Room 112
1220 Pacific Highway
San Diego, CA 92132-5190

DATE: January 27, 1998

CTO #: 0155

LOCATION: MCAS El Toro

FROM: Dante J. Tedaldi, Ph.D., P.E., Project Manager

DESCRIPTION: Response to Comments - Draft Proposed Plan Station Landfills
Operable Units 2B and 2C - Sites 2, 3, 5, and 17 - (Various Dates)

TYPE: Contract Deliverable (Cost) CTO Deliverable (Technical) X Other

VERSION: Draft REVISION #:

ADMIN RECORD: Yes X No Category Confidential

SCHEDULED DELIVERY DATE: 1/28/98 ACTUAL DELIVERY DATE: 1/27/98

NUMBER OF COPIES SUBMITTED: 0/7C/7E

COPIES TO (Include Name, Navy Mail Code, and No. of Copies):

SWDIV:

- G. Tinker, Code 56MC.GT (O)
J. Rogers, Code 5723.JR (1C/1E)
R. Callaway, Code 503.RC (1C/1E)
L. Hornecker, Code 56MC.LH (1C/1E)
B. Lindsey, Code 56MC.BL (1C/1E)
A. Piszkin, Code 56MC.AP (1C/1E)
L. Saunders, Code OODE (1C/1E)
N. Spertus, Code 552.NS (1C/1E)

BECHTEL (Distributed by Bechtel):

- K. Kapur (1C)
D. Tedaldi (1C/1E)
J. Gouge (45/7/A31) (1C/1E)
B. Coleman (1C/3E for AR & IR)
T. Latas (1C/1E)
BNI Document Control (1C/1E)
El Toro File (1C/1E)
SFRO File (1C/1E)

OTHER (Distributed by Bechtel):

- J. Joyce, El Toro (1C/1E)
G. Kistner, US EPA (1C/3E)
W. Lee, El Toro (1C/1E)
T. Mahmoud, Cal EPA (1C/2E)
Capt. M. Morgan, El Toro (1C/1E)
M. Potacka, BRAC (1C/2E)
Col. Ritchie, El Toro (1C/1E)
L. Vitale, CRWQCB (1C/2E)
Lt. Col. Wallace, El Toro (1C/1E)

O = Original Transmittal Sheet
C = Copy Transmittal Sheet
E = Enclosure

Date/Time Received