



BECHTEL NATIONAL INC.

CLEAN II TRANSMITTAL/DELIVERABLE RECEIPT

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

Document Control No.: CTO-0135/0260

File Code: 0222

TO: Contracting Officer
Naval Facilities Engineering Command
Southwest Division
Mr. Richard Selby, Code 02R.RS
Building 127, Room 112
1220 Pacific Highway
San Diego, CA 92132-5190

DATE: June 16, 1999
CTO #: 0135
LOCATION: MCAS El Toro

FROM: Jose D. Tedaldi for D. Project Manager tedaldi Program Manager

DESCRIPTION: Response to Comments - Draft Record of Decision for Operable Unit 2B -
Landfill Sites 2 and 17 - DTD June 1999

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

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- W. Lee, El Toro (1C/1E)
- T. Mahmoud, Cal EPA (1C/3E)
- M. Potacka, BRAC (1C/1E)
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- J. Bartel, FWS (1C/1E)
- D. Rundle, FWS (1C/1E)
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Bechtel

1230 Columbia Street
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San Diego, CA 92101-8502

CLEAN II Program
Bechtel Job No. 22214
Contract No. N68711-92-D-4670
File Code: 0338

IN REPLY REFERENCE: CTO-0135/0260

June 16, 1999

Contracting Officer
Naval Facilities Engineering Command
Southwest Division
Mr. Richard Selby, Code 02R.RS
Building 127, Room 112
1220 Pacific Highway
San Diego, CA 92132-5187

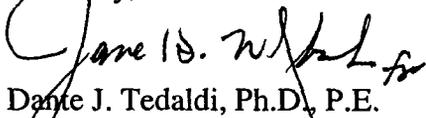
Subject: Response to Comments – Draft Record of Decision Operable Unit 2B – Landfill
Sites 2 and 17, MCAS El Toro, CA – Dated June 1999

Dear Mr. Selby:

It is our pleasure to submit this copy of the Response to Comments on the Draft Record of Decision (ROD) for Operable Unit (OU) 2B – Landfill Sites 2 and 17 – for the Marine Corps Air Station (MCAS) El Toro, California. This document was prepared under Contract Task Order (CTO) 0135 and Contract No. N68711-92-D-4670 and is being sent out concurrently with the Draft Final ROD for OU-2B.

We appreciate the opportunity to be of service to you on this project. If you have any questions or would like further information, please contact Jane Wilzbach at (619) 744-3029, or myself at (619) 744-3080.

Sincerely,


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

DJT/sp

Enclosure



Bechtel National, Inc. Systems Engineers-Constructors



BECHTEL NATIONAL INC.

CLEAN II TRANSMITTAL/DELIVERABLE RECEIPT

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

Document Control No.: CTO-0135/0260-2

File Code: 0222

TO: Contracting Officer
Naval Facilities Engineering Command
Southwest Division
Mr. Richard Selby, Code 02R.RS
Building 127, Room 112
1220 Pacific Highway
San Diego, CA 92132-5190

DATE: July 16, 1999
CTO #: 0135
LOCATION: MCAS El Toro

FROM: [Signature]
Project Manager

Program Manager

DESCRIPTION: Replacement Page for Response to Comments - Draft Final Record of Decision for Operable Unit 2B - Landfill Sites 2 and 17 - DTD June 1999

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

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CLEAN II Program
Bechtel Job No. 22214
Contract No. N68711-92-D-4670
File Code: 0222
IN REPLY REFERENCE: CTO-0135/0260

July 16, 1999

Contracting Officer
Naval Facilities Engineering Command
Southwest Division
Mr. Richard Selby, Code 02R.RS
Building 127, Room 112
1220 Pacific Highway
San Diego, CA 92132-5187

Subject: **Replacement Page** for the Response to Comments – Draft Record of Decision for Operable Unit 2B – Landfill Sites 2 and 17 – Dated June 1999

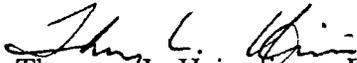
Dear Mr. Selby:

Enclosed please find a replacement page for the Response to Comments package associated with the Draft ROD for Sites 2 and 17. The Response to Comment package was transmitted on June 16, 1999. The replacement page is Page 1 of the response to comments received from Ms. Patricia A. Hannon. The change consists of a revision to the response to Ms. Hannon's comment on Table 10-4 from the Draft ROD. The revised response notes that Table 10-4 has been deleted from the Draft Final ROD and explains why this table is no longer applicable.

Recipients should remove and replace this page in their copies of the Response to Comment Package.

We appreciate the opportunity to be of service to you on this project. If you have any questions or would like further information, please contact Jane Wilzbach at (619) 744-3029, or myself at (619) 744-3002.

Sincerely,


Thurman L. Heironimus, R.G.
Project Manager

TLH/sp

Enclosure



Bechtel National, Inc. Systems Engineers-Constructors



BECHTEL NATIONAL INC.

CLEAN II TRANSMITTAL/DELIVERABLE RECEIPT

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

Document Control No.: CTO-0135/0260-1

File Code: 0222

TO: Contracting Officer
Naval Facilities Engineering Command
Southwest Division
Mr. Richard Selby, Code 02R.RS
Building 127, Room 112
1220 Pacific Highway
San Diego, CA 92132-5190

DATE: June 29, 1999

CTO #: 0135

LOCATION: MCAS El Toro

FROM:

[Handwritten signature]

Project Manager

Program Manager

DESCRIPTION: Replacement Page for Response to Comments - Draft Final Record of Decision for Operable Unit 2B - Landfill Sites 2 and 17 - DTD June 1999

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

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June 29, 1999

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Subject: **Replacement Page for the Response to Comments – Draft Record of Decision for Operable Unit 2B – Landfill Sites 2 and 17 – Dated June 1999**

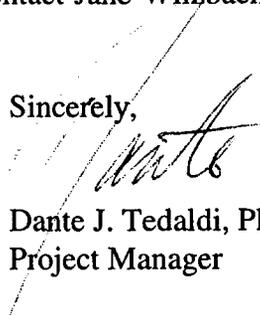
Dear Mr. Selby:

Enclosed please find a replacement page for the Response to Comments package associated with the Draft ROD for Sites 2 and 17. The Response to Comment package was transmitted on June 16, 1999. The replacement page is Page 1 of the response to comments received from Mr. Glenn R. Kistner, U.S. EPA. The revision consists of one sentence added to the end of Response 1 to note that the Draft Final ROD for Sites 2 and 17 has been revised to add a bullet stating that "natural resource/habitat mitigation measures will be coordinated with the U.S. Fish and Wildlife Service."

Recipients should remove and replace this page in their copies of the Response to Comment Package.

We appreciate the opportunity to be of service to you on this project. If you have any questions or would like further information, please contact Jane Wilzbach at (619) 744-3029, or myself at (619) 744-3080.

Sincerely,



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

DJT/sp

Enclosure



Bechtel National, Inc. Systems Engineers-Constructors

RESPONSE TO COMMENTS
DRAFT RECORD OF DECISION (ROD), OPERABLE UNIT (OU) 2B
LANDFILL SITES 2 AND 17
MCAS EL TORO, CALIFORNIA

<p>Originator: Jim A. Bartel, Assistant Field Supervisor US Department of the Interior, Fish and Wildlife Service</p> <p>To: Joseph Joyce, BRAC Environmental Coordinator MCAS El Toro</p> <p>Date: April 5, 1999</p>	<p style="text-align: right;">CLEAN II Program Contract No. N68-711-92-D-4670 CTO-0135 File Code: 02221</p>
<p><u>GENERAL COMMENTS</u></p> <p>1. We request that it is expressly set forth in the ROD that the Department of the Navy (DON) is the Federal lead agency (pursuant to Executive Order 12580) responsible for any present or future remedial action, operation, monitoring, maintenance, and corrective action associated with Sites 2 and 17. We requested by letter of August 17, 1998, to Marine Corp Air Bases Western Area, El Toro that the responsible Federal agency be identified for this action.</p>	<p><u>RESPONSES TO GENERAL COMMENTS</u></p> <p>RESPONSE: DON has added a reference to Executive Order 12580 to the Declaration portion of the ROD. Any further allocation of responsibility between DON and U.S. Fish and Wildlife Service (FWS) will be addressed in a Memorandum of Understanding (MOU) that will accompany the federal agency to agency transfer documentation.</p>
<p>2. Sites 2 and 17 serve as habitat and are occupied by the federally threatened coastal California gnatcatcher (<i>Poliophtila californica californica</i>). Section 7 of the Endangered Species Act (Act) of 1973, as amended requires a Federal agency to consult with the Fish and Wildlife Service (Service) in the event that a proposed action may affect a listed species. DON should initiate formal consultation with this office regarding the proposed remedial action at the site. This process will identify the appropriate actions to offset impacts to the habitat of the gnatcatcher resulting from remedial actions taken at the site.</p>	<p>RESPONSE: As discussed with representatives of FWS, DON will initiate the formal consultation with FWS by means of a letter from the Navy to Jim Bartel.</p>
<p><u>SPECIFIC COMMENTS</u></p> <p><u>Declaration</u></p> <p>3. Page 1 - <u>Description of the Remedy.</u> Please revise the first sentence to read "The selected remedy for remediation for Sites 2 and 17 to be completed by DON includes the following components."</p>	<p><u>RESPONSES TO SPECIFIC COMMENTS</u></p> <p>RESPONSE: The sentence has been revised as requested.</p>

**RESPONSE TO COMMENTS
DRAFT RECORD OF DECISION (ROD), OPERABLE UNIT (OU) 2B
LANDFILL SITES 2 AND 17
MCAS EL TORO, CALIFORNIA**

<p>Originator: Jim A. Bartel, Assistant Field Supervisor US Department of the Interior, Fish and Wildlife Service</p> <p>To: Joseph Joyce, BRAC Environmental Coordinator MCAS El Toro</p> <p>Date: April 5, 1999</p>	<p>CLEAN II Program Contract No. N68-711-92-D-4670 CTO-0135 File Code: 02221</p>
<p>4. Bullet 5 addresses land use restrictions. Please revise as follows “Land-use restrictions will be used to protect the landfill cover, restrict irrigation, prevent use of groundwater, assure that contact with landfill material does not occur, and allow DON and the FAA signatories access to the site for the purpose of conducting or overseeing monitoring and maintenance.”</p>	<p>RESPONSE: Bullet 5 has been revised as requested.</p>
<p>5. Page 5-15 - Figure 5-1. The legend includes “date sample taken” but it is not included on subsequent figures. Please include date sample taken on subsequent figures, Figures 5-2 through 5-13. Sample results reported in the Remedial Investigation (RI) report for landfills 2 and 17 report results for samples collected in 1995 and 1996. Are more recent data available?</p>	<p>RESPONSE: The sample date (or time period) when the samples were collected will be added to all figures in the ROD.</p> <p>Groundwater samples have been collected subsequent to the RI. The figures containing the results of groundwater sampling will be updated to show the latest published results for Sites 2 and 17.</p>
<p>6. Figure 5-6 (no pagination). Results for radionuclide, Gross Alpha of 16.3, 17.4, 17.9, and 26 pCi/L in the groundwater at site 2 exceed the Maximum Contaminant Level (MCL) of 15 pCi/L for drinking water. MCLs are also exceeded for chromium, nickel, and selenium in groundwater at Site 2. What is the depth of ground water samples collected at Site 2? This should be added to the legend in Figure 5-6. Please comment on the source of radionuclides in the groundwater at site 2.</p>	<p>RESPONSE: The depth at which groundwater samples were taken will be added to the data boxes on Figure 5-6.</p> <p>Metals and radionuclides in groundwater were evaluated by means of technical memoranda titled “Evaluation of Metals in Groundwater” and “Radionuclides in Groundwater.” The memoranda are found in Appendix E of the Draft CERCLA Groundwater Monitoring Plan that was issued in July 1998. The evaluations showed that the concentrations of metals and radionuclides at Site 2 appear to reflect ambient concentrations of these constituents at MCAS El Toro and do not appear to be the result of site specific activities.</p>

**RESPONSE TO COMMENTS
DRAFT RECORD OF DECISION (ROD), OPERABLE UNIT (OU) 2B
LANDFILL SITES 2 AND 17
MCAS EL TORO, CALIFORNIA**

<p>Originator: Jim A. Bartel, Assistant Field Supervisor US Department of the Interior, Fish and Wildlife Service</p> <p>To: Joseph Joyce, BRAC Environmental Coordinator MCAS El Toro</p> <p>Date: April 5, 1999</p>	<p style="text-align: right;">CLEAN II Program Contract No. N68-711-92-D-4670 CTO-0135 File Code: 02221</p>
<p>7. Page 5-27 - Figure 5-7. The units for radionuclides should be picocuries per liter (pCi/L) rather than picocuries per gram (pCi/g) for surface water and seep water. Results at site 2 for radionuclide, Gross Beta in surface water exceed MCLs for drinking water. Results for Gross Beta of 127 pCi/L at sample location 02_EF1, 144 pCi/L at sample location 02SW2, and 67 pCi/L at 02SW3 exceed the 50 pCi/L MCL. What is the source of radionuclides in the surface water at concentrations exceeding MCLs? Was either of the landfills ever used as a repository/disposal of radioactive wastes?</p>	<p>RESPONSE: The units for the radionuclides will be changed to pCi/L for surface and seep water.</p> <p>There are no official records or direct knowledge of radioactive materials being disposed at any of the MCAS El Toro landfills. However, a limited amount of scrap parts (radioluminescent dials and gages for aircraft) may have been inadvertently been placed in Sites 3 and 5. (Sites 3 and 5 are more likely to have received these parts than Sites 2 and 17 because Sites 3 and 5 were operational when radium paint was utilized at the base. Sites 2 and 17 were not in operation until well after the use of radium paint was discontinued by the Navy.)</p> <p>The concentrations of radionuclides in surface water are not believed to be associated with the landfills. Surface water is actually a misnomer and will be corrected. Seep water at Site 2 is the only surface water that remains for extended time periods. The rest of the "surface water" samples were taken during storm events and represent transient, turbulent conditions. The title of the figure will be changed to reflect the actual conditions under which the samples were collected.</p>
<p>8. Page 5-27 - Figure 5-7. Narrative Water Quality Objectives provided in the Water Quality Control Plan Santa Ana River Basin apply to Borrego Canyon Wash and San Diego Creek drainage. As shown Table 1, results of metals in surface water collected downgradient from Site 2 exceed criteria set to be protective of aquatic life. According to the BCP 1999, background levels in surface waters have not been established for MCAS El Toro. It should be determined if the landfill is contributing to the metal concentrations in surface waters adjacent to and downgradient of the landfill at sample locations 02_WF1; 02SW2; 02_EF2; and 02_EF1.</p>	<p>RESPONSE: As noted in the response to Comment 7, "surface water" samples were actually collected during storm events. Under such conditions, total metal concentrations can be overstated because of the turbulent conditions of the water. As such, it is not believed that the landfills are contributing to the total metals concentrations in the stormwater runoff. Additionally, there are numerous upstream, off-Station sources that could be potentially contributing to the metal concentrations in the stormwater.</p>

RESPONSE TO COMMENTS
DRAFT RECORD OF DECISION (ROD), OPERABLE UNIT (OU) 2B
LANDFILL SITES 2 AND 17
MCAS EL TORO, CALIFORNIA

<p>Originator: Jim A. Bartel, Assistant Field Supervisor US Department of the Interior, Fish and Wildlife Service</p> <p>To: Joseph Joyce, BRAC Environmental Coordinator MCAS El Toro</p> <p>Date: April 5, 1999</p>	<p style="text-align: right;">CLEAN II Program Contract No. N68-711-92-D-4670 CTO-0135 File Code: 02221</p>
<p>9. Page 5-39, Figure 5-13. Concentrations for metals are expressed in micrograms per liter (µg/l) whereas metal concentrations are reported as milligram/liter (mg/l) in other figures, e.g., Figure 5-6. Are these units correct for Figure 5-13? It would be helpful to use consistent units for the same parameters.</p>	<p>RESPONSE: The units shown on Figure 5-6 are correct. However, DON agrees with FWS that it would be helpful if the units shown on the figures were consistent and will change the units accordingly.</p>
<p>10. Page 7-3 and 7-4 - Section 7.2.1. As stated in the Draft ROD, "The institutional controls identified fall into two broad categories: 1) restrictions on future land use and 2) provision for access for potential future monitoring and maintenance activities by the FFA signatories if DON conducts them and for access by DON and the FFA signatories if DOI agrees to perform those responsibilities." The phrase "if DOI agrees to perform those responsibilities" should be deleted. Suggested revision for item #2 is as follows: "2) provision for access for potential future monitoring and maintenance activities conducted by DON and oversight of those activities by the FFA signatories." Clarification is essential because Section 7.2.1.2, Page 7-5 defines monitoring activities to include landfill gas monitoring, leachate monitoring, and groundwater monitoring for natural attenuation. Maintenance activities will include maintenance of security features (i.e., fences, signs, locks) and monitoring equipment. It is also stated on Page 7-15 that "maintenance activities will be expanded to include maintaining the landfill cap, rodent control measures, and erosion and drainage controls associated with the landfill cap." We do not agree to perform <u>any</u> monitoring, maintenance, or corrective action responsibilities associated with Sites 2 or 17. This will be set forth in the ROD as well as in any future agency-to-agency transfer documentation. This is essential inasmuch as it has come to our attention that regulatory agencies (EPA and DTSC) have rejected the natural attenuation and will require a treatability study of the groundwater as a part of the remedy at site 2, see Section 7.3.3.</p>	<p>RESPONSE: The phrase "if DOI agrees to perform these responsibilities" will be deleted.</p> <p>The statement regarding natural attenuation is correct. At the request of U.S Environmental Protection Agency (EPA), the remedy for groundwater at Site 2 is no longer addressed in the Site 2/17 ROD. Groundwater remediation will be addressed in a separate ROD or in an amendment to the Site 2/17 ROD.</p>

**RESPONSE TO COMMENTS
DRAFT RECORD OF DECISION (ROD), OPERABLE UNIT (OU) 2B
LANDFILL SITES 2 AND 17
MCAS EL TORO, CALIFORNIA**

<p>Originator: Jim A. Bartel, Assistant Field Supervisor US Department of the Interior, Fish and Wildlife Service</p> <p>To: Joseph Joyce, BRAC Environmental Coordinator MCAS El Toro</p> <p>Date: April 5, 1999</p>	<p style="text-align: right;">CLEAN II Program Contract No. N68-711-92-D-4670 CTO-0135 File Code: 02221</p>
<p>11. Page 7-4 - Section 7.2.1. The last sentence states that the actual drafting of the legal instruments relating to institutional controls will occur prior to the transfer. Institutional controls and land use restrictions limit the activities within the landfill boundaries of Sites 2 and 17. We understand the institutional controls set forth in Section 7.2.1.1. Are there additional institutional controls and/or land use restrictions that are not provided in the Draft ROD? We request you specify areas where the land use restrictions associated with Sites 2 and 17 will apply.</p>	<p>RESPONSE: Institutional controls for Sites 2 and 17 will be further defined in a Land Use Control Implementation and Certification Plan. The plan will be part of the Operation and Maintenance Plan required under Subparagraph 7.3(a)(17) of the Federal Facility Agreement. The LUCICP will address the following elements:</p> <ul style="list-style-type: none"> • a description and location of the sites, including a map; the approximate size of the site; and a description of any chemicals of concern. • the land-use control objectives and restrictions stated in the ROD; • the specific legal mechanism that will be used to achieve the ROD's land-use control objectives and restrictions; • the required frequency for periodic inspection of the sites; • identification of the entities responsible for carrying out the monitoring and inspection; • the methods for periodically certifying compliance with institutional controls upon completion of inspections; and • procedures for notifying the DON and FFA signatories in the event of a failure to comply with land-use restrictions. <p>FWS will have the opportunity to input into and review this document.</p> <p>The Draft Final ROD will also be revised to fully reflect Section 25232 of the California Health and Safety Code by adding prohibitions against building hospitals for humans, schools for people under 21 years of age, and any permanently occupied human health habitation other than those used for industrial purposes.</p> <p>At a meeting between DON and USFWS held on April 8, 1999, USFWS expressed concern that there might be restrictions against, for example, walking on the land. DON assured USFWS that this would not be the case. However, activities that could jeopardize the landfill cap, such as allowing off-road vehicles (which could cause erosion) on the property, would be prohibited.</p>

**RESPONSE TO COMMENTS
DRAFT RECORD OF DECISION (ROD), OPERABLE UNIT (OU) 2B
LANDFILL SITES 2 AND 17
MCAS EL TORO, CALIFORNIA**

<p>Originator: Jim A. Bartel, Assistant Field Supervisor US Department of the Interior, Fish and Wildlife Service</p> <p>To: Joseph Joyce, BRAC Environmental Coordinator MCAS El Toro</p> <p>Date: April 5, 1999</p>	<p style="text-align: right;">CLEAN II Program Contract No. N68-711-92-D-4670 CTO-0135 File Code: 02221</p>
<p>12. Page 7-4 - <u>Section 7.2.1.1, Land Use Restrictions.</u></p> <p>Please reverse the order of the two sentences in this paragraph because approval will be sought first before taking any actions regarding land use restrictions.</p>	<p>RESPONSE: This section has been rewritten and no longer contains the sentence referred to in this comment.</p>
<p>13. Page 7-4 - <u>Section 7.2.1.1, Future Land Use.</u> It is stated that Landfills 2 & 17 will be restricted from future use for residential purposes or day care centers for children. Will there be any other restrictions for public use associated with the Sites 2 and 17?</p>	<p>RESPONSE: As noted in the response to Comment 11, in addition to construction of day care centers and residences, there are 3 additional land uses prohibited by the California Health and Safety Code, Section 25232. They are: construction of a hospital for humans, a school for persons under 21 years of age, and any permanently occupied human habitation other than those used for industrial purposes. Together, DON and FWS will look for any additional restrictions at the time the LUCICP is produced.</p>
<p>14. Page 7-4 - <u>Section 7.2.1.1, Restrictions to Protect Remedy.</u> Animal intrusions at waste sites have been well documented in the literature (Suter et al. 1993). Animals (e.g., the California ground squirrel, coyote, and Southwestern pocket gopher) given in table 3-14 of the Draft Final Phase II Remedial Investigation report (BNI, Inc. 1997), near the site are likely to burrow to a greater depth than the four foot soil cap proposed for Sites 2 & 17. Measures have been taken to prevent other biotic intrusions such as root penetration by prohibiting planting of vegetation over the landfill cap without approval from DON. Please address what measures will be taken by DON to protect the integrity of the cap from burrowing mammals associated with these sites.</p>	<p>RESPONSE: DON plans to address the issue of burrowing animal intrusions during remedial design of the landfill caps. As discussed at the April 8 meeting with FWS, DON welcomes FWS input into the most effective means of minimizing such intrusions.</p>

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LANDFILL SITES 2 AND 17
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<p>Originator: Jim A. Bartel, Assistant Field Supervisor US Department of the Interior, Fish and Wildlife Service</p> <p>To: Joseph Joyce, BRAC Environmental Coordinator MCAS El Toro</p> <p>Date: April 5, 1999</p>	<p style="text-align: right;">CLEAN II Program Contract No. N68-711-92-D-4670 CTO-0135 File Code: 02221</p>
<p>15. Page 7-8 - Section 7.3. Alternative 3, DON's selected alternative, includes landfill capping, institutional controls, and monitoring. It is stated that "monitoring would be augmented in Alternative 3 to add additional monitoring equipment and address soil gas, perimeter gas, leachate, and groundwater at both sites. Security features (e.g., fences, locks, signs) would also be added to sites not currently containing these features. The landfill cap, settlement monuments, erosion control features (e.g. riprap, vegetation, drainage channels), and security features would be inspected periodically and repaired as necessary. Groundwater remediation would occur through natural attenuation of VOCs at Site 2. Groundwater monitoring will be used to confirm the effectiveness of this natural process. Institutional controls would be used to prohibit use of groundwater at both sites." If this additional monitoring equipment is covered in Section 9 and Tables 9.4 and 9.5, it would be helpful to cross reference that section.</p>	<p>RESPONSE: Section 9 of the ROD discusses the selected remedy for the landfill sites and contains additional monitoring details. A reference to this section will be added to Section 7. 3.</p>
<p>16. Page 7-9, Section 7.3.1 Landfill Cap. Paragraph 2 states that 39,000 cubic yards of excavated soil from OU-3A Sites 8, 11, & 12 will be placed into sites 2 and/or 17 landfills. Has the soil targeted for removal from OU-3A been analyzed for contaminants? The "Draft Environmental Impact Statement (EIS) for the Disposal and Reuse of Marine Corps Air Station El Toro Orange, County Irvine, California" states that material disposed of at Site IRP 8 was contaminated by the release of PCB containing transformer fluid (K.E.A Environmental 1998). According to the EIS, PCB-containing transformers were stored at Site 11 and wastewater sludges from sludge drying beds were disposed at Site 12. Will clean soil or contaminated soil be excavated from Sites 8, 11, and 12 and placed at Sites 2 and/or 17? We note that it is stated that no hazardous waste will be recycled into Site 2 and/or 17; however, if contaminated soil will be placed into landfills 2 and/or 17, please provide us with a list of contaminants and maximum concentrations expected to be removed from OU3A and transferred to</p>	<p>RESPONSE: The proposed placement of OU-3A soils into Sites 2/17 represents only one disposal option. (Off-site disposal in an approved facility is another option.)</p> <p>A list of contaminants and maximum concentrations was provided to FWS at the April 8 meeting.</p> <p>The transfer of contaminated soil from Sites 8, 11, and 12 was not taken into account in the Site 2 risk assessment. Any contaminated soil from Sites 8, 11, and 12 that is moved to Sites 2 or 17 would be used as foundation material. The soil, like the landfill contents below, would be covered by a minimum of a 4-foot monolithic soil cap. The monolithic soil cap will eliminate risk from landfill materials by severing the pathway for exposure.</p>

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<p>Sites 2 and/or 17. Was the transfer of contaminated soil (if applicable) from OU3A taken into account in the risk assessments conducted for Sites 2 and 17?</p>	
<p>17. We support EPA's recommendation that DON submit a Land-Use Control Implementation and Certification Plan (LUCICP) that develops actions necessary to achieve land-use restrictions discussed in the ROD. We request that a copy of the draft LUCICP be submitted to this office for review and comment.</p>	<p>RESPONSE: DON has committed to produce a LUCICP as requested by EPA. DON intends to work with FWS to produce this document and will submit a draft to FWS for review and comment, as requested.</p>
<p>18. Page 7-10 - Section 7.3.2, Institutional Controls. It is stated that institutional controls for Alternative 3 (DON's selected alternative) are basically the same as the institutional controls for Alternative 2 and refers the reader to Section 7.2.1. Reference to Section 7.2.1 is acceptable if responsibility for future maintenance and monitoring as described above for that section is clarified. Please see our comments to Section 7.2.1 regarding institutional controls.</p>	<p>RESPONSE: Responsibility for future maintenance and monitoring will be clarified in a MOU which will accompany the federal agency to agency transfer documentation (please see the response to General Comment 1).</p>
<p>19. Page 7-15 - 7.3.2, Institutional Controls, Bullet 4. We would appreciate the opportunity to coordinate with DON if rodenticides are to be used.</p>	<p>RESPONSE: As noted in the response to Comment 14, DON will be pleased to work with FWS to develop an effective means of minimizing the impact of rodent intrusions into the landfill cap. The actual means will be developed during the remedial design phase and may or may not include use of rodenticides.</p>

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<p>20. Page 7-15 - Section 7.3.3, Groundwater Remediation at Site 2 for the selected remedy, Alternative 3, it is stated that "Groundwater remediation of VOCs at Site 2 will take place through natural attenuation as discussed in Section 7.2.2." We understand that based on DON's study referenced on Page 7-6 using the AFCEE protocol, it was concluded that reductive dehalogenation does not appear to be occurring in the TCE plume. In addition, we understand natural attenuation has not been demonstrated and has been rejected by the regulatory agencies. It is our understanding that a treatability study for the VOC plumes will be required as a part of the remedy in lieu of natural attenuation at site 2.</p>	<p>RESPONSE: DON's study of natural attenuation at Site 2 was not conclusive as to whether reductive dehalogenation is occurring or not. Therefore, DON has removed the discussion of the groundwater remedy from the draft final ROD. The remedial action for groundwater at Site 2 will be finalized by means of a separate ROD or by an amendment to the Site 2/17 ROD.</p>
<p>21. Page 9-1 - Selected Remedy. Please revise Bullet 4 as follows "land-use restrictions and access requirements as set forth in Section 7.2.1.1 and 7.3.2 will be set forth in a Memorandum of Understanding between DON and the Service to protect the landfill cover and assure that contact with landfill materials does not occur."</p>	<p>RESPONSE: Bullet 4 will be revised as requested.</p>

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<p>22. Page 9-1 - Selected Remedy. Paragraph 2 states that elevated metals occur at each landfill site and that these elevated metal concentrations reflect natural ambient conditions at MCAS El Toro. This statement should be qualified as to the media it is referencing, e.g., groundwater. In view of the fact that background metal concentrations in surface water have not been established at MCAS El Toro, this conclusion cannot be fully supported given the fact that metal concentrations in surface water drainage downgradient of the landfills are elevated and exceed protective criteria for aquatic life. A determination needs to be made if leachate from the landfills is contributing to the elevated metal concentrations in the surface water.</p>	<p>RESPONSE: The statement will be revised as requested to clarify that the medium being addressed is groundwater.</p> <p>The only area where groundwater surfaces at Site 2 is at the location of a seasonal seep. The concentrations of analytes detected in seep water are shown on Figure 5-7 and are below the concentrations cited by USFWS in Table 1. The rest of the surface water samples depicted on Figure 5-7 were taken during storm events. As noted in the response to Comments 7 and 8, the concentrations of total metals in these samples is believed to be high because of the turbulent conditions under which the samples were collected and not because of impact of leachate from the landfill.</p>
<p>23. Page 9-2, Last Paragraph. Please revise the first sentence to read "Upon review of the monitoring reports, DON may need to implement corrective actions if landfill contaminants are increasing in concentration or migrating beyond their current locations." If Sites 2 and 17 are transferred to the Service in the future, we believe it is essential to identify the Federal lead agency responsible for any potential corrective action associated with Sites 2 and 17.</p>	<p>RESPONSE: The sentence will be revised as requested.</p>
<p>24. Page 10-7, Paragraph 3. According to the last sentence, Special status-plants and animals in the vicinity of El Toro are given in the FS reports. Please clarify whether these species are addressed in RI reports rather than the FS reports.</p>	<p>RESPONSE: The reference to the FS reports was incorrect. The special status species are listed in the RI reports. This will be corrected.</p>
<p>25. Page 10-7 - Paragraph 4, The coastal California gnatcatcher is a federally threatened not a "federal listed special status species." Please revise.</p>	<p>RESPONSE: The information will be corrected as requested.</p>

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<p><u>Responsiveness Summary</u></p> <p><u>Response to Written Comments:</u></p> <p>26. Comment number 3 - According to K. F. Bankuthy, Jr. the Irvine Ranch Water District (IRWD) has "facilities within the work area that need to be maintained." We do not have a location map of these utilities at this time to determine if Mr. Bankuthy is referencing areas associated with landfills 2 and 17. Maintenance of these and any other utility lines need to be addressed and the responsible party identified.</p>	<p>RESPONSE: Information on the location of the utilities will be provided to the FWS.</p>
<p><u>Section "Response to Comments From the U.S. Department of Interior."</u></p> <p>27. Soil samples were not taken to the maximum depth of burrowing activity to assess this pathway of exposure. Therefore, the risk assessment conducted at the sites failed to fully evaluate all pathways of exposure to burrowing animals. However, we believe any potential risk can be mitigated by DON's selected remedy if the cap design ensures that this pathway of exposure to ecological receptors is broken by providing a barrier adequate to prevent intrusion into the landfill by burrowing activity.</p>	<p>RESPONSE: DON will work with FWS to ensure that the cap design is adequate to minimize intrusion by burrowing animals.</p>

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<p>28. Likewise the ecological risk assessment failed to fully evaluate all pathways of exposure to the federally threatened coastal California gnatcatcher. During the risk assessment, insects were not assessed as a food source in evaluating risk to gnatcatchers via the food pathway. Instead, contaminants in plants were evaluated to determine risk to the gnatcatcher in the risk assessment via the food pathway. Gnatcatchers feed primarily on insects; plants would constitute a minimal portion of their diet. Modeling of a surrogate species for the gnatcatcher did show risk to avian species at Landfill 2 and 17 during the Ecological Risk Assessment. However, failure to evaluate contamination in prey that is the principal portion of the gnatcatcher's diet constitutes a data gap and may therefore underestimate risk to a federally threatened species. This data gap warrants further investigation. DON stated that there is one breeding territory at least partially on Site 2 that has been in use in 1995 and 1996. What about the use of Site 2 in 1997 and 1998? DON further stated that upon "closer examination of gnatcatchers" at the site, they do not appear to be affected by chemicals or investigative activities. Please provide data to support the conclusion that gnatcatchers are not affected by chemicals at the site. How was this determined? Were sublethal effects considered in this determination?</p>	<p>RESPONSE: As discussed in the April 8 meeting with FWS, DON agrees that further monitoring of the gnatcatcher with FWS could be an appropriate approach to evaluate the impact of the landfill remedy on the gnatcatcher.</p> <p>DON thanks the FWS for their comments and input on the remedial alternative for Sites 2 and 17 and looks forward to working with this agency to effect a timely and effective transfer of the property containing these sites.</p>

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<p>If definitive data on risks presented to the gnatcatcher are unavailable, we are willing to consider the selected remedy if DON will provide data to demonstrate efficacy of the remedy over time. A monitoring plan for the gnatcatcher to demonstrate protection of this species should be submitted to this office for approval as a part of this remedy. We are willing to work with DON in developing this plan. Without this data, risk to the gnatcatcher from hazardous releases at the site remains unknown.</p> <p>References:</p> <p>Bechtel National, Inc. 1997. Draft Final Phase II Remedial Investigation Report Operable Unit 2B - Site 2 Marine Corps Air Station El Toro, California Volume I of VI, CTO-0076-0554.</p> <p>California Regional Water Quality Control Board. Santa Ana Region. 1995. Water Quality Control Plan, Santa Ana River Basin (8). Santa Ana Regional Water Quality Control Board.</p> <p>Department of the Navy. 1999. Base Realignment and Closure Cleanup Plan (BCP) for Marine Corps Air Station El Toro, CA.</p>	

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<p>K.E.A. Environmental 1998. "Review Draft Environmental Impact Statement for the Disposal and Reuse of Marine Corps Air Station El Toro"</p> <p>National Toxic Rule (NTR). 57 FR 60853.</p> <p>Sutter II, G.W., R.J. Luxmoore, and E.D. Smith. 1993. Compacted Soil Barriers at Abandoned Landfill Sites are Likely to Fail in the Long Term. J. Environ. Qual. 22:217-226.</p>	

**RESPONSE TO COMMENTS
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<p>Originator: Glenn R. Kistner, RPM US EPA</p> <p>To: Joseph Joyce, BRAC Environmental Coordinator MCAS El Toro</p> <p>Date: January 29, 1999</p>	<p style="text-align: right;">CLEAN II Program Contract No. N68-711-92-D-4670 CTO-0135 File Code: 02221</p>
<p><u>GENERAL COMMENTS</u></p>	<p><u>RESPONSES TO GENERAL COMMENTS</u></p>
<p>1. Please add a description of the habitat mitigation measures to be undertaken to the <u>Declaration</u> and to <u>Section 9</u>.</p>	<p>RESPONSE 1: DON is currently negotiating habitat mitigation measures with the Department of the Interior. These measures will be resolved outside of the ROD. For clarity, a bullet has been added to page 2 of the Declaration and to page 9-1, "Selected Remedy," stating that "natural resource/habitat mitigation measures will be coordinated with the U.S. Fish and Wildlife Service."</p>
<p>2. Natural attenuation in the groundwater has not been demonstrated thus far (attachment), therefore, EPA will not accept it as part of this remedy. EPA would be willing however to consider a treatability study - over a 5 year period, to assess the viability of <i>Monitored Natural Attenuation</i> at Sites 2 and 17. In the meantime, the Navy needs to propose a contingency plan that will address the potential for plume migration and/or contamination level increases.</p>	<p>RESPONSE 2: DON has discussed this issue further with U.S. EPA and has agreed that the Site 2/17 ROD shall present the final remedy for soil and groundwater at Site 17 and for soil at Site 2. The remedy for groundwater will be presented in a separate ROD or as an amendment to the Site 2/17 ROD.</p>
<p>3. Tables showing chemical concentrations in groundwater, etc., should contain recent data that is more indicative of current conditions, not data that is several years old.</p>	<p>RESPONSE 3: Figures showing concentrations of analytes in groundwater at Sites 2 and 17 will be updated to show the results of the most recent published round of groundwater monitoring.</p> <p>The tables that are contained in the ROD are a compilation of data that was collected during the RI of Sites 2 and 17. The tables correspond with the narrative discussion in Section 5 and therefore will not be revised. However, DON has added 2 new tables that summarize the results of groundwater monitoring performed subsequent to the RI.</p>
<p>4. The ROD should state that an Institutional Control (IC) Monitoring, Compliance and Certification Plan will be submitted as part of the Remedial Design.</p>	<p>RESPONSE 4: The discussion of institutional controls has been revised to note that a Land-Use Control Implementation and Certification Plan (LUCIP) outlining the monitoring and compliance steps necessary to achieve the land-use restrictions/controls established in the ROD, will be developed as part of remedial design for the landfill sites.</p>
<p>5. VOC groundwater concentration values on the Figures should be shown in $\mu\text{g/L}$ rather than mg/L.</p>	<p>RESPONSE 5: VOC concentrations will be expressed in $\mu\text{g/L}$ as requested.</p>

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<p><u>SPECIFIC COMMENTS</u></p>	<p><u>RESPONSES TO SPECIFIC COMMENTS</u></p>
<p>1. <u>Description of the Remedy</u>, pg. 2, 2nd bullet; add “Treatability Study” to ... “ document the progress of the natural attenuation process.”</p>	<p>RESPONSE 1: Please see the response to General Comment 2. The draft final ROD will no longer present the remedy for groundwater at this site.</p>
<p>2. Add a bullet to <u>Description of the Remedy</u> that describes the mitigation measures to be implemented.</p>	<p>RESPONSE 2: Please see the response to General Comment 1. DON is currently negotiating with the Department of the Interior on the issue of habitat mitigation measures. This issue will be resolved outside of the ROD.</p>
<p>3. <u>Figure 5-6</u>; Why are the sampling results from 1995 and not from more recent sampling? More recent groundwater data should be used to show current conditions.</p>	<p>RESPONSE 3: Figures 5-6 and 5-13 have been revised to show the latest published groundwater monitoring results.</p>
<p>4. From which sampling event is groundwater analytic results shown on <u>Figure 5-13</u>? Are they the most recent?</p>	<p>RESPONSE 4: Please see the response to Comment 3.</p>
<p>5. Pg. 7-2, first paragraph; the statement ... “the solvent plumes in groundwater at Site 2 are expected to be reduced by natural attenuation.” is not supported at this time and should be deleted.</p>	<p>RESPONSE 5: The statement has been deleted as suggested.</p>
<p>6. <u>Section 7.3.3</u>; change sentence to reflect that a 5 year treatability study will be conducted.</p>	<p>RESPONSE 6: Since the Site 2/17 ROD no longer addresses remedial action for groundwater, references to a treatability study have not been added.</p>
<p>7. <u>Section 9, Selected Remedy</u>, 5th bullet; change to - “a pilot study to evaluate Natural Attenuation.”</p>	<p>RESPONSE 7: Please see the response to Comment 6.</p>
<p>8. Include a Contingency Plan as part of the <u>Selected Remedy</u>.</p>	<p>RESPONSE 8: Please see the response to General Comment 2. The final groundwater remedy for Site 2 will be addressed in a separate ROD or in an amendment to the Site 2/17 ROD.</p>
<p><u>RESPONSIVENESS SUMMARY</u> <u>COMMENTS FROM JUNE 18, 1998 PUBLIC MEETING</u></p>	
<p>1. pg. 4, # 3; please add “ whenever waste is left in place.” to the end of the Navy’s <u>Response</u>.</p>	<p>RESPONSE 1: This phrase has been added as requested.</p>

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<p>COMMENTS FROM EPA ATTORNEY - THELMA ESTRADA</p> <p>SPECIFIC COMMENTS:</p> <p>1. p.2: refers to groundwater monitoring requirements. Unless these are part of the landfill closure requirements, these should be deleted. If there are groundwater monitoring requirements that are part of landfill closure, we should decide whether these groundwater monitoring requirements would be met by the groundwater remediation that will be addressed in a separate document and whether we should just state that groundwater monitoring will be undertaken as part of the groundwater remediation.</p>	<p>RESPONSE 1: Please see the response to General Comment 2. The draft final ROD is being revised to present the final remedies for soil and groundwater at Site 17 and soil only at Site 2. The remedy for groundwater at Site 2 will be addressed in a separate ROD or in an amendment to the Site 2/17 ROD.</p> <p>The Site 17 groundwater detection monitoring requirements that are presented in the ROD are part of the landfill closure requirements. Groundwater monitoring requirements for Site 2 have been revised and are now intended solely to detect new releases. Additional groundwater monitoring required to assess the effectiveness of the groundwater remedy at Site 2 will be addressed along with the groundwater remedy in a separate ROD or ROD amendment.</p>
<p>2. p.7-4: Land Use Restrictions - delete the second to the last sentence in this paragraph as well as the phrase "and conducting additional remedial action" from the last sentence. Any agreement between the DON and the transferee (as to who pays for any additional remedial action) does not alter the DON's responsibility under CERCLA for the long-term effectiveness and protectiveness of the remedy it selects.</p>	<p>RESPONSE 2: The discussion of institutional controls has been revised in the Draft Final ROD and the statements noted in this comment have been deleted.</p>
<p>3. p.7-5: Irrigation - does this mean that there will be no irrigation at all? Is this not an issue at these landfills for the LRA?</p>	<p>RESPONSE 3: Irrigation will be restricted to allow only the minimum required to establish a vegetative cover on the landfill caps. Irrigation is a key issue at Sites 3 and 5 which are currently planned for recreational use (i.e., golf course and park, respectively). However, irrigation is not planned at Sites 2 and 17. Sites 2 and 17 are planned to be transferred to the Department of Interior for use as a (non-irrigated) habitat reserve.</p>
<p>4. p.7-6: Notification - second paragraph: add the phrase "remedy for the" before the word "site."</p>	<p>RESPONSE 4: The phrase has been added as requested.</p>
<p>5. p.7-7: Monitoring - states that at Site 2, only groundwater would be monitored. See my comment above re groundwater; will there be no monitoring of landfill gas and leachate at these landfills? Also,</p>	<p>RESPONSE 5: The discussion on Page 7-7 is part of the description of Alternative 2. Alternative 2 consists of monitoring using existing equipment installed at the landfill sites and institutional controls. Site 2 does not contain</p>

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<p>the last paragraph on this page refers to a Groundwater Monitoring Plan. Is this just for site 17 or is it also for site 2? Is this Groundwater Monitoring Plan required for landfill closures or is it being done as part of the groundwater remediation?</p>	<p>landfill gas probes or leachate sampling probes. Therefore, Alternative 2 does not address landfill gas or leachate monitoring at Site 2.</p> <p>Under Alternatives 3 (the selected alternative), 4, and 5, additional equipment would be added to monitor soil gas, perimeter gas, leachate, and groundwater. The Groundwater Monitoring Plan referred to on Page 7-7 addresses routine groundwater sampling that is performed at MCAS El Toro.</p>
<p>6. p.8-3: First full par. on the top of this page - states that alternative 3, 4, and 5 are expected to meet the ARARs. Does this apply to all the alternatives under 4 (a, b, c, and d) as well?</p>	<p>RESPONSE 6: Yes. The sentence has been rewritten to reflect that Alternatives 3, 4 (a, b, c, and d), and 5 (a, b, c, and d) will meet the ARARs for the remedial action at Sites 2 and 17.</p>
<p>7. p.8-4: Second par. - the last sentence here states that the remaining alternatives are more effective than alternative 4a in reducing infiltration. Yet, the previous sentence states that alternative 4a is the Title 27 prescriptive cap. This is confusing.</p>	<p>RESPONSE 7: Alternative 4a, the Title 27 prescriptive cap, consists of a foundation layer, a barrier layer comprised of clay, and a vegetative layer. This cap does not completely eliminate infiltration into the landfill. 27 CCR 20080 (b) and (c) and 21090 (a) allow engineered alternatives to the prescriptive cap provided these alternatives provide equivalent water quality protection. As part of the feasibility study, modeling was performed to determine how much infiltration each cap design allowed. Based on the modeling results, Alternatives 4c, 4d, 5c, and 5d are more effective than the prescriptive cap in reducing infiltration into the landfill.</p> <p>This paragraph has been rewritten to eliminate the confusion.</p>
<p>8. p.8-5: There are infiltration rates listed on this page which are different from the infiltration rates listed in Table 8-1. Am I missing something here?</p>	<p>RESPONSE 8: Table 8-1 presents the infiltration rates that were developed based on modeling performed in the feasibility study using a U.S. EPA model for hydraulic evaluation of landfill performance (HELP). Subsequent to issuing the draft final FS report, DON collected additional soil samples from the area designated as the borrow source in order to determine a more accurate value for the mean hydraulic conductivity. Infiltration into the landfill was then reevaluated using the revised hydraulic conductivity and a second computer model (UNSAT-H). The results of the UNSAT-H model confirmed the results of the HELP model.</p> <p>To eliminate confusion, the results of the UNSAT-H model have been</p>

RESPONSE TO COMMENTS
DRAFT RECORD OF DECISION, OPERABLE UNIT (OU-2B)
LANDFILL SITES 2 AND 17
MCAS EL TORO, CALIFORNIA

<p>Originator: Glenn R. Kistner, RPM US EPA</p> <p>To: Joseph Joyce, BRAC Environmental Coordinator MCAS El Toro</p> <p>Date: January 29, 1999</p>	<p>CLEAN II Program Contract No. N68-711-92-D-4670 CTO-0135 File Code: 02221</p>
	eliminated from the Draft Final ROD.
<p>9. p.9-2: Last par. - makes reference to corrective actions that may need to be implemented. To avoid confusion with the corrective action required under State requirements, I would delete this term and use the term "remedial actions." Also in this par., what does LEA stand for?</p>	<p>RESPONSE 9: The term "remedial action" has been substituted for "corrective action" as suggested. LEA stands for local enforcement agency. The definition has been added to Page 9-2 and to the acronym list.</p>
<p>10. p. 10-7: Last par. before the Action-Specific ARARs section - refers to CA Fish and Game Code requirements. I am assuming that these are ARARs because there are requirements here that are more stringent (or broader) than the requirements under ESA.</p>	<p>RESPONSE 10: This assumption is correct.</p>
<p>11. p.10-8: Second full par. from the top of the page - makes reference to Orange County Code. Local rules are not ARARs. The par. that follows states that the specific ARARs re post-closure requirements for landfills will be addressed in the RD phase. These should still be identified here Maybe they are in the ARARs Table; if so, the Table should be referenced in this narrative section.</p>	<p>RESPONSE 11: Page 10-8 has been revised to clarify that the Orange County Code is not an ARAR because it is a local rule.</p> <p>The action-specific ARARs for Sites 2 and 17 are found in Table 10-3. A reference to this table has been added to the first paragraph in Section 10.2.3.</p> <p>The intent of the sentence referenced in this comment was to say that <i>plans for complying with</i> these action-specific ARARs (e.g., how to mitigate fugitive dust) would be developed during the remedial design phase. To avoid confusion, the entire paragraph was deleted.</p> <p>A discussion of action-specific South Coast Air Quality Management District regulations was added in place of the deleted paragraph.</p>
<p>12. p.10-9: Last par. on this page should just be deleted. I think it's repetitive of what is stated in the next page.</p>	<p>RESPONSE 12: The paragraph has been deleted as suggested.</p>
<p>13. p. 10-10: A sentence should be added to this par. that concludes that it is in fact the case at El Toro that the waste pose relatively low long-term threat.</p>	<p>RESPONSE 13: This entire paragraph has been replaced with a more appropriate, standard paragraph taken directly from U.S. EPA Guidance on Preparing Superfund Decision Documents (Exhibit 6-3).</p>
<p>ARARS TABLES:</p> <p>1. p.10-12: First row - what is the application of this requirement to Sites 2 and 17?</p>	<p>RESPONSE 1: 22 CCR 66264.94 was relevant and appropriate because the waste released from the vadose zone to the groundwater at Site 2, in particular</p>

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MCAS EL TORO, CALIFORNIA**

<p>Originator: Glenn R. Kistner, RPM US EPA</p> <p>To: Joseph Joyce, BRAC Environmental Coordinator MCAS El Toro</p> <p>Date: January 29, 1999</p>	<p style="text-align: right;">CLEAN II Program Contract No. N68-711-92-D-4670 CTO-0135 File Code: 02221</p>
	<p>TCE and PCE, is similar in composition to listed waste. Because groundwater remediation at Site 2 is no longer being addressed in the ROD, this ARAR has been deleted.</p>
<p>2. p.10-13: Reference to implementation plans in the Basin Plan should be deleted. Not all of these implementation plans are ARARs and these need to be analyzed separately. The only things we have identified as ARARs in the Basin Plans are: beneficial uses, water quality objectives, both narrative and numerical standards. I would also delete reference to waste discharge requirements (WDRs) because these have generally been used to refer to the permits issued by the WB.</p>	<p>RESPONSE 2: Reference to implementation plans and waste discharge requirements have been deleted as suggested.</p>
<p>3. p. 10-15: Second row - how is this protection of floodplain applicable to sites 2 and 17. Also, since this is already the ROD, I would delete all the ARARs that were analyzed in the FS that we have concluded are not ARARs for this site and remedial actions. For instance, on this page, I would delete the National Historical Preservation Act since it seems that the conclusion is that it does not apply to this site.</p>	<p>RESPONSE 3: The reference to the National Historical Preservation Act has been deleted from Table 10-2 and the text of Section 10. Protection of floodplains is relevant and appropriate to Site 2 because this site is located within a 100-year floodplain. Therefore, the landfill and erosion control features will be designed, constructed, and maintained to avoid washout. In addition, the landfill cap will be designed to allow Borrego Canyon Wash to operation to channel flood waters through the site without overflow.</p>
<p>4. p.-18: Generally, the DOT requirements are not identified as ARARs because they are not environmental standards.</p>	<p>RESPONSE 4: DOT requirements have been deleted as suggested.</p>
<p>5. p.10-20: I would delete the Management memo referenced here as TBC and move it to the narrative section as something that the DON is committing to apply. TBCs are not appropriate in RODs where we generally have firm requirements or performance standards.</p>	<p>RESPONSE 5: The management memo referenced on Page 10-20 has been deleted from Table 10-3. A narrative discussion of this memo is found in Section 10.2.3 (last paragraph).</p>
<p>6. p. 10-21: Last row - see my comment above re groundwater monitoring requirements.</p>	<p>RESPONSE 6: Please see the response to Specific Comment 1. The ROD will address detection groundwater monitoring at Sites 2 and 17. Any additional groundwater monitoring necessary to assess the effectiveness of the groundwater remedy will be presented in a separate ROD or in an amendment to the Site 2/17 ROD.</p>

**RESPONSE TO COMMENTS
DRAFT RECORD OF DECISION, OPERABLE UNIT (OU-2B)
LANDFILL SITES 2 AND 17
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<p>Originator: Glenn R. Kistner, RPM US EPA</p> <p>To: Joseph Joyce, BRAC Environmental Coordinator MCAS El Toro</p> <p>Date: January 29, 1999</p>	<p>CLEAN II Program Contract No. N68-711-92-D-4670 CTO-0135 File Code: 02221</p>
<p>7. p. 10-24: Second row - the comment section should also state that deed restrictions will prohibit the construction of structures within 1000 feet of the landfills, or structures on top of the waste, etc.</p>	<p>RESPONSE 7: The comment section has been revised to state that such construction on top of or within 1,000 feet of the landfill will be prohibited without prior approval.</p>
<p>8. p.10-25: Last row - since we are deleting references to the groundwater remediation at this site, point of compliance is not relevant and appropriate.</p>	<p>RESPONSE 8: Since groundwater remediation is no longer addressed in this ROD, this ARAR has been deleted.</p>
<p>9. p.10-27: Last row - delete the last sentence in the column "Action/Requirement." The CERCLA remedial process is equivalent to the corrective action program under the State Regulations.</p>	<p>RESPONSE 9: The sentence has been deleted as requested.</p>
<p>10. Table 10-5: It was interesting to see the comparison among all the federal and State regulations. However, it wasn't clear to me how the DON made its decision as to what is the "controlling ARAR." An explanation of this determination is necessary.</p>	<p>RESPONSE 10: DON reviewed each portion of the regulations, comparing the state and federal regulations. The federal regulations were considered controlling ARARs except where the state regulations were more stringent. A discussion of this process has been added to the narrative portion of Section 10.</p>

**RESPONSE TO COMMENTS
DRAFT RECORD OF DECISION (ROD) FOR
OPERABLE UNIT (OU)-2B LANDFILL SITES 2 AND 17
MCAS EL TORO, CALIFORNIA**

<p>Originator: Tayseer Mahmoud, RPM DTSC</p> <p>To: Joseph Joyce, BRAC Environmental Coordinator MCAS El Toro</p> <p>Date: January 29, 1999</p>	<p style="text-align: right;">CLEAN II Program Contract No. N68-711-92-D-4670 CTO-0135 File Code: 02221</p>
<p><u>COMMENTS</u></p> <p>The Department of Toxic Substances Control (DTSC) has completed the review of the above subject document dated November 1998. The draft ROD presents the selected remedial action for OU-2B, Landfill Sites 2 & 17 at MCAS El Toro. This letter is to provide comments on the draft ROD. This letter also provide comments on the Technical Memorandum for Natural Attenuation at Site 2, and Technical Memorandum Site 2 Compliance Well Installation which provide supporting documentation for the ROD.</p>	<p><u>RESPONSES TO COMMENTS</u></p>
<p>DTSC comments are as follows:</p> <ol style="list-style-type: none"> Section 7.2.3 Monitoring and Inspections, Page 7-6 - The Draft ROD proposes monitored natural attenuation for two Volatile Organic Compounds (VOC) plumes at Site 2 without prior demonstration that it is occurring at the site. The Draft Technical Memorandum, U.S. Air Force Technical Protocol for Natural Attenuation at Site 2 Magazine Road Landfill, dated December 1998, did not provide conclusive evidence that natural attenuation is occurring. In fact, it recommends that long term monitoring be conducted to support natural attenuation. The Technical Memorandum (section 3.5) lists groundwater parameters that need to be measured to support natural attenuation. However, the Technical Memorandum does not recommend testing for dissolved hydrogen and methane because “they are difficult to collect and are not standard analyses in laboratories.” DTSC disagrees with this justification. Monitored natural attenuation is a remedy and therefore must be evaluated, operated and monitored like other remedies. The Technical Memorandum does not provide a technical justification for not conducting the full suite of groundwater analyses to support natural attenuation. The BRAC Cleanup Team should meet to arrive at a solution for the VOC plumes. 	<p>RESPONSE 1: Based on this comment and comments received from the U.S. EPA, DON has removed the discussion of groundwater remediation at Site 2 from the ROD. The remedy for groundwater at Site 2 will be addressed in a separate ROD or in an amendment to the Site 2/17 ROD. The discussion of groundwater monitoring at Site 2 has also been revised to address only monitoring required for landfill closure. Additional monitoring required to assess the effectiveness of the groundwater remedy will be addressed along with the remedy in a separate ROD or in an amendment to the Site 2/17 ROD.</p>

**RESPONSE TO COMMENTS
DRAFT RECORD OF DECISION (ROD) FOR
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<p>Originator: Tayseer Mahmoud, RPM DTSC</p> <p>To: Joseph Joyce, BRAC Environmental Coordinator MCAS El Toro</p> <p>Date: January 29, 1999</p>	<p>CLEAN II Program Contract No. N68-711-92-D-4670 CTO-0135 File Code: 02221-</p>
<p>2. Section 7.3.1, Landfill Cap, first paragraph - The text regarding borrow source should be revised to confirm that the soil will be mixed prior to compaction to achieve the required permeability.</p>	<p>RESPONSE 2: The sentence has been rewritten as suggested.</p>
<p>3. Section 7.3.1, Landfill Cap, Figure 7-1 - Consistent with the Feasibility Study (FS), the thickness of the cap should be 4 feet minimum. Revise the figure to show the cap thickness a minimum of 4 feet.</p>	<p>RESPONSE 3: Figure 7-1 has been revised to indicate that the 4-foot thickness is a minimum, not a maximum requirement.</p>
<p>4. Section 7.3.1, Landfill Cap, second paragraph, on-site waste consolidation - Add a statement that the Navy will submit a work plan to the regulatory agencies for confirmation sampling of the consolidated areas after the wastes have been removed. Also, the Navy will submit, to the regulatory agencies, the records of waste relocation, volumetric measurements, and the results of the confirmation sampling to show areas C1, C2, D2, B, & C have been cleaned, and information regarding the monitoring conducted to comply with South Coast Air Quality Management District (SCAQMD).</p>	<p>RESPONSE 4: This statement has been added as requested.</p>
<p>5. Figure 7-2, Site 2 Conceptual Grading and Monitoring Plan - Please provide Cross-Section J-J' shown on the drawing.</p>	<p>RESPONSE 5: The reference to the cross section has been deleted. Final landfill cap design drawings and cross sections will be completed at the remedial design phase.</p>
<p>6. Figure 7-2, Conceptual Grading and Monitoring Plan - The Legend notes refers to Figure 4-3 for more details on Cross Section C-C'. Please provide the correct reference. Also provide correct reference to Cross Section E-E'.</p>	<p>RESPONSE 6: The reference to the cross section has been deleted. Final landfill cap design drawings and cross sections will be completed at the remedial design phase.</p>
<p>7. Section 7.3.4, Monitoring and Inspection - Based on our review of the Technical Memorandum, Site 2 Compliance Well Installation, monitoring well 02NEW15 may be missing contaminants that are migrating above the well screen due to a local stratigraphic phenomena or fluctuating groundwater level occurring near the well. Geologic cross sections on Figure 3-1 show significantly</p>	<p>RESPONSE 7: Contaminant levels from HydroPunch™ samples were very low to begin with (in the low parts per billion range). Groundwater sample results from a monitoring well generally do not directly correspond to HydroPunch™ results unless the monitoring well samples are collected using the micropurging technique. This allows groundwater to be sampled from specific high permeability strata instead of across the entire well screen.</p>

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<p>different lithology at groundwater monitoring well 02NEW15 compared to the CPT borehole logs. Stratigraphic logs of the 16 CPT locations across the site show interbedded sands, silty sand and silt layer. At well 02NEW15, only fine to coarse-grained sand was noted during borehole logging. The fine-grain silt layers that were noted at all CPT locations were not logged during installation of monitoring well 02NEW15. The Technical Memorandum should evaluate whether these silty layers are missing at well 02NEW15, or not logged during drilling.</p>	<p>The first 19 feet of this boring was drilled with a bucket auger, which would tend to obscure any evidence of small silt or silty sand beds. Four drive samples (18-inches-long) were collected from the well boring 02NEW15 at depths of approximately 25, 30, 35, and 40 feet below ground surface. The sample collected at 30 feet bgs had reported interbeds of silty sand. Only sand was noted in the other samples. Based on a review of the nearby CPT logs, it is likely that there are silt and silty sand beds at well 02NEW15 that were not identified during sampling.</p>
<p>8. Monitoring well 02NEW15 is located approximately 30 feet from CPT 02CPT2A. Cross section B-B' on Figure 3-1 shows Hydropunch™ groundwater samples at 02CPT2A detected contaminants (benzene, chlorobenzene, 1,1-DCA, 1,2-DCE, PCE, vinyl Chloride) at the first sand layer beneath the water table at approximately 15 feet below ground surface. Groundwater sample collected at monitoring well 02NEW15 only detected chlorobenzene. The top of the well screen in monitoring well 02NEW15 is installed 25 feet below ground surface (9 feet below the groundwater table measured in July 1998). The Technical Memorandum reports that the groundwater level fluctuates significantly at Site 2. The unusual amount of rainfall in 1998 may have temporarily raised the groundwater level. If the water level measurements in Site 2 monitoring wells since July 1998 show a decreasing trend so that the water level at well 03NEW15 is at or below the upper well screen, well 02NEW15 would be sufficient. However, if the water level is not decreasing, it may be necessary to install another well screened at the water table to ensure early detection of contaminants downgradient from Site 2.</p> <p>The Technical Memorandum should discuss the potential for stratigraphic controls such as faults, missing silt layers or changing water levels to affect groundwater flow and contaminant migration around monitoring well 02NEW15.</p>	<p>RESPONSE: Monitoring well 02NEW15 was installed in the bed of Borrego Canyon Wash near the toe of the Site 2 landfill. As described in the work plan, a monitoring well in the wash bed requires a protective concrete column to resist erosive forces during flood events. The depth of scour was estimated to be at least 10 feet during peak flows in Borrego Canyon Wash. In Appendix B, the well construction diagram shows the protective column and the minimum thickness of the bentonite seal and transitional sand filter pack. These considerations preclude the top to the well screen from being higher than about 25 feet below ground surface. If the well screen were any higher, the thicknesses of the protective casing, bentonite seal, and/or transitional filter pack would have to be reduced, thereby increasing the potential for failure of the well.</p> <p>Groundwater samples collected in October 1998 and January 1999 did not contain reportable concentrations of VOCs. The pump was set approximately midway in the screened interval. In April 1999, a groundwater sample will be collected from the top of the screened interval to evaluate VOC concentrations from this depth interval.</p> <p>The absence of silt near well 02NEW15 should not be a factor in contaminant migration.</p> <p>Possible evidence of faulting was noted downgradient of well 02NEW15 (near well 02NEW16). However, because the potential fault is located downgradient of well 02NEW15, it would not be a factor in contaminant migration.</p>

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OPERABLE UNIT (OU)-2B LANDFILL SITES 2 AND 17
MCAS EL TORO, CALIFORNIA**

<p>Originator: Tayseer Mahmoud, RPM DTSC</p> <p>To: Joseph Joyce, BRAC Environmental Coordinator MCAS El Toro</p> <p>Date: January 29, 1999</p>	<p>CLEAN II Program Contract No. N68-711-92-D-4670 CTO-0135 File Code: 02221</p>
	<p>A change in water levels has the potential to affect contaminant migration on a small scale. However, the direction of contaminant migration in the area of Site 2 and well 02NEW15 would remain generally parallel to Borrego Canyon Wash.</p>
<p>9. Section 9, Selected Remedy, page 9-1 - See comment # 1 regarding natural attenuation and monitoring the VOCs in the plumes at Site 2.</p>	<p>RESPONSE 8: Please see DON's response to Comment 1.</p>
<p>10. Section 9, Selected Remedy, page 9-2, fifth paragraph - The text should be clarified that monitoring results will be submitted within 90 days from the sampling event. Also, add SCAQMD to the list of agencies that will receive reports for landfill gas migration monitoring (see Appendix C of the FS).</p>	<p>RESPONSE 9: The text has been revised as requested.</p>
<p>11. Table 10-4, page 10-29 - Delete information regarding Sites 3 & 5 because this ROD covers Sites 2 & 17 only.</p>	<p>RESPONSE 10: This table has been deleted from the ROD. Cleanup levels are not appropriate for Site 2 because the remedy for groundwater at Site 2 is no longer being presented in the Site 2/17 ROD. Cleanup levels are also not appropriate for Site 17 groundwater because the only chemicals exceeding MCLs were metals, and an evaluation of metals in groundwater showed that the concentrations of metals at Site 17 are within the range considered ambient for MCAS El Toro and are not the result of site-specific activities.</p>

RESPONSE TO COMMENTS
DRAFT RECORD OF DECISION – LANDFILL SITES 2 AND 17
MCAS EL TORO, CALIFORNIA

<p>Originator: Kenneth R. Smith, Deputy Director/Chief Engineer County of Orange</p> <p>To: Joseph Joyce, BRAC Environmental Coordinator MCAS El Toro</p> <p>Date: January 28, 1999</p>	<p style="text-align: right;">CLEAN II Program Contract No. N68-711-92-D-4670 CTO-0135 File Code: 02221</p>
<p><u>COMMENTS</u></p> <p>The County of Orange has been working with the Department of Navy (“DON”) since 1990 to obtain the right-of-way needed for construction of the Alton Parkway. As you are aware, the northerly extension of Alton Parkway traverses the base adjacent to the easterly boundary of the Department of Interior site. Particularly, Alton Parkway alignment is within 1000’ of Magazine Road Landfill (“Site 2”). A recent examination of the draft Record of Decision (“ROD”) prepared by DON in connection with the remediation of Sites 2 and 17 raises certain concerns for the County responding to the construction of Alton Parkway.</p>	<p><u>RESPONSES TO COMMENTS</u></p> <p>RESPONSE: The requirement to obtain prior approval for construction of structures within 1,000 feet of a landfill is a California regulation (Title 27 Section 21190). DON cannot exempt the County from this regulation. However, DON would be pleased to work with the County during the landfill cap design phase to ensure that both the Alton Parkway extension and the landfill cap are designed to avoid adverse impacts to either project.</p> <p>DON was aware of the potential extension to Alton Parkway during the feasibility study (FS). However, the landfill cap design presented in the FS was meant to be conceptual in nature and therefore did not involve extensive coordination with the County or review of the impact of the Parkway on the landfill cap. Specifically, DON did not review the final design drawings for the Parkway extension or attempt to assess the impact of the design on the landfill cap. This should be done during the detailed design phase.</p> <p>DON is responsible for the cost of the landfill remedy. The cost estimate that is part of the FS and ROD also considers costs associated with protecting Borrego Canyon Wash from washout that could impact the landfill cap. The County must also consider the protection of Borrego Canyon Wash in its design of the Parkway extension. DON considers that additional costs required to expand the capacity of the Wash or protect the Wash because of additional runoff due to the Parkway extension would be the responsibility of the County.</p> <p>Institutional controls have been revised in the Draft Final ROD to focus on the goals of the controls. Specific language will be developed at the post-ROD stage during preparation of Memorandum of Understanding that will accompany the federal agency to agency transfer documents. DON anticipates that the County will input into and review this document at the time it is developed.</p>

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DRAFT RECORD OF DECISION – LANDFILL SITES 2 AND 17
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<p>Originator: Kenneth R. Smith, Deputy Director/Chief Engineer County of Orange</p> <p>To: Joseph Joyce, BRAC Environmental Coordinator MCAS El Toro</p> <p>Date: January 28, 1999</p>	<p>CLEAN II Program Contract No. N68-711-92-D-4670 CTO-0135 File Code: 02221</p>
<p>On October 1991, DON entered into an agreement to convey the necessary right-of-way to the County and was coordinating the preparation of an Environmental Baseline Survey Report for the transfer of property during the period 1993 through 1995. Though these negotiations, the County informed DON of the anticipated alignment of Alton Parkway and the need to make ancillary drainage improvements to Borrego Canyon. Unfortunately, none of the documents prepared by DON, the feasibility study for Site 2 prepared in September 1997, the proposed plan for closure of landfills at MCAS El Toro issued in May 1998, and the draft Record of Decision for Sites 2 and 17 released in November 1998, specifically addressed possible impacts of DON's preferred remedy at Site 2 ("Alternative 3") on construction of Alton Parkway.</p> <p>Of particular concern, is the discussion presented in the Sites 2 and 17 Draft ROD regarding the requirements of California Code of Regulations, Title 27. As drafted, the County is concerned that DON envisions that construction of any structures within 1000 feet of the disposal area of Site 2, including Alton Parkway, will be prohibited absent approval from DON and the signatories to the Federal Facilities Agreement ("FFA"). In addition, according to DON the person undertaking such construction "shall be responsible for the cost of any additional remedial action required to facilitate such restricted use."</p> <p>Given the prior discussions and understandings between the County and DON, the County believes that construction of Alton Parkway should not be subject to restrictions described in the sites 2 and 17 Draft ROD. Accordingly, the County makes the following recommendations. First, DON should confirm in the Draft ROD that construction of Alton Parkway (a) was taken into account by DON and other FFA signatories during selection of the preferred remedy, and (b) can proceed without any additional approvals. Second, the County recommends that DON develop and present in the final version of the Sites 2 and 17 Draft ROD the specific language of the institutional controls it proposes for Site 2. Third,</p>	

RESPONSE TO COMMENTS
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Originator: Kenneth R. Smith, Deputy Director/Chief Engineer County of Orange To: Joseph Joyce, BRAC Environmental Coordinator MCAS El Toro Date: January 28, 1999	CLEAN II Program Contract No. N68-711-92-D-4670 CTO-0135 File Code: 02221
the County requests DON's confirmation that the construction of Alton Parkway will not require the County to participate in the cost of the remedy, or any subsequent changes thereto, selected for Site 2.	

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LANDFILL SITES 2 AND 17
MCAS EL TORO, CALIFORNIA**

<p>Originator: Glenn R. Kistner, RPM US EPA</p> <p>To: Joseph Joyce, BRAC Environmental Coordinator MCAS El Toro</p> <p>Date: February 4, 1999</p>	<p style="text-align: right;">CLEAN II Program Contract No. N68-711-92-D-4670 CTO-0135 File Code: 02221-</p>
<p><u>SUPPLEMENTAL COMMENTS</u></p> <p>This letter is a supplement to the United States Environmental Protection Agency's (EPA) comments dated January 29, 1999, on the above referenced document. I realize that the review period for the Draft ROD is officially over, however, EPA feels that the issue described below needs to be addressed prior to the submittal of a Draft Final ROD.</p> <p>Although the draft ROD for Landfill Sites 2 and 17 contains monitoring and inspection requirements for groundwater, landfill gas and leachate, there are no such provisions for the Institutional Controls (ICs) or land-use restrictions that will also be utilized as part of the remedy. Since ICs will be such an important part of this remedy (and for Landfill Sites 3 and 5), EPA requests the Navy to include a section in the draft Final ROD on the monitoring of the land-use restrictions/controls.</p> <p>This new section should state that a Land-Use Control Implementation and Certification Plan (LUCICP) outlining the monitoring and compliance steps necessary to achieve the land-use restrictions/controls established in the ROD, will be developed as part of Operations and Maintenance (O&M) for the landfill sites. The Navy shall also submit a draft LUCICP to the Federal Facilities Agreement (FFA) agencies, the Local Reuse Agency, the Local Enforcement Agency and the U.S. Department of the Interior for review.</p> <p>At a minimum, the following elements of the LUCICP should be outlined in the draft Final ROD:</p> <ol style="list-style-type: none">1. A description and the location of the Sites, including a map, a description of their approximate size and a description of any chemicals of concern;2. the land-use control objectives and restrictions stated in the ROD;3. the particular controls and mechanisms that will be used to achieve the ROD objectives and restrictions;	<p><u>RESPONSES TO COMMENTS</u></p> <p>RESPONSE: The institutional controls discussion found in Section 7.2.1 of the Site 2/17 ROD has been revised to refer to and outline the elements of the LUCICP as noted in this comment. The discussion of the selected alternative in Section 9 has also been expanded to include discussion of the LUCICP.</p>

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MCAS EL TORO, CALIFORNIA**

Originator: Glenn R. Kistner, RPM US EPA	CLEAN II Program Contract No. N68-711-92-D-4670 CTO-0135 File Code: 02221
To: Joseph Joyce, BRAC Environmental Coordinator MCAS El Toro	
Date: February 4, 1999	
4. the inspection frequency of the Sites and surrounding areas; 5. the entities responsible for carrying out the monitoring/inspections; 6. the method(s) for certifying the condition of the Sites and surrounding areas; 7. the agency notification procedures (in case of remedy failure); and, 8. any other relevant information.	

**RESPONSE TO COMMENTS
DRAFT RECORD OF DECISION (ROD) FOR SITE 2 AND 17
MCAS EL TORO, CALIFORNIA**

<p>Originator: Michael B. Wochnick, Manager California Integrated Waste Management Board</p> <p>To: Joseph Joyce, BRAC Environmental Coordinator MCAS El Toro</p> <p>Date: February 8, 1999</p>	<p>CLEAN II Program Contract No. N68-711-92-D-4670 CTO-0135 File Code: 02221</p>
<p><u>COMMENTS</u></p> <p>Board staff have reviewed the draft ROD for compliance with the Applicable, Relevant and Appropriate Regulations (ARARs) issued by this agency under Title 27, California Code of Regulations and addressing closure and postclosure maintenance of the Sites 2 and 17.</p> <p>Based on the information contained in this document, Board staff find the draft ROD conceptually adequate. However, for the purpose of better understanding of the proposed compliance with our regulations regarding long-term postclosure landfill gas monitoring, Board staff request that the following comments be taken into consideration prior to finalizing the proposed design.</p> <ol style="list-style-type: none"> 1. Landfill gas monitoring probe locations and their vertical configuration should be compared with the available geological and hydrogeological information in confirm their functionality and longevity. 2. Board staff should be provided with the probe design details and proposed construction methods. 3. Steps should be taken to assure that all information obtained during probe installation will be accurately recorded and subsequently submitted for Board staff review upon project completion. 4. Schedule should be provided for the landfill gas migration monitoring system installation. 	<p><u>RESPONSES TO COMMENTS</u></p> <p>RESPONSE: DON concurs with CIWMB's request. However, because the items requested in this comment are implementation details, they will be addressed at the remedial design/remedial action stage and not in the ROD. Agency members of the BCT will have the opportunity to comment on remedial design documents (e.g., Engineering Design Reports, O&M Manuals) that address these issues during the remedial design phase. The following statement has been added to Section 7.3.4 of the Draft Final ROD to ensure that CIWMB will have the opportunity to review these design details: "Remedial design documentation (e.g., Engineering Design Reports, O&M Manuals) will be submitted to U.S. EPA, DTSC, and RWQCB for review in accordance with the FFA"</p>

**RESPONSE TO COMMENTS
DRAFT RECORD OF DECISION, OPERABLE UNIT 2B
LANDFILL SITES 2 AND 17
MCAS EL TORO, CALIFORNIA**

<p>Originator: Patricia A. Hannon CRWQCB</p> <p>To: Joseph Joyce, BRAC Environmental Coordinator MCAS El Toro</p> <p>Date: February 1, 1999</p>	<p>CLEAN II Program Contract No. N68-711-92-D-4670 CTO-0135 File Code: 02221</p>
<p><u>COMMENTS</u></p> <p><u>Page 1, Declaration, Description of the Remedy, first bullet</u> – We request that this sentence be revised such that it contains that a minimum of four feet of soil will be used in the monolithic soil cap.</p>	<p><u>RESPONSES TO COMMENTS</u></p> <p>RESPONSE: The sentence has been revised as requested.</p>
<p><u>Figure 5-6 Analytes Detected in Groundwater, site 2 – Magazine Road Landfill</u> – Please update the analytical data being used on this map.</p>	<p>RESPONSE: Figure 5-6 has been updated to reflect the latest published groundwater monitoring results at Site 2.</p>
<p><u>Page 5-27, Figure 5-7 and Page 5-39, figure 5-13</u> – Please note the date when these water samples were collected and update the map if it does not show the most recent data.</p>	<p>RESPONSE: Figure 5-13 has been updated to reflect the latest published groundwater monitoring results at Site 17.</p> <p>Figure 5-7 reflects the results of the latest storm water sampling and seep sampling performed during the Installation Restoration Program. The dates of the sampling events will be added to the figure.</p>
<p><u>Table 10-4, Chemicals of Concern and Remediation Goals for Groundwater</u> – Please update the maximum concentration detected for each analyte at each landfill site.</p>	<p>RESPONSE: Table 10-4, Chemicals of Concern and Remedial Goals for Groundwater, has been eliminated from the Draft Final ROD. This table showed the site-specific chemicals of concern in groundwater and the remedial goals for these chemicals, including metals and VOCs at Site 2 and metals at Site 17. Subsequent to the FS, an evaluation of metals in groundwater was performed (ref. CERCLA Groundwater Monitoring Plan, June 1999). This evaluation showed that the elevated concentrations of metals in groundwater at Sites 2 and 17, including nickel, selenium, and thallium, are within the range considered ambient at MCAS El Toro and are therefore metals are not chemicals of concern at those sites. VOCs remain chemicals of concern at Site 2; however, since groundwater is no longer being addressed in the Draft Final Site 2/17 ROD, it is not appropriate to include remedial goals for groundwater at this site. Remediation of groundwater at Site 2 will be addressed in a separate ROD or in an amendment to the Site 2/17 ROD.</p> <p>Because metals are no longer chemicals of concern and because groundwater at Site 2 is no longer being addressed in the Draft Final ROD, the table showing chemicals of concern and remedial goals for groundwater was eliminated.</p>

**RESPONSE TO COMMENTS
DRAFT TECHNICAL MEMORANDUM
U.S. AIR FORCE TECHNICAL PROTOCOL FOR NATURAL ATTENUATION
AT SITE 2 MAGAZINE ROAD LANDFILL
MCAS EL TORO, CALIFORNIA**

<p>Originator: Ned Black, Ph.D., Ecologist/Microbiologist US EPA</p> <p>To: Glenn Kistner, RPM US EPA</p> <p>Date: January 20, 1999</p>	<p>CLEAN II Program Contract No. N68-711-92-D-4670 CTO-0135 File Code: 02221</p>
<p><u>SPECIFIC COMMENTS</u></p>	<p><u>RESPONSES TO SPECIFIC COMMENTS</u></p>
<p>1. <u>Dissolved oxygen.</u> The cut-off value for awarding 3 points in the AFCEE protocol is 0.5 mg/L. For values between 0.5 and 1.0 mg/L, the protocol awards 0 points. In Table 1, the March 1997 value is 0.57 mg/L. The score for this value should be 0. Although dissolved oxygen is depleted in Well 02_DGMW60 with respect to well 02NEW11, the dissolved oxygen within the contaminated groundwater is not yet consistently at a level which supports reductive dechlorination.</p>	<p>RESPONSE 1: Comment noted. DON agrees that more data must be collected and evaluated to determine definitively if natural attenuation is occurring at Site 2. Because additional analysis is required to finalize the remedy for groundwater at Site 2, the discussion of groundwater remediation at Site 2 has been deleted from the ROD. The remedy for groundwater will be addressed in a separate ROD or by means of an amendment to the Site 2/17 ROD.</p>
<p>2. <u>Nitrate and sulfate.</u> As noted in this memorandum, both of these electron acceptors are present at levels well above the concentrations which are conducive to reductive dechlorination.</p>	<p>RESPONSE 2: Comment noted.</p>
<p>3. <u>Oxidation-reduction potential.</u> The value of ORP in the October 1997 sampling of well 02_DGMW60 may be the start of a trend, or it may be an anomaly. One point does not demonstrate a trend.</p>	<p>RESPONSE 3: Comment noted. DON agrees that more data must be collected and evaluated to determine definitively if natural attenuation is occurring at Site 2.</p>
<p>4. <u>1,2-DCE.</u> No mention is made of isomer analysis. The references to DCE as a daughter product of TCE biodegradation (Sections 3.2.1 and 3.2.7) are unsubstantiated. cis-1,2-DCE is a significant daughter product of TCE biodegradation, trans 1,2-DCE is not. Unless and until data are provided which show that the detected 1,2-DCE is cis-DCE, no points can be awarded for these data in the AFCEE protocol analysis.</p>	<p>RESPONSE 4: The long-term groundwater monitoring program includes an isomeric analysis of 1,2-DCE. In October 1998 and January 1999, cis-1,2-DCE was reported in the groundwater sample collected at well 02DGMW60 at a concentration of 14 µg/L.</p>
<p>5. In light of comments 1 and 4 above, the AFCEE protocol scores for all sampling events in Well 02_DGMW60 are less than 5. Again, the evidence presented here in support of monitored natural attenuation as a viable remedial alternative are slight at best.</p>	<p>RESPONSE 5: Comment noted.</p>

**RESPONSE TO COMMENTS
DRAFT RECORD OF DECISION, OPERABLE UNIT 2B
LANDFILL SITES 2 AND 17
MCAS EL TORO, CALIFORNIA**

<p>Originator: Marsha Mingay, Public Participation Specialist DTSC</p> <p>To: Tayseer Mahmoud, RPM DTSC</p> <p>Date: January 11, 1999</p>	<p>CLEAN II Program Contract No. N68-711-92-D-4670 CTO-0135 File Code: 02221</p>
<p>RESPONSIVENESS SUMMARY</p> <p>Introduction</p> <p>Page 1: Should number "1A" be renumbered to "1" since it is a stand alone, undivided, comment?</p>	<p>RESPONSE: Yes. The comment has been renumbered from 1A to 1.</p>
<p>Second paragraph - Clarify that the only comments omitted from this Responsiveness Summary were the comments from the Local Reuse Authority (LRA). The reader may interpret the current wording to mean that comments, other than the LRA's, were also omitted. The current wording may cause the reader to wonder why the Marine Corps treated some comments differently than others. (If more comments, other than the LRA's were omitted, then please provide DTSC with the rational of why this action was taken. Since some public comments about Site 3 and 5 are contained in this document, it would not seem appropriate to remove similar comments addressing the same sites.)</p>	<p>RESPONSE: The only comments omitted are the LRA comments because they deal exclusively with Sites 3 and 5. This has been clarified in the text.</p>
<p>RESPONSE TO WRITTEN COMMENTS</p> <p>Page 1: The response in the first paragraph makes a conclusion but does not substantiate how the monolithic soil cap will reduce the amount of infiltration. It is assumed that bench testing or modeling was done to substantiate this conclusion. Please include information which supports the conclusion.</p>	<p>RESPONSE: The response has been revised to state that a landfill cap model developed by the U.S. EPA was used to estimate infiltration for each cap design and that this model showed that Alternative 3 reduced infiltration by 90 percent over current site conditions.</p>
<p>The draft Response to Comments wording could be improved by adding the following phrase (printed here in bold face font and underlined), "<u>It is important to note that</u> the remedial investigation (RI) of the landfill sites showed even under current (uncapped) conditions, there has been little, if any, impact to groundwater at any of the sites." Additionally, the sentence immediately following this information should be in a separate paragraph since it is a new topic.</p>	<p>RESPONSE: This comment has been incorporated as requested.</p>

**RESPONSE TO COMMENTS
DRAFT RECORD OF DECISION, OPERABLE UNIT 2B
LANDFILL SITES 2 AND 17
MCAS EL TORO, CALIFORNIA**

<p>Originator: Marsha Mingay, Public Participation Specialist DTSC</p> <p>To: Tayseer Mahmoud, RPM DTSC</p> <p>Date: January 11, 1999</p>	<p>CLEAN II Program Contract No. N68-711-92-D-4670 CTO-0135 File Code: 02221</p>
<p>Second paragraph, second to the last sentence - This sentence seems to be misplaced in that it does not naturally flow into the sentences surrounding it. It The sentence would fit better in the paragraph if it was the second sentence of the paragraph. Please correct the paragraph, or remove this sentence from the text.</p>	<p>RESPONSE: The sentence has been moved as suggested.</p>
<p>Page 4: Comment number 3 - Mr. Bankuthy, Jr. states that the Irvine Ranch Water District (IRWD) has "facilities" within the work area which need to be maintained. The response merely thanks them for their "input". To fully address their issue, please either state that the Marine Corps is aware of the facilities and clarify who will maintain them; or request the IRWD to provide additional information regarding these facilities.</p>	<p>RESPONSE: The response has been revised to indicate that DON is aware of these facilities and that their presence will be considered during remedial design of the landfill caps.</p>
<p>Page 5: First paragraph under Clean Closure - Add information which states why clean closure was determined to be "unnecessary" for Sites 2, 3 and 5. Additionally, the draft Response to Comments does not address Site 17. Please incorporate information, as appropriate, about Site 17.</p>	<p>RESPONSE: Information has been added to this response to explain that capping the landfill will eliminate risks due to exposure to wastes and therefore will be protective of human health and the environment. Because capping will eliminate risks, clean closure is not necessary.</p>
<p>First paragraph under Permanent Elimination of Waste Materials - It is not understood why this information is being presented since this issue was not mentioned in the comment. Please either relate the response to the comment or delete it from the text.</p>	<p>RESPONSE: The paragraph has been deleted.</p>
<p>One portion of the comment seems to be focused on using a presumptive remedy which leaves unknown materials in place for a long period of time. It is suggested that the response address health issues. What is the threat now? What would be the threat if the material was excavated and removed?</p>	<p>RESPONSE: The response has been revised to explain that capping the landfills would eliminate risks due to direct exposure to wastes, would minimize the potential for future contamination of groundwater, and would therefore be protective of human health and the environment.</p>
<p>Page 6: Characterization of Landfill Wastes ... - The response states that it was "assumed from the beginning that the landfill would be capped." Please</p>	<p>RESPONSE: This statement has been eliminated.</p>

**RESPONSE TO COMMENTS
DRAFT RECORD OF DECISION, OPERABLE UNIT 2B
LANDFILL SITES 2 AND 17
MCAS EL TORO, CALIFORNIA**

<p>Originator: Marsha Mingay, Public Participation Specialist DTSC</p> <p>To: Tayseer Mahmoud, RPM DTSC</p> <p>Date: January 11, 1999</p>	<p>CLEAN II Program Contract No. N68-711-92-D-4670 CTO-0135 File Code: 02221</p>
<p>include information which explains why an assumption was made prior to evaluation of all alternatives and consideration of public comment. Without this information, the resources used to evaluate the final remediation technology, and the efforts made to educate and receive public comment, sounds superfluous.</p>	
<p>Characterization of Landfill Wastes ... - The sixth sentence states, "The landfill cap will provide a barrier to ...". To assist the reader, a parenthetical reference to response number one would provide them with additional information regarding the cap.</p>	<p>RESPONSE: A parenthetical reference to the correct comment has been added.</p>
<p>Characterization of Landfill Wastes ... - The tenth sentence states, "Such municipal landfills are addressed using a presumptive remedy approach." It is suggested that a more descriptive word be used in lieu of "addressed" (e.g., remediated, cleaned up).</p>	<p>RESPONSE: The word addressed has been replaced with "typically remediated."</p>
<p>Page 7: At the very bottom of response to 4A, please include a new paragraph that states, "The future costs for Sites 3 and 5 will be addressed in a Record of Decision for these sites."</p>	<p>RESPONSE: The paragraph has been added as requested.</p>
<p>Response to 4B, second paragraph - To avoid a possible misconception by the reader, state up-front, in a brief sentence or two, the risk posed and conclusions reached. Additionally, the change would help to eliminate the possible conclusion that since "total and dissolved metals were detected" it must be harmful to public health or the environment.</p>	<p>RESPONSE: The response has been revised to explain that the human health risk to a recreational child playing in seep water at Site 2 was evaluated in the RI and found to be within the range considered acceptable by the U.S. EPA. Seep water is the only surface water that is present at Site 2 for any significant period of time. The other surface water samples were taken during storm events and represent water that is typically present for only a few hours in the wash.</p>
<p>Page 8: Response to 4B - At the end of this response, please state that comments on Site 3 and 5 will be addressed in a future Record of Decision for these sites.</p>	<p>RESPONSE: This statement has been added as requested.</p>
<p>Page 9: It would be useful to add in the response that since Sites 2 and 17 will be</p>	<p>RESPONSE: This statement has been added as requested.</p>

**RESPONSE TO COMMENTS
DRAFT RECORD OF DECISION, OPERABLE UNIT 2B
LANDFILL SITES 2 AND 17
MCAS EL TORO, CALIFORNIA**

<p>Originator: Marsha Mingay, Public Participation Specialist DTSC</p> <p>To: Tayseer Mahmoud, RPM DTSC</p> <p>Date: January 11, 1999</p>	<p>CLEAN II Program Contract No. N68-711-92-D-4670 CTO-0135 File Code: 02221</p>
<p>transferred to Department of the Interior, they will not effect the El Toro Reuse Planning Authority's Millennium Plan. This information would help the uninformed reader of this fact.</p>	
<p><u>Page 12:</u> Response to 6B - Same comment as stated for Page 9 (see above comment). Additionally, please ensure that the commentator's statement, "A subsurface evaluation may better define the actual volume and extent of the buried wastes." does not address Sites 2 and 17. If it could address these sites, it is strongly suggested that the Marine Corps provide a written response to this statement.</p>	<p>RESPONSE: The response has been revised assuming that the comment may refer to characterization of buried wastes at Sites 2 and 17.</p>
<p><u>Page 13:</u> Response to 6F - The response states, "... modeling ... cap under a wide variation in the amount of annual rainfall." Please provide the parameters that were studied (i.e., explain "wide variation").</p>	<p>RESPONSE: The response has been revised to clarify that 44 years of historical daily records were used to simulate rainfall at Sites 2 and 17. Based on the records, the annual precipitation rate averages about 14.14 inches per year and ranges from 3.85 inches per year (1953) to 34.04 inches per year (1983).</p>
<p><u>Page 16:</u> Response to 7 - Since the commentator did not specifically mention "Site 24", the response could be improved by creating an introductory sentence which links the statements made by the commentator and "Site 24" (e.g., "It is assumed that the comment about 'toxic substances from the El Toro base are seeping into our water table' refers to contamination in groundwater caused by Site 24. Site 24 is ..."). It is also suggested that the second paragraph be reworded to be more straightforward using lay person's language (e.g., "According to ... the landfills do not contain material which readily migrates. This is supported by data which shows ... Although the landfill shows little, if any, evidence of impact from the landfills, regulations require a remediation to restrict water from entering the landfill. Based upon the characteristics of the landfill's material, a monolithic soil cap will meet the regulatory standard and be protective of public health and the environment.")</p>	<p>RESPONSE: The introductory statement has been added as requested and the second paragraph has been completely rewritten.</p>

RESPONSE TO COMMENTS
DRAFT RECORD OF DECISION, OPERABLE UNIT 2B
LANDFILL SITES 2 AND 17
MCAS EL TORO, CALIFORNIA

<p>Originator: Marsha Mingay, Public Participation Specialist DTSC</p> <p>To: Tayseer Mahmoud, RPM DTSC</p> <p>Date: January 11, 1999</p>	<p>CLEAN II Program Contract No. N68-711-92-D-4670 CTO-0135 File Code: 02221</p>
<p>Page 20 to 23: Response 10B through 10O- These comments could also be addressing Sites 2 and 17. Please reevaluate your response. If there is a possibility that the comments do address Sites 2 and 17, please provide responses.</p>	<p>RESPONSE: Mr. Bennett indicates in this introduction (Comment 10A) that these comments refer to Sites 3 and 5. There are also numerous references throughout his comments to conditions at Site 5. Since the only references are to Sites 3 and 5 and to conditions that exist at these two sites, DON does not believe that Mr. Bennett intended his comments to apply to Sites 2 and 17.</p>
<p><u>RESPONSE TO COMMENTS RECEIVED AT THE PUBLIC MEETING</u></p> <p>Page 4: Response to 3 - The response omits the fact that institutional controls are required when waste is left in place. This is the fundamental basis for institutional controls versus regulatory agencies who just enforce the laws and regulations. Please reword the response.</p>	<p>RESPONSE: The response has been reworded to indicate that institutional controls are required by federal and state regulations when waste is left in place.</p>
<p>Page 7: Response to 5B - The last sentence states, "The positive response from the public at previous meetings with this same format attests to the effectiveness of the meeting format." Since a portion of the community is dissatisfied with the public meeting format, it would be advisable to substantiate the claim that DON has received a "positive response".</p>	<p>RESPONSE: This sentence has been expanded to explain what is meant by positive response.</p>
<p>Page 8: Response to 5B - The response leads the reader to believe that all activities listed in bullets are mandated. This is not correct since some of the activities listed went beyond the legal requirement (e.g., a public notice in two newspapers versus the requirement for only one). Please correct the wording to more accurately describe the listed activities.</p>	<p>RESPONSE: Clarification has been added in cases where regulatory requirements were exceeded.</p>
<p>Page 9: Response to 6 - This comment could also be addressing Sites 2 and 17. Please reevaluate your response. If there is a possibility that the comment does address Sites 2 and 17, please provide a response.</p>	<p>RESPONSE: Based on the number of cubic yards of soil cited in this comment, portions of the comment specifically address Site 5. However, where the comment could possibly be broader in scope, the DON has provided a response.</p>
<p>Page 10:</p>	<p>RESPONSE: The reference has been corrected.</p>

**RESPONSE TO COMMENTS
DRAFT RECORD OF DECISION, OPERABLE UNIT 2B
LANDFILL SITES 2 AND 17
MCAS EL TORO, CALIFORNIA**

<p>Originator: Marsha Mingay, Public Participation Specialist DTSC</p> <p>To: Tayseer Mahmoud, RPM DTSC</p> <p>Date: January 11, 1999</p>	<p>CLEAN II Program Contract No. N68-711-92-D-4670 CTO-0135 File Code: 02221</p>
<p>Response to 7 - The response refers to Comment 1A which is incorrect since this response does not address clean closure. Response 4A (from Response to Written Comments) does address clean closure. Please review and make the necessary changes.</p>	
<p>The commentator alludes to the issue of synergism (“... adding to the bulk of what already exists in those two landfills can compound the problem ...”). Since this issue has not been addressed, please provide a response.</p>	<p>RESPONSE: The response has been revised to address all aspects of the comment, including synergism.</p>
<p>The commentator is also concerned with overflow and run off. Please provide a response to this comment.</p>	<p>RESPONSE: The response has been revised accordingly.</p>
<p><u>Page 14:</u> Response to 9 - To clarify that the response only refers to Site 2 and 17, please add “for Sites 2 and 17” at the end of the sentence.</p>	<p>RESPONSE: The wording has been changed to “...the most feasible approach for Sites 2 and 17 is to cap the landfills.”</p>
<p><u>RESPONSES TO THE U.S. DEPARTMENT OF THE INTERIOR</u></p> <p><u>Page 1 to 7:</u> To remain with the established format, please include numbers for each comment. This system allows for easy reference and improves future communication involving this document.</p>	<p>RESPONSE: Numbers have been added to the comments as requested.</p>
<p><u>Page 2:</u> Partial paragraph at top of page - The information could be clarified by adding a sentence which states a conclusion. The following (printed in bold font) is suggested, “... and in surface water collected from the seep. Since data indicates that up gradient water contains similar chemicals at similar levels, Site 2 has not impacted the seep water.”</p>	<p>RESPONSE: The paragraph has been revised as suggested.</p>
<p>Second full paragraph on page, last sentence - This sentence states, “There was no attempt to collect soil samples at the maximum depth of burrowing activity ... Because DON wanted to avoid ... disturbance of landfill material.” This statement, although true, may sound illogical to the average reader. The average reader will understand that due to the</p>	<p>RESPONSE: The sentence has been rewritten to state simply that DON collected surface soil samples at the landfill sites.</p>

**RESPONSE TO COMMENTS
DRAFT RECORD OF DECISION, OPERABLE UNIT 2B
LANDFILL SITES 2 AND 17
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<p>burrowing animal, the landfill material was already “disturbed”. One question they may ask is, “How much more disturbance would DON do by collecting a few inches of soil?” It is suggested that this response be reviewed and if appropriate, reworded.</p>	
<p>The next two paragraphs appear to be outside the comment and therefore could be deleted. However, if the decision is made to keep them in the document, please note the following. The paragraph states, in part, “Collecting samples only at the surface was considered acceptable because the primary exposure to ecological receptors occurs on the surface where exposed wastes occur.” If the landfill surface has exposed wastes, the average reader will assume that a burrowing animal, while in the burrow, is surrounded by exposed wastes. Therefore, they may assume that the primary exposure to the burrowing animal is their sleeping quarters. Similar to my last comment, they will not understand your justification. Please review this and make appropriate changes to text if possible.</p>	<p>RESPONSE: The paragraphs in question have been rewritten. Subsequent to DOI’s submittal of these comments, DOI and DON met (on 8 April 1999) and agreed to work together during the remedial design to develop measures to control burrowing into the landfill cap.</p>
<p>The comment seems to be asking if burrowing species are present on the landfill and if they were considered in the sampling conducted. These two questions need to have responses.</p>	<p>RESPONSE: The response has been revised to clarify that, although burrows were found at Sites 2 and 17, the DON did not attempt to observe or trap the burrowing species.</p>
<p>(As a side note, since the DOI will receive title to this land, and since they presumably have experts in their department about this type of issue, were they consulted during the investigation? If so, a more complete response would be to site the meeting and decisions made between DON and DOI.)</p>	<p>RESPONSE: DOI has been aware of the investigations of Sites 2 and 17, but only recently began working closely with the DON to plan the remediation of the sites and the transfer of the property containing Sites 2 and 17. DON and DOI met on 8 April 1999 to discuss specific comments on the Record of Decision for Sites 2 and 17. Burrowing animals were discussed from the perspective of controlling the impact of the animals on the integrity of the landfill cap. DON and DOI have agreed to work together on this issue during the remedial design phase.</p>
<p>Page 3: Last paragraph on the page - Please spell out the acronym, “MCP P”. Additionally, the text does not clearly identify the connection between the hazard index for the American Robin and MCP P. Additional information</p>	<p>RESPONSE: MCP P is the acronym for 2-(2-methyl-4-chlorophenoxy)-propionic acid. The acronym has been spelled out as requested and the connection between the hazard index for the American Robin and MCP P has been clarified as requested. MCP P was reported in surface soil. The American</p>

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<p>is required to establish this relationship. Information should also be added that clarifies where the MCPP is located. Is it one of the chemicals in the landfill? Is it from surrounding agricultural activities?</p>	<p>Robin could be exposed to MCPP through direct ingestion of soil or through ingestion of soil macroinvertebrates such as earthworms.</p> <p>The RI did not speculate on the source of the MCPP.</p>
<p><u>Page 4:</u> Top partial paragraph - The sentence states, "... gnatcatchers .. Do not appear to be affected by chemicals or investigative activities". Please add supporting data.</p>	<p>RESPONSE: The conclusion that gnatcatchers are not being affected by chemicals at the landfill sites was a qualitative assessment based on the fact that gnatcatchers are breeding at the sites. This has been clarified in the text.</p>
<p><u>Page 5 to 6:</u> Bottom partial paragraph on page 5 and top of page 6 - The information in this paragraph is not requested by the commentator. A suggestion is made to either move it to the end of this response or delete the paragraph.</p>	<p>RESPONSE: The paragraphs at the bottom of Page 5 and the top of Page 6 have been deleted.</p>
<p><u>Page 6:</u> First paragraph, "... minimizes short-term risks due to exposure to landfill contaminants" - Provide additional information to assist the reader in understanding how the native soil cap minimizes the short term risks.</p>	<p>RESPONSE: The paragraph containing this phrase has been deleted. Please see the response to the previous comment.</p>
<p>Second paragraph, second sentence - Clarify which alternative "this alternative" refers to.</p>	<p>RESPONSE: The sentence has been revised to clarify that the reference is to Alternative 5.</p>
<p>Second paragraph, fourth sentence - The sentence is missing the word "to". Please rewrite as follows, "more costly to repair".</p>	<p>RESPONSE: The word "to" has been added as requested.</p>
<p><u>Page 7:</u> First paragraph, third sentence - To improve clarity, please place commas around "should damage occur".</p>	<p>RESPONSE: Commas have been added as suggested.</p>
<p>Second paragraph - State that the comment will be completely evaluated and responded to in the Record of Decision for Sites 3 and 5.</p>	<p>RESPONSE: The following sentence has been added to the response: "The issue of irrigation of the landfill cap will be completely evaluated and responded to in the Record of Decision for Sites 3 and 5."</p>
<p>The last comment states that the DOI has only reviewed the Proposed Plan</p>	<p>RESPONSE: Subsequent to the date of these comments, DOI reviewed the RI and FS reports and Draft ROD for Sites 2 and 17. Comments on these</p>

**RESPONSE TO COMMENTS
DRAFT RECORD OF DECISION, OPERABLE UNIT 2B
LANDFILL SITES 2 AND 17
MCAS EL TORO, CALIFORNIA**

<p>Originator: Marsha Mingay, Public Participation Specialist DTSC</p> <p>To: Tayseer Mahmoud, RPM DTSC</p> <p>Date: January 11, 1999</p>	<p style="text-align: right;">CLEAN II Program Contract No. N68-711-92-D-4670 CTO-0135 File Code: 02221</p>
<p>and that the supporting documents will be reviewed during the pre-acquisition process. Will the DON accept comments on the supporting documentation during the pre-acquisition period? If not, it is strongly suggested that DON contact the DOI to inform them that the comment period on the supporting documents was already held. It is important to note that the Proposed Plan did state that the public comment period for the Proposed Plan also included the supporting documents. It is suggested that DON work toward a mutual resolution with DOI on any issues/concerns they may have regarding the supporting documents (e.g., Remedial Investigation, Feasibility Study). Please state in the Response to Comments how this issue will be addressed.</p>	<p>documents were presented to DON via letter dated April 5 1999. DON reviewed the comments made by DOI and responded to each comment at a meeting held with DOI on April 8 1999. DOI has indicated that these responses adequately address the issues raised in the letter.</p> <p>The response to comment will note that DON and DOI have met to address their concerns and that DON and DOI intend to continue to meet and work toward a mutual resolution of their concerns throughout the property transfer period.</p>

**RESPONSE TO COMMENTS
DRAFT RECORD OF DECISION – LANDFILL SITES 2 AND 17
MCAS EL TORO, CALIFORNIA**

<p>Originator: Courtney C. Wiercioch, Manager MCAS El Toro</p> <p>To: Joseph Joyce, BRAC Environmental Coordinator MCAS El Toro</p> <p>Date: January 29, 1999</p>	<p style="text-align: right;">CLEAN II Program Contract No. N68-711-92-D-4670 CTO-0135 File Code: 02221</p>
<p><u>GENERAL COMMENTS</u></p> <p>1. Thank you for the opportunity to comment on the Draft Record of Decision (ROD) for Landfill Sites 2 and 17 located within the Department of Interior site. We have reviewed the Draft ROD and offer the following general comments. These comments are intended to highlight our concerns and to promote a continuing dialogue between the Local Redevelopment Agency (LRA), the Department of Navy (DON) and the United States Marine Corp (USMC), regulatory agencies and key stakeholders concerning selection of the most appropriate remedy for the landfill sites at MCAS El Toro.</p> <p>Alternative 3, the DON's preferred remedy for Sites 2 and 17, consists of construction of a four-foot thick soil cover, installation of surface drainage, and seeding drought-resistant grasses. Although this remedy may be appropriate for Sites 2 and 17 due to their proposed use as habitat preserve, it should not be universally applied to other landfill sites (i.e., 3 and 5). As you are aware, LRA's Airport and Open Space Plan proposes recreational land uses (Golf Course and Regional Park) on Landfill Sites 3 and 5. The ability to landscape and irrigate these sites is critical for productive reuse. Therefore, LRA strongly opposes application of such a remedy (Alternative 3) on Landfill Sites 3 and 5.</p>	<p><u>RESPONSES TO GENERAL COMMENTS</u></p> <p>RESPONSE: This comment relates to Sites 3 and 5 which are addressed in a separate Record of Decision.</p> <p>As discussed in the Draft ROD for Sites 3 and 5, dated March 1999, Alternative 4d (a single barrier cap with a flexible membrane liner) has been selected for Sites 3 and 5, rather than Alternative 3. This decision was made because Alternative 4d will allow the sites to be irrigated and will therefore more effectively support the intended site reuses (i.e., golf course and park, respectively).</p> <p>Sites 2 and 17 are planned to be used as part of a habitat reserve. Alternative 3 was selected for Sites 2 and 17 because this type of cap has been shown to be effective in semi-arid climates such as MCAS El Toro and because the 4 foot monolithic cap will support regrowth of coastal sage scrub which provides habitat for the California gnatcatcher, a federally threatened species that has been observed at these sites. Since irrigation is not proposed as part of the planned reuse of Sites 2 and 17, a cap containing a flexible membrane liner is not required for these sites.</p>
<p>2. The Draft ROD places the proposed institutional controls for Landfill Sites 2 and 17 into two broad land use and monitoring categories. The lack of specificity is disconcerting given that the institutional controls are not simply a component of the remedy but are a key component. Therefore, LRA recommends that the Draft ROD provide as much detail as possible regarding proposed controls. Particularly, the Draft ROD should be specific regarding the areal extent of such controls. LRA, as the proposed future owner of the base, will own properties within close proximity to Landfill Sites 2 and 17 and will be adversely impacted by these controls. More specifically, construction of the easterly extension of Alton Parkway which would be located within</p>	<p>RESPONSE: The Draft Final ROD for Sites 2 and 17 has been revised to clarify that there are two instances where institutional controls apply to land adjacent to Sites 2 and 17 as follows:</p> <ul style="list-style-type: none"> • Construction of structures within 1,000 feet of the edge of the landfill is prohibited without prior approval of California Integrated Waste Management Board (CIWMB). • Land-disturbing activities on lands adjacent to the landfill that may cause adverse effects upon the cap through erosion of the cap or diversion of off-site surface water runoff onto the cap is prohibited unless the land owner of the adjacent property

RESPONSE TO COMMENTS
DRAFT RECORD OF DECISION – LANDFILL SITES 2 AND 17
MCAS EL TORO, CALIFORNIA

<p>Originator: Courtney C. Wiercioch, Manager MCAS El Toro</p> <p>To: Joseph Joyce, BRAC Environmental Coordinator MCAS El Toro</p> <p>Date: January 29, 1999</p>	<p style="text-align: right;">CLEAN II Program Contract No. N68-711-92-D-4670 CTO-0135 File Code: 02221</p>
<p>1000 feet of Site 2, will be directly impacted.</p>	<p>provides for mitigation of such adverse effects and obtains the prior approval of DON and the FFA signatories.</p> <p>Title 27 Section 21190 requires that all proposed postclosure land uses, other than non-irrigated open space, on sites implementing closure or on closed sites shall be submitted to the enforcement agency (EA) (i.e., CIWMB), Regional Water Quality Control Board (RWQCB), local air district, and local land use agency. 27 CCR 21190 also specifies that the enforcement agency (i.e., CIWMB) shall review and approve proposed postclosure land uses if the project involves structures within 1,000 feet of the disposal area, structures on top of waste, modification of the low permeability layer, or irrigation over waste. Since the easterly extension of Alton Parkway would be located within 1,000 feet of Site 2 and since the grading associated with this parkway could impact runoff onto the landfill cap, CIWMB, DON, and the FFA signatories would need to review and approve proposed structures associated with the Parkway in this area.</p>
<p>3. Additionally, DON notes that “[t]he actual drafting of the legal instruments relating to these institutional control measures will occur prior to agency-to-agency transfer.” LRA strongly disagrees with this approach. This will preclude LRA from participating in the design of these institutional controls potentially impacting LRA’s ability to effectively implement planned uses in the vicinity of these Landfill Sites.</p>	<p>RESPONSE: DON worked closely with the regulatory agencies, especially the DTSC, to develop the institutional controls language that is found in the FS reports and ROD for Sites 2 and 17 and believes that the language conveys the appropriate level of detail for such documents. To support this belief, DON performed a search of 35 U.S. EPA Region IX RODs for federal facilities and reviewed and followed draft guidance published by the U.S. EPA on institutional controls.</p> <p>Fifty-six Region IX federal facilities RODs were identified and 35 were reviewed. The RODs were signed between 1991 and 1998 and represent a cross section in terms of contaminants of concern, impacted media, date of issue of the ROD, and use of institutional controls. It was concluded that the discussion of the institutional controls in the RODs reviewed was generally much less detailed than the discussion in the Sites 2 and 17 FS documents and the Site 2/17 ROD.</p> <p>The U.S. EPA Workforce on Institutional Controls has prepared draft guidance titled “Institutional Controls: A Reference Manual” (U.S. EPA 1998). The</p>

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	<p>draft manual proposes that the decision document (in this case the ROD) should focus on the goals to be achieved by institutional controls, rather than specifying the precise form of institutional controls to be implemented (in order to provide flexibility after the ROD is signed) and should focus on performance standards setting forth the aims that the institutional controls are intended to achieve (e.g., prevent exposure to contaminated groundwater by prohibiting well drilling). The ROD should also contain plans for long-term monitoring of compliance with institutional controls.</p> <p>The institutional controls language contained in the Draft Final ROD has been revised from that found in the Draft ROD. The language in the Draft Final ROD is intended to comply with U.S. EPA guidelines by focusing on the goals to be achieved by the institutional controls and discussing in some detail the kinds of controls envisioned. Much of the language has been taken from approved RODs for other federal facilities and is intended to provide a starting point for the development of detailed institutional controls required for property transfer. It is intended that DON and the transferee will develop the exact wording of the institutional controls at the time of property transfer. Because the LRA will potentially be impacted by the language contained in the transfer documentation, the LRA will have the opportunity to input into and review the documentation before it is finalized.</p>

**RESPONSE TO COMMENTS
DRAFT RECORD OF DECISION – LANDFILL SITES 2 AND 17
MCAS EL TORO, CALIFORNIA**

<p>Originator: Courtney C. Wiercioch, Manager MCAS El Toro</p> <p>To: Joseph Joyce, BRAC Environmental Coordinator MCAS El Toro</p> <p>Date: January 29, 1999</p>	<p style="text-align: right;">CLEAN II Program Contract No. N68-711-92-D-4670 CTO-0135 File Code: 02221</p>
<p><u>GENERAL COMMENTS</u></p> <p>ATTACHMENT</p> <p>4. Comments on Draft ROD for Landfill Sites 2 & 17</p> <p>In May 1998, the Department of Navy and the United States Marine Corps (“DON/USMC”) released its proposed plan for addressing environmental problems associated with four inactive landfills (IRP Sites 2, 3, 5 and 17) located at the Marine Corps Air Station El Toro (“MCAS El Toro”) in the County of Orange.¹ For all four sites, DON/USMC proposed the same remedy, identified as “Alternative 3” in the Proposed Plan. Alternative 3 generally consists of (1) a soil cap, (2) institutional controls, and (3) long-term monitoring.</p> <p>In November 1998, DON/USMC issued a draft Record of Decision for Sites 2 and 17 only.² In the Draft ROD, DON/USMC identified Alternative 3 as its preferred remedy for Sites 2 and 17. As part of its continuing effort to work with DON/USMC, regulatory agencies, and key stakeholders to ensure implementation of the most appropriate remedy for the landfill sites at MCAS El Toro, the County provides the following comments on the Draft ROD.</p>	<p><u>RESPONSES TO GENERAL COMMENTS</u></p> <p>RESPONSE: Please see the response to Comment 3. DON has revised the institutional controls presented in the Draft Final ROD to be consistent with U.S. EPA guidance and with the language contained in approved Region IX RODs for similar federal facilities. The LRA will have the opportunity to input into and comment on the final language developed in the transfer documentation for Sites 2 and 17.</p>

¹ “Proposed Plan for Closure of Inactive Landfills at Marine Corps Air Station El Toro” (May 1998) [the “Proposed Plan”].

² “Draft Record of Decision, Operable Unit 2B, Landfill Sites 2 and 17, Marine Corps Air Station, El Toro, California” (November 1998) [the “Draft ROD”].

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To: Joseph Joyce, BRAC Environmental Coordinator MCAS El Toro	
Date: January 29, 1999	
Impact of Proposed Institutional Controls <p>One concern previously expressed by the LRA is that DON/USMC has not provided sufficient detail concerning the institutional controls it proposes to include as part of Alternative 3.³ This lack of specificity is problematic because regulatory agencies and others recognize that institutional controls represent a key component of the final remedy for all MCAS El Toro landfills. As such, the LRA has requested DON/USMC to provide as much detail as possible regarding proposed institutional controls as early as possible in the remedy selection process.⁴</p> <p>Similar sentiments have been expressed by others. The California Environmental Protection Agency, Department of Toxic Substances Control (“DTSC”) expressed concerns with DON/USMC’s position that institutional controls could be determined at the time the property is transferred. According to DTSC, “[i]nstitutional controls are used to support the remedy to assure the protection of human health or the environment. As such, institutional controls are as vital to the remedy as any engineering control or technology.” Institutional controls therefore must be evaluated “with the same level of scrutiny as the</p>	

³ “Comments on the Proposed Plan for Remediation of Inactive Landfills at MCAS El Toro,” submitted by the Orange County Local Redevelopment Authority on July 13, 1998 [the “LRA Comments”].

⁴ At a meeting between DON/USMC and the LRA held on April 30, 1998, DON/USMC stated that it would attempt to provide the LRA with examples of institutional controls developed for remediated landfills located at other closing military bases. A specific request for examples of these institutional controls subsequently was made in a letter sent to DON/USMC on June 5, 1998, and also at a meeting between DON/USMC, the LRA and various regulatory agencies held on October 22, 1998. To date, these exemplars have not been provided. Moreover, DON/USMC proposed a November 1998 meeting with regulatory agencies and the LRA to discuss institutional controls; DON/USMC subsequently canceled the meeting and proposed to reschedule it for some unspecified later date following completion of additional technical review.

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DRAFT RECORD OF DECISION – LANDFILL SITES 2 AND 17
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<p>engineering alternatives.”⁵</p> <p>Likewise, in the comments prepared by the El Toro Reuse Planning Authority, it was noted that institutional controls have been described only in general terms by DON/USMC. As with the LRA and DTSC, the El Toro Reuse Planning Authority requested that the discussion of institutional controls “be expanded and more specific.”⁶</p> <p>Despite these comments, DON/USMC does not provide substantially more detail about proposed institutional controls in the Draft ROD. According to DON/USMC:</p> <p style="padding-left: 40px;">[t]he institutional controls identified fall into two broad categories: 1) restrictions on future land use and 2) provision for potential monitoring and maintenance activities by DON and oversight of those activities by the FFA [Federal Facility Agreement] signatories if DON conducts them and for access by DON and the FFA signatories if DOI [Department of Interior] agrees to perform these responsibilities.</p>	

⁵ Letter from Tayseer Mahmoud, Remedial Project Manager, DTSC, to Joseph Joyce, BRAC Environmental Coordinator, MCAS El Toro (Nov. 17, 1997), at attachment p. 3.

⁶ Draft ROD, Responsiveness Summary, “Response to Written Comments Received During the Public Comment Period” (Item 6H). Ironically, DON/USMC responded to this comment by stating, “DON has worked closely with DTSC to develop the institutional controls language found in the FS report and believes that this language is much less general than that found in a typical FS report for landfill sites.” Given DTSC’s previous position on this issue, the LRA seriously questions the validity of this response.

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<p>DON/USMC further notes that “[t]he actual drafting of the legal instruments relating to these institutional control measures will occur prior to the agency-to-agency transfer.” Draft ROD at 7-4.</p> <p>The LRA has three principal concerns with DON/USMC’s approach to developing institutional controls.</p>	
<p>5. First, by deferring development of the proposed institutional controls, DON/USMC effectively precludes any meaningful comment by regulatory agencies, the LRA and other members of the public on an extremely important component of its preferred remedy. If interested parties do not understand what restrictions are being imposed, it is difficult - if not impossible - to provide appropriate and timely comments.</p>	<p>RESPONSE: Please see the response to Comments 2 and 3. The area over which the institutional controls will extend and the goals of the institutional controls have been clarified in the Draft Final ROD. The ROD also contains as much detail as possible, within the guidelines of the U.S. EPA and in accordance with the detail typically provided in other federal facilities RODs. The regulatory agencies and the LRA will have the opportunity to input into and comment on the transfer documentation that contains the final wording of the institutional controls.</p>
<p>6. Second, the LRA is uncertain what restrictions, if any, may be imposed on property located outside of the landfill boundaries. DON/USMC states in the Draft ROD that (1) “agency approval is required if postclosure land uses involve <i>structures within 1000 feet of the disposal area, structures on top of waste, modification of the low permeability layer, or irrigation over the waste,</i>” and (2) “institutional controls proposed for Sites 2 and 17 are designed to comply with this regulatory requirement by restricting land uses and modifications to the remedy <i>as specified below.</i>” Draft ROD at 7-4 (emphasis added). Yet, all of the institutional controls subsequently discussed by DON/USMC in the Draft ROD appear to be limited to activities occurring at or within the boundaries of the actual landfill sites. Nowhere in the Draft ROD does DON/USMC indicate whether it intends to develop any institutional controls restricting the use of adjoining properties.</p>	<p>RESPONSE: Please see the response to Comment 2. The Draft Final ROD will contain two restrictions on adjacent property. The first restriction will require the developer of adjacent property to take measures to assure that runoff from this property does not adversely impact the landfills. The second restriction will require the developer of property within 1,000 feet of the landfill sites to obtain prior approval from CIWMB prior to building any structures. The later requirement is mandated by California regulations (27 CCR 21190).</p>

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<p>DON/USMC's failure to clarify this issue has the potential to complicate important County projects that are taking place near Site 2. For example, as DON/USMC is aware, the County intends to construct the Alton Parkway. A portion of the parkway is located within 1,000 feet of the Site 2 landfill. To date, DON/USMC has not identified any specific restrictions, approval processes, costs or other issues that could impede completion of the project. However, language in the Draft ROD suggests that such issues could arise in the future.⁷</p> <p>Any uncertainty regarding the County's ability to proceed with this project can and should be addressed by DON/USMC in the record of decision for Site 2. To resolve this uncertainty, DON/USMC should (1) discuss in the final version of the Draft ROD the specific language of the institutional controls it proposes for Sites 2 and 17, and (2) confirm that these controls will not result in any additional obligations or responsibilities being imposed on the County in connection with the construction of the Alton Parkway.</p>	

⁷ The LRA notes that, according to DON/USMC, any person seeking to undertake "restricted uses" will have to obtain prior approval from DON/USMC and the FFA signatories and will be responsible for the cost of any additional remedial action required to implement such uses. Draft ROD at 7-4.

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<p>7. Third, DON/USMC's failure to provide adequate detail regarding the institutional controls proposed for Sites 2 and 17 raises serious questions regarding the approach it will adopt in developing similar institutional controls for Sites 3 and 5. The LRA's principal focus is on the remedial activities occurring at Sites 3 and 5 because these sites will be transferred from DON/USMC to the County of Orange. As DON/USMC is aware, Sites 3 and 5, and surrounding property will be developed for a variety of reuses. As such, it is imperative for DON/USMC to identify with particularity the institutional controls being proposed for these two sites. Any approach that defers development of institutional controls until after the remedy is selected or the property is transferred to the County will not be acceptable to the LRA.</p>	<p>RESPONSE: This comment relates to landfill Sites 3 and 5. Institutional controls for these sites are identified in the Draft ROD for Sites 3 and 5. The ROD was issued for review and comment in March 1999.</p>
<p>8. Appropriateness of Physical Remedy for Sites 3 and 5</p> <p>As discussed in earlier comments submitted to DON/USMC by the LRA, a key factor that must be considered in selecting a remedy for the landfill sites at MCAS El Toro are anticipated reuse plans. Though perhaps obvious, it is important to emphasize that the reuses proposed for Sites 2 and 17 are substantially different from those proposed for Sites 3 and 5. Sites 2 and 17 are located on property that will be transferred to DOI for use as a habitat preserve. The reuses proposed for these two sites are relatively passive in nature. For example, DON/USMC intends to prohibit building of any structures other than monitoring wells, planting of any vegetation (apart from the basic ground cover) and irrigating these sites. In addition, DON/USMC intends to restrict access to the site by erecting fences and signs. Draft ROD at 7-5.</p>	<p>RESPONSE: DON agrees that the proposed reuse of the site must be considered in the selection of the remedy. As noted in the response to Comment 1, DON has carefully considered the input received from the LRA, regulatory agencies, and the public during the public comment period for the landfill sites and has selected Alternative 4d rather than Alternative 3 for Sites 3 and 5.</p> <p>Alternative 3 remains the selected remedy for Sites 2 and 17 because the monolithic cap is expected to perform well in the non-irrigated semi-arid scenario associated with reuse of these sites. The monolithic cap will also support the regrowth of coastal sage scrub, which provides habitat for the federally threatened California gnatcatcher.</p>

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<p>In contrast, Sites 3 and 5 are located on property that will be transferred to the County for reuse in a variety of recreational and open space purposes.⁸ Among other things, these sites may be used for golf courses, ballfields, equestrian trails, and regional parks. The ability to plant vegetation, irrigate and provide access to Sites 3 and 5 therefore is critical to effective and productive reuse of this property.</p> <p>The LRA recognizes that DOI (the ultimate recipient of Sites 2 and 17) and regulatory agencies may have more information concerning the compatibility of Alternative 3 with proposed reuses of Sites 2 and 17 and, more generally, the appropriateness of the proposed implementation of Alternative 3 for Sites 2 and 17. In this regard, the LRA generally would defer to the judgment of these parties concerning the selection of a remedy at Sites 2 and 17.⁹ However, the LRA wishes to restate for DON/USMC the fundamental conclusion presented in its earlier comments on the remediation of the MCAS El Toro landfills: While the selection of Alternative 3 may be deemed appropriate for Sites 2 and 17, it is <i>not</i> an acceptable remedy for Sites 3 and 5.</p>	

⁸ MCAS El Toro Master Development Program, Airport and Open Space Plan; Letter from Courtney C. Wiercioch, Program Manager, MCAS El Toro Master Development Program, to Joseph Joyce, BRAC Environmental Coordinator, MCAS El Toro (September 1, 1998).

⁹ It should be noted that the LRA has raised a number of comments and concerns in response to the Proposed Plan that have general application to the proposed implementation of Alternative 3 at all four MCAS El Toro landfill sites. These comments and concerns still need to be addressed by DON/USMC.

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<p>9. Conclusion</p> <p>It is the responsibility of DON/USMC to ensure that the remediation of Sites 2 and 17 be undertaken in a manner that does not jeopardize the development of nearby parcels by third parties, including the County. The LRA therefore requests that DON/USMC address and, if necessary, resolve the issues raised in these comments prior to finalizing the record of decision for Sites 2 and 17.</p>	<p>RESPONSE: DON acknowledges that CERCLA, through the NCP, requires that DON consider reasonably foreseeable land-use in selecting protective remedial actions (56 <i>Federal Register</i> 8710, 8 March 1990). In addition, the NCP provides for the use of institutional controls to supplement engineering controls as a component of a completed remedy in order to ensure that a remedial action is protective (40 CFR Section 300.430(a)(1)(iii)(D)). However, the nuances of how local land-use planning and CERCLA remedy processes interact are not specifically addressed in CERCLA or the NCP. DoD has issued a policy memorandum to clarify these nuances in the context of closing BRAC installations.</p> <p>DoD's 25 July 1997 policy memorandum titled "Responsibility for Additional Environmental Cleanup after Transfer of Real Property" provides in relevant part:</p> <p style="padding-left: 40px;">"The DoD is committed to working with local land-use planning authorities, local government officials, and the public to develop realistic assumptions concerning the future use of property that will be transferred by DoD..."</p> <p style="padding-left: 40px;">"DoD's expectation is that the community at-large, and in particular the land-use planning agency, will take the environmental condition of the property, planned remedial activities, and technology and resource constraints into consideration in developing their reuse plan..."</p> <p style="padding-left: 40px;">"DoD environmental restoration efforts for properties that are to be transferred out of federal control will attempt, to the extent reasonably practicable, to facilitate the land-use and redevelopment needs stated by the community in plans approved prior to the remedy selection process."</p> <p>DON has worked closely with the DOI, LRA, local government officials, and the public to ensure that there is a clear understanding of the presence of landfill materials at Sites 2 and 17 and the constraints that capping and leaving these wastes in place will impose.</p>

**RESPONSE TO COMMENTS
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MCAS EL TORO, CALIFORNIA**

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<p>10. Finally, please note that the LRA does not intend, through the submission of these or other comments, to suggest that the selection of Alternative 3 at any of the MCAS El Toro landfill sites is, in its judgment, lawful, technically sound, or otherwise advisable. In providing these comments, the LRA notes that, at the present time, it remains very concerned about much of the analysis presented by DON/USMC in support of the selection of Alternative 3. Indeed, the LRA intends to present additional comments in the immediate future regarding the proposed implementation of Alternative 3 at Sites 3 and 5. These latter comments are warranted in light of new data and analyses provided by DON/USMC to the LRA and regulatory agencies following the close of the public comment period on the Proposed Plan.</p>	<p>RESPONSE: Comment noted. DON will address the LRA's comments on the selected remedy for Sites 3 and 5 in the response to agency comments on the Site 3/5 ROD.</p>