

**Draft Final**  
**Summary After-Action Report: Ranges 43-48 prescribed burn**  
**Former Fort Ord, California**

U.S. Department of the Army  
Fort Ord Base Realignment and Closure (BRAC) Environmental Office

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# Summary After-Action Report: Ranges 43-48 prescribed burn

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## Attachments

1. A summary of community comments and responses
2. Responses to comments received on Draft Summary After-Action Report

## Acronyms

ATSDR	Agency for Toxic Substances and Disease Registry
BA	Burn area
BLM	Bureau of Land Management
BRAC	Base Realignment and Closure
CAAQS	California Ambient Air Quality Standards
CARB	California Air Resources Board
CHOMP	Community Hospital of the Monterey Peninsula
COPC	Chemicals of potential concern
DTSC	California Department of Toxic Substances Control
EOD	Explosive ordnance disposal
EPA	U.S. Environmental Protection Agency
FORA	Fort Ord Reuse Authority
HE	High explosive
HEAT	High explosive anti-tank
LAW	Light anti-tank weapon
MBUAPCD	Monterey Bay Unified Air Pollution Control District
MEC	Munitions and explosives of concern
mph	Miles per hour
MR	Munitions response
MS	Mobile station
OB	On-base
OMC	Ord Military Community
PS	Public site
PDT	Pacific daylight time
PIO	Public information officer
POM-PAO	Presidio of Monterey Public Affairs Office
RAWS	Remote automated weather stations
RI/FS	Remedial Investigation/Feasibility Study
SEAT	Single-engine air tanker
USACE	U.S. Army Corps of Engineers
USACHPPM	U.S. Army Center for Health Promotion and Preventive Medicine

# Summary after-action report: Ranges 43-48 prescribed burn

## 1 Introduction and background

- a. The Army, as the lead agency, in consultation with U.S. Environmental Protection Agency (EPA) and California Department of Toxic Substances Control (DTSC), had determined that an Interim Action was appropriate to protect human health from the imminent threat posed by munitions and explosives of concern (MEC)<sup>1</sup> at three Interim Action sites (Ranges 43-48, Range 30A and site 16) at the former Fort Ord, while an ongoing comprehensive study of munitions response needs at the former Fort Ord is conducted under basewide Munitions Response Remedial Investigation/Feasibility Study (MR RI/FS) program.
- b. For the three Interim Action sites, selected actions included prescribed burning to clear vegetation to facilitate subsequent surface and subsurface removal of MEC. MEC found during the removal would be detonated using engineering controls. Prescribed burning was conducted in the Ranges 43-48 site on October 24, 2003. Surface and subsurface removal of MEC and associated detonations began in November 2003. This report summarizes the activities associated with the Ranges 43-48 prescribed burn as part of the Interim Action, and makes recommendations for planning and execution of future prescribed burns at the former Fort Ord.
- c. *Record of Decision, Interim Action for Ordnance and Explosives at Ranges 43-48, Range 30A, and Site OE-16, Former Fort Ord, California* (Army, 2002), described the prescribed burning-portion of the Interim Action to include the following:
  - i. Preparation of a burn plan outlining the objectives of the burn; the burn area; the range of environmental conditions under which the burn will be conducted; the manpower and equipment resources required to ignite, manage, and contain the fire; a smoke management plan; and establishment of communication procedures for the fire crew and to the public and other affected agencies.
  - ii. Site preparation, including removal of debris; establishment and maintenance of primary, secondary, and tertiary containment lines, staging areas, and escape routes; and protection of existing structures by removing nearby vegetation and applying fire suppressant foam or demolishing and removing the structures.
  - iii. Conducting the burn in a manner to ensure the fire is fully contained and does not escape the perimeter of the burn area.
  - iv. Offering voluntary temporary relocation for any Monterey County resident who wishes to relocate during a prescribed burn.
  - v. Conducting air monitoring during the prescribed burn - data will be used to further evaluate the effectiveness of prescribed burning as a vegetation clearance alternative.

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<sup>1</sup> The Department of Defense and the Department of the Army determined the need to utilize standardized terminology related to the Military Munitions Response Programs. This report utilizes terms consistent with the standardized terminology.

## 2 Scope of Ranges 43-48 prescribed burn

- a. Three work plans were prepared for the implementation of Ranges 43-48 prescribed burn.
  - i. *Former Fort Ord Prescribed Burn Plan for Ranges 43-48* (Fire Stop, 2002), amended by *Ranges 43-48 Prescribed Burn Plan Addendum* (Parsons, 2003a). The prescribed burn plan for Ranges 43-48 describes the objectives of the burn; the burn area; the range of environmental conditions under which the burn will be conducted; the manpower and equipment resources required to ignite, manage, and contain the fire; a smoke management plan; establishment of communication procedures for the fire crew and to the public and other affected agencies; and an escape contingency plan.
  - ii. *Draft Final Revised Voluntary Relocation Plan* (Creighton & Creighton, Inc., 2003). The revised plan describes how the Army would relocate Monterey County residents who wish to be temporarily out of the area during prescribed burns. This plan describes changes made to the 2002 Voluntary Relocation Plan. It describes the roles and responsibilities of the various Army organizations and contractors, and local government and community organizations, prior to, during, and after prescribed burns. It also describes the responsibilities of those people who wish to relocate.
  - iii. *Final Prescribed Burn Air Sampling and Analysis Plan, Ranges 43-48, Former Fort Ord, California*, (MACTEC Engineering and Consulting, Inc., 2003). The plan outlines procedures for the collection and analysis of air samples during a prescribed burn to (1) confirm or refine conclusions drawn from other studies that ground-level concentrations of ordnance-related air pollutants downwind of the prescribed burn will be below human health-protective regulatory screening levels, and (2) provide data to assess the adequacy of the burn prescription relative to smoke dispersion and downwind impacts.
  - iv. Additionally, site preparation activities to be performed prior to a prescribed burn at Ranges 43-48 to reduce smoke emissions during the prescribed burn and ensure the prescribed burn is contained within site boundaries, are documented in *Final Ranges 43-48 Site-Specific Work Plan, Former Fort Ord* (Parsons, 2003). These preparatory activities were mainly completed in 2002.
- b. Although the Army was the lead agency for this action, planning and execution of the prescribed burn was supported by and closely coordinated with two regulatory oversight agencies: U.S. Environmental Protection Agency (EPA) and California Department of Toxic Substances Control (DTSC). California Air Resources Board (CARB) and Monterey Bay Unified Air Pollution Control District (MBUAPCD) were also involved in planning and coordination of the prescribed burn. Agency involvement included participation in planning meetings, review of documents including the burn prescription, participation in air monitoring activities and participation in the decision-making process. Representatives from EPA, DTSC and MBUAPCD were present at the Management Center during implementation. The agencies were also involved in the review of the Ranges 43-48 burn operations and in planning for future prescribed burns at the former Fort Ord.
- c. Community relations activities relative to the Ranges 43-48 prescribed burn project during the 2003 burn season included: mailing Community Bulletin 5 and Community Bulletin 6 to more than 50,000 households in Monterey Peninsula and Salinas areas; issuing press releases and newspaper notices; participating in media interviews and providing media tours; providing information at Community Involvement Workshops, Technical Review Committee meetings and Open Houses; providing information to local elected officials and offering briefings; informing various local organizations such as Red Cross, California State University Monterey Bay, local schools, American Lung Association, Monterey County Farm Bureau and Fort Ord Reuse Authority; informing the local medical community through Monterey County Department of Health; and updating the Fort Ord Environmental Cleanup hotline and [www.fortordcleanup.com](http://www.fortordcleanup.com) with information regarding the prescribed burn program.

### 3 Summary of activities

#### a. Overall planning and coordination

- i. The prescribed burn was planned to occur on one or more days meeting the burn prescription sometime during the Fort Ord burn season (July 1 through December 31). Because of the requirement to mobilize the personnel and equipment necessary to conduct the fire, provide security, conduct air monitoring and implement relocation, a mobilization decision three days in advance of a day forecasted to meet the burn prescription was necessary. Relocation registration began in July 2003. Meteorological conditions were monitored daily and forecasts were reported to the regulatory agencies twice weekly beginning August 2003. A notification list was developed so that the project personnel could be contacted as soon as the decision to mobilize was made three days in advance of any scheduled prescribed burn.
- ii. Beginning on the day of mobilization, the Incident Command Post was to be operational for fire operation personnel at Building 4522; the Management Center was to be operational at Building 4522 for the Army, EPA, DTSC and MBUAPCD project managers to monitor activities, handle communications among activity centers, and provide information for public dissemination; and the Relocation Center was to be operational at Building 4463 for hotline, complaint handling, relocation registration and travel arrangement staff. On the day before the scheduled burn, the Media Center was to be operational at the Stilwell Community Center.
- iii. On October 10 a decision to mobilize for a prescribed burn on October 13 was made, relocation was announced and crews mobilized. However, due to changes in weather forecast, the burn was postponed on the next day and the crews demobilized.
- iv. On October 21, the weather was forecasted to meet the prescribed conditions on October 24-26. Based on this forecast, and after verifying that key required conditions were met – fuel moisture level was within prescription, equipment and personnel were available and backup fire resources were forecasted to be available – the Army contacted the regulatory agencies and the decision was made to mobilize for a prescribed burn on October 24. Project personnel and regulatory agencies were immediately notified to mobilize. A press release was issued announcing the scheduled burn and families who registered for relocation, local elected officials, nearby schools and others received notices via phone or e-mail. Pretreatment of fuelbreaks began.
- v. On October 23, MBUAPCD conducted baseline air monitoring, voluntary temporary relocation began, and press releases were issued to inform the community of the road closure and the initiation of relocation. National Weather Service upgraded the fire weather watch for the region to a Red Flag Warning for the region except the immediate coast; additional firefighting equipment was brought to the site to better prepare in the event of an escape. After verifying that key required conditions were met – burn prescription was forecasted to be met on the scheduled day, fuel moisture level was within prescription, equipment and personnel were available and backup fire resources were forecasted to be available – a pre-planned phone call among upper management officials of the Army, EPA, DTSC and CARB occurred at 6:00 p.m. During the call the agencies were informed of the present conditions and were in agreement that the prescribed burn should proceed, pending determination the next morning that the burn prescription would be met. Designated roads were closed at 7:00 p.m. to establish an exclusion zone for public safety.
- vi. On October 24, the Army's meteorologists determined that the meteorological conditions were expected to meet the conditions outlined in the burn prescription. Then, after securing the burn perimeter and verifying the readiness of fire operations, the Army made the decision to ignite the prescribed burn. Air monitoring began and the complaint team

mobilized. Hotline, web updates, and the Relocation Center were operational. Ignition of the test burn began at about 9:00 a.m. (Pacific Daylight Time) followed by the full burn. A media tour to Range 31 was conducted. Several media interviews were handled. The first spot fire was observed at about 9:30 a.m. along the western primary fuelbreak. The fire breached the fuelbreak and the Ord Military Community (OMC) Fire Chief declared an escape at about 11:00 a.m. All resources were then directed to controlling the fire and contingency resources were called in. The fire burned approximately 1,470 acres by the time it was contained in the late afternoon. The fire team observed and responded to a flare-up along the western edge of the fire at about 7:45 p.m. Hotline operators reported that Seaside residents observed flare-ups occurring several hundred feet east of General Jim Moore Boulevard at about 9:00 p.m. Fire engines patrolled the area along General Jim Moore Boulevard during that evening.

- vii. On October 25, the fire personnel made a decision to ignite unburned vegetation within containment lines, for fire safety purposes. Air monitoring, hotline, web updates, complaint handling and relocation were operational.
- viii. On October 26, additional patches of vegetation within containment lines were burned for fire safety purposes. Hotline, web updates, complaint handling and relocation were operational. Due to additional days of active ignition the relocation period was extended through Tuesday (October 28) noon.
- ix. Mop-up and patrol of the fire area continued until October 31 when the fire operation was declared complete.
- x. On November 12, the Army's air monitoring team collected baseline air samples.

## **b. Fire operations**

- i. The goals and objectives of the Ranges 43-48 prescribed burn are outlined in *Former Fort Ord Prescribed Burn Plan for Ranges 43-48* (Fire Stop, 2002). The five goals were
  1. Contain the burn within the established primary containment lines that are located around the perimeter of Ranges 43-48 burn unit.
  2. Minimize smoke impacts.
  3. Clear vegetation to facilitate a safe conduct of ordnance cleanup at Ranges 43-48.
  4. Minimize damage to natural resources and rare, threatened and endangered species.
  5. Complete prescribed burn operations with no injuries to fire personnel or the surrounding communities.
- ii. *Final Ranges 43-48 Prescribed Burn After-Action Report, former Fort Ord* (Parsons, 2004) documents Fire Stop's activities regarding the conduct of the burn operations and evaluates whether the goals were achieved.
  1. Contain the burn within the established primary containment lines that are located around the perimeter of Ranges 43-48 burn unit. The prescribed burn breached its western primary control boundary. The breach was caused by spot fires that apparently developed through vegetation along the fuelbreak that was not completely soaked with water/foam and retardant, and were not suppressed completely. A more detailed report of an investigation into the cause of the escape is included in the Prescribed Burn After-Action Report.
  2. Minimize smoke impacts. The Prescribed Burn After-Action Report reports that the majority of the smoke plume rose and dispersed at high altitudes as planned, but some low-lying residual smoke was observed in several nearby cities. The smoke impacts were attributable to the size of the fire, which was increased due to the escape; longer duration of vegetation burning due to the escape, which caused continued smoke generation well into the afternoon when a sea breeze kicked in and trapped the smoke at low altitudes; and the cooler temperature burning that was the result of fire suppression efforts.
  3. Clear vegetation to facilitate a safe conduct of ordnance cleanup at Ranges 43-48. The vegetation clearance objective for the Ranges 43-48 site was met.
  4. Minimize damage to natural resources and rare, threatened and endangered species. All ground activities within the Impact Area were restricted to established fuel breaks. The objectives to minimize impacts to natural resources were met.
  5. Complete prescribed burn operations with no injuries to fire personnel or the surrounding communities. The prescribed burn was conducted without any injuries to project personnel or the public, and no property damage was caused.
- iii. Decision making
  1. Mobilization. The mobilization decision was made following pre-established procedures. Once a potential window of opportunity to conduct the prescribed burn was identified, the weather forecasts were issued to EPA, DTSC, CARB and MBUAPCD daily and the Army's meteorological team began consulting with the CARB meteorology duty desk daily. On October 21, the Army's meteorological team forecasted that the burn prescription could be met on October 24, and Fire Stop, through Parsons and U.S. Army Corps of Engineers (USACE) recommended to the Army to mobilize for the burn. The fuel moisture level was verified to be within prescription. The Army verified that the equipment and personnel were available and backup fire resources were forecasted to be available. The Army notified EPA, DTSC, CARB and MBUAPCD. Then, the Army made the decision to mobilize for a prescribed burn on October 24. Project personnel and regulatory agencies were immediately notified to mobilize.

2. Ignition. The ignition decision was made following pre-established procedures. On the morning of October 24, the Army's meteorological team determined that the burn prescription was met based on their morning weather forecast. Fire Stop completed and signed the burn day Go/No-go checklist. OMC Fire Chief signed the burn day Go/No-go checklist. Fire Stop then proceeded to ignite a test burn and recorded their observations in a burn day monitoring form. During the test burn, the weather, fuel consumption rate, flame lengths, smoke column height, and smoke dispersal pattern were observed and documented. Based on the conditions observed, it was recommended that the burn be conducted over the entire site. After the test burn, Fire Stop continued with the rest of the prescribed burn.
3. Escape. Shortly after the main ignition started, some spot fires were observed and Fire Stop responded to manage them. By 10:18 a.m. PDT two spot fires had merged and burned approximately 30 acres outside the western primary fuelbreak. At about 11:00 a.m. PDT OMC Fire Chief declared the fire burning outside Ranges 43-48 an escape. At this time, OMC Fire Chief assumed command of the operations in accordance with the contingency plan.

### c. Air monitoring

- i. The air monitoring program is outlined in *Final Prescribed Burn Air Sampling and Analysis Plan, Ranges 43-48, Former Fort Ord, California* (MACTEC, 2003). It involved monitoring of ambient air using 15 monitoring stations: two adjacent to the prescribed burn area (BA1 and BA2), three on-base locations 2,000 to 3,000 feet from the burn area (OB1, OB2 and OB3), nine off-base locations surrounding the burn area in Seaside, Spreckels, Gonzales, along Highway 68 and at Monterey Bay Aquarium (PS1 through PS9), and one mobile sampling station that was dispatched to within the City of Seaside on October 24 (MS1). The program included collection of air samples during the active ignition, day after active ignition (smoldering phase), and baseline before or after the burn event. The air samples were analyzed for the following chemicals of potential concern (COPCs): aldehydes and acrolein; energetic materials and their likely breakdown products; inhalable particulate matter (PM10); particulate metals; and dioxins and furans.
- ii. Air monitoring was conducted by MACTEC Engineering and Consulting, Inc. (MACTEC) and supplemented by MBUAPCD and U.S. Army Center for Health Promotion and Preventive Medicine (USACHPPM). MBUAPCD operated stations PS2 and PS4 through PS8, and collected and analyzed samples for PM10. USACHPPM collected and analyzed samples for energetics. The results of the entire effort are documented in *Draft Final Ranges 43-48 Prescribed Burn Air Monitoring Report, Former Fort Ord, California* (MACTEC, 2004).
- iii. The primary objectives of the air sampling program were to (1) confirm or refine conclusions drawn from other studies that ground-level concentrations of munitions and explosives of concern (MEC)-related air pollutants downwind of the prescribed burn will be below human health-protective regulatory screening levels, and (2) provide data to assess the adequacy of the burn prescription relative to smoke dispersion and downwind impacts. The monitoring results show that MEC-related chemical signatures were not observed at any of the sampling locations. At the sampling station most heavily impacted by smoke (BA1) during active ignition, CPOC concentrations were below the limits of detection and the applicable regulatory screening levels for all MEC-related chemicals. With regard to the second objective, the evaluation is complicated by the unplanned size and duration of the burn as it extended beyond the original perimeter. The data from the investigation show PM10 concentrations on the active ignition day were significantly above the 24-hour California Ambient Air Quality Standards (CAAQS) at nearly every monitoring site, and elevated PM10 concentrations on the second day were even more widespread, with every site at or above the 24-hour CAAQS. Aldehyde and acrolein were also observed at levels above the regulatory screening levels at some sites. However, acrolein was detected in five baseline samples, therefore further evaluation of acrolein screening levels may be warranted due to possible ubiquitous sources of acrolein (MACTEC, 2004).

#### d. Relocation

- i. The 2002-2003 relocation program related activities are documented in *Final After-Action Report, Fort Ord 2003 Voluntary Relocation Program* (C&C, 2004).
- ii. Relocation registration
  1. A total of 768 families registered for relocation during 2003. Of these, 219 registrations were carried over from the 2002 relocation program. 332 families registered on days between October 22 and October 28 (the day the relocation period ended) as listed below. Forty-two (42) families registered after the relocation period ended (between October 29 and December 31, 2003).

October 22 –	40 families
October 23 –	78 families
October 24 –	119 families
October 25 –	35 families
October 26 –	11 families
October 27 –	38 families
October 28 –	11 families
  2. Registration information was added to a secure online database so that up-to-date information was available to the registration staff, travel arrangement/contracting staff, reimbursement staff and hotline operators.
  3. The relocation for Ranges 43-48 fire was originally intended to last three nights, but was extended by two additional nights due to the continued fire operation. Those who registered for relocation were notified of the change through e-mail, telephone, hotline updates or web updates.
  4. Relocation registration was handled by two core staff plus two additional assistants on an as-needed basis. The relocation office hours (regular 8:00 a.m.-5:00 p.m. Monday through Friday) was extended at the time the Ranges 43-48 burn was announced, to 8:00 a.m.-9:00 p.m. on October 22 and 23, 8:00 a.m.-10:00 p.m. on October 24 and 8:00 a.m.-8:00 p.m. on October 25-26. The changes in the hours of operation were announced on the hotline and the website, [www.fortordcleanup.com](http://www.fortordcleanup.com).
- iii. Travel arrangement
  1. Pre-paid hotels outside of Monterey County (exclusion zone) were selected and arrangements were made well in advance of the prescribed burn. Most pre-paid hotels were selected to be within walking distance of restaurants at which meal vouchers would be used. Some rooms for large families and multi-room requirements were anticipated in advance and arranged.
  2. Travel arrangement/contracting staff were located at the Relocation Center as soon as the scheduled burn was announced. Necessary office space, telephone, fax and computer equipment were pre-arranged for their use. The relocation database was extensively used to ensure each relocation registrant's needs were met.
- iv. Reimbursement
  1. Reimbursement forms were mailed to those who registered for relocation shortly after the Ranges 43-48 fire was over. They were also asked to file reimbursement claims by December 15, 2003 to avoid delays. U.S. Army Corps of Engineers has received 493 reimbursement claims and processed all claims, at a cost of \$291,309.
  2. Hotel rooms directly paid by the Government (pre-paid option) cost \$39,357.50. Food vouchers cost \$33,111.50.
  3. The cost of relocation expenses associated with the announced and postponed October 13 fire was \$800.
  4. The total relocation expenses were \$364,578.
  5. Reimbursements were made within 30 days of receiving the reimbursement request.

## e. Outreach

### i. Hotline

1. The Fort Ord environmental cleanup project maintains a toll-free hotline (1-800-852-9699 and 242-7383). The hotline maintains updates on detonation and prescribed burn schedules throughout the year. During the 2003 burn season, in anticipation of an increased number of calls, arrangements were made to increase staffing at the time of the announcement of a scheduled burn. The staffing level was increased from one person to three people on October 21 and the operating hours of 8:00 a.m.-5:00 p.m. Monday through Friday were increased to include some evening hours to match relocation office hours.
2. Relocation hours of operation for the evening of October 24 was set to last until 9:00 p.m. so two operators were available from 5:00 p.m. to 9:00 p.m.; however, because the hotline hours for the evening was misreported to the press as ending at 10:00 p.m., the operators staffed the phone beyond 9:00 p.m. During that evening, the fire became noticeable to the Seaside residents bordering General Jim Moore Boulevard, and the hotline received several calls from concerned and frightened residents. The hotline was staffed until 11:00 p.m. that evening. Calls to the hotline during the early evening hours were sparse.
3. During the burn operations, the burn hotline was updated at the same time as the website was updated, as prompted by the Management Center.
4. Many callers wanted to know the status of the fire. However, the primary purposes of the hotline were to (1) provide basic information about the burn (e.g. whether the prescribed burn was scheduled, if the burn is ongoing, if the burn had been completed), (2) answer relocation-related questions and assist callers, and (3) record air quality-related complaints.
5. Usage summary
  - a. There were 4,667 calls to the line in October 2003, of which 3,496 were made during the week of Ranges 43-48 burn activities (October 22-28). The typical amount of calls to the hotline is less than 100 per month.
  - b. Of the 3,496 calls, 1,064 of the calls were In-State Toll-Free calls originating from all over the state, generally outside of Monterey County area, and including primary relocation areas (Gilroy, Watsonville and Santa Cruz). 2,432 were In-State Long Distance Toll-Free Calls. All of these calls were made from the 831 area code and were originated from Big Sur, Carmel, Carmel Valley, Castroville, Gonzales, Greenfield, King City, Monterey, Salinas and Soledad. The majority of the calls were from Carmel, Monterey and Salinas.
  - c. The highest volume of calls was recorded on October 24 – the first day of the burn. A total of 1,273 calls were made to the hotline that day. Call summary:
    - October 22 – 189 calls
    - October 23 – 611 calls
    - October 24 – 1,273 calls
    - October 25 – 709 calls
    - October 26 – 443 calls
    - October 27 – 176 calls
    - October 28 – 95 calls
  - d. The average length of an In-State Long Distance Toll-Free Call was 1-4 minutes. The longest In-State Long Distance Toll-Free Call was 29 minutes in length.
  - e. The average length of an In-State Toll-Free Call was 1-3 minutes. The longest In-State Toll-Free Call was 15 minutes in length.
  - f. There were no calls originating from outside of California.

ii. Website

1. The Fort Ord environmental cleanup project maintains a public website [www.fortordcleanup.com](http://www.fortordcleanup.com). Various types of cleanup-related information are posted on the public website, such as in the NEWS section and in a pop-up window feature. During the burn season updated messages were posted on the NEWS section of the website. Pop-up feature was used as necessary to ensure each person accessing the website would encounter the latest information about the prescribed burn program, such as the relocation period extension. Relocation program information and information about how to register, were posted on the website several months in advance of the prescribed burn in October.
2. The website was updated on October 24: at 8:00 a.m., 11:00 a.m., 2:00 p.m. and 7:00 p.m. Updates were made on October 25: at 11:30 a.m., 2:50 p.m., 3:30 p.m. and 5:00 p.m. Updates were made on October 26: at 11:10 a.m., 2:50 p.m. and 6:30 p.m. An update was made on October 28 at 5:10 p.m. An update was made on October 30.
3. Usage summary
  - a. There were 7,907 visits made to [www.fortordcleanup.com](http://www.fortordcleanup.com) during the week of the burn (Monday, October 20 through Sunday, October 26). The typical number of visits made to the website varies because it is extensively used to provide information on many aspects of the Fort Ord environmental cleanup program. Data for three weeks in December 2003 is provided below for comparison. During these weeks the number of visitors varied from 2,666 to 4,144 per week. The numbers of “unique visitors” are also presented for these weeks. They represent the number of individuals (computers) who visited the website during each day, and they are totaled for each week. During the week of the prescribed burn, 4,492 unique visitors were recorded. During the three weeks in December 1,174 to 1,422 unique visitors were recorded for each week. The data shows that 200-300 unique visitors might visit the site each day, while more than 2,000 unique visitors per day visited the website during the week of the burn, suggesting that the website is an effective mode of disseminating information regarding the prescribed burn project.

	Oct 20-26		Dec 1-7		Dec 8-14		Dec 15-21	
	#Visits	#Unique Visitors	#Visits	#Unique Visitors	#Visits	#Unique Visitors	#Visits	#Unique Visitors
Mon	300	210	473	179	775	230	716	276
Tue	367	261	502	187	760	212	860	254
Wed	839	420	206	136	666	236	669	272
Thu	935	472	456	189	507	203	487	198
Fri	3,636	2,088	463	198	502	160	420	183
Sat	1,810	1,021	219	126	418	137	253	128
Sun	20	20	527	159	516	129	182	111
Total	7,907	4,492	2,666	1,174	4,144	1,307	3,587	1,422

- b. All of the visitors during the week of the prescribed burn were repeat users, as well as visitors during the three weeks in December 2003 noted above.
- c. The highest number of visits was made on October 24 – the first day of the burn. A total of 3,636 visits were made by 2,088 unique visitors.
- d. The average length of visit was 3:20 minutes during the week of October 20-26 and 5:42 minutes on October 24. In comparison, the average length of visit during the month of December 2003 was 3:37 minutes per visit.

- e. Two web administrators manage the operation of the website. Additional individuals were trained in updating the website information during the week of the prescribed burn to ensure uninterrupted operation.
- iii. Media
1. Local media was informed of the prescribed burn project during the months leading to the burn. A number of press releases were planned and issued for the prescribed burn through Presidio of Monterey Public Affairs Office (POM-PAO) (listed below). Other media activities (interviews, press conferences) were conducted as requested or as needed, and were handled through POM-PAO.
    - July 21 -- Army Announces Relocation Available During Prescribed Burn
    - October 21 -- Army Mobilizes to Burn Vegetation at Fort Ord in Three Days - Voluntary Relocation Plan in Effect
    - October 23 -- Army Plans Prescribed Burn Tomorrow - Voluntary Relocation Plan in Effect
    - October 23 -- Prescribed Burn Prompts Road Closure
    - October 24 -- Army Conducts Prescribed Burn Today - Voluntary Relocation Plan in Effect
    - November 7 -- Army to Hold Public Comment Meeting about Recent Prescribed Burn
    - November 19 -- Procedure for Filing Claims with Army as a Result of Recent Prescribed Burn
  2. Notices about the burn season were placed in local newspapers on a weekly basis. The first notice was a half-page size advertisement in Monterey County Herald, the Salinas Californian, Coast Weekly, Monterey County Post and a Spanish language weekly paper El Sol. The advertisement announced that the Army intended to conduct a prescribed burn on one or more days before December 31, 2003, depending weather conditions, announced the availability of the hotline and the website, and announced the availability of temporary voluntary relocation program. Subsequent advertisements were placed in these newspapers on a weekly basis until the prescribed burn was conducted.
  3. After mobilization and up until demobilization, Fire Stop's Public Information Officer (PIO) took the lead in providing the current information about the progress of the burn and associated activities to the Management Center as well as the press.

**f. Air quality-related complaints**

- i. The environmental cleanup hotline was used to receive air quality-related complaints, as well as for other purposes. Hotline operators were trained to fill out a complaint form if the caller mentioned air quality-related issues, observations and/or complaints, or if the caller wished to file a complaint. The complaint forms were compiled hourly and an hourly summary was reported to the Management Center with coordinates of the origins of complaints. The complaint and coordinate information was available to be provided through the Incident Command Post to the helicopter equipped with a video camera, in case a picture of the complaint area was determined necessary or appropriate. Updated information was reported up to hourly to MBUAPCD, and MBUAPCD provided updated information on complaints it received on its complaint reporting line.
- ii. Two MBUAPCD air quality inspectors visited complaint locations and other locations on October 24 to make observations and to take portable particulate matter readings. EPA, DTSC and Regional Water Quality Control Board representatives accompanied these inspectors to make independent observation of the places visited. Two MBUAPCD inspectors inspected various locations on October 25, each accompanied by a regulatory agency representative. One inspector inspected the air quality on October 26.
- iii. On October 24, hotline operators filled out several complaint forms, resulting in 80 entries on the complaint list. These entries represented 19 air quality-related complaints, 14 concerned for a relative, friend or pet, 17 reported observations of smoke and/or ash and 30 calls were about issues other than air quality and health. The calls came mostly from Monterey Peninsula cities, as follows:
  - 14 from Seaside
  - 1 from Marina
  - 22 from Monterey
  - 23 from Carmel
  - 2 from Del Rey Oaks
  - 8 from Pacific Grove
  - 2 from Pebble Beach
  - 1 from Monterey-Salinas Highway corridor
  - 1 from Carmel Valley
- iv. There were three entries on October 25 (one each from Seaside, Monterey and Carmel) of which one was an air quality-related complaint. There were four entries on October 26 (two from Carmel, one each from Monterey-Salinas Highway corridor and Pacific Grove), of which two were air quality-related complaints. There were two entries for October 27 and one for October 28 (other issues).
- v. MBUAPCD recorded 33 air quality-related complaints on October 24. The natures of complaints were mainly observations of smoke and ash, smell of smoke, and acute effects such as irritation of eyes, dryness in throat and cough. MBUAPCD received no complaints on October 26. The calls came mostly from Monterey Peninsula cities, as follows:
  - 5 from Seaside
  - 9 from Monterey
  - 0 from Del Rey Oaks
  - 7 from Carmel
  - 2 from Pacific Grove
  - 2 from Pebble Beach
  - 2 from Marina
  - 1 from Salinas
  - 3 from Carmel Valley
  - 1 from Watsonville

**g. Community issues**

- i. Due to the prescribed burn expanding into two adjacent burn polygons, and increased smoke impacts to nearby communities that resulted from it, the Army, EPA and DTSC received numerous inquiries, questions and comments regarding the prescribed burn, as well as observed extensive local newspaper coverage for several days. The Army, EPA and DTSC felt a need to officially solicit public issues and concerns and respond to them. Three avenues were set up for anyone to submit comments on the prescribed burn: (1) via regular mail, (2) electronically through [www.fortordcleanup.com](http://www.fortordcleanup.com) and (3) oral or written comment at a public comment meeting. An advertisement announcing the public comment opportunities and the meeting was posted on [www.fortordcleanup.com](http://www.fortordcleanup.com), and issued in the Monterey County Herald and the Salinas Californian on November 10, 2003. The public comment meeting was held at the Embassy Suites Hotel in Seaside, California on November 13, 2003.
- ii. The November 13 public comment meeting was conducted in two parts: the poster session in one room, in which posters exhibiting information about the burn and subject matter experts were available to answer questions; and the comment room, in which upper management officials from the Army, EPA and DTSC were present to listen to community comments and the proceedings were recorded by a court reporter and audio tapes. The transcript of the November 13 public comment meeting is available in the Administrative Record.
- iii. Forty-seven (47) people voiced their comments at the November 13 meeting, as well as 10 submitted written comments on comment cards during that evening. The Army received 17 written comments and 34 email comments. There were 22 letters to the editors of local newspapers on the topic of Fort Ord's prescribed burn during October and November of 2003. In all, 117 people commented on the Ranges 43-48 prescribed burn, concerning a range of issues such as the control of the burn, air quality-related impacts, communication with the public and the relocation program. A summary of community comments and responses is included in attachment 1.

## 4 Evaluation

### a. Overall planning and coordination

- i. Separating the Incident Command Post from the Management Center was effective in separating the fire operation component from the rest of the activities. The intent was that those who were responsible for making decisions about fire operations could concentrate on their tasks at hand, without undue interference.
- ii. The Management Center was capable of issuing updates on an hourly basis, but updates were made more infrequently. Community comments and hotline operator feedback indicate that people were looking for updates, but since they were not getting new information frequent enough they went to other sources (such as media), and contributed to frustration.
- iii. Despite efforts to coordinate with various air quality, weather forecasting and local fire agencies, there were instances of miscommunication, specifically regarding the purpose of the test burn, communication procedures and decision-making processes.
- iv. The overall coordination process used to support mobilization and ignition decision-making between the Army and regulatory agencies was burdensome to remedial project managers, yet not as effective as it should have been. While it included frequent meetings and conference calls participated by management-level personnel from multiple agencies, and frequent and timely feedback of information to them about the status of preparation, there still remained a few significant areas of miscommunication, particularly related to the purpose of the test burn and ignition decision-making.
- v. Mobilization decision-making based on a three-day advance weather forecast has too high a chance of not being able to execute the burn while incurring significant cost of mobilizing equipment and personnel and implementing relocation.

### b. Fire operations

- i. The widths and conditions of the western primary fuelbreak that was breached during the Ranges 43-48 prescribed burn may not have been adequate to contain the fire given the weather conditions that day. Prior to the burn, additional vegetation cutting to widen primary fuelbreaks started, but could not be completed due to the presence of unexploded ordnance. This was mitigated by the application of foam, water and fire retardant. However, spot fires developed and resulted in an escape.
- ii. Aerial management of the fire was more difficult to implement than anticipated. Vertical and horizontal explosive safety setback distances posed challenges during contingency operations. Local fire agencies stressed that a fire is better managed closer to the fire, preferably from the ground level.
- iii. The current burn prescription focuses more on reducing smoke impacts. Under the current prescription, the options available include both on-shore and offshore flows. However, the off-shore scenario has a higher tendency to correspond with high fire risk days.
- iv. Primary and secondary lines of communication were required and provided for the fire operations team. However, some communication problems were experienced within the fire team and between the fire team and the contingency resources after the escape was declared.

### c. Meteorology

- i. Under the current burn prescription only a few opportunities for burning occur each year, and the types of preferred weather conditions are difficult to predict reliably. This affects mobilization decision-making three days in advance and ignition decision-making on the morning of the burn day. However, the preferred factors remain to be high atmospheric mixing depth (>1,500 feet msl) and calm wind to facilitate the smoke column.

- ii. The current burn prescription considers surface to 20-ft level wind speed as a factor. Air quality agencies suggested that higher wind speeds at up to 1,000-ft level might have contributed to the greater smoke impacts to the downwind communities.
- iii. The Army's meteorologists coordinated with CARB meteorologists prior to the actual day of the burn. However, there were professional disagreements over data interpretation based on the use of different meteorological data and models. In addition, the role of the CARB meteorologist who was on-site on the day of the burn was unclear. The Army and CARB interpreted the purpose of the test burn differently.

**d. Air monitoring**

- i. Energetic materials and their likely breakdown compounds were not detected in any of the samples, including the active ignition day sample at the location most heavily impacted by smoke (BA1).
- ii. Outside of the immediate burn area (BA1 and BA2), particulate metals were either not detected or were less than regulatory screening levels, with only once exception. The estimated peak hourly concentration of aluminum detected at PS2 (Fitch Middle School) on the active ignition day exceeded the regulatory screening level. However, aluminum is a common element found in soil and taken up by plants, and has many other common sources in the environment. Considering that the October 2003 burn expanded from the original 490 acres to approximately 1,500 acres, aluminum emissions from biomass burning should not be an issue in future prescribed burns of sizes 400 acres or less (current Habitat Management Plan restriction).
- iii. Based on the energetics and particulate metals data, contribution to air emissions attributable to incidental detonations of munitions and explosives of concern during a prescribed burn is negligible.
- iv. Dioxins and furans were monitored at the burn area locations (BA1 and BA2) and mobile sampling station (MS1). The analytical results show dioxins and furans were either not detected or detected below the screening level in all samples.
- v. Acrolein was included in the air monitoring program, as it is a vegetation-related combustion product. Acrolein was detected in five baseline air samples at levels above the screening level, as it has other sources such as tobacco smoke, burning gasoline and heating of fats.
- vi. Other than at the burn area (BA1 and BA2), acetaldehyde and formaldehyde were not detected above the screening level, except acetaldehyde at OB-2 on the active ignition day. Considering that the October 2003 burn expanded from the original 490 acres to approximately 1,500 acres, aldehyde emissions from biomass burning should not be an issue in future prescribed burns of size 400 acres or less (current Habitat Management Plan restriction).
- vii. The Ranges 43-48 data suggests that the data from burn area sampling locations (BA1 and BA2) do not represent the level of smoke exposure at receptor locations. Capture of the smoke at the burn area sampling locations may also be heavily influenced by the wind direction, which could shift during the fire, limiting the usefulness of the data.
- viii. Particulate matter (PM10) monitoring showed concentrations exceeding the 24-hour California Ambient Air Quality Standards (CAAQS) at nearly every monitoring site on the active ignition day, and at every monitoring site the following day.
- ix. Baseline air monitoring data obtained through this effort can potentially be used as the baseline for air monitoring efforts for future prescribed burns, since monitoring locations were distributed at several key locations surrounding the former Fort Ord.
- x. The Army has requested Agency for Toxic Substances and Disease Registry (ATSDR) to evaluate the air monitoring results. It is expected that ATSDR will issue a public health consultation for the Ranges 43-48 prescribed burn in 2004.

**e. Relocation**

- i. Although the air emissions study conducted in 2001 indicated that air emissions from incidental detonation of munitions during a prescribed burn at the former Fort Ord would be at levels well below health-protective regulatory screening levels, the voluntary temporary relocation program was established to address potential added health risks due to munitions-related chemical emissions. The air monitoring results from the Ranges 43-48 prescribed burn showed that the ground-level concentrations of munitions-related air pollutants downwind of the prescribed burn were below human health-protective regulatory screening levels, confirming the finding of the prior study. Although munitions-related air emissions were not a problem, the Ranges 43-48 burn generated much more smoke than initially planned, and the relocation program did provide a significant measure to reduce smoke impacts to the community.
- ii. Community comments urged the Army to discourage people from relocating without any smoke exposure-related health concern.
- iii. Community comments urged the Army to accommodate medical issues and people who are unable to leave the area.
- iv. The staffing level of two core relocation counselors plus additional personnel when needed, was adequate and was appropriate to respond to fluctuating needs.
- v. The staffing level of the travel arrangement/contracting staff was adequate.

**f. Outreach**

- i. Community comments suggested incorporating information about devastating effects of wildfires, environmental benefits of prescribed burning, more realistic description of smoke that people should expect to experience, and the importance of munitions cleanup that the burning will support into outreach materials.
- ii. Community comments requested more frequent updates about the burn operation be provided. There was also a suggestion that local emergency service providers, hospitals, urgent care provides, and local elected officials should be informed more frequently during prescribed burns.
- iii. Hotline
  1. The initially planned level of staffing was adequate. Staffing levels were adjusted according to the need, and an adequate number of personnel were pre-trained as hotline operators and readily accessible during the peak operating period of October 23-25, 2003.
- iv. Website
  1. The procedures for posting updates on the public website were well planned, including backup personnel for updates, and was carried out smoothly. The website requires just two web administrators and proved to be very effective in disseminating information to more than 2,000 individuals during the prescribed burn.
- v. Media relations
  1. The number and timing of press releases were adequate for informing local media. There was also media coverage in the San Jose and San Francisco Bay areas regarding the Ranges 43-48 prescribed burn.
  2. The effectiveness of reaching out to people through weekly newspaper advertisements is unclear. The relocation report includes responses to a 2002 questionnaire, indicating only 2 out of 126 respondents found newspaper advertisement as the most important source of information.
  3. The Army's Public Affairs Office recommended the Army should be the one source of burn-related information to the media during future burns to prevent conflicting information from circulating.

**g. Air quality-related complaints**

- i. Accepting air quality-related complaints through the hotline and having a person compiling the information was appropriate. Exchange of air quality-related complaint information with MBUAPCD was appropriate.
- ii. The coordinates of origins of complaints were reported to the Management Center. However it appears that the information was not critical in the conduct and documentation of the burn.

**h. Community issues**

- i. Community issues are addressed above and in Attachment 1.

## 5 Overall recommendations for future prescribed burns to support munitions response

### a. Overall planning and coordination

- i. Provide periodic updates from the Management Center to the Relocation Center and the Media Center so that the Management Center is one source of information for updates to the public and the media.
- ii. Increase level of coordination with air quality, weather forecasting and local fire agencies in planning the next prescribed burn.
- iii. Modify and simplify the decision making process for mobilization. Clearly identify the roles and responsibilities of each individual and organization, and the process for decision-making.
- iv. Change the mobilization decision criteria so as to increase the chance of success once that decision is made (e.g. change the burn prescription so potential burn days are better forecasted, change relocation notification timing to two days before the scheduled burn, reduce the time needed to mobilize fire operations equipment, possibly change the types and reduce the amount of equipment).
- v. Evaluate the logistics program to accommodate mobilization decision-making 2 days before a burn, instead of 3 days before a burn.

### b. Fire operations

- i. Evaluate locations, widths and conditions of fuel breaks on a site-specific basis for each future prescribed burn. Consider the size and location of the burn, burn prescription, ground-level wind direction and speed, fuel moisture and type, types and number of equipment, types and number of backup resources, and expected types of ordnance.
- ii. Evaluate vertical and horizontal explosive safety setback distances for essential and nonessential personnel during the prescribed burn.
- iii. Re-prioritize the five prescribed burn goals. The first two goals would include: completing prescribed burn operations with no injuries to fire personnel or the surrounding communities; and containing the burn within the established primary containment lines. The next priority goals would include: minimizing smoke impacts; clearing the vegetation to facilitate munitions cleanup; and minimizing damage to natural resources.
- iv. Ensure communication is maintained throughout the burn operations between each key personnel. Verify and test communication channels between fire operations team and the contingency resources.
- v. Consider community suggestions included in Attachment 1 and input from local fire agencies and air quality agencies:
  1. Conduct smaller burns of shorter duration that can be completed while smoke dispersion potential is great, over several days.
  2. Burn during calmer wind speed, and winds blowing away from the nearest population.
  3. Cut or black-line a width of vegetation along fuel breaks so as to increase their effectiveness.
  4. Do not burn on high risk fire days.
  5. Clear munitions and explosives of concern from the surface of the ground surrounding the Impact Area to provide a reliable line from which local fire agencies can fight the fire on the ground to prevent any escaped fire from going outside the Impact Area where most prescribed burns are planned.
  6. Improve local fire agencies' ability to assist in the case of contingency scenario. Use existing local emergency response mechanisms.

**c. Meteorology**

- i. Evaluate the burn prescription. The burn prescription needs to allow for more potential burn days during the burn season for Fort Ord (between July 1 and December 31 of each year). Increase reliability of forecasting the types of preferred weather conditions. Provide for local weather collection on a site-specific basis, and relocate RAWS (weather stations) as necessary.
- ii. Clarify the purpose of the test burn, if one is planned, as part of future prescribed burn operations. Clarify procedures for the Army to consult with the CARB duty desk. Coordinate forecasting procedures with those used by CARB. Clearly identify the roles and responsibilities of each individual and organization, and the process for decision-making.

**d. Air monitoring**

- i. Eliminate future monitoring for energetic materials and their likely breakdown compounds.
- ii. Eliminate future monitoring for particulate metals.
- iii. Disseminate the findings to the public to establish, in the community, the knowledge that the smoke from prescribed burns at the former Fort Ord is essentially no different than the smoke from any other fires involving similar vegetation types. Options for outreach include: Community Bulletin #7 that would be mailed to over 50,000 households in the Monterey and Salinas areas, presentations at future Community Involvement Workshops and/or Technical Review Committee meetings, and providing an information booth at community event(s).
- iv. Eliminate future monitoring for dioxins and furans.
- v. Reevaluate sources and screening levels for acrolein based on potential contributions from other sources such as tobacco smoke, burning gasoline and heating of fats.
- vi. Reevaluate the need to conduct further monitoring for aldehydes and acrolein.
- vii. Eliminate air monitoring at or adjacent to the burn area in future burns.
- viii. Retain particulate monitoring at potential receptor locations. Reevaluate the number and locations of air monitoring stations to collect data in areas potentially impacted by smoke.
- ix. Utilize the baseline air monitoring data obtained from the Ranges 43-48 project in air monitoring efforts for future burns.

**e. Relocation**

- i. Offer voluntary temporary relocation for the next prescribed burn. Use the information collected from the Ranges 43-48 prescribed burn as well as the next burn to evaluate the need for the relocation program.
- ii. Consider emphasizing that the relocation program is intended to provide temporary relief to those who have smoke exposure-related health concerns.
- iii. Consider ways to accommodate medical issues and people who are unable to leave the area.
- iv. Include in future planning recommendations made by staff, as documented in the relocation report.

**f. Outreach**

- i. Incorporate information about devastating effects of wildfires, environmental benefits of prescribed burning, more realistic description of smoke that people should expect to experience, and the importance of munitions cleanup that the burning will support.
- ii. Evaluate procedures for informing key community sectors during the prescribed burn, such as emergency service providers, hospitals, urgent care facilities, and local elected officials.
- iii. Collect and disseminate information regularly through the hotline, the website, and the Media Center.
- iv. Media relations

1. Expand recipients of press releases to media organizations in the San Jose and San Francisco Bay Area.
2. Evaluate the scope of the weekly newspaper advertisements. Reduce the number of local papers used and reduce the frequency of advertisements.
3. Designate the Army's Public Affairs Office to be the one source of burn-related information to the media during future burns to avoid conflicting information from circulating among the public and media.

**g. Air quality-related complaints**

- i. Assess the need for reporting coordinates of origins of complaints to the Management Center and the Incident Command Post, on a project-specific basis.

**h. Community issues**

- i. Improve the ability to control future prescribed burns.
- ii. Communicate the smoke impacts anticipated to be experienced by the community in advance, the benefits of prescribed burns, and accurate relocation program-related information.
- iii. Collect and disseminate information regularly.

## 6 References

- a. Creighton & Creighton, Inc. (C&C), 2003. *Former Fort Ord, Monterey, California, Interim Action Remedial Investigation/Feasibility Study, Draft Final Revised Voluntary Relocation Plan*, July 22.
- b. \_\_\_\_\_, 2004. *Draft Final After-Action Report, 2003 Voluntary Relocation Program*. April 6 (finalized without revision June 1).
- c. Fire Stop, 2002. *Former Fort Ord Prescribed Burn Plan for Ranges 43-48*. August.
- d. Fort Ord Prescribed Burn Public Comment Session, Reporter's Transcript of Proceedings. November 13, 2004.
- e. MACTEC Engineering and Consulting, Inc. (MACTEC), 2003. *Final Prescribed Burn Air Sampling and Analysis Plan, Ranges 43-48, Former Fort Ord, California*. July.
- f. \_\_\_\_\_, 2004. *Draft Final Ranges 43-48 Prescribed Burn Air Monitoring Report, Former Fort Ord, California*. June 16.
- g. Parsons, 2003. *Final Ranges 43-48 Site-Specific Work Plan, Former Fort Ord*. August 7.
- h. \_\_\_\_\_, 2003a. *Former Fort Ord Ordnance and Explosives (OE) Cleanup, Ranges 43-48 Prescribed Burn Plan Addendum*, August 18.
- i. \_\_\_\_\_, 2003b. *Post-Burn Evaluation For Burns Greater Than 250 Acres or Burns For Which Smoke Impacts Occurred, for October 24, 2003 prescribed burn at Munitions Response Site 43-48, former Fort Ord*. December 15.
- j. \_\_\_\_\_, 2004. *Final Ranges 43-48 Prescribed Burn After-Action Report, former Fort Ord*. May 18.
- k. U.S. Department of the Army (Army), 2002. *Record of Decision, Interim Action for Ordnance and Explosives at Ranges 43-48, Range 30A, and Site OE-16, Former Fort Ord, California*. September 20.

## **Attachment 1**

## Attachment 1

### Summary of public comments and responses 2003 Ranges 43-48 prescribed burn at the former Fort Ord

Due to the prescribed burn expanding into a larger area, and increased smoke impacts to nearby communities that resulted from it, the Army, U.S. Environmental Protection Agency (EPA) and California Department of Toxic Substances Control (DTSC) received numerous inquiries, questions and comments regarding the prescribed burn, as well as observed extensive local newspaper coverage for several days. The Army, as the lead agency for this action, and EPA and DTSC as support agencies, felt a need to officially solicit public issues and concerns and respond to them. Three avenues were set up for anyone to submit comments on the prescribed burn: (1) via regular mail, (2) electronically through [www.fortordcleanup.com](http://www.fortordcleanup.com) and (3) oral or written comment at a public comment meeting on November 13, 2003.

Forty-seven (47) people voiced their comments at the November 13 meeting, as well as 10 submitted written comments on comment cards during that evening. The Army received 17 written comments and 34 e-mail comments. There were 22 letters to the editors of local newspapers on the topic of Fort Ord's prescribed burn during October and November of 2003. In all, 117 people commented on the Ranges 43-48 prescribed burn, concerning a range of issues such as the control of the fire, air quality-related impacts, communication with the public and the relocation program. A summary of community comments and responses is provided below.

#### **Issues related to the overall program and decision-making:**

**Comment 1:** Several people wanted explanations for why people experienced so much ash and smoke impacts, and how this occurred. Commentators suggested that someone should be held accountable. One requested a question-and-answer session with the decision makers. People wanted to know who was in charge of the burn and who Okayed proceeding with the prescribed burn that day. One said that real community members were not involved.

**Response:** The Army regrets that more people experienced the inconvenience of smoke and ash from the Ranges 43-48 burn than initially anticipated. The added impacts were mainly due to the fire jumping a primary containment line and burning an additional approximately 1,000 acres of land, and the resulting fire suppression efforts that cooled down the fire thus generating more smoke. This is explained in more detail in the Prescribed Burn After-Action Report.

The ranges of weather conditions under which the burn would occur (the "burn prescription") was coordinated among the Army, U.S. Environmental Protection Agency (EPA) and the State of California represented by Department of Toxic Substances Control (DTSC). The burn prescription and description of the way the prescribed burn would be conducted were documented in *Final Ranges 43-48 Prescribed Burn Plan, Former Fort Ord, Monterey, California* dated October 7, 2002 (Administrative Record # OE-0401K) and updated in *Ranges 43-48 Prescribed Burn Plan Addendum* dated August 18, 2003 (Administrative Record # OE-0401K.1). These reports are available in the Administrative Record. The overall approach for conducting the prescribed burn at Ranges 43-48, including the burn prescription, was described in a series of Community Bulletins, each mailed to more than 50,000 households in Monterey and Salinas areas during 2002 and 2003.

The Army believes it followed the previously agreed-upon steps for making the decision to burn on October 24, 2003. The Army's meteorologists monitored and forecasted the weather daily beginning

August 2003 to identify days that would potentially meet the burn prescription. On one occasion in 2003 the Army forecasted a potential day for a burn, mobilized equipment and personnel and announced relocation, and postponed the burn due to changes in weather forecast. Later the Army's meteorologists identified October 24-26 to potentially meet the burn prescription and the Army mobilized for the prescribed burn. The Army coordinated the mobilization activities with EPA, DTSC, California Air Resources Board (CARB) and Monterey Bay Unified Air Pollution Control District (MBUAPCD), as well as notified local community and the media for three days prior to the burn. In the morning of October 24, the Army's meteorologists determined the burn prescription was met, the Army determined other conditions required for conducting the burn -- including the availability of backup fire management resources -- are met, and the team proceeded with conducting the burn.

The decision to burn on October 24 is documented in the Prescribed Burn After-Action Report.

**Comment 2:** One asked for explanations about the timing of the escape and the timing of it being reported to the public.

**Response:** The prescribed burn on October 24, 2003 started at about 9:00 a.m.(Pacific Daylight Time). A spot fire occurred across a western primary containment line at about 9:30 a.m. and was suppressed. Shortly afterward two other spot fires started along the same control boundary and the fire team worked to suppress them. However the two spot fires grew larger and eventually merged together. After verifying the situation the Ord Military Community fire chief called it an escape at about 11:00 a.m., and took control of the operations.

The information about the spot fires was not reported to the public until after the escape was declared. This was because the fire crew needed to verify and confirm that there was, in fact, a breach in the containment line, prior to reporting it to the public. Fire Stop's burn management staff spent a considerable time waiting for good, verifiable information to come in from the front line of operation. Once there was enough information to determine an escape, the contingency plan was implemented to concentrate on controlling the fire. Information about the breach and escape was reported to the public only after it had been confirmed, to avoid unnecessary confusion.

**Comment 3:** Some felt that innocent people should not have to deal with the inconvenience of exposures to smoke and ash in order to protect people who trespass off-limit areas.

**Response:** The Army recognizes there are public concerns about the smoke impacts to the community, and has previously received and considered similar comments questioning the decision to protect trespassers from explosive hazards rather than the general public from exposure to smoke from the prescribed burning. The danger of unexploded ordnance is real. The Army, EPA and DTSC have considered this comment in evaluating alternatives to addressing the explosive risks, as documented in *Final Interim Action Ordnance and Explosives Remedial Investigation/Feasibility Study For Ranges 43-48, Range 30A, Site OE-16, Former Fort Ord, California*, dated March 7, 2002 (Administrative Record # OE-0332JJ).

Because of the presence of live, sensitively-fuzed unexploded ordnance items on the ground surface of these sites, their proximity to residences and schools, and the history of trespassing incidents, the Army, EPA and DTSC decided to conduct the Interim Action to remove unexploded ordnance, including the decision to use prescribed burning to clear vegetation. A 60-day public comment period was held before the decision was made in 2002. Please see *Record of Decision, Interim Action for Ordnance and Explosives at Ranges 43-48, Range 30A and Site OE-16, Former Fort Ord, California*, dated September 20, 2002 (Administrative Record # OE-0414).

**Comment 4:** Many people expressed their opposition to prescribed burning at Fort Ord, for reasons such as smoke exposure to people, concerns about the potential of fire going out of control, and the concern that burns and cleanup of the base would lead to more development of Fort Ord. Two indicated that prescribed burning is against air pollution law and National Environmental Policy Act.

**Response:** The prescribed burn at Ranges 43-48 was planned to include a number of measures to reduce smoke impacts to the public and to control the fire within its intended boundaries. These measures included (a) removing surface ordnance and combustible debris from the site prior to conducting the burn as much as possible; and selecting relatively dry fuel conditions to reduce smoke generation, (b) selecting a range of weather conditions that would allow the majority of smoke to rise to high altitudes and disperse there; notifying the community in advance; and offering voluntary temporary relocation to reduce smoke impacts, (c) preparing and pre-treating a system of fuel breaks that included primary, secondary and tertiary containment lines; having enough equipment and personnel onsite to manage the fire; and adjusting the ignition patterns to manage the fire, and (d) having contingency fire resources to respond in an event the fire travels in an unplanned manner.

The prescribed burn at Ranges 43-48 was intended to facilitate the cleanup of unexploded ordnance necessary to protect the public from the imminent threat posed by unexploded ordnance. Although proposed reuse was considered in the development and evaluation of alternatives to address the explosive hazards, it was not a significant input to the evaluation.

Consistency of the interim action with applicable environmental laws and regulations was evaluated and documented in *Record of Decision, Interim Action for Ordnance and Explosives at Ranges 43-48, Range 30A and Site OE-16, Former Fort Ord, California*, dated September 20, 2002.

**Comment 5:** Two people opposed burning as a method of removing or detonating unexploded ordnance.

**Response:** The prescribed burn at Ranges 43-48 was intended to facilitate the cleanup of unexploded ordnance by removing the vegetation and exposing the ground surface so that the ordnance cleanup workers could see the ground and work safely. The prescribed burning was not conducted as a method of removing or detonating unexploded ordnance, although some ordnance was expected to detonate during the fire. In fact, during the surface removal of Ranges 43-48 area shortly after the burn, more than 5,000 explosive ordnance items were found.

**Comment 6:** Some stated they fully support the need to clean up the former firing ranges to prevent the possibility of injury or death involving unexploded ordnance. They urged the Army to clean up the ranges as soon as possible. One countered if these areas are so dangerous with grenades etc., then why isn't the Army clearing other parts of the former Fort Ord?

**Response:** The Army has been investigating and cleaning up unexploded ordnance at Fort Ord since 1993. Investigation and cleanup priorities are formed based on the hazard of unexploded ordnance, accessibility and proximity of the sites to the public, and reuse priorities. The Army is committed to continuing the cleanup of unexploded ordnance at the former Fort Ord to mitigate its explosive hazards.

**Comment 7:** Several expressed their support of the prescribed burn for reasons such as the benefits to the habitat, local agencies' commitment to the Habitat Management Plan, wildland fuel management, reuse that the follow-on cleanup would enable, and mainly, for enabling the Army to address the hazards of unexploded ordnance for the safety of the public and the cleanup workers. Two recalled accidents involving unexploded ordnance, including one in which one was killed and another was seriously injured. Some said the additional areas that burned was a plus, since it would have saved the resources required to burn those acreage and the activities associated with those "events". One observed that it was obvious that

the burn was very effective in exposing the hazardous ordnance and making the cleanup possible. Another stated that the threat of unexploded ordnance is real, particularly to the residents of City of Seaside and the children.

**Response:** The Army agrees that prescribed burning has beneficial impacts to the habitat at the former Fort Ord, contributes to effective wildland fuel management, and facilitates reuse planned by the local community in addition to enabling the cleanup of unexploded ordnance to address explosive hazards. The Army also recognizes the impacts and inconveniences this action has caused and will cause to the community, such as road closures, short-term smoke exposures and voluntary temporary relocation, and will continue to explore ways to minimize these impacts.

**Comment 8:** Some commented that the chaparral vegetation would have burned anyway, so it is better to conduct controlled burns than have an uncontrolled wildfire. Some referred to the catastrophic wildfires in Southern California as harsh reminders that wildland fuel management is essential to protect our communities, and that prescribed fire is the most efficient and ecologically sound strategy for preventing such catastrophic wildfires. One countered if the threat of wildfire is such a large problem, what has the Army done for all these years?

**Response:** The Army agrees that prescribed burning has a beneficial impact in terms of wildland fuel management, since it prevents vegetation fuel loads from accumulating excessively. Excessive accumulation of vegetation fuel load is associated with uncontrolled wildfire. The Army also agrees that prescribed burning is an ecologically sound strategy in this rare plant community that requires periodic fires.

#### **Issues related to the control of the fire:**

**Comment 9:** How dangerous is it to light a fire with ordnance in the area? Explosions during a fire would have put the City of Seaside in danger. One noted hearing explosions over night, but another commented he did not hear any explosion.

**Response:** U.S. Army Corps of Engineers established a 1,701 ft exclusion zone surrounding the Ranges 43-48 prescribed burn area, based on a conservative calculation of a distance that a fragment might fly from a detonation of an ordnance item likely present in the area, and assuming that such a detonation occurs at the edge of the burn area. Only essential personnel were allowed to enter the exclusion zone. Although people conducting the prescribed burn were essential to the operations, they still had to stay away from the burn some distance. This is why the fire was managed from the air. Twenty-six houses in Fitch Park military housing area were affected by this exclusion zone and received a special notice about the burn.

**Comment 10:** Homes in Seaside were in danger. It was lucky that Seaside did not burn up. One commentator suggested there should have been guidelines for how close to residential areas a prescribed burn should be allowed.

**Response:** The area between the City of Seaside and the western boundary of the expanded fire had been cleared of vegetation and ordnance, and prevented the fire from further approaching the city boundary. Any burning embers that could have flown into this previously cut area were not expected to start a large fire. The fire remained 750 to 2,000 ft from the city boundary.

**Comment 11:** Some suggested perhaps Fire Stop did not have enough personnel and equipment to put out the fire, or there was not enough planning. One commentator wondered about the adequacy of

methods used to fight the escaped fire, and if the resources could have been better used if they assisted in the Southern California fires.

**Response:** The prescribed burn was planned to include equipment necessary to conduct and manage the fire, standby equipment, and backup fire suppression resources. Fire Stop brought 10 fire engines, 2 single-engine air tankers (SEATs), 4 water tenders, two bulldozers, 13 helicopters and more than 80 personnel. In addition, Ord Military Community Fire Department (currently Presidio of Monterey Fire Department) and local fire agencies provided backup support. The prescribed burn plan included procedures for handling spot fires. Despite their attempts to manage the spot fires, the fire escaped the primary control line. As soon as the escape was declared, ignition stopped and all resources were directed to controlling the fire.

**Comment 12:** Some questioned the decision to conduct a burn during a fire danger season. One person noted the day before the fire, National Weather Service had issued a Red Flag Warning of high fire danger for the majority of the state of California, and wondered if the Army wanted the fire to go out of control so they could burn off more land than they were to be allowed to burn.

**Response:** The prescribed burn was planned for the 490-acre Ranges 43-48 site, and containing the fire within this boundary was one of the project's top priorities. However, it was also important to minimize smoke impacts to the nearby communities. That's why the burn prescription for the Ranges 43-48 prescribed burn specifically called for relatively dry fuel conditions to reduce smoke generation and weather condition that would send the smoke to high altitudes and disperse there. Unfortunately, these parameters are also associated with fire weather conditions. The National Weather Service issues "Fire Weather Watch" and "Red Flag Warning" advisories for areas with higher wildfire potential. Typically fire agencies are on an alert status once a Red Flag Warning is issued for their areas. For October 24, a Red Flag Warning had been issued for parts of Monterey County except for the immediate coast where Fort Ord is located. Because of this, local fire agencies were on high alert status, and the Army obtained additional firefighting resources to be able to better respond to an event of an escape. The Army had also established a network of fuel breaks and pre-treated primary containment lines with water, foam and retardant to reduce the chance of an escape.

**Comment 13:** Some commended those involved in planning and preparation for the prescribed burn, which kept the fire from getting worse. One person commented that the fire was never totally out of control. It stayed inside the third containment line and no direct action was taken to suppress the fire from the ground. The commentator also noted that Seaside has a fire break along most of its eastern boundary. Some people commented they were glad that the fire was conducted safely, without any loss of lives or property. One characterized the experience as being represented by a diligent group of firefighters working many hours to get things under control, and many thanked those firefighters.

**Response:** Conducting the prescribed burn safely was one of the Army's top priorities as well. No injury, death or property damage was caused by the Ranges 43-48 fire. Although the fire burned more areas than planned, it stayed within the former Fort Ord's Impact Area boundary. The prescribed burn at Ranges 43-48 was planned to include a number of measures to control the fire within its intended boundaries, including: preparing and pre-treating a system of fuel breaks that included primary, secondary and tertiary containment lines; having enough equipment and personnel onsite to manage the fire; and having contingency fire resources to respond in an event the fire travels in an unplanned manner. The Army appreciates those firefighters who responded to the escape and helped ensure the fire remained under control.

### **Suggestions for future burns:**

**Comment 14:** Many urged the Army to consider alternatives to burning, and suggested methods such as cutting vegetation, fencing the ordnance area while developing new technology, and using remote-controlled armored bulldozers to remove vegetation and dig out the explosives. One announced a meeting at Monterey Peninsula College to discuss alternatives to burning with an Oak Ridge National Laboratory expert on November 20. Another suggested an airborne magnetometer technology be considered, as well as an alternative to fund EPA and the State of California to take on the cleanup responsibility. One suggested that there should be sufficient time to explore alternatives since the Army would be busy cleaning up the 1,500 acres for three years, since it is three times the area intended for burn and cleanup.

**Response:** Many alternative methods of clearing vegetation to support the cleanup of unexploded ordnance were considered during the development of *Final Interim Action Ordinance and Explosives Remedial Investigation/Feasibility Study For Ranges 43-48, Range 30A, Site OE-16, Former Fort Ord, California*, dated March 7, 2002 (Administrative Record # OE-0332JJ). In this study, manual, mechanical and remotely-operated mechanical clearance methods, prescribed burning, animal grazing and herbicide application were evaluated, and prescribed burning was selected as the best alternative for clearing vegetation in Ranges 43-48, primarily because other methods would directly expose vegetation clearance workers to unexploded ordnance.

**Comment 15:** Suggestions were made for modifying the procedures for conducting prescribed burns in the future, including:

- The Army should learn from this burn, correct mistakes and move on with future burns.
- Conduct the burn at night, while most people are indoors (to minimize smoke exposure).
- The Army should educate the public about the devastating effects of large-scale wildfires that could be initiated by lightning, arsonists, vandalism, careless campers, and other miscellaneous causes; and of the benefits of a progressive controlled burn-program to avoid the uncontrollable situation of natural growing fuel that becomes more severe with each passing year.
- One suggested using the sea water for fire suppression, since the fresh water is a scarce commodity in this community.
- One suggested burning when the winds are blowing away from surrounding towns, with relocation.
- Some people suggested that the Army burn the entire area once. One suggested that the Army burn the entire area once, and then set up a five-year rotation for habitat maintenance and fire safety purposes.
- One suggested fewer, larger acreage burns to more rapidly move forward with the range cleanup.
- One suggested conducting several small (400-500 acre) burns per year in scattered areas, to facilitate faster completion of range cleanup. Gradually link the burned areas together; within a very few years those burned areas will provide good anchors for the remainder of the burns.
- One suggested conducting frequent small burns of a few acres that can easily be contained with the available personnel and equipment. Instead of waiting for just the right conditions, which will probably change during the burn anyway, do these small burns on a fairly routine schedule, every few weeks or so. Small fires will create less smoke no matter where it blows.
- One person suggested it might be more prudent to light the fire at the downwind firebreak, letting the fire burn slowly upwind creating a wide firebreak first. When the fire has burned far enough upwind, light a second fire at the upwind edge, which quickly increases in intensity and races downwind. This may result in a longer and smokier burn, but minimizes the risk of the burn going out of control.

**Response:** The Army appreciates these suggestions and will consider them in planning future prescribed burns. Some of the suggestions, such as smaller burn size, is already being discussed with regulatory agencies as a possibility. Some of the suggestions, such as conducting fewer, larger burns, are more difficult to consider because of existing, regulatory requirements such as the Habitat Management Plan limiting prescribed burns at the former Fort Ord to 800 acres per year or less.

**Comment 16:** One suggested spring or early summer may be a better time of year to set a fire, since it would be much easier to extinguish it.

**Response:** The Habitat Management Plan allows prescribed burns to occur at the former Fort Ord between July 1 and December 31 of each year, to protect sensitive species in the Central Maritime Chaparral habitat.

**Comment 17:** One suggested forming an independent panel to make the go/no-go decision of any future burns. The decision should not be left to organizations with a vested interest in timely completion of the project, i.e. the Army and the private contractor. The Army should use eminent atmospheric scientists such as those at Naval Postgraduate School, to advise on the dispersion of the smoke plume under conditions that actually exist on the scheduled day of the burn. Local fire authorities should be empowered to review the adequacy of the firebreaks and the fire suppression capabilities, again with an eye to actual burn conditions.

**Response:** The Army will seek an increased level of coordination with air quality, weather forecasting and local fire agencies in planning the next prescribed burn.

**Comment 18:** One person stated that there is a general forecast that predicts the general weather conditions of the area, but in the Fort Ord area and in the surrounding areas, the winds do different things (in terms of direction). The commentator asked that the panel (at the November 13 meeting) consider funding a \$2 million proposal from Naval Postgraduate School that would research the wind patterns by developing a meteorological monitoring network, and that would assist in decision-making for future burns at the former Fort Ord in the long-run.

**Response:** The environmental cleanup of the former Fort Ord is conducted as part of the Army's Base Realignment and Closure (BRAC) action, and its ability to fund research-and-development proposals are very limited.

#### **Issues related to the weather conditions:**

**Comment 19:** Some commented that the weather on October 24 was not suitable for a prescribed burn. Some stated that weathermen on TV said that the weather was not suitable for a burn. One commented that easterly wind would result in too many people in the path of the smoke before reaching the ocean, and it usually is accompanied by an inversion, which is not a condition favorable to high-level dispersion of smoke. One asked to include weather equipment in future planning. Another commentator disagreed with the quote in the Herald of an Army representative that October 24 was "absolutely the perfect day to do the burn." He noted at 6:30 a.m. in Carmel Hills, winds were blowing 20 to 25 miles per hour (mph), with gusts to 35 mph. Such winds imply at least moderate- to low-level turbulence, as gusts from aloft are brought down to the surface levels. Such gusts would fan any flames to much larger conflagrations.

**Response:** The actual weather data from October 24 indicated that the weather mostly followed the burn prescription and the morning forecast. The burn prescription and the relatively dry fuel conditions were selected to reduce smoke generation and to send the smoke to high altitudes and disperse there. The Prescribed Burn After-Action Report reported that the majority of smoke rose to high altitudes and moved out over Monterey Bay, but some residual smoke was noticeable at the ground level. The low-level smoke was primarily generated from the initial stages of the burn as well as during fire suppression and smoldering stages, when the fire was not hot enough to lift the smoke to high altitudes. Meteorological data from onsite weather monitoring stations during the Ranges 43-48 fire is included in the Prescribed Burn After-Action Report. The Army is evaluating whether the burn prescription should be changed.

**Comment 20:** Some felt that the weather conditions were just right for conducting a prescribed burn on that day, and the burn was conducted under the best of circumstances at the time.

**Response:** The Army believes the conditions necessary to conduct the Ranges 43-48 burn as planned existed in the morning of October 24.

**Comment 21:** Some commentators noted that we should recognize the reality that fire behavior and weather factors are extremely difficult to predict, and weather often changes.

**Response:** It is often difficult to reliably forecast weather more than a day in advance. In early 2003 the Army asked meteorologists at the Naval Postgraduate School to research the ability to predict weather, and the reliability of those forecasts made one, three and five days in advance. The study showed that until 24 hours in advance, forecasts made based only on meteorological models were not very reliable; however forecasters familiar with local weather patterns may be able to predict weather more reliably. October 24 was identified as potentially meeting the burn prescription five days in advance; the forecasts were refined as the day approached. However, as was the case in November 2002 and earlier in October 2003, the weather could change and a scheduled burn may need to be postponed one or more days. The Army also recognizes that fire behavior is not an exact science and it could change, therefore it is important to leave enough flexibility for those conducting the fire so that a range of options are available to them in conducting the fire.

#### **Issues related to smoke and ashes:**

**Comment 22:** The amount of smoke and ashes caught many people by surprise. The Army needs to promote the awareness of the consequences of the burn, and so people could be better prepared to deal with them, and avoid being exposed to hazardous chemicals. Some commented that the smoke and ashes were merely inconveniences, and something we should accept, because the benefits of burn and ordnance cleanup far outweigh the inconveniences we experience. Many noted or complained about ash falling on their parked cars and houses. One commented paint on someone's car had been "etched" by the toxic "snowflake" accumulated on the vehicle. One person noted a strange, salt-like substance on her car after the rain (after the burn).

**Response:** Two Community Bulletins were mailed each to more than 50,000 households in Monterey and Salinas areas in 2003, and other outreach activities were conducted, to raise awareness of the unexploded ordnance cleanup and associated prescribed burn at Fort Ord. Based on the experience of October 2003, the Army will re-evaluate its community outreach materials regarding the description of potential impacts people might experience during future prescribed burns.

The air monitoring program for the Ranges 43-48 prescribed burn included sampling and analysis of ambient air from various air monitoring locations in and around the former Fort Ord. In 2001 the Army, in consultation with EPA and DTSC, conducted an assessment of ordnance-related air emissions that may be associated with conducting a prescribed burn at Ranges 43-48, showing that the smoke from prescribed burns at Fort Ord would be no different from that from an ordinary vegetation burn. The study used conservative assumptions and concluded that air pollutant emissions from incidental detonations during a prescribed burn in Ranges 43-48 would be minor compared to emissions contributed directly by biomass burning, and contribute pollutant concentrations well below health-protective regulatory screening levels (Administrative Record # OE-0355). This conclusion was confirmed through the air monitoring that was conducted during the October 2003 prescribed burn; the monitoring results showed that munitions-related chemical compounds were not detected. The results of the air monitoring are presented in the air monitoring report.

**Comment 23:** Several commentators stated they or someone they knew experienced health problems during the fire, including eye irritation, nosebleed, dizziness, headache, cough, and difficulty breathing. Some reported being unable to stay home or leave home in order to minimize their exposure to smoke. One wondered if children should be allowed to stay outdoors on the day of the burn. Some felt that conducting the prescribed burn demonstrated disregard for the health and safety of the community.

**Response:** Many people who called the prescribed burn hotline during the Ranges 43-48 prescribed burn, as well as these and other commentators, expressed a variety of reactions to smoke and ash, ranging from not being bothered at all, to difficulty breathing during short-term exposure to an elevated concentration of smoke, to reports of continuing scratchy throat days after the fire was over. These community feedbacks emphasize the fact that effects of exposure to smoke from a prescribed burn vary greatly among individuals, and they are best mitigated by the individuals to meet their own, specific needs. According to the Monterey County Health Department, health effects from short-term exposure to smoke should generally be reversible and short term effects, and the risk of long-term health effects is very low (from the physicians' alert issued on October 24, 2003).

**Comment 24:** What is in the smoke, what are the health effects of exposure to smoke, and what are the long-term effects? One stated chemicals from the explosives are in the smoke. Another stated that, in addition to particulates there are many toxic gases that come off the burn, such as phosgene gas, redhazens (phonetic) gases, cyanide gases, all kinds of nitrites, nitrite gases, and perchlorate. What carcinogens are found in the smoke generated in the burns at Fort Ord that are not present in smoke from ordinary fires? How did the Army determine, before the fire was conducted, that the smoke will not be harmful to people? What is in the ash and what are the health effects of ash?

**Response:** The air monitoring program for the Ranges 43-48 prescribed burn included sampling and analysis of ambient air from various air monitoring locations in and around the former Fort Ord. In 2001 the Army, in consultation with EPA and DTSC, conducted an assessment of ordnance-related air emissions that may be associated with conducting a prescribed burn at Ranges 43-48, showing that the smoke from prescribed burns at Fort Ord would be no different from that from an ordinary vegetation burn. The study used conservative assumptions and concluded that air pollutant emissions from incidental detonations during a prescribed burn in Ranges 43-48 would be minor compared to emissions contributed directly by biomass burning, and contribute pollutant concentrations well below health-protective regulatory screening levels (Administrative Record # OE-0355). This conclusion was confirmed through air monitoring that was conducted during the October 2003 prescribed burn; the monitoring results showed that munitions-related chemical compounds were not detected. The results of the air monitoring are presented in the air monitoring report.

**Comment 25:** A person reported the Herald reporting "health officials advised that people evacuate the area as there was air pollution caused by the now out-of-control burn" on Friday.

**Response:** The Monterey County Health Department issued a physicians' alert in the morning of October 24, 2003, informing local physicians about the voluntary relocation program, altering them of potential health effects of smoke exposure and that they would likely be short-term effects, identifying potentially sensitive populations such as individuals with asthma, informing how one can reduce smoke exposure during the prescribed burn, and providing road closure information. On October 24 after the prescribed burn had begun, Monterey Bay Unified Air Pollution Control District issued a health advisory, advising people in areas affected by the smoke to be cautious and avoid unnecessary outdoor activities, encouraging people with respiratory and heart ailments, young children and older adults to limit their exposure to smoke by staying indoors or temporarily seeking areas with cleaner air, and informing that the smoke from the fire is expected to continue throughout the day. The Army is not aware of any advisory from local public health office to evacuate.

**Comment 26:** One commentator stated at the November 13 meeting that she was getting calls every day from people who had been in CHOMP (Community Hospital of the Monterey Peninsula), that the emergency room was filled with people at the CHOMP. Another commentator stated he accompanied an Air District inspector to "chase the worst conditions that the fire was generating," and that his observations at various areas surrounding the former Fort Ord, including the CHOMP, were different than the much worse conditions portrayed by the media. One person asked for a panel that would track the status of cancer, respiratory illness, skin rashes and other diseases for the past seven years to see if there's any correlation to the burns. Another commented there has never been a health study done on off-site impacts from Fort Ord.

**Response:** It is not possible to know how many of the hospital visits that occurred on October 24 were actually attributable to exposure to smoke from the Ranges 43-48 prescribed burn. On October 24, numerous complaints were received by the Army's prescribed burn hotline; these included 19 air quality-related complaints and 14 calls from people concerned for a relative, a friend or a pet.

**Comment 27:** One asked for a list of all weapons known to have been on Fort Ord grounds such as Explosives, Chemical, Biological, and Radioactive. Conduct soil sampling and analysis of all sites known to have been used for military training; testing shall include screening for all compounds used in the manufacture of Explosives, Chemical, Biological, and Radioactive materials known to have been on Fort Ord grounds. Conduct a study and evaluation of impacts or potential impacts on human health resulting from exposure to smoke emitted from the burning of Explosives, Chemical, Biological, and Radioactive materials. Another commentator stated he is not aware of any ordnance items that contain significant radioactive material.

**Response:** The types of ordnance known or expected to exist at Ranges 43-48 included 4.2-inch, 60mm, and 81mm mortars; 14.5mm subcaliber projectiles; 35mm subcaliber rockets; 90mm recoilless rifle rounds; 84mm high explosive antitank (HEAT) projectiles; 40mm high explosive (HE) grenades; 66mm light antitank weapon (LAW); small arms; practice anti-personnel mines; dragon guided missiles; practice claymore mines; and fragmentation hand grenades. There have been no evidence to suggest that radioactive, chemical or biological weapons were ever fired at the former Fort Ord.

Detonations of unexploded ordnance is not expected to cause significant impacts to soil based on results of *Final Basewide Remedial Investigation/Feasibility Study, Fort Ord, California*, October 1995 and on studies discussed in the *Final Ordnance Detonation Sampling and Analysis Plan, Former Fort Ord, Monterey, California*, dated October 24, 2000 (Administrative Record # OE-0234J). Although the studies mentioned above indicate there would be no significant impacts to soil from ordnance detonation, the Ordnance Detonation Sampling and Analysis Plan presents approaches to further evaluate potential soil contamination from ordnance detonations under Fort Ord site-specific conditions.

The air monitoring program for the Ranges 43-48 prescribed burn included sampling and analysis of ambient air from various air monitoring locations in and around the former Fort Ord. In 2001 the Army, in consultation with EPA and DTSC, conducted an assessment of ordnance-related air emissions that may be associated with conducting a prescribed burn at Ranges 43-48, showing that the smoke from prescribed burns at Fort Ord would be no different from that from an ordinary vegetation burn. The study used conservative assumptions and concluded that air pollutant emissions from incidental detonations during a prescribed burn in Ranges 43-48 would be minor compared to emissions contributed directly by biomass burning, and contribute pollutant concentrations well below health-protective regulatory screening levels. This conclusion was confirmed through air monitoring that was conducted during the October 2003 prescribed burn; the monitoring results showed that munitions-related chemical compounds were not detected. The results of the air monitoring are presented in the air monitoring report.

**Comment 28:** One suggested that Monterey Bay Unified Air Pollution Control District's preliminary report indicated the fire was unhealthy to anyone who lived in the area for at least four days. One asked about the availability of Monterey Bay Unified Air Pollution Control District report about the Fort Ord burn.

**Response:** The Army will review the preliminary report by Monterey Bay Unified Air Pollution Control District. The report is available by contacting the District at (831) 647-9411.

**Comment 29:** Several commented on the accessibility to health care. One felt that health care and medications should be made available to the impacted public for free. Another suggested a health forum, and another requested a health and stress program.

**Response:** It is anticipated that the effects of exposure to smoke from any prescribed burn will vary greatly among individuals, and they are best mitigated by the individuals to meet their own needs. The temporary voluntary relocation program was offered to any Monterey County resident who wished to be out of the area during the burn and provided an opportunity to avoid smoke exposure. The Army will review the components of the relocation program and seek ways to be more responsive to these suggestions.

Information about free or low-cost medical care for low-income individuals and families is available by contacting Monterey County Health Department.

The Army recognizes the impacts and inconveniences this action has caused and will cause to the community, such as road closures, short-term smoke exposures and voluntary temporary relocation, and will continue to explore ways to minimize these impacts.

### **Issues related to relocation:**

**Comment 30:** One suggested there should be a consideration for people who are unable to leave the area for work-related or other reasons. Several people expressed their appreciation of and support for the relocation program. Some expressed they would relocate during the next burn. One commentator hoped that future burns by Bureau of Land Management (BLM) would include a relocation program.

Two commentators stated some people had difficulty finding the relocation office and they were provided the program information and assistance from Fort Ord Environmental Justice Network. One of them stated she was told that only 300 and 350 families would be relocated since there wasn't sufficient funds to accommodate more people.

**Response:** The temporary voluntary relocation program was offered to any Monterey County resident who wished to be out of the area during the burn and provided an opportunity to avoid smoke exposure. The Army will review the components of the relocation program and seek ways to be more responsive to these suggestions and to improve upon disseminating accurate information. The relocation program was included in the Interim Action Record of Decision to specifically address the potential contribution of air pollutants from unexploded ordnance in prescribed burns at the former Fort Ord.

**Comment 31:** There were comments of disapproval of those who took advantage of the relocation program even though they did not have any health concerns related to the burn.

**Response:** The Army will consider emphasizing that the relocation program is intended to provide temporary relief to those who have smoke exposure-related health concerns.

### **Issues related to communication:**

**Comment 32:** Some commentators expressed feeling misinformed about what they should expect of the prescribed burn. One urged the Army to take significant steps to restore public trust before carrying out any future burns. Several reported difficulty getting up-to-date information from organizations such as the Red Cross, local fire and police agencies and nearby businesses, and suggested better informing them. One commented that the hotline was not updated frequently enough. Some commentators requested adequate advance notice to the public and better follow-up information as the burn is happening. Some reported that many people were unaware of the prescribed burn program or the November 13 public comment meeting. One suggested setting a "prescribed burn call registry" program, under which people who would be directly impacted by a burn would get calls from the Army's staff. One stated there was no real community involvement. Some indicated that enough information was available prior to the burn and felt well informed. One person commented that the website updates were useful.

**Response:** The Army acknowledges that the local communities experienced more smoke and ash than initially anticipated during the Ranges 43-48 prescribed burn, due mainly to the increased size of the area burned. The Army appreciates, and will consider these suggestions in reviewing its community outreach strategy for future burns.

**Comment 33:** The Army should post warning signs about the potential danger of unexploded ordnance, although this should not be necessary in housing areas.

**Response:** The Impact Area is known to contain numerous unexploded ordnance items, and is fenced. Warning signs are posted around the Impact Area as well as other areas known or suspected to contain unexploded ordnance. The need for posting warning signs is reviewed at least annually as part of the ordnance and explosives site security program. Community members who has specific recommendations that could improve ordnance site security at the former Fort Ord are encouraged to contact the Army's community relations office at (831) 393-1284.

**Comment 34:** One person suggested that local elected officials should be informed about public comments heard at the November 13 public comment meeting.

**Response:** The records of the November 13 public comment meeting are available for public review at the Administrative Record.

**Comment 35:** One person commented on a quote in the Herald's October 25, 2003 article of Fire Stop's public information officer, as saying "wildfires are difficult beasts." The commentator wondered this might be an admission that he and his crew didn't do their job of supervising a controlled burn.

**Response:** This comment is so noted.

### **Issues related to the impacts to plants and wildlife:**

**Comment 36:** Is there any consideration for the welfare of the deer, bobcats, rabbits and other wild animals affected by the burn? One person commented that wildlife living in the area of the Fort Ord burn were severely and negatively impacted by the burn, due to loss of habitat, places for drinking water, and sources of food. She wanted to know what the impacts to the wildlife were. What has been done to protect them, what has been done to inform the residents of the Monterey area regarding wildlife that may be

escaping from the burn area, about wildlife that may be injured and how to assist them. She asked if the SPCA (Society for the Prevention of Cruelty to Animals) and local veterinarians have been notified about the potential wildlife impacts, or whether the Army's veterinarian was in attendance at the time of the burn. She wondered if there have been any attempts to monitor for or assist injured animals.

**Response:** Although the prescribed burn at Ranges 43-48 likely resulted in injury or death to some wildlife, the losses were likely no more detrimental to wildlife than from a natural fire or wildfire. Wildlife in chaparral communities have adapted to fire in many ways. Larger animals and birds will flee the burning areas because they are much more mobile than smaller animals. Small animals and reptiles wither, escape the fire area using existing burrows or shelters, burrow themselves into the sand or perish. Studies of the effects of fires to wildlife have shown that although mortality does occur, the levels of loss are considered negligible compared to the long-term benefits to wildlife following a fire.

Planning for the prescribed burn at Ranges 43-48 included a procedure for reporting and responding to injured or endangered wildlife during the burn. There were no such reports received during the burn.

**Comment 37:** One person reported seeing dying birds while she was at a Gilroy hotel to which she had relocated.

**Response:** This comment is so noted.

**Comment 38:** One person commented that the area of Fort Ord burn was in a monarch butterfly fly zone, and requested that the area be restored to original or better condition. He also requested for a butterfly breeding facility.

**Response:** The Monarch butterfly may use areas of former Fort Ord periodically but they overwinter in groves of native Monterey pines and in Eucalyptus groves. Although there were a few Monterey pines located in the area of the escaped fire, the primary vegetation type in the burn area was maritime chaparral. Monarch butterflies are protected in Pacific Grove by a local ordinance but the only protected butterfly found on former Fort Ord is the endangered Smith's blue butterfly, which does not occur in the maritime chaparral habitats of the former Fort Ord that were burned.

**Comment 39:** Who will control the relocation of the field mice, ground squirrels, lizards, crows, fox, coyotes, mountain lions, deer and other critters that formerly resided in their rolling range? Who will control the surface runoff from the burned out habitat once the rainy season begins?

**Response:** Wildlife species impacted by the recent prescribed burn are adapted to periodic fire (see response above). Erosion is a natural process that occurs following disturbances such as a fire. Significant erosion is not expected to occur on the burned area just because it burned. The soils located in the burn area are very well drained because they are primarily comprised of loose sands. Based on past experiences at the former Fort Ord, erosion only becomes a problem where run-off from paved areas or road-cuts funnel storm water onto steep slopes. Erosion control measures will be implemented throughout the environmental cleanup project.

**Comment 40:** One commentator urged the Army to educate the public on the environmental benefits of a controlled burn, i.e. endangered plants that only reproduce or regrow best after a fire, such as Toro Manzanita. There could be devastation to some of those species if they were to be hand-cut. It also can give native species an edge over non-native species.

**Response:** Prescribed burning is a valuable land management tool that helps maintain healthy diversity of plants and wildlife in chaparral habitats. Fire also reduces the amount of vegetation that is available for a

larger fire that could threaten lives and property. Natural resource managers recognize that, to maintain the quality of habitat for plant and animal populations in the long-term, fire is necessary in chaparral environment. In fact, several rare plant species on the former Fort Ord require fire to remove the hard seed coat and enable the plant to germinate since some of the plants do not re-sprout from a burl or root structure. Fire-adapted chaparral plants cannot persist without occasional fires. Without burning, rare plant species die off while only a few dominate the landscape. Animal diversity also declines as the canopy becomes thick, overgrown, and too shaded to support the desirable edible plants. Without occasional fires to rejuvenate the chaparral, many rare plants are in danger of permanent extinction.

The Army appreciates, and will consider the suggestion in reviewing its community outreach strategy for future burns.

### **Issues related ordnance cleanup:**

**Comment 41:** One commentator wondered how many lives are going to be lost and injuries suffered searching for unexploded ordnance after the fire. Certainly, not all of them will be found, and even if it were found, there are always going to be doubts whether the land will be safe for use. The commentator suggested halting the prescribed burns to end impacting the public health and the environment, and halting the cleanup of ordnance to save lives and injuries on the part of cleanup workers.

**Response:** The Army has been investigating and clearing unexploded ordnance at Fort Ord since 1993. During over 10 years of investigation, there have been no accident or injury involving unexploded ordnance on the project. Although workers encounter great risks in actively searching and handling unexploded ordnance, they manage the risks by their experience and training, and by following safety procedures.

The Army, in consultation with EPA and DTSC, plans each investigative work carefully to address explosive hazard effectively. However, it is not possible to guarantee all risks have been removed from any area. The Army will continue to work with the regulatory agencies and the public to find an effective and realistic cleanup approach for each area. The action being taken at Ranges 43-48 is intended to protect the public from the imminent threat posed by unexploded ordnance. Long-term management of explosive risks will be evaluated in the basewide Munitions Response Remedial Investigation/Feasibility Study after the Interim Action (currently ongoing cleanup) is completed.

**Comment 42:** A commentator suggested using people in retention centers to clean up the land to save millions of dollars and to keep them busy.

**Response:** The cleanup of unexploded ordnance is a very dangerous activity and as such, is required to be conducted by persons with specific military training. The Department of Defense has specific requirements for all persons involved in the cleanup of ordnance sites. As such, only those trained and certified can be used in the cleanup process.

**Comment 43:** One suggested establishing a military engineering program on the burned area where troops could learn techniques for removing unexploded ordnance. This is a skill that should be used in Iraq.

**Response:** The Department of Defense requires that all unexploded ordnance personnel working on DoD projects be graduates from one of the following schools or courses: U.S. Army Bomb Disposal School, Aberdeen Proving Grounds, MD; U.S. Naval Explosive Ordnance Disposal (EOD) School, Indian Head, MD; EOD Assistants Course, Redstone Arsenal, AL; EOD Assistance Course, Eglin Air Force Base, FL;

or a DoD Certified equivalent course. Unexploded ordnance personnel working in Iraq are also required to meet these requirements.

**Comment 44:** Two commentators stated homeless people were working for the Army cleaning up the ordnance, without training.

**Response:** Please see responses to comments above.

**Other issues:**

**Comment 45:** One person asked when one could file a claim for property damage. One suggested offering a special process for claims other than relocation, and establishing a multi-agency claims board to consider them. One person stated the Office of Staff Judge Advocate had not returned many of her calls.

**Response:** Individuals who seek reimbursement for an expense associated with the Ranges 43-48 prescribed burn should first contact the relocation office through the hotline at 1-800-852-9699 and discuss with a relocation counselor. After the November 13 meeting, the Office of the Staff Judge Advocate reviewed their call logs and procedures to ensure that all calls were returned within 24 hours.

**Comment 46:** One person stated he was considering a legal action because the prescribed burn heavily impacted Carmel area unexpectedly. Another commentator stated he urged the local Air District board to sue the Army again to prohibit the harm from any further burning unless alternatives are considered.

**Response:** Many alternative methods of clearing vegetation to support the cleanup of unexploded ordnance were considered during the development of *Final Interim Action Ordinance and Explosives Remedial Investigation/Feasibility Study For Ranges 43-48, Range 30A, Site OE-16, Former Fort Ord, California*, dated March 7, 2002. In this study, manual, mechanical and remotely-operated mechanical clearance methods, prescribed burning, animal grazing and herbicide application were evaluated, and prescribed burning was selected as the best alternative for clearing vegetation in Ranges 43-48, primarily because other methods would directly expose vegetation clearance workers to unexploded ordnance.

**Comment 47:** One person wondered what the effects to tourism dollars caused by the burn that occurred during the weekend were. Another stated 80% of businesses in Carmel had to close due to ash and smoke and tourists were leaving.

**Response:** This comment is so noted.

**Comment 48:** One person stated loud sounds of booming were heard a few days before the prescribed burn started, and the sky was strangely dark two to three days before the burn was announced, that made her feel like the burn had already started.

**Response:** This comment is so noted.

**Comment 49:** Several members of Fort Ord Environmental Justice Network commented that the base closure process was not being done right, with boarded-up houses and homelessness. They expressed their concerns about the lack of employment and job training opportunities, the need for improvements to the former base, the need for affordable housing, and the lack of good healthcare. They suggested funding for the environmental cleanup of the former Fort Ord should be used to clean up the base more efficiently and to show progress. There were comments that the organization was recently asked to pay rent for their office building, and one asked the panel (at the November 13 meeting) to look into this.

**Response:** The Army is aware of the economic impacts of the closure of Fort Ord, and has been conducting environmental investigation and cleanup activities at the base since it was listed for closure in 1991 in an effort to prepare Fort Ord lands for reuse as specified in Fort Ord Reuse Authority reuse plan. The Army and its contractors have contracts in place with local businesses and cleanup-related jobs are available to qualified persons with required training.

At the request of the Army, a representative of the Fort Ord Reuse Authority (FORA) attended the November 13 public meeting. He was in attendance to hear the comments and could formulate a response if appropriate, since the lease of this specific building is part of FORA's business operations. The Army documented this concern within the meeting transcript, which available to the public in the Administrative Record.

**Comment 50:** Some said they did not feel that their voices were being heard, and they were not included as a part of the process.

**Response:** The Army is committed to conducting the environmental cleanup of the former Fort Ord with meaningful public participation. The comments and suggestions that the Army received from the public regarding the Ranges 43-48 prescribed burn is documented in this summary after-action report, and will be considered in planning future prescribed burns at the former Ford Ord. The transcripts of the November 13 public comment meeting can be reviewed at the Administrative Record.

## **Attachment 2**

## Attachment 2

### Responses to comments received on Draft Summary After-Action Report: Ranges 43-48 prescribed Burn (Comments are shown verbatim)

#### Comments from Claire Trombadore, U.S. Environmental Protection Agency, Region IX, May 25, 2004.

**Comment 1:** It might be a good idea to include an acronym list in this document.

**Response:** An acronym list was added.

**Comment 2:** Attachment 1, page A-1, first paragraph. Please correct the typographical error (missing a “d”) in the Fort Ord web site address.

**Response:** The correction has been made.

**Comment 3:** Attachment 1, page A-5, Response to Comment 11. Please correct typographical error in second to last sentence - “spit fires” should be “spot fires”.

**Response:** The correction has been made.

**Comment 4:** May want to mention in the evaluation section that ATSDR is preparing Public Health Consultation on the burn. It is scheduled to be released to the public in the Summer of 2004.

**Response:** The following paragraph is added to section 4d: “The Army has requested Agency for Toxic Substances and Disease Registry (ATSDR) to evaluate the air monitoring results. It is expected that ATSDR will issue a public health consultation for the Ranges 43-48 prescribed burn in 2004.”

#### Comments from Gary Honcoop, California Air Resources Board, May 27, 2004 via e-mail

**Comment 1:** Page 2, section 2b. We recommend that you delete the reference to ARB presence and support at the Management Center during implementation as we were not consulted on the day of the burn and played no role in the implementation phase.

**Response:** The reference to California Air Resources Board (CARB) presence and support at the Management Center is deleted.

**Comment 2:** Page 3, section 3a, paragraph (vi). We recommend that you revise the first sentence to read: “On October 24, *after the Army meteorologists determined* that the meteorological conditions *were expected to meet* the burn prescription, and after securing...”

**Response:** The referenced sentence is revised to read: “On October 24, the Army’s meteorologists determined that the meteorological conditions were expected to meet the conditions outlined in the burn prescription. Then, after securing the burn perimeter and verifying the readiness of fire operations, the Army made the decision to ignite the prescribed burn.”

**Comment 3:** Page 4, section 3a, paragraph (vi). The word “text” should read “*test*”.

**Response:** The correction was made.

**Comment 4:** Page 4, section 3a, paragraph (vi). We recommend that you add a statement indicating that the Army evaluated the test burn and determined that the prescribed fire should proceed based on testing of the fuel's ignition characteristics.

**Response:** Section 2.2.3.8 of *Final MRS-Ranges 43-48 Prescribed Burn After-Action Report, Former Fort Ord, California* states: "A test burn was conducted prior to igniting the entire burn site to determine if the burn objectives could be accomplished. During the test burn, the weather, fuel consumption rate, flame lengths, smoke column height, and smoke dispersal pattern were observed and documented. Based on the conditions observed, it was recommended that the burn be conducted over the entire site." This statement is added to section 3b, paragraph iii.2.

**Comment 5:** Page 4, section 3a, paragraph (vi). The timing of events would be better understood if the text read: "The fire jumped the western primary fuelbreak at (*specify the time*) and Ord Military Community (OMC) Fire Chief declared an escape about 11:00 a.m."

**Response:** The referenced sentence is revised to read: "The first spot fire was observed at about 9:30 a.m. along the western primary fuelbreak. Subsequently the fire breached the fuelbreak and Ord Military Community (OMC) Fire Chief declared an escape at about 11:00 a.m."

**Comment 6:** Page 5, section 3b, paragraph (ii), number 1. We understand that active ignition continued even after the escape was declared. If that is the case, we recommend that you state that active ignition continued for some time after the escape was declared.

**Response:** Active ignition did not continue after the escape was declared. This is as reported in section 2.2.3.13 of *Final MRS-Ranges 43-48 Prescribed Burn After-Action Report, Former Fort Ord, California*.

**Comment 7:** Page 5, section 3b, paragraph (ii), number 2. We recommend that you add a statement that smoke impacts were also caused by the strong winds which bent the column of smoke down toward the ground.

**Response:** The referenced section summarizes what is reported in the contractor's report of the conduct of the Ranges 43-48 prescribed burn. *Final MRS-Ranges 43-48 Prescribed Burn After-Action Report, Former Fort Ord, California* does not make the observation suggested in this comment. However this concern was documented in Section 4c, paragraph ii of the summary after-action report.

**Comment 8:** Page 5, section 3b, paragraph (ii), number 2. We recommend that you clarify that the Army meteorologists' early morning MM5 model run forecast off-shore conditions throughout the day and did not forecast the afternoon sea breeze.

**Response:** In response, the Army's meteorologist checked the MM5 and 12km ETA model (used by National Weather Service) for October 24 concerning the sea breeze. The models were consistent showing offshore winds over Fort Ord until 5:00 p.m. when they indicated a very weak sea breeze would develop (less than 5 knots). The sea breeze could have developed earlier, but since the model outputs are for 3 hour-blocks of time, exact timing of sea breeze could not be forecast. Model runs from the previous day (October 23) showed an even weaker sea breeze on the 24<sup>th</sup>, which was the primary model guidance that was available for making the forecast for October 24<sup>th</sup>.

Appendix A of the *Final Ranges 43-48 Prescribed Burn After-Action Report* includes forecasts made by the Army's meteorologists on October 24: at 7:00 a.m. offshore wind was forecast throughout the day,

with a note of a chance of onshore wind after 1:00 p.m.; and at 1:00 p.m. offshore wind was forecast throughout the rest of the day with a note of a chance of onshore wind after 1:00 p.m.

A weather forecast is a necessary element in the current prescription. In the morning of October 24, 2003, the Army determined the burn prescription was met, when the morning forecast, including the MM5 and 12km ETA model, led the meteorologists to expect that weather conditions would meet the prescribed conditions.

However, an escape was declared at about 11:00 a.m. on October 24. At that point the prescribed burn operation switched to a contingency operation under the direction of the Ord Military Community Fire Chief. Should the prescribed burn have continued without an escape, active burning would have stopped when the Marina profiler detected a stable low-lying air mass (sea breeze) as described in the burn prescription. This would have occurred at about 1:00 p.m. Pacific Daylight Time based on the Marina profiler data (shown in Appendix A of the *Final Ranges 43-48 Prescribed Burn After-Action Report*).

The paragraph referenced by the comment summarizes the factors that contributed to greater smoke impacts than initially anticipated. The Army's forecast concerning the afternoon sea breeze did not contribute to greater smoke impacts since an escape was declared before the onset of the sea breeze, and since the burn prescription required discontinuing active ignition when sea breeze was detected.

**Comment 9:** Page 6, section 3b, paragraph (iii), number 2. We recommend that the second sentence be revised to read: "...the Army's meteorological team determined that the burn prescription *was expected to be met*..."

**Response:** The referenced section summarizes what is reported in the contractor's report of the conduct of the Ranges 43-48 prescribed burn. The text in the referenced sentence is consistent with section 2.2.3.2 of *Final MRS-Ranges 43-48 Prescribed Burn After-Action Report, Former Fort Ord, California*. A weather forecast is a necessary element in the current prescription. In the morning of October 24, 2003, the Army determined the burn prescription was met, when the morning forecast led the meteorologists to expect that weather conditions would meet the prescribed conditions.

**Comment 10:** Page 6, section 3b, paragraph (iii), number 2. The last sentence begins: "After the test burn," The ARB's position is that the Army did not do a test burn in the classic sense and that all inferences to the test burn should be clarified to indicate that the test burn was done to determine the fuel's ignition characteristics.

**Response:** The referenced section summarizes what is reported in the contractor's report of the conduct of the Ranges 43-48 prescribed burn. Section 2.2.3.8 of *Final MRS-Ranges 43-48 Prescribed Burn After-Action Report, Former Fort Ord, California* states: "A test burn was conducted prior to igniting the entire burn site to determine if the burn objectives could be accomplished. During the test burn, the weather, fuel consumption rate, flame lengths, smoke column height, and smoke dispersal pattern were observed and documented. Based on the conditions observed, it was recommended that the burn be conducted over the entire site." This statement is added to section 3b, paragraph iii.2. This concern was also documented in section 4a, paragraph iii of the summary after-action report.

**Comment 11:** Page 6, section 3b, paragraph (iii), number 3. We suggest that you clarify the time that the two spot fires merged.

**Response:** The time that the two spot fires merged is not reported in *Final MRS-Ranges 43-48 Prescribed Burn After-Action Report, Former Fort Ord, California*. For clarification purposes, the second sentence in

the referenced paragraph is revised to read: “By 10:18 a.m. PDT two spot fires had merged and burned approximately 30 acres outside the western primary fuelbreak.”

**Comment 12:** Page 14, section 4a, paragraph (iv). The first sentence reads that the overall coordination process used to support mobilization and ignition decision-making between the Army and regulatory agencies was too burdensome. From our perspective, the process was not too burdensome, but was not effective as there were clearly misunderstandings that led to smoke impacts. We recommend that you revise the paragraph to read: “The overall coordination process used to support mobilization and ignition decision-making between the Army and regulatory agencies was not effective as it should have been. While it included frequent meetings and conference calls participated in by management-level personnel from multiple agencies, and frequent and timely feedback of information to them about the status of preparation, there still remained a few significant areas of miscommunication, particularly related to the purpose of the test burn and ignition decision-making.”

**Response:** The referenced paragraph is revised to read: “The overall coordination process used to support mobilization and ignition decision-making between the Army and regulatory agencies was burdensome to remedial project managers, yet not as effective as it should have been. While it included frequent meetings and conference calls participated by management-level personnel from multiple agencies, and frequent and timely feedback of information to them about the status of preparation, there still remained a few significant areas of miscommunication, particularly related to the purpose of the test burn and ignition decision-making.”

**Comment 13:** Page 14, section 4b, paragraph (iii). The prescription, as it is written now, does allow burning with an on-shore flow. These days do not necessarily coincide with high fire risk and strong stable conditions. The Army chose to focus on off-shore flow days, which are also written into the prescription, in order to transport smoke off-shore. Therefore, we suggest that you revise the paragraph to read: “Any burn prescription should focus on reducing smoke impacts. The options available include both on-shore and off-shore flows. The current preferred prescription is based on an off-shore flow, which has a higher tendency to correspond with high fire risk days.”

**Response:** The prescription allowed for both offshore and light onshore scenarios. The October 24 prescribed burn was conducted under an offshore event since an onshore scenario did not develop before then. The referenced paragraph is corrected to read: “Current burn prescription focuses more on reducing smoke impacts. Under the current prescription the options available include both on-shore and offshore flows. However the off-shore scenario has a higher tendency to correspond with high fire risk days.”

**Comment 14:** Page 14, section 4c, paragraph (i). We recommend you revise the first sentence to read: Under the current off-shore burn prescription, .....” based on the comment above.

**Response:** The statement regarding the low number of periods that meet the current burn prescription each year, and the difficulty in reliably forecasting those periods, is applicable to both offshore and onshore scenarios allowed under the current burn prescription, based on an evaluation by Naval Postgraduate School.

**Comment 15:** Page 15, section 4c, paragraph (ii). One tool that was missed by all groups was a persistence forecast. Under the extended stable high pressure conditions that existed last October, it would have been very instructive to look at the day before (to see if the sea breeze had kicked in) in determining the Go/No Go decision. In the case of last year’s burn, the sea breeze did kick in on the day before so persistence would have indicated a No Go for October 24th.

**Response:** This comment is noted.

**Comment 16:** Page 15, section 4c, paragraph (iii). We generally agree with the paragraph, but recommend that you revise to read: “The Army meteorologists coordinated with meteorologists with the California Air Resources Board prior to the actual day of the burn. However, there were professional disagreements over data interpretation based on the use of different meteorological data and models. In addition, the role of the ARB meteorologist that was on-site on the day of the burn was unclear, as was the purpose of the test burn in supporting the meteorological forecast.

**Response:** The referenced paragraph is revised to read: “The Army’s meteorologists coordinated with meteorologists with the California Air Resources Board prior to the actual day of the burn. However, there were professional disagreements over data interpretation based on the use of different meteorological data and models. In addition, the role of the CARB meteorologist who was on-site on the day of the burn was unclear. The Army and CARB interpreted the purpose of the test burn differently.”

**Comment 17:** Page 19, section 5c, paragraph (ii). We agree that you need to clarify the purpose of the test burn but we disagree with the implication that a test burn would not be conducted (i.e. reference to the phrase “if one is planned.”) The Army needs to follow the plan that was written for these operations, which includes a test burn. In addition, test burns are a common and critical part of prescribed burns in general. Therefore, we recommend that you delete the phrase “if one is planned as part of future prescribed burn operations.”

**Response:** There will be a site-specific plan for each prescribed burn. For the Ranges 43-48 prescribed burn, the Army’s contractor chose to include the test burn in its procedures. The Army and regulatory oversight agencies are in the process of learning from the Ranges 43-48 experience and planning for the next prescribed burn, and intend to consider the widest range of options possible. Since a test burn is not required by any regulation or by the Interim Action Record of Decision under which this action is authorized, the Army is not requiring that a test burn be a part of the next prescribed burn. The Army recognizes, however, that test burn is commonly used in prescribed burns.

Comments from Michael E. Boyd, CALifornians for Renewable Energy, Inc, May 26, 2004 via e-mail

**Comment 1:** CARE has received several phone calls from our membership in the Fort Ord community concerning the Fort Ord Prescribed Burns and Voluntary Relocation Program. Fort Ord Prescribed Burns. In October 2002 acting in behalf of the LeVonne and Donald Stone as members of CALifornians for Renewable Energy, Inc. (CARE), I wrote a letter to the Monterey Bay Unified Air Pollution Control District (MBUAPCD or the District) requesting “completion of a CEQA/NEPA compliant environmental review of the Settlement Agreement between the Monterey Bay Unified Air Pollution Control District and the United States Department of the Army and United States Department of Defense” over the Fort Ord Prescribed Burns.

CARE respectfully request that such environmental review include a determination of potential emission levels of all criteria pollutants under the federal Clean Air Act from the project (including use of US EPA air modeling protocols), as well as Toxic Air Contaminants from the project as defined by the California Air Resources board. CARE requests the analysis examine the effects of the project on biological resources including threatened and endangered species under the federal Endangered Species Act, in consultation with the US Fish and Wildlife Service. CARE respectfully request such analysis include an analysis of potential public health effects including the performance of a health risk assessment on the project to insure compliance with California Health and Safety Code, § 41700.

**Response:** The comment does not pertain to the prescribed burn summary after-action report.

**Comment 2:** Despite raising my previous attempts to raise concerns for the prescribed burn, on October 24, 2003 the Army, and MBUAPCD conducted a prescribed burn, that went out of control, which allowed FORA, in my professional opinion, to inflict disparate air quality impacts on the surrounding community. For example a TV news report by TV station KSBY on October 24, 2003 reported,

The fire from the former Fort Ord's control burn is causing some smoky problems for area residents.

The U.S. Army had predicted the smoke would all be pushed out to sea, but, instead, it headed straight for the Monterey and Carmel areas, covering cars and houses, and making it hard to breathe for area residents.

"My eyes are burning, having a problem breathing. As a matter of fact, I can see it on everybody as I'm passing by," said Pacific Grove resident Bob Adermach. Ash fell like snow in Carmel all day. The white stuff came down in chunks, piling up in local shops.

"It's not a good thing for a tourist town to be covered with ash," said Carmel resident Charles Benore.

Visitors were miffed by the smoke and ash.

"I'm not too happy with it. It's getting in my eyes," said visitor Michael Cisneros. "We have New York City air, so we don't really need to come to California for this," said visitor Krista Wergeland.

Again on October 27, 2003 KSBY reported,

A prescribed burn that got out of control at the former Fort Ord continued to generate a lot of smoke Monday.

The fire was ignited about 8:30 a.m. Friday and was supposed to be controlled to burn about 500 acres. It quickly got out of control and has charred nearly 1,500 acres. Ash from the fire fell on Peninsula cities -- some as far south as Carmel.

Many area residents have expressed anger over the Army's handling of the burn from the beginning. "Just not a good thing for a tourist town to be covered with ash," Peninsula resident Sandy Dabrante said.

Army officials said a controlled burn is the safest option for clearing thick brush so that cleanup crews can then remove thousands of rounds of dangerous unexploded ordnance. But just two hours after this burn started, it jumped two containment lines and came within a quarter-mile of homes along Jim Moore Boulevard.

"It's scary ... we live one block down ... it's scaring us because we have kids ... we don't think it should be that close to us ... we feel that it's out of control now," Seaside resident Tammy Suarez said.

On Friday afternoon, a spokesman for the company that started the fire confirmed that the fire was out of control. But how that happened is still under investigation.

**Response:** The Ranges 43-48 prescribed burn was conducted by the Army on October 24, 2003. Other comments are noted.

**Comment 3:** After the burn I prepared the attached petitions that stated as follows,

We the undersigned petitioners are residents who have experienced adverse health impacts from the prescribed burn at Fort Ord California beginning on October 24, 2003. We the undersigned have reason to believe that as the result of concerted action between the Monterey Bay Unified Air Pollution Control District (“MBUAPCD”) and the US Army a prescribed burn, (“the burn”), was implemented on October 24, 2003, in violation of provisions of federal, state and local environmental laws including, but not limited to, the Clean Air Act, 42 U.S.C. §§ 7603 et seq.; the Comprehensive Environmental Response, Compensation and Liability Act (“CERCLA”), 42 U.S.C. §§ 9601 et seq.; the Resource Conservation and Recovery Act (“RCRA”), 42 U.S.C. §§ 6901 et seq.; California Health and Safety Code sections 41700 and 41800; and District Rules 402, 432.3.4, and 432.3.3.5., as the result of a Settlement Agreement between the MBUAPCD and U.S. Army over the Fort Ord Prescribed Burns, in that neither agency has performed an environmental analysis or risk assessment as required under the above statutes, the California Environmental Quality Act (CEQA), and the National Environmental Policy Act (NEPA) on such Settlement in order to determine the burn’s potential impacts on the environment and public health and safety, prior to the burn. Their Agreement is in settlement of Monterey Bay Unified Air Pollution Control District v. United States Department of the Army and United States Department of Defense, No. CV 99- 20485 (RMW) (N.D. Cal.)

Because of the ongoing struggle with FORA FOEJN did not have adequate time to collect many signatures but several collected where provided by Ms. Stone. It is my professional opinion that FORA’s timing of its eviction proceedings against FOEJN on February 17, 2004 was to minimize opposition to their ill planned and unsafe Prescribed Burn, where homeless persons where hired to start the blaze. It also is corroborative of my opinion that that the FOEJN is being denied due process and its civil rights based on race, religion, and income.

**Response:** Consistency of the interim action (including the prescribed burn) with applicable environmental laws and regulations was evaluated and documented in *Record of Decision, Interim Action for Ordnance and Explosives at Ranges 43-48, Range 30A and Site OE-16, Former Fort Ord, California*, dated September 20, 2002.

All personnel hired by Fire Stop were required to meet or exceed the prescribed burn training requirements for their respective classifications set forth by the qualification documents of the National Wildfire Coordinating Group (NWCG 310-1).

Other statements do not pertain to the prescribed burn summary after-action report.

**Comment 4:** As a result I have researched the agendas and minutes of recent meetings of the Monterey Bay Unified Air Pollution Control District. The agenda for the September 19, 2002 meeting listed under item number twenty a closed session regarding a conference with legal counsel regarding existing litigation in the MBUAPCD vs. U.S. Army. Further research disclosed the existence of a Settlement Agreement between the MBUAPCD and U.S. Army over the Fort Ord Prescribed Burns apparently executed following this meeting.

1. This Settlement Agreement (“Agreement”) is made and executed by and between Plaintiff Monterey Bay Unified Air Pollution Control District (“District”) and Defendants United States Department of the Army and United States Department of Defense (“United States”), collectively known as “the Parties.”

2. This Agreement is in settlement of Monterey Bay Unified Air Pollution Control District v. United States Department of the Army and United States Department of Defense, No. CV 99- 20485 (RMW) (N.D. Cal.) (“the suit”), an action in which the District alleges that burning conducted by the Army in September 1998 violated a Settlement Agreement dated June 1, 1998 (“June 1998 Settlement Agreement”), and provisions of federal, state and local environmental laws including the Clean Air Act, 42 U.S.C. §§ 7603 et seq.; the Comprehensive Environmental Response, Compensation and Liability Act (“CERCLA”), 42 U.S.C. §§ 9601 et seq.; the Resource Conservation and Recovery Act (“RCRA”), 42 U.S.C. §§ 6901 et seq.; California Health and Safety Code sections 41700 and 41800; and District Rules 402, 432.3.4, and 432.3.3.5. On March 13, 2001, the Court granted summary judgment in part, and denied it in part, on several issues in this case. However, there remain unresolved claims in this litigation.

3. As used in this Agreement, the term “smoke,” whether used as a noun or an adjective, shall include, without limitation, the following:

A. A mixture of ambient air and carbon particulates that is produced by combustion.

B. Any byproduct or result of the combustion of vegetative matter or ordnance that is mixed with ambient air. C. Any criteria or hazardous air pollutant regulated by California or Federal law, only to the extent that these are produced by B., above.

4. Without admitting any issue of fact or law, the District and the United States have agreed to compromise and resolve their differences, and thereby avoid further litigation regarding the District’s claims, and in so doing, to settle, discontinue and end the present action pending between them on the terms and conditions set forth below.

The evidence of the US Army’s execution of the Settlement Agreement is evinced by the September 2002 record of decision listed on the Fort Ord Environmental Cleanup web site as “Available Now! Record of Decision, Interim Action For Ordnance and Explosives at Ranges 43-48, Range 30A, and Site OE-16 (September 2002)”.

**Response:** These statements do not pertain to the prescribed burn summary after-action report.

**Comment 5:** CARE contacted our CEQA /NEPA consultant, John Gabrielli, Esquire, (530) 753-0869 to confirm the duties of the District and other state agencies involved including DTSC, US EPA, and the US Army. Mr. Gabrielli confirmed that their duties under the California Environmental Quality Act (CEQA) and the National Environmental Policy Act (NEPA) to perform an environmental review under this state and federal law on the Settlement Agreement which is a “discretionary project” of which the District is the “lead agency” in the environmental review of such. The District maintains jurisdictional authority over any off-base environmental impacts of the prescribed burns in any case.

"Discretionary project" means a project which requires the exercise of judgment or deliberation when the public agency or body decides to approve or disapprove a particular activity, as distinguished from situations where the public agency or body merely has to determine whether there has been conformity with applicable statutes, ordinances, or regulations.

"Lead Agency" under CEQA means the public agency, which has the principal responsibility for carrying out or approving a project.<sup>1</sup> The Lead Agency will decide whether an EIR or Negative Declaration will be

required for the project and will cause the document to be prepared. The fundamental point is that CEQA gives the Lead Agency the tasks of determining whether an EIR or a Negative Declaration will be required for the project and preparing the document.

CEQA achieves its purpose of long-term protection of the environment by functioning as "an environmental full disclosure statute, and the EIR is the method . . . [of] disclosure . . ." *Rural Landowners Assn. v. City* (1983) 143 Cal.App.3d 1013, 1020. An EIR's purpose is "to provide public agencies and the public in general with detailed information about the effect which a proposed project is likely to have on the environment . . ." (PRC § 21061; *Karlson v. City of Camarillo* (1980) 100 Cal.App.3d 789, 804) and acts as "an environmental 'alarm bell' whose purpose is to alert the public and its responsible officials to environmental changes before they have reached the ecological points of no return" *County of Inyo v. Yorty* (1973) 32 Cal.App.3d 795, 810.

CEQA requires mitigation measures to be formulated in an Environmental Impact Report, to reduce significant adverse project effects to a level of insignificance (Guideline §15126(c)). The mitigation measures are not just informational; if a project has significant environmental impacts identified in an EIR, feasible mitigations must be implemented or the project must be denied. PRC§21081. As noted CEQA commentators, Remy, Thomas, Moose and Manley observed, "[i]n contrast to [the National Environmental Protection Act], CEQA requires agencies to implement . . . feasible alternatives identified in EIRs for projects that will otherwise cause significant adverse impacts." *Guide to the California Environmental Quality Act (CEQA)* (9th ed. 1996), p. 9, citing PRC § 21002, 21081, Guidelines §§ 15002(a)(3), 15021(a)(2), 15091(a); *Sierra Club v. Gilroy* (1990) 222 Cal.App.3d 30, 41; *Kings County Farm Bureau v. City of Hanford* (1990) 221 Cal.App.3d 692, 730-731. Thus, "an agency cannot satisfy the statute simply by 'considering' the environmental impacts of a proposed project." *Guide to CEQA*, supra, pp. 9-10, citing *Burger v. County of Mendocino* (1975) 45 Cal.App.3d 322.

Agencies must deny approval of a project with significant adverse effects when feasible alternatives can substantially lessen the effects. *Sierra Club v. Gilroy* (1990) 222 Cal.App.3d 30, 44, 41 citing *Citizens for Quality Growth v. City of Mt. Shasta* (1988) 198 Cal.App.3d 433, 440-441; Guidelines §§ 15002(a)(3), 15021(a)(2),(c), 15041(c), 15364, 15370.

The US Army and the District must adopt findings, supported by substantial evidence in the record, in order to approve a project with significant impacts when it fails to adopt mitigation measures identified in the EIR and review process. Guideline §15091.

CEQA requires an EIR to "be prepared as early as feasible in the planning process to enable environmental considerations to influence project program and design . . ." Guideline § 15004(b).

A fundamental purpose of an EIR is to provide decision makers with information they can use in deciding whether to approve a proposed project, not to inform them of the environmental effects of projects that they have already approved, as is the case here with the Settlement Agreement. If post-approval environmental review were allowed, the final decision would likely become nothing more than post hoc rationalizations to support action already taken. CARE expressly condemns and objects to this use of environmental documents.

In the recent case *Citizens for Responsible Government v. City of Albany* (1997) 97 Daily Journal DAR 10014, the Court held that the City's approval of a development agreement unlawfully "contracted away its power to consider the full range of alternatives and mitigation measures required by CEQA" (Id. at 10020). Even though the development agreement anticipated environmental review, its very existence precluded effective analysis. While the facts of the Albany case involved submission of a development agreement to public vote, the reasoning of the Court is relevant:

The appropriate time to introduce environmental considerations into the decision-making process was during the negotiation of the development agreement. Decisions reflecting environmental considerations could most easily be made when other basic decisions were being made, that is, during the early stage of project conceptualization, design, and planning. At this early stage, environmental review would be an integral part of the decision-making process. Any later environmental review might call for a burdensome reconsideration of decisions already made and would risk becoming the sort of "post hoc rationalization to support action already taken," which our high court disapproved in [Laurel Heights I] (Id. at 10020).

The US Army under the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA), 42 U.S.C. § 9601 et seq.; 40 CFR Parts 300–311 and the District under CEQA is mandated to complete environmental review prior to commitment of public funds to the project and approving Business Terms. The Business Terms themselves is already the subjected to judicial review before the Federal Court, over the Monterey Bay Unified Air Pollution Control District v. United States Department of the Army and United States Department of Defense, No. CV 99- 20485 (RMW) (N.D. Cal.). In executing the Settlement Agreement between the MBUAPCD and U.S. Army over the Fort Ord Prescribed Burns, the District "approved" steps in implementation of the project, which committed it to a definite course of action. This is evinced by the settlement agreement itself, which commits the District to a “modeling investigation for several theoretical burn scenarios on Ranges 43-48 of the former Fort Ord”, in return for the US Army’s commitment to “provide the District with the funds to pay for the modeling effort, up to the amount of \$50,000”. CARE respectfully requests the Settlement Agreement be set aside until such time as the US Army’s and the District’s independent review of the project is complete.

Further research disclosed relevant CEQA code sections responsive to CARE’s concerns for the need for the District to carry out its duties to prepare and environmental review on the Settlement Agreement between the MBUAPCD and U.S. Army over the Fort Ord Prescribed Burns.

PRC§ 21083.8.1. (b)(2) For purposes of this division, all public and private activities taken pursuant to, or in furtherance of, a reuse plan shall be deemed to be a single project. However, further environmental review of any such public or private activity shall be conducted if any of the events specified in Section 21166 have occurred. [Emphasis added]

(c) Prior to preparing an environmental impact report for which a lead agency chooses to utilize the provisions of this section, the lead agency shall do all of the following:

(A) Hold a public hearing at which is discussed the federal environmental impact statement prepared for, or in the process of being prepared for, the closure of the military base or reservation. The discussion shall include the significant effects on the environment examined in the environmental impact statement, potential methods of mitigating those effects, including feasible alternatives, and the mitigative effects of federal, state, and local laws applicable to future nonmilitary activities. Prior to the close of the hearing, the lead agency may specify the baseline conditions for the reuse plan environmental impact report prepared, or in the process of being prepared, for the closure of the base or reservation. The lead agency may specify particular physical conditions which it will examine in greater detail than were examined in the environmental impact statement. Notice of the hearing shall be given as provided in Section 21092. The hearing may be continued from time to time.

(B) Identify pertinent responsible agencies and trustee agencies and consult with those agencies prior to the public hearing as to the application of their regulatory policies and permitting standards to the proposed baseline for environmental analysis, as well as to the reuse plan and planned future nonmilitary land uses of the base or reservation. The

affected agencies shall have not less than 30 days prior to the public hearing to review the proposed reuse plan and to submit their comments to the lead agency.

(C) At the close of the hearing, the lead agency shall state in writing how the lead agency intends to integrate the baseline for analysis with the reuse planning and environmental review process, taking into account the adopted environmental standards of the community, including, but not limited to, the applicable general plan, specific plan, and redevelopment plan, and including other applicable provisions of adopted congestion management plans, habitat conservation or natural communities conservation plans, integrated waste management plans, and county hazardous waste management plans.

(D) At the close of the hearing, the lead agency shall state, in writing, the specific economic or social reasons, including, but not limited to, new job creation, opportunities for employment of skilled workers, availability of low and moderate income housing, and economic continuity, which support the selection of the baseline.

(d)(1) Nothing in this section shall in any way limit the scope of a review or determination of significance of the presence of hazardous or toxic wastes, substances, or materials including, but not limited to, contaminated soils and groundwater, nor shall the regulation of hazardous or toxic wastes, substances, or materials be constrained by prior levels of activity that existed at the time that the federal agency decision to close the military base or reservation became final.

CARE respectfully requests that such environmental review include a determination of potential emission levels of all criteria pollutants under the federal Clean Air Act from the project (including use of US EPA air modeling protocols), as well as Toxic Air Contaminants from the project as defined by the California Air Resources board. CARE requests the analysis examine the effects of the project on biological resources including threatened and endangered species under the federal Endangered Species Act, in consultation with the US Fish and Wildlife Service. CARE respectfully request such analysis include an analysis of potential public health effects including the performance of a health risk assessment on the project to insure compliance with California Health and Safety Code, § 41700.

California Health and Safety Code, § 41700, requires that “no person shall discharge from any source whatsoever such quantities of air contaminants or other material which causes injury, detriment, nuisance, or annoyance to any considerable number of persons or to the public, or which endanger the comfort, repose, health, or safety of any such persons or the public, or which cause, or have a natural tendency to cause injury or damage to business or property.”

**Response:** These comments do not pertain to the prescribed burn summary after-action report.

**Comment 6:** For the following reasons, CARE respectfully requests (1) the Settlement Agreement be set aside until such time as the US Army’s and the District’s independent review of the project is complete (2) the US Army and the District perform its duties under CEQA/NEPA, and (3) issue a Notice of Intent to prepare an environmental review on the Settlement Agreement which is a “discretionary project” of which the District is the “lead agency” under CEQA and the US Army under NEPA. CARE additionally requests the US Army and the District call a “Public Hearing” on such review, and that written notice of such hearing be provided to all persons seeking to participate in the “Voluntary Relocation Program” for the Fort Ord Prescribed Burns and other interested parties, including CARE.

**Response:** These comments do not pertain to the prescribed burn summary after-action report.

Comments from Mike Weaver, May 27, 2004 via e-mail

**Comment 1:** Thank you for the opportunity to comment. As a 52 year resident adjacent to former Fort Ord, I can honestly say, I told you so. I told the Army and I told the regulatory agencies that it is NOT a good idea to torch dry California hillsides. The Army's history of having fires getting out of control on former Fort Ord would lead one to believe that they might learn something. I continually pointed out that for many years we had the entire 7th Division to assist in times of dangerous fire on the base. I continually advised that the 30 or so members of FireStop were wholly insufficient, even with back up, to prevent a calamity. You are extremely lucky, damn lucky, that houses in the City of Seaside did not go up in flames.

**Response:** This comment is noted.

**Comment 2:** The public was led to believe it would be a one day "prescription" burn, i.e., good medicine. The report accurately tells us it was eight days, from October 24, 2003 to October 31, 2003. The report reveals, under chronology, that "CARB designated October 24th as a no-burn day". It also states that "FireStops FWM had a conference call with CARB who stated October 25 was a no-burn day." Note; The OMC Fire Chief cited on the checklist it was a no-burn day.

**Response:** The Army followed the pre-established procedures for making the decision to burn on October 24, 2003.

**Comment 3:** I received a call from a friend the morning of October 24th. My friend advised me that he heard the Army "was going to burn today". "Couldn't be true.", I answered, "It is breezy, not a good day for a fire."

**Response:** This comment is noted.

**Comment 4:** I think it was about this time that FireStop was igniting the brush with alumagel. Note: Please explain exactly what "alumagel" is. What other names is it known by?

**Response:** Fire Stop used alumagel, gelled gasoline, to ignite the vegetation at Ranges 43-48. This is consistent with procedures described in *Final Ranges 43-48 Prescribed Burn Plan*.

**Comment 5:** Surely the fire crews had anticipated explosive hazards from the fire. When these occurred, it was determined that the fire would only be fought from the air. The wind had come up blowing the fire west. Because of unexploded ordnance, bullets and such, going off, fire fighting planes were required to keep above 1701 feet.

**Response:** A response to similar comments (Comment 9) is included in Attachment 1 of the prescribed burn summary after-action report.

**Comment 6:** The conclusion one draws from this is that the fire was an intentional unexploded ordnance removal action. It was not the remedial action being portrayed in the press as the reason for the fire, to remove the brush cover. Further evidence of this are the activities on October 25 and 26, when "It was decided that all pockets and islands of vegetation needed to be burnt out..." This was ostensibly to "mimimize smoke impacts".

**Response:** The prescribed burn at Ranges 43-48 was intended to facilitate the cleanup of unexploded ordnance by removing the vegetation and exposing the ground surface so that the ordnance cleanup workers could see the ground and work safely. A response to similar comments (Comment 5) is included in Attachment 1 of the prescribed burn summary after-action report.

**Comment 7:** With the fire area nearly three times larger than planned and the smoke impacts immense in all areas surrounding former Fort Ord, it was a fiasco. Yet incredibly, in this report, under lessons learned, it states "Loosening the burn prescription should also be considered so that there are more possible burn days."

**Response:** The referenced statement is included in *Final MRS-Ranges 43-48 Prescribed Burn After-Action Report, Former Fort Ord, California*. Days that would meet the current burn prescription occur infrequently and are difficult to forecast. From the perspective of planning and executing the burn operations, a prescription that would provide a greater number of potential burn days would reduce the chance of false alarms. The statement was not intended to imply that the Army would burn more than current limitation (of 800 acres per year).

**Comment 8:** A major goal of the so-called prescribed burn was to minimize smoke impacts. Please note: THE GOAL FAILED! The smoke was so bad in Corral de Tierra, south of the fire that we were choking on the night of the 24th, even with all doors and windows closed. We had to abandon our house and head for fresh air. Elderly area residents who do not drive were stuck. Under smoke progression, in the report, it refers to smoke in the neighboring communities as being "residual drift smoke". Indeed, what it was was very dark, very dense, choking smoke. Also, please note, from my neighbors and my observations, the maps of the smoke progression are wrong. The areas of smoke overlay should be larger. Re-torching islands of brush only sent forth new plumes of smoke on days after the 24th.

**Response:** The measurement of particulate matter, a primary constituent of smoke, in the air during the prescribed burn is detailed in *Draft Final Ranges 43-48 Prescribed Burn Air Monitoring Report, Former Fort Ord, California* and summarized in this prescribed burn summary after-action report. The maps provided in the Smoke Management section of *Final MRS-Ranges 43-48 Prescribed Burn After-Action Report, Former Fort Ord, California* are based on the Army's observations, wind directions recorded by the weather stations at the former Fort Ord, and where smoke complaints originated. Please note, these maps were meant to demonstrate the general progression of the smoke during the prescribed burn and contingency operations and how the diurnal winds rotated the smoke throughout each day of the contingency operations.

**Comment 9:** Hiring a middleman, or middlemen, in this case, FireStop, may be a clever way to let them take the blame. However, it does not remove the Army's responsibility. Nor does it absolve the regulatory agencies from their duties of protecting the public. For shame!

**Response:** This comment is noted.