APPENDIX E

RESPONSES TO COMMENTS ON THE DRAFT FINAL INTERIM ACTION ORDNANCE AND EXPLOSIVES REMEDIAL INVESTIGATION/FEASIBILITY STUDY FOR RANGES 43-48, RANGE 30A, SITE OE-16, FORMER FORT ORD, CALIFORNIA, JANUARY 18, 2002

RESPONSES TO COMMENTS ON THE DRAFT FINAL INTERIM ACTION ORDNANCE AND EXPLOSIVES REMEDIAL INVESTIGATION/FEASIBILITY STUDY FOR RANGES 43-48, RANGE 30A, SITE OE-16, FORMER FORT ORD, CALIFORNIA, JANUARY 18, 2002

I. REGULATORY AGENCY COMMENTS

IA. UNITED STATES ENVIRONMENTAL PROTECTION AGENCY, REGION IX COMMENTS DATED FEBRUARY 15, 2002

Comment 1: **In reviewing the comments found in Appendix D that were provided by the California Environmental Protection Agency, Department of Toxic Substances Control (DTSC), it was noted that Specific Comment 7 took issue with the premise that all fuzed Ordnance and Explosives (OE) items must be destroyed in place. In addition, Specific Comment 12 contained a statement that "UXO items should not be categorized based on fuzing." Also, in Specific Comment 17, the statement is made that "The movability of an item should not be categorically written off due to fuze type, but should be evaluated on a case by case basis by a qualified EOD technician."**

The responses provided to the referenced DTSC comments changed the OE detonation alternative categories from "OE Items with an Intact Fuze" and "OE Items with No Fuze" to "Nontransportable OE Items" and "Transportable OE Items," respectively, in Section 6.1.3 (OE Detonation Alternatives) of the document. While this removes the "fuze-no fuze" issue from the document, it does not specifically state how the contractor will determine what can and cannot be moved (transported). Also, the response to DTSC Specific Comment 7 indicates that Section 6.1.3 will be revised to "include citations of the technical manuals that present information used in the development of the revised designations." However, no such citations were provided in the revised Section 6.1.3.

Please revise the document to include a detailed discussion and/or diagram of the methodology used by the COE and its contractors to determine whether or not an item of OE may be moved prior to disposal. If this information is provided in one or more published documents, please provide a citation for each document, and reference them in the revision.

Response 1: The Army agrees that criteria for determining whether an OE item is "transportable" or non-transportable" should be described as clearly and thoroughly as possible. The Army recognizes that fuzing is one of the most decisive factors in making such a determination. However, definitions and discussions of transportable and non-transportable OE items presented in the IA RI/FS are intended to supplement detonation alternatives analysis and are not intended to guide field activities. Because the decision to move or not to move an OE item will be made in the field on a case-by-case basis by the UXO Safety Specialist, it is best to describe the details of the decision process in the site-specific work plan(s) that will be jointly developed by the OE contractor and the UXO Safety Specialist.

Reference to technical manuals such as EP-385-1-92a, the TM60 series, and applicable Ordnance Data Sheets had been included in the Glossary for the "transportable" and "non-transportable" definitions in lieu of revising Section 6.1.3.

Comment 2: **EPA Errata Comment 1 on Page D-11 reads as follows: "Acronym List, Page ix, and Section 4.2.1.5 History of Use, first paragraph, fourth sentence, Page 38: The acronym "TP," when used to describe an OE item stands for "Target Practice." It is defined as "Training Practice" in the Acronym List in the study. Please correct this."**

Response 2: The acronym "TP" has been used historically for both the terms "training practice" and "target practice". In the future, the definition will be clarified as "target practice" where appropriate.

Comment 3: **Section 6.3.1.3.2, OE Remedial Action Alternatives, O&M Costs, page 63, and in similar discussions throughout the document. This subsection states that "The subsurface OE Removal Alternatives has no associated O&M costs." It is quite possible certain O&M costs may be necessary -- at least until the Basewide OE RI/FS determines otherwise. Please factor in some reasonably anticipated O&M requirements.**

Response 3: The following three OE Remedial Action Alternatives were evaluated for each of the three IA sites (Ranges 43-48, Range 30A, and Site OE-16): *No Action with Existing Site Security Measures, Enhanced Site Security Measures, and Identify and Remove OE (Subsurface OE Removal).* Because the first two alternatives do not take action to remove OE and instead focus on maintaining or enhancing controls to minimize OE-related hazards while the basewide OE RI/FS is being conducted, operations and maintenance (O&M) costs were estimated for implementation of these controls. The preliminarily identified preferred alternative, *Subsurface OE Removal*, takes action to remove surface and subsurface OE at the sites; therefore, additional controls (and associated O&M of these controls) would not be required as with the other alternatives evaluated. Costs associated with maintaining site controls during subsurface OE removal and restoring these controls after work is completed were included in the capital cost estimates.

Comment 4: **Table 5 - ARARs:- Page 1 of 11: Reference to RCRA needs to address both Munitions Rule and other RCRA statutory and regulations. For the Munitions Rule, while it is correct to say that it is not applicable, it may well be relevant and appropriate for certain elements of the proposed action. There may also be other RCRA standards which should be evaluated as relevant and appropriate as well (e.g. Land Disposal Restrictions).**

Response: The Munitions Rule is not applicable; however, it will be evaluated to determine whether it is relevant and appropriate with respect to the proposed remedial alternative.

Comment: **Page 2 of 11: Clean Water Act, 404b1 ..... On one hand it says it's not an ARAR, but on the other it says if OE is encountered in wetlands, the regulations will be followed. Suggest identifying it as a location-specific ARAR, but that wetlands are not expected. However, if wetlands are encountered, will follow substantive provisions of ARAR.**

Response: The Army feels that the Clean Water Act, 404 (b)(1) is not an ARAR because it consists of non-substantive procedural and administrative requirements with which the Army, under CERCLA, is not required to comply.

Comment: Page 3 of 11: Cal Clean Air Act, MBUAPCD Rule 407. The description and remarks sections need to be revised to correctly distinguish between substantive and procedural requirements of these rules. While a permit is not required, the Army must demonstrate that it is achieving the substantive standards. Also, it's not really accurate to say the non-substantive procedural and administrative provisions do not qualify as ARARs. Suggest: "Contains non-substantive procedural and administrative provisions which, under CERCLA, the Army is not required to comply with." Please adjust where similar language is used in Table 5.

Response: Comment accepted. The citation within Table 5 has been changed to reflect suggested language.

Comment: Page 4 of 11: Cal HSC Title 22. Discussion needs to reflect that the first obligation is to determine if waste "generated", either by picking up OE or by preparing to blow it in place, is hazardous. Then determine appropriate management requirements.

Response: Comment accepted. The remarks section will be modified to reflect that the standard would become applicable to the management of the material if the material is determined to be hazardous pursuant to the regulation.

Comment: Page 7 of 11: Cal Fish and Game 1900, etc. Even if Army is correct that they are not a "person", this could be relevant and appropriate. This "person" approach is used several times. Please reconsider.

Response: Comment accepted. Table 5 has been changed to reflect that, although the definition of "person" in the statute does not include the Army, the standards of control may be relevant and appropriate, and the citation is therefore considered an ARAR.

Comment: Page 9 of 11: Cal Clean Air Act, Title 17 CCR 80100. It seems this should be treated the same as EPA Policy on Wildland and Prescribed Burns with regard to substantive aspects of smoke management plans.

Response: The regulations are considered relevant and appropriate. The Army will comply with substantive elements of the regulations. Under CERCLA, the Army is not required to comply with procedural and administrative provisions; however those elements will be addressed as part of the interim remedial design/remedial action process.

Comment: Page 9 of 11: Cal Clean Air Act 41800. Please clarify or eliminate statement that action will be conducted in a manner such that waste will not be burned.

Response: Table 5 has been modified to reflect that the intent of prescribed burning within the context of the IA is to remove vegetation and not to burn waste.

Comment 5: Table B3, p. 3 of 3. Interim Action Costs, OE Detonation. Drop the "million" next to "13,000 million".

Response 5: Comment accepted. Text has been changed to delete "million"

IB. CALIFORNIA ENVIRONMENTAL PROTECTION AGENCY, DEPARTMENT OF TOXIC SUBSTANCES CONTROL COMMENTS DATED FEBRUARY 15, 2002

Thank you for providing the Department of Toxic Substances Control (DTSC) with the Draft Final Interim Action Ordnance and Explosives Remedial Investigation/Feasibility Study for Ranges 43-48, Range 30A, and Site OE-16 for our review. The document was prepared by Harding ESE for the United States Army Corps of Engineers on behalf of the United States Army at Fort Ord. Our comments are as follows:

Comment 1: **Appendix D, Response to Comments;**

Previous DTSC General Comment #1: The Department of Toxic Substances Control (DTSC) has made the determination that Ordnance and Explosives (OE)/Unexploded Ordnance (UXO) recovered at closed, transferred and transferring ranges can be considered a hazardous waste pursuant to California Code of Regulations (CCR). As a result, treatment of OE/UXO must be performed in a manner consistent with California hazardous waste treatment requirements specified in CCR, Title 22, Division 4.5, Chapter 14, Article 16 (Miscellaneous Units). Please include the appropriate references in the ARARs.

Army's Response: The Army has no objection to citing provisions of Title 22 Hazardous Waste Regulations as ARARs if OE is determined to be a hazardous waste when treated. However, the Miscellaneous Unit Requirements merely provide for the issuance of permits with terms and provisions that would apply specific requirements to specific sites. Procedural requirements such as a permit do not qualify as an ARAR and will not be issued for the IA Table 5 (ARARs) has been revised to include an evaluation of CCR, Title 22, Division 4.5, Chapter 14, Article 16 (Miscellaneous Units).

DTSC Response: DTSC agrees that a Resource and Conservation Recovery Act (RCRA) permit will not be required for the IA. However, the substantive requirements of Title 22, Division 4.5, Chapter 14, Article 16 must be followed.

Response 1: The only substantive requirement of RCRA Subpart X and corresponding state regulation, California Code of Regulations Title 22, Section 66264.600 et seq., is that open detonation be conducted in a manner protective of human health and the environment. This is one of the nine criteria that was specified in the U.S. Environmental Protection Agency's *Guidance for Conducting Remedial Investigations and Feasibility Studies Under CERCLA* (EPA 1988) (RI/FS/ Guidance) and was evaluated in the IA RI/FS.

Comment 2: **Section 6.1.3, OE Detonation Alternatives, Detonation Chambers, Page 52. Please delete the last sentence of this section starting with the word "because…". The sentence inaccurately states that the OE items would have to be transported over hundreds of acres.**

Response 2: Comment accepted. Text has been changed to delete text as recommended.

Comment 3: **Sections 6.3.1.3.2, 6.3.2.3.2, and 6.3.3.3.2. The costs for the remedial action alternatives (surface and subsurface removal) do not include long term Operation and Maintenance (O&M) costs. Since the reuse and the ultimate cleanup level (depth) is not clear at this time, it should be noted that O&M costs associated for long term management of the site may be incurred.**

Response 3: The following three OE Remedial Action Alternatives were evaluated for each of the three IA sites (Ranges 43-48, Range 30A, and Site OE-16): *No Action with Existing Site Security Measures, Enhanced Site Security Measures, and Identify and Remove OE (Subsurface OE Removal).* Because the first two alternatives do not take action to remove OE and instead focus on maintaining or enhancing controls to minimize OE-related hazards while the basewide OE RI/FS is being conducted, operations and maintenance (O&M) costs were estimated for implementation of these controls. The preliminarily identified preferred alternative, *Subsurface OE Removal*, takes action to remove surface and subsurface OE at the sites; therefore, additional controls (and associated O&M of these controls) would not be required as with the other alternatives evaluated. Costs associated with maintaining site controls during subsurface OE removal and restoring these controls after work is completed were included in the capital cost estimates.

Comment 4: **Tables 2-4 in Appendix. The tables in the Appendix listing OE/UXO found at each of the three IA sites need to be checked. According to the tables, the only items found were either OE Scrap or UXO. No OE was found. Table 4 (OE-16) also uses slightly different terminology than either Table 2 (Ranges 43-48) or Table 3 (Range 30A).**

Response 4: The information in Table 4, OE-16, UXO and OE Scrap Discovered During Investigations, is correct. In this table, entries "FALSE," "OES-E (Scrap, Expended)" and "OE Scrap" indicate that the item(s) was an OE scrap. Entries "TRUE," "UXO" and "UXO (live)" indicate that the item(s) was unexploded ordnance.

II. COMMENTS FROM OTHER ORGANIZATIONS AND THE PUBLIC

IIA. COMMENTS FROM MIKE WEAVER, CHAIR, THE HIGHWAY 68 COALITION, BOARD MEMBER, MONTEREY BAY TOXICS PROJECT, DATED FEBRUARY 18, 2002

FOR THE ADMINISTRATIVE RECORD

In my mailbox on February 16, 2002 was your letter postmarked February 15, 2002. Your letter states that you are denying my written request for a 30-day review extension. I handed you a written request for a 30-day extension on February 6, 2002. This was the same evening that I received the correct (Draft Final) copy of the above referenced study document.

Thanks to California DTSC, I was able to obtain the correct (Draft Final) copy on the evening of February 6, 2002. Your letter to me states that this allows me about two weeks (12 days) to review this extensive and important document. You then encourage me in the next sentence to comment on it (by February 18, 2002).

You are well aware of the Fort Ord Superfund Technical Assistance Grant (TAG), and you know we have community Technical Advisors (TA's) whose function it is to assist community members with reviewing and commenting on the Army's Superfund cleanup documents, such as this one.

You know you have only recently agreed to release this Draft Final, Interim Action RI/FS for Ordnance and Explosives to the TAG Advisors. Furthermore, you know that TAG TA's have not received this document, DESPITE the fact that it has been the subject of ongoing requests for over half of a year. TAG Advisors and community members are eager to read this document, review it, and comment on it, IF given the opportunity.

However, you are closing off the public's ability to review and comment on this very important document. Yet, in the same letter, you state that people can also make comments on the RI/FS during the required public comment period, which will begin in mid-March and end in mid-April as part of the Proposed Plan. You seem to be deliberately manipulating and diminishing the public's ability to have early and meaningful participation in the Fort Ord Superfund cleanup process. As you are aware the Army is required to do a base wide Ordnance and Explosives RI/FS. What I see here is a further attempt to piecemeal that regulatory requirement.

You are, in essence:

1) **Preventing substantive review**

2) **Preventing early and meaningful participation in the process**

3) **Excluding public participation**

4) **Attempting to "jam" the public through the process**

5) **Stifling serious concerns**

I request that you reconsider your shutting the door on the request for an additional 30 days. (We would like 30 days!) Those of us who are lifelong neighbors of former Fort Ord wish better consideration than the seemingly callous treatment we have been receiving at the hands of the Army, Environmental and Resources Management Department.

In the interim, and while awaiting your reconsideration, I would like to offer the following. This is after a very preliminary skimming of the above referenced document. California DTSC was kind enough to suggest areas of the document that seem to pertain to the meat of the matter.

Response: We have responded to your request in a letter dated February 13, 2002. The close of the review period for the document was February 18th, about two weeks from the day you received it. In addition, people can also make comments on the IA RI/FS during the required public comment period, beginning on March 12, 2002 and ending on April 11, 2002, when the Proposed Plan for this action is available. With the time available during the public comment period, we will not extend the comment period on the Draft Final IA RI/FS. We encourage you, however, to comment on the document as soon as possible.

Comment 1: **To begin with, the priorities for selecting these particular three areas are unclear. We are all concerned about safety. The entire base is a concern. However, the selection of these three areas over others is not clearly spelled out. The areas are approximately one-half mile to one mile from areas considered populated. They are fenced and patrolled. An analysis and explanation for why the area immediately next to the City of Seaside was not chosen would be a start. An explanation regarding potential new future land uses nearby would also be helpful in this document. The Interim Action proposes to spend millions of dollars of taxpayer money on an interim clean up. The specific reasons are not clear. After all small children from the City of Seaside are more likely to play closer to home than further away.**

You may remember my concerns when an area sort of near the town of Del Rey Oaks was chosen for a "non-time critical" clean up. After spending millions of dollars of taxpayer money, the Army changed the nomenclature to a "time-critical" clean up. The area where all the money was spent is proposed for an 18-hole golf course, a 360 plus room hotel, and a conference center. My question about who benefited, the public's safety or the developer, has never been answered.

Response 1: The Army acknowledges your concerns regarding the prioritization and selection process for ordnance and explosives (OE) clean up at the former Fort Ord (Fort Ord). As described in Section 2.0 (Purpose and Objectives) of the Interim Action OE RI/FS (IA OE RI/FS), the Army is conducting the basewide OE RI/FS which includes a comprehensive evaluation of the need for OE clean up for all property at Fort Ord. While the basewide OE RI/FS is being conducted, remedial actions at the IA sites are being evaluated on an interim basis because the basewide OE RI/FS will not be completed until 2005. In the meantime, there is a need to: (1) take appropriate action to protect human health from an imminent threat and/or (2) institute temporary measures to stabilize the IA sites in the short term while a final remedial solution is being developed under the OE RI/FS for these sites. As described in Section 5.0 (Interim Remedial Action Objectives and Selection of Interim Action Sites) of the IA OE RI/FS, the IA sites (Ranges 43-48, Range 30A, and Site OE-16) were selected as priorities for Interim Action because of: (1) the presence of live, sensitively fuzed surface OE items at these sites, (2) their close

proximity to residential neighborhoods, and (3) the history of trespassing incidents at these sites. Other areas at Fort Ord, such as noted in your comment, will be evaluated for OE clean up in the basewide OE RI/FS.

In addition, the Army recognizes the safety issues relating to the lands adjacent to the City of Seaside. The Army has published a Notice of Intent that will allow the Army the ability to address the OE hazards in this area.

Comment 2: **This document fails to mention the numerous amounts of wildlife that are being displaced and disturbed with the Army's hopscotch clean up enterprises and their "blow in place" activities. I have lived my entire life immediately next door to former Fort Ord adjacent to its southern boundary on State Highway 68. In the past two years we have witnessed types of wildlife that we have never seen on our property before. These include packs of coyotes, rattlesnakes, eagles, and red foxes. There also seem to be more migrating deer. The document repeatedly cites the native plants and the HMP. Strangely, it avoids the mammals, reptiles, and bird populations that can and do burn up in wild land fires. The document also seriously downplays the risks of wild land fires getting out of control. Need I remind anyone of New Mexico or Malibu?**

Response 2: The Army recognizes OE remedial activities may have impacts on wildlife living on or near Fort Ord; concerns over impacts to the environment must be balanced with concerns over impacts to human health associated with the presence of OE at Fort Ord. Blow-in-place activities are conducted when OE is found that cannot be safely moved for detonation elsewhere as described in Section 6.0 of the IA OE RI/FS. Section 6.0 also: (1) evaluates "Impacts to Protected and Other Natural Resources" for each of the OE remedial alternatives considered for the IA sites, (2) acknowledges the risk of wildfire escape when prescribed burning is conducted, (3) describes precautions the Army would take to minimize these risks, and (4) outlines an approach to conducting vegetation clearance activities in increments to minimize impacts to wildlife and minimize the risk of wildfire escape. Interim Action vegetation clearance, OE remedial, and OE detonation activities will be conducted in a manner that takes into consideration impacts to animal species found at Fort Ord, including those listed in Table 1 (Habitat Management Plan [HMP] Species at Fort Ord) of the IA OE RI/FS.

The IA OE RI/FS addressed impacts to special-status species that are either protected by the federal or State endangered species acts, considered federal or State species of concern, or are considered rare or endangered by the California Native Plant Society. Impacts to other species including vertebrates are not expected to be significant since the proposed prescribed burns will occur during the time of year when plants and animals have had time to complete their reproductive cycles.

Comment 3: **This piecemeal proposed clean up project has an agenda. It is just not clearly spelled out. I question why the millions of dollars should be allocated to these three areas at this time when we have a situation with a toxic dump on the former Fort Ord property that is contaminating the groundwater. The toxic plume threatens the health of the nearby City of Marina, as well as the students and staff of the California State University of Monterey Bay. If the Army was as interested in public health as they say, they should be moving this toxic dump's contents**

somewhere else. Somewhere else, that has an impervious lining on the bottom of the landfill. It is a question of priorities. It is a question of who benefits.

Response 3: The Army recognizes your concerns regarding chemical contamination at Fort Ord. Chemical contamination at Fort Ord is being addressed under the Installation Restoration Program (IRP) or Basewide Remedial Investigation/Feasibility Study (RI/FS) and Record of Decisions for chemical contamination. Results from these investigations and remedial actions can be found in the applicable site characterization and site confirmation reports. These reports are part of the Fort Ord Administrative Record. This Interim Action Ordnance and Explosives Remedial Investigation/Feasibility Study (IA OE RI/FS) and OE RI/FS address OE risks at the former Fort Ord. Risks associated with contact with OE are acute and potentially catastrophic in nature and may result in crippling injuries or death. The Army believes it is necessary to proceed with actions to address OE risks as soon as possible, even concurrent with ongoing chemical cleanup.

Comment 4: Page 11, The one paragraph discussion of the inducement of seawater intrusion offers absolutely no data to back up its assertion that seawater intrusion continues to affect these aquifers. Please provide the data to justify this comment. Also on page 11, under OE RI/FS background, the study states "In November 1998, the Army agreed to evaluate OE at the former Fort Ord in an OE RI/FS consistent with (CERCLA)". The study fails to reveal that citizens sued the Army and that the Army in a settlement agreed to do a BASE WIDE RI/FS.

Response 4: Section 3.2.5.2 (Hydrogeology) provided a reference to the most recent Fort Ord document that presents data regarding saltwater intrusion at Fort Ord. The full citation of the document was provided in Section 9.0 (References), and is available for public review and is part of the Administrative Record for Fort Ord.

Comment 5: Page 14, Under location of Ranges 43-48, it is stated, "Other historic use of the area included a "Company Problems" training area. Please explain what a "Company Problem" is, and what constituted training for "Company Problems" at this area. Are there "Company Problems" still there today?

In my experience of attempting to follow the Superfund cleanup next door to me, the Army plays up or down the "threat" based often on what appears to be politically expedient. I remember when I was told that there were never any Army Tanks at Fort Ord. When the Army admitted that there were Tanks at Fort Ord, I was initially told that they were only "stored" there. Now, this document begins to reveal the existence of "anti-tank" weaponry, and the existence of tanks. Where were the tank training areas? Will these be revealed in the Base Wide RI/FS?

Response 5: The “Company Problems” area was used as a company training and maneuver area. Infantry companies used the area to develop team building and fighting skills under a variety of battle scenarios.

In response to the comment *“Now, this document begins to reveal the existence of “anti-tank weaponry and the existence of tanks”:* Infantry units at former Fort Ord practiced using a variety of weapons including antitank weapons. Antitank weapons (e.g., rockets, missiles and projectiles) were used to train soldiers in tank warfare tactics. The weapons were fired at targets that included unmanned obsolete Armored Personnel Carriers

(APCs), tank hulls, and other hard targets. The information regarding antitank weaponry use at Fort Ord has been available to the public for at least 10 years and can be found in reports at least as early as 1991 (see Work Plan for Basewide Remedial Investigation/Feasibility Study, December 1991, Section 5.39.1, pg. 141).

At this time, two areas potentially related to tank training have been identified at former Fort Ord: the Tank Gunnery Range in the eastern part of the base, and the Ranging Area in the former Fritzsche Army Airfield. Preliminary investigations have been performed at these locations and they have been discussed in the Draft Final Literature Review and the Draft Archives Search Report. To date, only tank maneuvering/driving can be confirmed to have taken place at former Fort Ord; no evidence of tank-fired ordnance has been identified in any of the sites investigated. Detailed discussions of the two tank training areas will be presented in the future OE RI/FS.

Comment 6: **Page 18, Section 4.1.2.3.2, titled "Development Areas (OE-15MOCO.2 and OE-15SEA.4)". It states approximately 11 acres of Development Area lie within this IA site (Plate 3). The 11 acres lie within portions of Ranges 44 and 45 that extend outside the 472-acre Habitat Area. It then goes on to say "THE CLEANUP OF THE REMAINDER OF THE DEVELOPMENT AREA (72 ACRES) IS BEING CONSIDERED FOR COMPLETION UNDER A DIFFERENT PROGRAM AND IS NOT PART OF THIS IA."**

Again, this is not clear as to what is intended, what development is being proposed on the 11 acres, or who may stand to benefit. If safety is the issue, why are not the 72 acres being considered? Why is this section of the study cut short?

Response 6: Since preparation of the Draft IA RI/FS and receipt of regulatory agency comments, the Army has reconsidered the use of mechanical clearance in specific areas and consequently adjusted the Ranges 43-48 IA site boundary to exclude an area of approximately 72 acres planned for future development (Sites OE-15SEA.4 and and majority of OE-15MOCO.2 in the northern portion of Ranges 43-48). A non-time critical action is under consideration. According to onsite OE safety personnel, areas behind the firing lines of these OE sites could be cleared of vegetation using mechanical clearance methods without endangering vegetation clearance workers. The Army has determined the use of mechanical clearance in these areas would comply with the Endangered Species Act (ESA) and Habitat Management Plan (HMP) that limits the use of mechanical clearance methods in the central maritime chaparral (CMC) habitat present over the majority of land in the current Ranges 43-48 IA site boundary.

Comment 7: **Page 19 talks about road clearances that were performed. These road clearances apparently were performed prior to a study. The stated road clearances, the cost of the road clearances, the specific locations of the road clearances on former Fort Ord are not clear. It states the road clearances were performed to facilitate travel within selected portions of the MRA. It then states the Maverick road clearance was "cleared" to a depth of four feet. That is a pretty permanent road clearance. Please clarify. Please clarify the difference between a four-foot deep road clearance and a four-foot deep fuel break.**

Response 7: Access to areas located within the Multi-Range Area (MRA) requires that the roads be cleared of UXO. Clearance to a depth of 4 feet allows for the safe passage of heavy

equipment and support vehicles. There is no difference in UXO removal actions taken during a four-foot deep road clearance or a four-foot deep fuel break clearance. Location of the road and fuel break clearances are shown on Plate 4 and related date is presented in Table 2.

Comment 8: **It was stated at the Army's Community Meeting on February 6, 2002 that the reason Range 30A was included in this Draft Final IA RI/FS was because of its proximity to the Laguna Seca Racetrack. My question as to why the Army chose to clean up an area north of a proposed parking lot for a racetrack (an extra parking lot) over cleaning up areas near the City of Seaside was not adequately answered.**

Millions of dollars of taxpayer money are at stake here. The prioritization of clean up to benefit the safety and preserve the health of the existing residents is the issue. This document is not clear on this issue at all other than repetitiously reiterating the same confusing rationale.

Page 25 of this study document continues (under 4.2.4 Conceptual Site Model) "Depending on the vegetation clearance alternative chosen to support the OE remedial action at Range 30A, portions of other ranges to the south such as Range 28, 29, and 30 may or may not need to be incorporated into the area of remediation."

Thus, here we have a study that leaves open the possibility that the plans will change. We have a study that concludes "burning, blowing in place and subsurface digging" is the Army's preferred alternative. This is not an Investigation or Study. It is an Army Position Paper. I believe it is the reason the Army is denying the public the ability to review it, and to review it with technical advisors. The Army picked the result then set about creating a precedent setting document that will put "the Camel's nose under the tent".

Response 8: Please see Response to Comment 1 regarding the prioritization and selection of sites for interim action and why Range 30A was selected as an interim action site. The decision whether or not to incorporate other ranges to the south of Range 30A (such as Ranges 28, 29 and 30) into the interim action site could not be made due to limited data availability in these areas at the time the IA OE RI/FS was prepared. However, as OE remedial action is conducted at Range 30A, field data may indicate these adjacent areas meet the criteria for interim action, and should be remediated. The Army has made all documents related to the IA OE RI/FS available for public review; copies are available in the Fort Ord Administrative Record, the information repositories and on the web site www.fortordcleanup.com.

Comment 9: **Site OE-16 analysis finds that the location is in close proximity (approximately one mile) to a residential neighborhood (Fitch Park). The document fails to mention proposed new land uses at adjacent Parker Flats. How might this factor in to the prioritization?**

Response 9: The purpose of the interim action (IA) is to remove the immediate threat to public safety. The proximity of Site OE-16 to the Fitch Park residential area constitutes an immediate threat to public safety, and for that reason, it is included in the IA. Because the IA

addresses immediate threats to existing nearby residents, the proposed land use of the Parker Flats area is not a factor in prioritizing actions to be taken at Site OE-16.

Comment 10: Page 37 contains a false statement/conclusion under "Impacts to the Public" i.e., "Conducting a prescribed burn within the IA sites is not expected to have adverse impacts on the public because it would include informing and offering support to affected residents and coordinating relocation efforts during and for a period after a burn..."

Much of the public, myself included, will be forced to make a choice of staying home and being poisoned by the smoke but protecting one's home from being burned down by the fire "accidentally" getting away, OR leaving to stay at a Motel 6 type operation and risking coming home to have everything burned down. This is really no choice at all. The statement under "Impacts to the Public" is tantamount to the Government saying, "Hi, we are the government and we are here to help you!"

As one who grew up across the road from former Fort Ord, I was witness to the out of control fires that erupted infrequently due to live fire exercises in dry grass. The Army and the 7th Division were on hand then to help put the fires out. Intentionally starting fires in California on dry hills is a very dangerous thing to do. It puts me at risk. It puts my family at risk. It puts the Highway 68 Corridor community at risk.

Response 10: The Army acknowledges your concerns regarding the risks associated with a prescribed fire to go beyond containment lines. Please see Section 6.1.1.2 (Prescribed Burning, Level of Effort in Terms of Personnel) for precautions the Army would take to minimize these risks.

Comment 11: What is the basis for the costs of alternatives? Where is the underlying data? Where is it available? Isn't it "might be 50% more or 30% less" a very broad range? What factors might either really elevate the costs or diminish the costs? If a fire gets out of control and burns surrounding residential neighborhoods, how might that elevate the costs? If my attorney sues, how might that elevate the costs?

Response 11: References to the sources of information had been added to Appendix C. EPA Guidance (*A Guide to Developing and Documenting Cost Estimates During the Feasibility Study - July 2000*), indicates the level of detail required in feasibility study cost estimates, and recognizes at the RI/FS stage, that an accuracy of +50/-30 percent is a reasonable range of accuracy. The cost estimates presented in the IA OE RI/FS follow these guidelines, and include a percentage of total costs added as a contingency for unknown future costs.

Comment 12: Page 83, Section 8.3.2, titled "Community Relations Strategy" The Army has violated every one of the seven listed objectives.

Response 12: The Army disagrees. The Army strives to meet the objectives through work with the public and regulatory agencies in conducting community relations activities. The Army's community relations activities specific to the interim action program to date include two symposia, two community bulletins mailed to over 40,000 households in the community, presentations at regularly scheduled Community Involvement Workshops and Technical Review Committee meetings, and discussions with local interest groups. Following this

IA OE RI/FS, the Proposed Plan will be issued for a 30-day public comment period and two public comment meetings are scheduled to gather public comments.

Comment 13: This document's revelation that burned unexploded ordnance is often more dangerous after a fire is not adequately analyzed in terms of alternatives.

Response 13: Under OE removal procedures, any OE or suspected OE item must be considered as sensitive and dangerous, and handled with extreme caution unless determined otherwise by a trained UXO personnel. Any UXO that may be destabilized by the heat of burning vegetation will be removed by these trained personnel.

Comment 14: The risk of escaped fires or wildfires is downplayed and not adequately analyzed. The language that there were regular natural fires at Fort Ord is not borne out by scientific data. Where is your data on this?

Response 14: As discussed in Section 6.1.1.2 (Prescribed Burning, Use at Fort Ord and Other Sites and Under What Conditions), prescribed burning has been extensively used at Fort Ord. The table in that section provides specific information about recent uses of prescribed burning in support of OE cleanup activities.

Comment 15: Page 42 of this document states "Prescribed burning has been used extensively at the former Fort Ord." is an undocumented assumption and statement. Where is your data?

Response 15: Section 6.1.1.2 (Prescribed Burning; Use at Fort Ord and Under What Conditions) of the IA OE RI/FS includes a discussion of prescribed burns that have been conducted at Fort Ord.

Comment 16: Page 50 reveals the Army position that OE removal to depths consistent with planned re-use was selected. The document then fails to adequately reveal the planned or proposed reuse. The public has a right to know where millions of dollars of their tax money is going. This document fails to analyze surface or one foot deep clean up for safety versus four foot deep clean up. The data on the different costs, I believe is minimized. Where is the data? How was it computed? Total costs listed and added for the Army's selected/preferred alternative for the three areas ranges from an estimate of $23.5 million to $25.1 million. These numbers may be 50% higher or 30% lower. For this kind of money, the public deserves the right to have adequate time to review this document, ask questions, have technical advisors ask questions, AND GET ANSWERS. This all needs to happen PRIOR to the Army springing its Plan on the neighbors.

Response 16: Section 6.1.2.3 (Identify and Remove OE) of the IA OE RI/FS indicates subsurface removal would be conducted to depths consistent with planned reuse on each area. Planned reuse for the IA areas are described in Section 4.0 (Interim Action Remedial Investigation) based on a current understanding of reuse as either habitat area or development. Data used in developing costs was based on OE contractor estimates.

The above is by no means a complete review of the document.

IIB. COMMENTS FROM EDWARD M. OBERWEISER, MBTP BOARD OF DIRECTORS, SANTA CRUZ, CALIFORNIA, DATED FEBRUARY 16 and 17, 2002

COMMENTS DATED FEBRUARY 16, 2002

Resubmission: FOR THE ADMINISTRATIVE RECORD

Comment: **I am formally requesting an extension of the thirty day public comment period for the "Interim Action, RI/FS.**

Only in the last two weeks have the documents been in the hands of some interested members of the Monterey Bay communities. That is not anywhere near enough time to read, digest and make comment on this extremely complex and important document.

One of our Board members, Michael Weaver only received a copy less than weeks ago.

Our Technical Advisors still have not received the "Draft Final Interim Action, RI/FS" or the supporting documents for review, so they can deliver their report to us on this document, and make their comments as well.

This has been an ongoing problem for the entire seven years I have been involved in the cleanup of the former Fort Ord Army base. The public does not receive complete documents from the Army in a timely manner for adequate review and comment.

The Monterey Bay Toxic Projects cannot perform its function under the EPA Technical Assistance Grant until our advisors have had adequate time to read, review and write a proper response to the Draft Final.

Only after we have received our Technical Advisors report, will we be able to set up a Monterey Bay Toxic Projects public meeting and explain the document to the general public in more accessible language.

Response: A letter was sent to you on February 27, 2002 in response your request for a 30-day extension for reviewing the Draft Final IA RI/FS report.

Comment: **As regards the document, it appears the Army is trying to complete separate EISs on different ranges. Under NEPA, evaluation of the actual and potential impacts of Army activities at these and other ranges must be treated as a single "action" for NEPA purposes, and must be considered in a single EIS.**

Response: Since the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) and National Contingency Plan (NCP) provide a process for public involvement in a manner that is functionally equivalent to the requirements of National

Environmental Policy Act (NEPA), compliance will be achieved by following the CERCLA/NCP procedures. CERCLA specifically seeks to avoid unnecessary duplication of effort. The CERCLA/NCP process addresses, where appropriate, consideration of environmental effects and compliance with applicable legal standards, and the public will be afforded the same opportunity to review and comment that is provided by NEPA.

Comment: **Also, the document includes no discussion of the chemicals contained in the smoke that will be emitted during the burning. This makes it impossible to fully assess impacts to the humans and the environment due to the smoke emissions.**

Response: Section 6.0 (Interim Action Feasibility Study; Air Emissions) summarized the results of the *Technical Memorandum, Air Emissions from Incidental Ordnance Detonation During a Prescribed Burn on Ranges 43 through 48, Former Fort Ord* (*Harding ESE, 2001c*) (Air Emissions Technical Memorandum), which was prepared to (1) quantify a reasonable upper bound estimate of air emissions from incidental detonation of OE in Ranges 43 through 48, (2) compare those emissions with those expected from burning of biomass, and (3) compare screening level estimates of pollutant concentrations from OE to health-protective regulatory screening values. The Air Emissions Technical Memorandum concluded that air pollutant emissions from incidental OE detonation during a prescribed burn in Ranges 43 through 48 will be minor compared to emissions contributed directly by biomass burning, and will result in pollutant concentrations well below health-protective regulatory screening levels.

Please include this in the administrative record as comments on the Draft Final, Interim Action Ordnance and Explosives RI/FS for Ranges 43-48, Range 30A, Site OE-16 Former Fort Ord, California.

COMMENTS DATED FEBRUARY 17, 2002

Resubmission: FOR THE ADMINISTRATIVE RECORD

Please include this as an addendum to my previous comments. I am formally requesting an extension of the thirty day public comment period for the "Interim Action, RI/FS."

Response: A letter was sent to you on February 27, 2002 in response your request for a 30-day extension for reviewing the Draft Final IA RI/FS report.

Comment 1: **Only in the last two weeks have the documents been in the hands of some interested members of the Monterey Bay communities. That is not anywhere near enough time to read, digest and make comment on this extremely complex and important document.**

One of our Board members, Michael Weaver only received a copy less than weeks ago.

Our Technical Advisors still have not received the "Draft Final Interim Action, RI/FS" or the supporting documents for review, so they can deliver their report to us on this document, and make their comments as well.

This has been an ongoing problem for the entire seven years I have been involved in the cleanup of the former Fort Ord Army base. The public does not receive complete documents from the Army in a timely manner for adequate review and comment.

The Monterey Bay Toxic Projects cannot perform its function under the EPA Technical Assistance Grant until our advisors have had adequate time to read, review and write a proper response to the Draft Final.

Only after we have received our Technical Advisors report, will we be able to set up a Monterey Bay Toxic Projects public meeting and explain the document to the general public in more accessible language.

Response 1: The Army has made all documents related to the IA OE RI/FS available for public review at the time they are published; copies are available at the Fort Ord Administrative Record, in the information repositories, and on the website (http://www.fortordcleanup.com).

Comment 2: As regards the document, it appears the Army is trying to complete separate EISs on different ranges. Under NEPA and the required EIS evaluation of the actual and potential impacts of Army activities at these and other ranges must be treated as a single "action" for NEPA purposes, and must be considered as a single EIS. Additionally you must comply with the substantive requirements of the California Environmental Quality Act (CEQA).

Response 2: Since the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) and National Contingency Plan (NCP) provide a process for public involvement in a manner that is functionally equivalent to the requirements of National Environmental Policy Act (NEPA), compliance will be achieved by following the CERCLA/NCP procedures. CERCLA specifically seeks to avoid unnecessary duplication of effort. The CERCLA/NCP process addresses, where appropriate, consideration of environmental effects and compliance with applicable legal standards, and the public will be afforded the same opportunity to review and comment that is provided by NEPA. CEQA does not apply to federal decisions.

Comment 3: Also, the document includes no discussion of the chemicals contained in the smoke that will be emitted during the burning. This makes it impossible to fully assess impacts to the humans and the environment due to the smoke emissions.

Response 3: Section 6.0 (Interim Action Feasibility Study; Air Emissions) summarized the results of the *Technical Memorandum, Air Emissions from Incidental Ordnance Detonation During a Prescribed Burn on Ranges 43 through 48, Former Fort Ord* (*Harding ESE, 2001c*) (Air Emissions Technical Memorandum), which was prepared to (1) quantify a reasonable upper bound estimate of air emissions from incidental detonation of OE in Ranges 43 through 48, (2) compare those emissions with those expected from burning of biomass, and (3) compare screening level estimates of pollutant concentrations from OE

to health-protective regulatory screening values. The Air Emissions Technical Memorandum concluded that air pollutant emissions from incidental OE detonation during a prescribed burn in Ranges 43 through 48 will be minor compared to emissions contributed directly by biomass burning, and will result in pollutant concentrations well below health-protective regulatory screening levels.

Please include this in the administrative record as comments on the Draft Final, Interim Action Ordnance and Explosives RI/FS for Ranges 43-48, Range 30A, Site OE-16 Former Fort Ord, California.

IIC. COMMENTS FROM MRS. W.V. GRAHAM MATTHEWS, CARMEL VALLEY, CALIFORNIA, DATED FEBRUARY 19, 2002

Thank you for returning my call regarding the deadline for comments on the Interim RI/FS document and for alerting me that it could be found on the Fort Ord website. I have not been able to review it thoroughly but sufficiently to be able to make the comments below. As Julie Anne Delgado, current co-president of the Monterey Bay Chapter of CNPS, will be commenting on the document for that organization, I am writing as an individual with over 40 years of involvement in conservation issues on the Monterey Peninsula. By way of background, I served as state forestry coordinator for CNPS for over 15 years and was instrumental in the development of its fire and post-fire seeding policies for native habitat. I am also the author of the widely used book, *An Illustrated Key to the Flowering Plants of Monterey Co*.

Comment 1: **As a general statement I strongly support prescribed burns and let-burn policies where public health and esthetic values can be protected. The Mediterranean-type plant communities that occur at Fort Ord not only benefit from fire, but also support a variety of "fire follower" native annuals that germinate only or primarily after a fire, serving to hold the soil until the dominant shrubs recover. I appreciate that this document recognizes these values.**

I am concerned about the limited number of species found in the three areas considered in this document. I do understand that this study is limited to Ranges 43-48, 30A, and OE-16; however, because it is likely to become a template for the base-wide OE RI/FS, it is very important that the methodology be thorough and accurate. I note in section 3.2.4.2 that many surveys are listed between 1994 and 2000, but it is not clear that they were necessarily done at the time of year to cover the blooming period of the large number of rare, threatened, and endangered (RT&E) plants that occur on the base.

Response 1: Your comment is acknowledged regarding your support of prescribed burning where protection of public health and esthetic values can be protected. The methodology for development of the burn prescription will be described in the Operational Burn Plan. Baseline surveys for HMP annuals were conducted at Ranges 43 – 48 in April 2000 during a blooming period. Surveys were conducted by inspecting areas of known or potential habitat by walking transects at approximately 25-foot intervals. Observed populations have been mapped using global positioning satellites. Neither Hooker's manzanita or Coast wallflower were found during the 1992 or 2000 surveys of Ranges 43-48. Hooker's manzanita can be surveyed at any time of the year since it is not an annual plant. Coast wallflower would have been identified during the annual plant survey if it were present.

Comment 2: **Central maritime chaparral is correctly considered to be "rare and declining and of the highest priority;" while the document identifies six RT&E species (4.1.2) found in mature and intermediate habitat, it recognizes that the seedbank for other sensitive species, particularly "fire followers," doubtless exists in the soil. It is therefore imperative that the timing of burns mimic the natural regime as closely as possible and that clearing for firebreaks, etc. disturb as little of the site as possible. I applaud the plan to develop baseline data before the OE remedial action and to**

monitor for five years afterward. One of the main purposes of this monitoring should be to identify and quantify RT&E annual "fire followers."

Response 2: Your comment is acknowledged regarding the timing of burns to mimic the natural regime of seedbank germination as closely as possible with minimal site disturbance, and collection of baseline data. We agree with your comment to minimize disturbances during OE clearance operations. Existing roads have been used as fuel breaks to reduce the risk of weed infestations and habitat loss. Habitat monitoring occurs for five years following the cleanup to identify problems such as weed infestations during the habitat recovery. Weed and erosion control have been ongoing at former Fort Ord through an agreement with the Bureau of Land Management and California Department of Parks and Recreation since the base closed in 1994 and will continue until the property is transferred.

Comment 3: I note that no baseline study has been done for Range 30A (4.2.2.1) nor has the density of the plant species been estimated. I urge that it be given the same baseline and monitoring treatment as Ranges 43-48. Regarding OE-16, inasmuch as Hooker's manzanita is found on that site (4.3.2.2), it seems likely that suitable habitat for it exists on the other two sites.

Response 3: Collection of biological baseline data will occur at Range 30A before the vegetation is cleared. Hooker's manzanita is expected to occur at Range 30A but not at OE-16 or Ranges 43 – 48 based on the flora and fauna surveys conducted to develop the HMP (see HMP Figure B-11).

Comment 4: Under Prescribed Burning (6.1.1.2), the report indicated that burning resulted in an estimated 3000 plants per acre compared to 29 for cutting. Diversity was also much higher (pp. 40, 47). These conclusions are consistent with other studies and serve to justify the use of prescribed fire in natural preserves even if there is some inconvenience to surrounding residents. It is critical to devise and follow a careful prescription to minimize smoke and to warn residents well in advance of planned burn days as the document proposes. The propensity of weeds to colonize disturbed areas and fire roads can be a serious problem in natural areas; therefore, weed control after a fire should be a part of this plan. If disturbance is strictly minimized during prescribed fires, post-fire weed control should be only a minor expense, but it should be included in budgeting. Detonation of OE may result in additional disturbed areas that may require weed control. Mechanical cutting also promotes weed infestations and can cause serious erosion if not carefully done; I therefore would oppose this procedure on any areas slated for habitat preservation. I am gratified to see that the USF&WS has also taken this position (p. 44).

Response 4: Your comment is acknowledged regarding the benefits of prescribed burning. The methodology for development of the burn prescription will be described in the Operational Burn Plan.

Comment 5: It is a matter of concern that the Air Pollution Control District's recent Smoke Management Draft EIR finds that significant amounts of the toxic substance acrolein are found in smoke from burning vegetation. Every effort should be made to monitor this pollutant and reduce its impact to the minimum level.

Response 5: Your comment is acknowledged regarding air pollutant monitoring during prescribed burning. The methodology for development of the burn prescription will be described in the Operational Burn Plan, and an air monitoring plan will also be developed prior to a burn.

In summary, I support the Preferred Alternatives with attention to RT&E plant species that I have recommended and careful adherence to a Prescribed Burn Plan to minimize impacts on public health and air clarity.

I am glad to know that the IA RI/FS will be followed by the Proposed Plan, which will be released early next month for a public comment period of 30 days. As I mentioned to you, I was disappointed not to receive a copy of the IA RI/FS, even though I attended both workshops conducted by the Army at the Monterey Conference Center in September and November. Therefore, I would very much like to receive a copy of the plan or at least a fairly detailed summary as an alternative if the document is very large.

IID. COMMENTS FROM UNITED STATES DEPARTMENT OF THE INTERIOR, BUREAU OF LAND MANAGEMENT, HOLLISTER RESOURCE AREA DATED FEBRUARY 13, 2002

The BLM appreciates the efforts of the Army in the preparation of the Draft Final Interim Action Ordnance and Explosives Remedial Investigation/Feasibility Study For Ranges 43-48, Range 30A, Site OE-16 Former Fort Ord, California (RI/FS). Because most of the sites evaluated in the RI/FS are scheduled to be transferred to the BLM for habitat management and public recreation, the BLM is very interested in the cleanup operations. The following comments reflect our review of the document.

Comment 1: **Section 3.2.3.3 Future Land Uses. The RI/FS indicates that future uses are based upon several plans including the Bureau of Land Management (BLM) Site Use Management Plan (SUMP) (USACE 1995). This section also explains that lands within the Multi-Range Area (MRA) are designated as either Unrestricted Areas, Unrestricted/BLM areas, Limited Access areas, or Restricted/Administration areas. Ranges 43-48 encompass lands that include all four of the designations within the SUMP. Site OE-30A encompasses lands that are almost entirely designated as Restricted/Administration areas.**

While the SUMP was a useful document in delineating potential future uses based upon then known UXO cleanup technologies, site conditions, and habitat management requirements, the BLM has learned that it is not feasible to manage lands under the Installation-Wide Multispecies Habitat Management Plan (HMP) through a Restricted/Administration area designation. Should the BLM accept these lands for management under the HMP, cleanup levels would need to be sufficient to allow for habitat restoration activities, recreational uses and road/trail development. Furthermore, as lands become developed around the margins of the MRA, the BLM will need more freedom to fight wildland fire which will require UXO cleanup sufficient to work safely off designated fuelbreaks and roads in an emergency situation.

Response 1: Army acknowledges the need for BLM to manage lands for habitat restoration activities, recreational uses and road/trail development in a manner that may extend beyond SUMP designations. The preferred OE remedial action alternative is for subsurface OE removal to be performed to depths consistent with planned reuse. The Army looks forward to working with BLM to establish appropriate OE removal depths in the site-specific work plans for the IA sites.

Comment 2: **Section 6.1.2.3 Identify and Remove OE. The RI/FS identifies the appropriate cleanup depth scenario for OE removal as "Identify, Investigate, and Remove All Anomalies to Depths Consistent with Planned Reuse In Each Area". As stated above, the BLM can support this removal scenario as long as it does not reflect future land-uses proposed under the SUMP for the Restricted/ Administration designation. It is our understanding that a Site-Specific Work Plan will be prepared for each site that will delineate OE removal depths to support future land-uses. The BLM will work with the Army on that Work Plan for lands that it is scheduled to receive, however, emphasizes that lands must be cleaned sufficient to allow for**

wildland fire suppression, habitat restoration activities, recreational uses and road/trail development.

Response 2: The Army looks forward to working with BLM on the issues outlined in the comment regarding site-specific work plans.

Comment 3: Sections 7.1.1, 7.2.1, and 7.3.1 Summaries of Preferred IA Alternatives. The BLM generally supports the preliminarily preferred IA alternatives for Ranges 43-48, Range 30A and OE 16 noting some concerns above. We share the concern of the U.S. Environmental Protection Agency described in Comment 2 within their December 7, 2001 letter which refers to the size of the treatment areas. The potential prescribed burn areas for Ranges 43-48 and Range 30A are very large and OE discrimination and cleanup crews will be hard pressed to finish all of the required work before the vegetation regenerates and covers the sites. The size of the preferred burns, we presume, are based upon the presence of existing control lines and fuelbreaks that will be necessary to contain the fire. The IA/RS should provide a better explanation of why the proposed treatment sites are so large. Smaller treatment blocks (i.e., prescribed burn areas) may be easier to control, and would reduce smoke production and duration.

Response 3: We understand your concern regarding the ability to complete the cleanup before the vegetation regenerates and covers the site. However, remediation is being planned to ensure cleanup is completed without having to re-disturb the vegetation. Once the site is burned, the surface will be cleared of OE and metal to facilitate the use of digital geophysical detection equipment that will be used to map the site. Once the electronic data has been evaluated, specific anomalies will be identified for excavation and removal starting in the chaparral habitat areas. Even if the vegetation regenerates before all the targets are excavated, the targeted anomalies can be reacquired and removed without the need to clear vegetation from the site.

Reducing the size of the cleanup site would require construction of new fuel breaks that would result in additional habitat loss, increase the risk of erosion and spread of invasive weeds, and cause additional adverse impacts to the rare maritime chaparral plant community. In addition, creation of smaller burn polygons would require many more burn days and result in smoke being in the air for more than the one to three days that is anticipated under the current plan. Furthermore, creating additional firebreaks within these polygons would require OE clearance in areas potentially heavily impacted by OE, and may be impractical. The methods to be used in conducting prescribed burns, pretreatment of fuel breaks with retardant, burning under ideal weather conditions, and use of helicopters, will enable the Army to control the fire.

Comment 4: Appendix B (Screening Evaluation of OE Remedial Action Depths) and Appendix C (Interim Action Remedial Alternatives Cost Estimates). The information in these two appendices is very helpful and we realize that much speculation is involved in approximating cleanup costs under various removal depths. Although the analysis does show that removals are more expensive under a four foot depth as opposed to a one foot depth, we believe that the cost is not prohibitively different to select a one foot removal depth. For example, subsurface OE removal for Ranges 43-48 under a one foot depth scenario is estimated at 9.5 million dollars, and under a four foot removal the estimate is 10.0 million dollars. The BLM believes that the Army

should consider the deeper OE removal depth in areas that are scheduled to be transferred to the BLM.

Response 4: The Army acknowledges your comment regarding OE removal depths. The preferred OE remedial action alternative is for subsurface OE removal to be performed to depths consistent with planned reuse, and is not limited to conducting a 1 foot removal. The Army looks forward to working with BLM to establish appropriate OE removal depths in the site-specific work plans for the IA sites.

Comment 5: Based upon six years of managing 7,200 acres at Fort Ord, the deeper removal level is consistent with the types of land management activities that can be expected under the HMP for the MRA. The BLM will often need to penetrate the surface deeper than one foot while conducting native plant restoration activities, and road/trail maintenance and development. We also believe that it is impractical to remove OE to a depth of one foot, then require Army COE support for disturbances to a deeper depth on a case by case situation.

Response 5: Please see Response to Comment 4 above.

Comment 6: The freedom to penetrate the surface to a deeper depth is very important for our emergency fire suppression responsibilities which will become increasingly more critical as land is developed around the margins of the BLM's habitat area. While the BLM will strive to aggressively fight wildfire indirectly from established control lines and fuelbreaks, there may be times when fire crews will need to arrest an approaching fire directly if that fire threatens development or other sensitive resources. For this reason, coupled with the fact that other management activities often require periodic subsurface disturbance deeper than one foot, the BLM supports a deeper removal depth.

Response 6: Please see Response to Comment 4 above.

Thank you for the opportunity to comment on this document and we appreciate your efforts in considering a wide range or alternatives. We look forward to working with the Army on OE removal Work Plans and prescribed fire burn plans related to the base clean up. If you have any questions, feel free to contract Eric Morgan our Project Manager at (831) 394-8314.

IIE. COMMENTS FROM BRUCE DELGADO, BOTANIST, MARINA CITY COUNCIL, MARINA, CALIFORNIA, DATED FEBRUARY 19, 2002

First, I'd like to thank you for and appreciate all the effort that has gone into the Interim RI/FS process. It is my hope that this document and those that will soon follow will renew progress toward the reuse and clean-up of Fort Ord for the benefit of all of Monterey County citizens and that it will do so in an environmentally-sensitive manner. I agree with the preliminary preferred alternative to use prescribed burning and I believe implementing a safe burn program should be the paramount objective to both sustains healthy human and non-human life in and around Fort Ord.

Below are my specific comments on the Draft Final Interim RIFS:

Comment 1: **Section 3.2.3.3 (pg. 8). Existing fuelbreaks will also be cleared of OE sufficient to allow heavy equipment to travel over fire roads (suggest adding here "and adjacent, usually 15' wide, strips of vegetation clearance areas") for firefighting activities and annual maintenance.**

Response 1: Fuel breaks are between 45 – 50 feet wide and OE has been removed from existing roadbeds to a depth of 4 feet. However, the Army is considering removing OE from the strips of vegetation clearance areas to provide additional safety for fire-fighting activities.

Comment 2: **Section 4.1.2 (pg. 16). Here it is written that "Table 1 provides a list of HMP species found at Fort Ord and their associated status." Table 1 appears to only list HMP species observed in ranges 43-48. For this reason I assume such HMP species such as Hookers manzanita, coast wallflower, Monterey (Toro) manzanita, and California tiger salamander were excluded from Table 1. Table 1 and text on pg. 16 should clarify if they represent all of Fort Ord or just Ranges 43-48.**

Response 2: The HMP species list on Table 1 and discussed in the text identify the species present at all three of the IA sites (Ranges 43-48, Range 30A, and Site OE-16). In addition, the species listed in the comment, including Toro manzanita (*Arctostaphylos montereyensis*), Hooker's manzanita (*Arctostaphylos hookeri*) and California tiger salamander (*Ambystoma tigrinum californiense*) are also present at some or all of these sites, and were erroneously not included in the table. Hooker's manzanita is present within Range 30A based on Figure B-11 of the HMP and Toro manzanita is present within OE-16 based on Figure B-5 of the HMP.

Comment 3: **Pgs. 16-18 do not mention if seasonal surface water occurs in Ranges 43-48. If there are seasonal surface waters within 1 kilometer of any of the ranges proposed for interim action some mention of protocol that would be followed to minimize potential impact to California tiger salamander would be appropriate. Plate 6 of Range 30A appears to show a grassy depression near the center of this range that could hold surface water, but this is difficult to tell from this aerial.**

Response 3: There are no vernal pools located within the three IA sites based on Figure H-3 of the Flora and Fauna Baseline Study of Fort Ord, California, December 1992. However, there are three vernal pools located within one kilometer of Site OE-16 and one located

adjacent to Range 30A. Therefore, potential upland habitat for the California tiger salamander may occur within OE-16 and Range 30A. However, no California tiger salamanders were found during baseline monitoring of the vernal pools near Site OE-16 during the spring of 1998 and 2000. Should the presence of California tiger salamander be confirmed in the IA areas, work will be conducted in a manner protective of this species.

Comment 4: **I would reasonably expect that Hookers manzanita and possibly coast wallflower occurs in Ranges 43-48. Hookers manzanita could plausibly occur in Mature, Intermediate and Disturbed Habitat. Coast wallflower could plausibly occur in at lease disturbed habitat of these ranges. What year and time of year were botanical surveys completed in Ranges 43-48? Were surveys conducted just along certain transects and roads or throughout Ranges 43-48? If thorough surveys were not safe to conduct then text should be modified to include the possibility that HMP species other than those observed during surveys could occur within these ranges. This is important because improper timing of surface-disturbing activities could adversely affect coast wallflower and burning could provide benefits for HMP species listed in the text and others such as Hookers manzanita and coast wallflower which aren't listed in the test.**

Response 4: Baseline surveys for HMP annuals were conducted at Ranges 43 – 48 in April 2000. Surveys were conducted by inspecting areas of known or potential habitat by walking transects at approximately 25-foot intervals where safety allowed. Observed populations have been mapped using global positioning satellites. Neither Hooker's manzanita or Coast wallflower were found during the 1992 or 2000 surveys of Ranges 43 – 48.

Comment 5: **Section 6.1.1.2 (pg. 39 – Air Emissions). Here the text states "These air emissions may potentially include combustion products, volatile or semivolatile organic compounds, unburned or incompletely burned energetic material, and particulate metals and metal compounds …"**

However on pg. 40 where results of an emissions investigation are discussed there is no specific mention of semivolatile organic compounds, unburned or incompletely burned energetic material, or metal compounds. Is it possible that the text could be augmented to give percentage comparisons between reasonable upper bound emissions for these omitted elements expected from incidental OE detonation and biomass burning? I appreciate the fact that the conclusion of this investigation is that pollutant emissions from OE detonation will be minor and below health-protective regulatory screening levels. Thank you for your in-depth emissions study. I think the document would be strengthened if it showed the additional comparisons requested above.

Response 5: The results of the study is documented in *Technical Memorandum, Air Emissions from Incidental Ordnance Detonation During a Prescribed Burn on Ranges 43-48, Former Fort Ord, California*, which is available in the Administrative Record. Your suggestions are appreciated and will be considered in development of the Operational Burn Plan, which will address air sampling.

Comment 6: **Pg. 40 – Erosion. I agree with the statement that, in the long term, burning would have a beneficial impact on the health and growth of plants and their stability. I**

also agree that usually erosion is often minimal after burning due to rapid and robust revegetation after fire in maritime chaparral. However the potential for erosion after fire (or other clearance method) increases with both the intensity of precipitation the first two years after fire (or other clearance method) and the number and steepness of roads and fuelbreaks (both current and historical) and other disturbance features in or near the burn (or otherwise cleared) area. For this reason I suggest two mitigation measures be written into this document to minimize erosion potential: (1) The number of roads and fuelbreaks and the steepness of fuelbreaks chosen for fire suppression will be reduced to the maximum extent possible to reduce erosion potential. Larger sized burn (or otherwise cleared) areas would reduce erosion potential as compared to smaller areas. (2) Current and historical roads, fuelbreaks, and other disturbed areas would be monitored at least for two years after the proposed vegetation clearance occurs and actions such as seeding of non-invasive grasses, broadcasting weed-free straw, and installation and maintenance of erosion control features would be implemented as necessary to arrest erosion where it is observed. Budget planning should include the provision of funds for this purpose so monies would be available when and if needed.

Response 6: Roads and fuel breaks to support potential prescribed burns at OE-16, Range 30A and Ranges 43 – 48 have been created using the existing road and fuel break system. The existing roads were used to avoid impacting the rare species and their habitat as well as to minimize the risk of erosion and spread of invasive weeds. Furthermore, creating additional firebreaks would require OE clearance in areas potentially heavily impacted by OE, and may be impractical. Maintenance of fuel breaks and control of invasive weeds will continue to be an Army land management requirement until the property is transferred to the future recipients.

Comment 7: Pg. 40 – Impacts to Protected and Other Natural Resources. I fully agree and have observed both during my work as a botanist on Fort Ord and in my private life investigating areas burned by the Army on Fort Ord that burning rejuvenates and enhances the overall diversity and HMP species diversity, HMP species abundance, and HMP species reproductive output (flowers, and by deduction, fruits and viable seed) more than simply cutting vegetation. The 1997 Army fire that burned Army OE site 10B and 300 acres on the east side of Barloy Canyon Road resulted in the highest diversity of native fire-following plant species, and the largest specimens of the endangered sand gilia ever observed by myself or any of the several professional and local expert botanists I have spoken with about this issue. The majority of recent fires on Fort Ord (OE 10A, OE 10B, and Plant Reserve #3 on the west side of Parker Flats Cut-off) have resulted in robust expressions in terms of numbers and sizes of individual plants of HMP species such as coast wallflower, sand gilia, Monterey spineflower, and Monterey manzanita. In comparison, areas where vegetation was manually or mechanically cut on Wolf Hill and between Parker Flats Road and the dirt portion of Watkins Gate Road north of Eucalyptus Road the expression of these HMP species was almost absent. Instead these cut areas supported mostly a fast regrowth of a few common scrub species such as shaggy-barked manzanita, black sage and coyote bush.

Response 7: The Army has been working with the BLM and California Department of Parks and Recreation to control the spread of invasive weeds into areas identified as future habitat

reserves. The Army plans to continue this effort until such time the property is transferred.

Comment 8: **Unfortunately the increased biodiversity found after fire does include a large potential for weed problems. This is not news for Fort Ord Army and Base Realignment and Closure staff and they have provided effective weed abatement on Fort Ord for several years. I suggest some mention of invasive non-native weeds be added to pg. 40. Similar to the need for post-vegetation clearance erosion monitoring mentioned above. 1) The number of roads and fuelbreaks chosen for fire suppression will be reduced to the maximum extent possible to reduce invasive weed potential. Larger sized areas cleared of vegetation would reduce invasive weed potential as compared to smaller areas because larger areas would have less "edge" areas and less human-disturbed areas which are more vulnerable to weed invasions. 2) Current and historical roads, fuelbreaks, and other disturbed areas would be monitored at last for two years after the proposed vegetation clearance occurs and weed abatement would be implemented as necessary to arrest weed invasions where they are observed. Budget planning should include the provision of funds for this purpose so monies would be available when and if needed.**

Response 8: Please see Response to Comment 6 above.

Comment 9: **6.3.1.2 (Implementability) and 6.3.1.3 (Cost). Perhaps I missed some references but I am concerned that these sections do not seem to discuss the potential for erosion and invasive weed problems after remedial actions are taken. Can the Army ensure that time will be allotted for weed abatement after surface clean up efforts and before revegetation makes weed abatement impractical or significantly more expensive than it would be during the initial two years post-remedial action? Table 5, pg. 1 of 11. Endangered Species Act. Includes in the Remarks column that "The report recommends measures to ensure compliance with this ARAR." I suggest specifically including measures that would be taken to abate erosion and invasive weeds should these potential problems occur, especially within the first 1-3 years when OE clearance is proposed to be taking place. Coordinated planning and funding would be appropriate for all of these efforts to be successful.**

Response 9: Section 6.3 states O&M costs over a monitoring period of five years are estimated for the prescribed burning, mechanical, and manual clearance alternatives. These cost estimates include not only habitat monitoring and reporting requirements, but also include the cost to implement erosion and invasive weed control measures. This cost is based on the historical expense of implementing the HMP during caretaker and pre-disposal actions.

Table 5, page 1 of 11 identifies the Endangered Species Act (ESA) as an Applicable and Location Specific Applicable or Relevant and Appropriate Requirement (ARAR). The HMP was developed following consultation with the U.S. Fish and Wildlife Service as required by the ESA. The HMP establishes mitigation measures to avoid or reduce impacts to special-status species during the Army's pre-disposal actions such as the cleanup of unexploded ordnance. The Army is required to ensure the reestablishment of healthy high-diversity maritime chaparral habitat that has a variety of seral stages and age classes that includes microhabitat for sand gilia, Monterey spineflower, Seaside bird's beak, and black legless lizard. Implementation of erosion and exotic weed control

measures are a part of fulfilling the Army's obligations identified in the HMP. The Army plans to continue this effort until such time the property is transferred.

Comment 10: Appendix C Cost Estimates. Upon my brief review of this appendix I didn't see any reference to the cost of post interim action weed or erosion abatement. Weed abatement could cost as much as $200 to 400 per acre for each of the first 2 to 4 years after a fire or other vegetation clearance effort. I would guess erosion abatement could cost approximately $2000 per mile of fuelbreaks for either of the first three years after a burn or other vegetation clearance if there was significant precipitation such as occurred in the 1997-1998 El Nino winter.

Response 10: Please see Response to Comment 9 above. In addition to operations and maintenance costs described in Comment 9, costs were included under the subsurface OE removal alternatives for site restoration and erosion control measures to be implemented as these actions are completed.

Comment 11: Appendix D, pg. D2. Response 2 states that Section 6.3 has been revised to include estimates of vegetation regrowth and OE Remedial Action durations. Section 6.3 is fairly long and involved and I wasn't able to find these revisions though I expect they were made. I agree with the concern of Comment #2. Response #2 states that surface clearance could occur in the first year post-remedial action and that subsurface removal operations can be performed as vegetation grows back. I have two concerns about this. 1) While feasible, it may prove difficult to complete surface clearances and to detect and mark all subsurface items in 1-2 years after remedial actions. 2 Changing clean-up priorities negotiated between Fort Ord Reuse Authority and Army or other events could affect the proposed clean-up timetable after vegetation clearance is completed. I suggest the text be augmented in the appropriate place to provide for a contingency strategy in case OE clearance becomes problematic. The contingency I would suggest is to allow approximately a 20-30 year period of HMP species reproduction and regrowth before clearing vegetation a 2nd time if OE clearance is interrupted and no longer feasible after the first clearance.

Response 11: A discussion of vegetation regrowth estimates was provided in Section 6.3.1.2 (OE Remedial Action Alternatives; Implementability), which indicated OE Remedial Action at each of the IA sites could be completed before vegetation grows back to a level that would make OE Remedial Action hazardous. Please see Response to BLM Comment 1 above regarding the size of the treatment areas. The cleanup of the IA sites will occur following a methodical approach (i.e. surface clearance of metal and OE, digital mapping the site, identifying specific anomalies for excavation, beginning excavations in the chaparral habitat before the other habitat types). This approach will ensure the cleanup will be completed before the habitat has reestablished. We recognize the importance of avoiding situations where the vegetation would have to be re-disturbed since several of the chaparral plants require many years before they reach maturity and produce seed.

IIF. COMMENTS FROM CALIFORNIA NATIVE PLANT SOCIETY, MONTEREY BAY CHAPTER, CARMEL, CALIFORNIA, DATED FEBRUARY 24, 2002

Thank you for the opportunity to comment on the draft final Interim Action RI/FS. My brief comments below are similar to those expressed by individual members, and represent the official position of the Monterey Bay Chapter California Native Plant Society (CNPS) as discussed and agreed upon at several CNPS Board of Directors' meetings.

CNPS supports the judicious use of prescribed fires and appreciates the Army's efforts to use all possible means to implement and monitor a safe and effective prescribed burn program. CNPS appreciates and has participated in several of the numerous and regular community forums held by the Army for public input on unexploded ordnance removal options that are safe for people and enhance habitat values as per the Fort Ord Habitat Management Plan.

CNPS agrees that burning would have a beneficial impact on the health and growth of plants and their stability. The number of roads/fuel breaks and their size, erosion, and invasive weeds are all concerns of which the Army is well aware, but warrant mention due to their potential to adversely affect rare plants and plant communities. These concerns are relevant to all of the vegetation clearance options (not just prescribed burning) addressed in the Interim Action RI/FS because all options will include significant ground disturbance and the need for many miles of fuel breaks and/or administrative roads.

Comment 1: **Fuelbreaks and erosion – Fuelbreaks, especially their roadbed portions, alter or remove native vegetation. Most erosion on Fort Ord is a result of roads and other human-disturbed areas. Therefore, as a guiding principle, CNPS suggests reducing the size and number of fuelbreaks to the minimum needed to safely conduct and contain burns. If the Army can effectively control a 485-acre prescribed burn (as suggested in the Interim RI/FS for Ranges 43-48) than that size of a burn would be supported by CNPS as compared to a number of smaller burns which would need more acres of fuelbreaks. Some significant erosion on Fort Ord has also resulted after fires when heavy rains occurred in undisturbed areas. Therefore CNPS suggests that specific mention in the Interim Action RI/FS and the subsequent proposed plan be given to the funding available and the erosion monitoring and corrective actions that will be taken if significant erosion occurs after vegetation clearance activities in the three proposed areas.**

Response 1: The Army acknowledges your comment and plans to consider smaller burns in the future, where practicable. Reducing the size of the cleanup site would require construction of new fuel breaks that would result in additional habitat loss, increase the risk of erosion and spread of invasive weeds, and cause additional adverse impacts to the rare maritime chaparral plant community. In addition, creation of smaller burn polygons would require many more burn days and result in smoke being in the air for more than the one to three days that is anticipated under the current plan. Furthermore, creating additional firebreaks within these polygons would require OE clearance in areas potentially heavily impacted by OE, and may be impractical. The methods to be used in conducting prescribed burns, pretreatment of fuel breaks with retardant, burning under ideal weather conditions, and use of helicopters, will enable the Army to control the fire. Roads and fuel breaks to support potential prescribed burns at OE-16, Range 30A and Ranges 43-48

have been created using the existing road and fuel break system. The existing roads were used to avoid impacting the rare species and their habitat as well as to minimize the risk of erosion and spread of invasive weeds. Maintenance of fuel breaks and control of invasive weeds will continue to be an Army land management requirement until the property is transferred to the future recipients.

Comment 2: **Fuel breaks and HMP plants – As the army knows well there are several HMP plant species that could be affected by fuel break installation and future maintenance within the 3 areas proposed for vegetation clearance. CNPS requests that the Interim RI/FS and the subsequent proposed plan specifically address properly timed surveys (e.g., during flowering season) and protective measures for HMP species such as sand gilia, Monterey spineflower and Seaside birdsbeak. These protective measures should include the following: mapped survey results of occupied and unoccupied habitat, alternatives to avoid direct impacts, and scheduled fuel break installation and maintenance to occur outside the growing season of these species.**

Response 2: Provisions are established to monitor habitats for five years following the cleanup to identify problems such as weed infestations during the habitat recovery. Weed and erosion control have been ongoing at former Fort Ord through an agreement with the Bureau of Land Management and California Department of Parks and Recreation since the base closed in 1994 and will continue until the property is transferred. The Army understands and agrees with your concern regarding impacts to protected species and will implement measures during fuel break installation and maintenance in a manner that will mitigate impacts to protected species to the maximum extent possible.

Comment 3: **Invasive weeds – Like erosion, the majority causes of invasive weed infestations on Fort Ord are along roads and other human-disturbed areas. CNPS applauds all the efforts the Army has undertaken to abate Fort Ord's invasive weeds. Again, as a guiding principle, CNPS suggests reducing the size and number of roads/fuelbreaks to the minimum needed to safely conduct and contain burns. A larger burn area requires fewer roads/fuelbreaks resulting in a reduction of disturbed habitat and weed invasion. Conversely, dividing large burn areas into several smaller burn areas would require a greater number of roads/fuelbreaks thus increasing disturbance and weed infestations. Monitoring for weeds is also important, therefore, CNPS suggests that specific mention of the amount of funding available for weed monitoring should be included in the Interim Action RI/FS and the subsequent proposed plan. Furthermore, these two documents need to address what invasive weed abatement actions will be taken if invasive weeds (such as annual grasses in chaparral) begin to establish after vegetation clearance activities in the three proposed areas.**

Response 3: Please see response to your Comment #1. Also, Section 6.3 states O&M costs over a monitoring period of five years are estimated for the prescribed burning, mechanical, and manual clearance alternatives. These cost estimates include not only habitat monitoring and reporting requirements, but also include the cost to implement erosion and invasive weed control measures. This cost is based on the historical expense of implementing the HMP during caretaker and pre-disposal actions.

Comment 4: **Finally, it is important to recognize that clearing maritime chaparral too frequently could damage rare plant populations. CNPS is concerned that, after initial vegetation clearance in the three proposed areas, there is the possibility that, for various reasons, significant regrowth of vegetation could prevent the completion of ordnance removal. CNPS would like the Army to be specific in the subsequent proposed plan that a 2nd vegetation clearance in any of the three areas would not occur until HMP species have the chance to reproduce and replenish their seed banks. This period of time should be two or more decades.**

Response 4: The cleanup of the IA sites will occur following a methodical approach (i.e., surface clearance of metal and OE, digital mapping the site, identifying specific anomalies for excavation, beginning excavations in the chaparral habitat before the other habitat types). This approach will ensure the cleanup will be completed before the habitat has reestablished. A discussion of vegetation regrowth estimates was provided in Section 6.3.1.2 (OE Remedial Action Alternatives; Implementability). We recognize the importance of avoiding situations where the vegetation would have to be re-disturbed since several of the chaparral plants require many years before they reach maturity and produce seed.

In closing, CNPS wishes to express thanks for all the Army and Base Realignment and Closure staff effort that has gone into the habitat management and base clean-up efforts at Fort Ord and for the exhaustive public outreach your staff has conducted.

IIG. COMMENTS FROM ROBERT HALE, MONTEREY, CALIFORNIA, DATED FEBRUARY 17, 2002

I strongly support the selection of prescribed burning as the alternative for vegetation clearance. Burning will have the greatest chance of preserving a healthy maritime chaparral at Fort Ord. I think the concerns about emissions have been adequately addressed and the proposed monitoring and mitigations are adequate.

Comment 1: **The potential short duration impacts of smoke should be compared to the chronic background level of fireplace smoke that exists for months in many local neighborhoods. How bad from an air quality perspective will a few days of burning really be?**

Response 1: The Army acknowledges your suggestion, and will consider the possibility of making such a comparison where data is available in the Operational Burn Plan.

Comment 2: **Regarding HMP species, a listing of fire dependent annuals would help to demonstrate the potential loss of diversity without burning. My observation in 1998 would include the following as heavily fire dependent:**

- **Phacelia grisea**
- **Phacelia brachyloba**
- **Silene multinerva**
- **Malacothrix clevelandis**
- **Papaver californicurn**
- **Artirhium kelloggic**

These annuals form dense, nearly carpet, displays in many areas amongst the burnt chaparral. Many other annuals including HMP species such as Gilia tenuiflora and Chorizanthe pungens are so large and prodigious following a fire. This implies that most of the seed bank production may occur following fires. Thus the diversity of species in maritime chaparral greatly depends on burning not only for number of species but also abundance. Prescribed burning is clearly the biologically superior alternative.

Response 2: The Army acknowledges your comment regarding prescribed burning's positive effects on the indicated species.

Comment 3: **Following burning sites should be actively monitored for invasive weed problems and removal prior to seed production a high priority of major invasive weeds such as Erichtites and thistles.**

Response 3: Provisions are established to monitor habitats for five years following the cleanup to identify problems such as weed infestations during the habitat recovery. Weed and erosion control have been ongoing at former Fort Ord through an agreement with the Bureau of Land Management and California Department of Parks and Recreation since the base closed in 1994 and will continue until the property is transferred. Invasive weed monitoring will be performed following OE remedial actions at the IA sites.

Comment 4: OE clearance work needs to focus on preventing the spread of non-native invasive weeds. You should include requirements to clean all equipment and clothing of potential weed seeds prior to operations in the ranges. This includes vehicles too.

Response 4: Please see Response to Comment 3 above.

Again thank you for your excellent work in support of prescribed burning.

IIH. COMMENTS FROM MONTEREY BAY UNIFIED AIR POLLUTION CONTROL DISTRICT, DATED FEBRUARY 11, 2002

The purpose of this letter is to provide our District's comments on the *Draft Final Interim Action Ordnance and Explosives Remedial Investigation/Feasibility Study for Ranges 43-48, Range 30A, Site OE-16, Former Fort Ord, California,* called hereafter the Draft Final IA RI/FS.

We note that several sections of the Draft Final IA RI/FS were rewritten and improved over the previous document, in response to previously submitted comments from this and other agencies.

General

In making these comments, it is important to note that it has been this agency's long-standing position that the Army:

- **Must treat the community's concern regarding health issues as a top priority;**
- **Conduct a complete and thorough analysis of the potential health impacts from the predicted air emissions from burning vegetation and ordnance; and**
- **Complete a comprehensive review, including a comparison of risk, of alternatives for clearing vegetation.**

These elements are necessary to assure that the Army makes its selection of vegetation clearance methods upon a sound and informed basis.

Unless otherwise specified, the section and page numbers refer to the Draft Final IA RI/FS.

Specific

Comment 1: §3.1.2, pg. 4: It would be worthwhile to note the fact that no depleted uranium-containing OE were used onsite, since these seem to be objects of particular concern for the community.

Response 1: Depleted uranium is a highly regulated, controlled material. All use and possession of depleted uranium within the Department of Defense (DoD) must comply with the licensing guidelines established by the Nuclear Regulatory Commission (NRC), or otherwise approved for use by DoD. The Army currently has 14 individual NRC licenses issued directly to each organization responsible for the management of depleted uranium. Only three depleted uranium training items, which were similar to artillery rounds, were used at Fort Ord to train soldiers for proper weapons set-up at ranges. The strictly controlled training rounds were never fired and were always brought back to Building 3708 when not in use. Building 3708 has been surveyed for radiological contamination and no residual contamination from the use of depleted uranium was found. Your suggestion will be considered in future descriptions that summarize what types of OE were typically used at Fort Ord as part of the basewide OE RI/FS.

Comment 2: **Table, p. 42: From our records, the acres burned in 1997 was approximately 700 acres, which included portions of OE-10A burned during an escaped fire. Also, in 1999 approximately 100 acres burned in a detonation-ignited wildfire. These incidences of fire escapes are important to note from the safety aspect.**

Response 2: In 1997, the acreage burned was estimated visually from a helicopter. Since then, the area burned has been mapped and incorporated into the Army's Geographical Information System, and acreage was calculated to be approximately 400 acres. The table did not include any wildfire incidents.

Comment 3: **§6.3, first bullet, p. 57: In combining the nine criteria into three categories, the importance of certain criteria may be minimized.**

Response 3: The Army acknowledges your concerns regarding the importance of each of the nine EPA criteria. Grouping the nine criteria into three categories allowed for streamlining the evaluation of alternatives for each of the three steps of cleanup (vegetation clearance, OE remedial action and detonation of OE). Proper weight is given to each evaluation criteria consistent with their categorization in the National Contingency Plan: (1) overall protection of human health and the environment and compliance with ARARs are threshold criteria that must be met, (2) long-term effectiveness and permanence; reduction of toxicity, mobility, or volume through treatment; short-term effectiveness; implementability; and cost are primary balancing criteria, and (3) state and community acceptance are modifying criteria that will be considered in remedy selection.

Comment 4: **§6.3.1.1.1, last paragraph, p. 58: The Army has insisted that the emission calculations in this document should only reflect the increment that the OE would contribute, because the rest of the material which will be burned, i.e., normal vegetation, should be treated as a normal prescribed burn. The District has always urged that specific presentation of expected impacts from the prescribed burning is essential to the Army's ability to make informed decisions. Furthermore, under the revised State requirements for smoke management from prescribed burns, the emissions from burning vegetation are required to be calculated and smoke sensitive areas determined prior to burns being conducted. There are also requirements for monitoring smoke for large prescribed burns, such as would be conducted for Ranges 43-48. Where in the RI/FS process will the requirements for smoke management planning and monitoring be met?**

Response 4: A smoke management plan consistent with California Code of Regulations Title 17 will be included in the Operational Burn Plan. An air monitoring plan will also be prepared prior to a burn. These plans will be generated as part of the remedial design stage of the RI/FS process.

Comment 5: **§6.3.1.2.1, last paragraph, p. 60: "Burning would be somewhat difficult to implement from an administrative perspective because of air quality and some public concerns . . . " is a serious understatement of the magnitude of the difficulty and public concerns. Also, the importance of planning and preparation prior to the burns being conducted is not emphasized as it should be. The success of being able to conduct the burns without serious adverse impacts will not be possible without such pre-burn efforts.**

Response 5: The Army acknowledges your concerns about the importance of planning and preparation prior to prescribed burning, and is committed to conducting these activities in close coordination with the regulatory agencies and public to minimize potential impacts.

Comment 6: §6.3.2.1.1, second to last paragraph, p. 64: The importance of planning and preparation prior to the burns being conducted is not emphasized as it should be. The success of being able to conduct the burns without serious adverse impacts will not be possible without such pre-burn efforts.

Response 6: The Army acknowledges your concerns about the importance of planning and preparation prior to prescribed burning, and is committed to conducting these activities in close coordination with the regulatory agencies and public to minimize potential impacts.

Comment 7: §6.3.2.2.1, end of first paragraph, p. 66: See comment on §6.3.1.2.1.

Response 7: The Army acknowledges your concerns about the importance of planning and preparation prior to prescribed burning, and is committed to conducting these activities in close coordination with the regulatory agencies and public to minimize potential impacts.

Comment 8: §6.3.3.1.1, second to last paragraph, p. 70: See comment on §6.3.2.1.1.

Response 8: The Army acknowledges your concerns about the importance of planning and preparation prior to prescribed burning, and is committed to conducting these activities in close coordination with the regulatory agencies and public to minimize potential impacts.

Comment 9: §6.3.3.2.1, end of first paragraph, p. 72: See comment on §6.3.1.2.1.

Response 9: The Army acknowledges your concerns about the importance of planning and preparation prior to prescribed burning, and is committed to conducting these activities in close coordination with the regulatory agencies and public to minimize potential impacts.

Comment 10: §7, and Summary Tables, in general: In using effectiveness as an evaluation category, there is no explanation of the ranking of the criteria, including adverse health and environmental impacts (criteria 1) and community acceptance (criteria 9), which were included in the category.

Response 10: Please see Response to Comment 3 above. The Proposed Plan and ROD will contain separate discussions of the criteria, including community and State acceptance, which will be determined after the IA OE RI/FS and Proposed Plan have been reviewed by the public and regulatory agencies.

Comment 11: Table 5, p. 1 or 11: We disagree with the conclusion that Title 17, CCR §80100 et seq. is not an ARAR. In particular, §80160 (Special Requirements for Prescribed Burning and Prescribed Fires in Wildland and Wildland/Urban Interface Areas) and its subsections provide specific planning requirements for the type of burning that could be conducted at the former Ft. Ord. Similar to the "Interim Air Quality Policy on Wildland and Prescribed Fires", this regulation provides guidance and requirements necessary for planning prescribed burns.

Response 11: The referenced regulations will be considered as a relevant and appropriate ARAR. The Army will comply with substantive elements of the regulations. Under CERCLA, the Army is not required to comply with procedural and administrative provisions; however those elements will be addressed as part of the interim remedial design/remedial action process.

Comment 12: Table 6, column 3 "Prescribed Burning", p. 2 of 2: We disagree with the ease of implementation. Please see previous comments on §6.3.1.2.1.

Response 12: Please see Response to Comment 5 above.

Comment 13: Table 9, column 2 "Prescribed Burning", p. 1 of 1: We disagree with the ease of implementation. Please see previous comments on §6.3.1.2.1.

Response 13: Please see Response to Comment 5 above.

Comment 14: Appendix D, Response to District Comment 8, p. D29: We disagree that the extent of contribution of IA activities cannot be calculated. The emission inventory for prescribed burns that is part of the adopted Air Quality Maintenance Plan for this air basin is 11.8 TPD for volatile organic gases and 3.0 TPD for NOx. There are standard emission factors that may be used to estimate these emissions for all prescribed burns, based on vegetation type.

Response 14: Air emission estimates for a prescribed burn on Ranges 43 - 48 are included in "Technical Memorandum, Air Emissions from Incidental Ordnance Detonation During a Prescribed Burn on Ranges 43 through 48, Former Fort Ord, California" (*Harding ESE, 2001c*). However, the effect of emissions on regional air quality is not directly proportional to the quantity of emissions. Factors such as meteorological conditions during a prescribed burn will significantly affect the downwind concentrations of smoke. On any given day, the emission inventory for volatile organic gases and NOx from the District's Air Quality Maintenance Plan may or may not represent amounts which would cause an exceedance of an ambient air quality standard. The Army maintains that the ambient air quality standards themselves are not ARARs, but rather the source-specific rules and regulations that were established to achieve those standards could become ARARs.

Thank you for providing this opportunity to comment on the Draft Final IA RI/FS. If you require further details on our comments, please contact Amy Taketomo at our District offices.