

U.S. Army Corps of Engineers
Los Angeles District
915 Wilshire Boulevard
Los Angeles, California 90017
June 2020

SAN LUIS OBISPO COUNTY, CALIFORNIA

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LIST OF ACRONYMS AND ABBREVIATIONS

AGC Advanced Geophysical Classification

ARARs Applicable or Relevant and Appropriate Requirements

ASR Archives Search Report bgs below ground surface

CDFW California Department of Fish and Wildlife

CERCLA Comprehensive Environmental Response, Compensation, and Liability Act

CFR Code of Federal Regulations
CNG California National Guard

Cal Poly California Polytechnic State University

COPC contaminants of potential concern

CSLO Camp San Luis Obispo CSM Conceptual Site Model

DDESB Department of Defense Explosive Safety Board
DERP Defense Environmental Restoration Program

DGM Digital Geophysical Mapping

DoD United States Department of Defense

DTSC State of California Department of Toxic Substances Control

ESA Endangered Species Act

FS Feasibility Study

ft feet

FUDS Formerly Used Defense Sites
GSA General Services Administration

HA Hazard AssessmentHDA High Density AreaHE high explosive

HRR Historical Records Review

IC Institutional Controls
MC Munitions Constituents

MD Munitions Debris

MDAS material documented as safe

MEC Munitions and Explosives of Concern
MMRP Military Munitions Response Program

MRS Munitions Response Site

N/A Not Applicable

NCP National Oil and Hazardous Substances Pollution Contingency Plan

NIA Non-Impacted Area

O&M Operations and Maintenance PA Preliminary Assessment

RACER Remedial Action Cost Engineering and Requirements

RAO Remedial Action Objectives

RCRA Resource Conservation and Recovery Act

RI Remedial Investigation

SARA Superfund Amendment and Reauthorization Act

SI Site Inspection

SLERA Screening Level Ecological Risk Assessment

SLO BG San Luis Obispo Botanic Gardens TCRA Time Critical Removal Action

USACE United States Army Corps of Engineers

USC United States Code

USEPA United States Environmental Protection Agency

USFWS United States Fish and Wildlife Service

UXO Unexploded Ordnance

WWII World War II

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PART 1: DECLARATION

1.1 SITE NAME AND LOCATION

Project Name: Camp San Luis Obispo (CSLO) Munition Response Site (MRS) 07 – Grenade

Courts 25 and 26

Site Name: MRS 07 – Grenade Courts 25 and 26

Formerly Used Defense Site (FUDS) Project Number: J09CA203107

Federal Facility Identifier: CA99799F688000

MRS 07 – Grenade Courts 25 and 26 (hereafter referred to as MRS 07 (previously identified as MRS 01/02) is located along California Highway 1, approximately 8 miles east of the Pacific Ocean (at Morro Bay) and approximately 5 miles northwest of U.S. Highway 101 between the cities of San Luis Obispo and Morro Bay on the western slopes of the Santa Lucia Range. MRS 07 was identified during the Remedial Investigation/Feasibility Study (RI/FS) and previous investigations as MRS 01/02; however, based on a realignment of the FUDS property in 2013, the MRS number was designated as MRS 07.

MRS 07 comprises 52.6 acres and has been subdivided into two areas (to facilitate the evaluation): MRS 07 High Density Area (HDA) (33.3 acres) and MRS 07 Non-Impacted Area (NIA) (19.3 acres) (previously known as MRS 01/02A and MRS 01/02B, respectively). The MRS location is depicted on Figure 1 – MRS 07 Location Map and the site layout is depicted on Figure 2 – MRS 07 Site Layout (all referenced figures throughout this document are included in Attachment 2).

Based on the results of the Archives Search Report (ASR) (Ref. 1), the Historical Records Review (HRR) (Ref. 2), and the Site Inspection (SI) conducted for Camp San Luis Obispo (CSLO) (Ref. 3), three MRSs (MRS 01, MRS 02, and MRS 05) were identified for further investigation, and are included and described in the Final Remedial Investigation (RI)/Feasibility Study (FS) Report (Ref. 4). MRS 05 will be addressed under a separate response project and will have its own stand-alone Decision Document.

Historical records do not distinguish between MRS 01 and MRS 02 (MRS 02 overlaps MRS 01 to the north); therefore, the two MRSs were aligned into a single MRS in July 2013 and have been addressed together during implementation of the RI/FS. This Decision Document addresses MRS 07.

1.2 STATEMENT OF BASIS AND PURPOSE

This Decision Document presents the Selected Remedy for MRS 07, in San Luis Obispo County, California, as documented in the *Formerly Used Defense Sites Program Proposed Plan for Camp San Luis Obispo, MRS 01/02 – Grenade Courts 25 and 26 and MRS 05 – Multi-Use Range Complex, San Luis Obispo County California Formerly Used Defense Sites (FUDS) Project No. J0CA203107* (Proposed Plan) (Ref. 5). The Selected Remedy was chosen in accordance with the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) (Ref. 6), as amended by the Superfund Amendment and Reauthorization Act (SARA) and the National Oil and Hazardous Substances Pollution Contingency Plan (NCP) (Ref. 7). This decision is supported by the documents included in the Administrative Record Index for this site (Attachment 3).

The State of California Department of Toxic Substances Control (DTSC) reviewed the Proposed Plan and submitted correspondence to U.S. Army Corps of Engineers (USACE) on 15 May 2019 indicating that they had no further comments on the Preferred Remedy. Documentation of DTSC's concurrence is included as an attachment to this Decision Document (Attachment 1) and is provided in the Administrative Record file at the San Luis Obispo Public Library, 995 Palm Street, San Luis Obispo, California 93403.

1.3 ASSESSMENT OF MRS 07

The Selected Remedy for MRS 07 in this Decision Document is necessary to protect the public health, welfare and the environment from exposure to potential residual explosive hazards at MRS 07.

1.4 DESCRIPTION OF SELECTED REMEDY

Five remedial alternatives were evaluated for MRS 07. The Selected Remedy (Alternative 4 – Digital Geophysical Mapping [DGM] and/or Advanced Geophysical Classification [AGC] and Surface/Subsurface Removal of DoD Military Munitions and Institutional Controls [ICs] to Protect Current and Future Site Users) for MRS 07 is presented in Table 1.

TABLE 1 MRS 07 SELECTED REMEDY						
	Evaluated Alternatives for MRS 07					
MRS	Alternative 1 – No Further Action.	Alternative 2 - ICs to Protect Current and Future Site Users.	Alternative 3 – DoD Military Munitions ⁽²⁾ Removal from the Surface and ICs to Protect Current and Future Site Users.	Alternative 4 – DGM and/or AGC with Surface/Subsurface Removal of DoD Military Munitions and ICs to Protect Current and Future Site Users.	Alternative 5 - Excavation, Sifting, Removal of DoD Military Munitions and Restoration	
MRS 07 ⁽¹⁾				✓		

⁽¹⁾ The DGM/AGC Surface/Subsurface removal elements of any remedy implemented in MRS 07 will only be implemented in the HDA of the MRS. The remainder of the MRS will be included in any ICs implementation, as applicable.

The Selected Remedy was based upon the ability to address unacceptable explosives risks posed by the presence of DoD Military Munitions remaining at MRS 07. The Selected Remedy for MRS 07 is described in further detail in Section 2.12 of this Decision Document.

⁽²⁾ The term "Military Munitions" means all ammunition products and components produced for or used by the armed forces for national defense and security, including ammunition products or components under the control of the DoD, the Coast Guard, the Department of Energy, and the National Guard [see 10 United States Code (USC) §101(e)(4)(A) for a detailed definition].

The Selected Remedy for MRS 07 will be composed of:

- Boundary surveying.
- Vegetation clearance, as applicable and appropriate.
- Surface clearance.
- DGM and/or AGC.
- Intrusive investigation of geophysical anomalies and removal of subsurface munitions.
- 3Rs (Recognize, Retreat, Report) Education Awareness Program.
- Site-specific Emergency Contact Information.
- Informational signs.

DGM and/or AGC, along with surface clearance, will remove both surface and subsurface Munitions and Explosives of Concern (MEC) that present a threat at the site. While not a component of the Selected Remedy, Five-Year Reviews will be implemented to ensure the Selected Remedy remains protective of human health and the environment after implementation.

1.5 STATUTORY DETERMINATIONS

The Selected Remedy for MRS 07 is Alternative 4 (DGM and/or AGC with Surface/Subsurface Removal of DoD Military Munitions and ICs to Protect Current and Future Site Users). Based on the information currently available, the Selected Remedy is protective of human health and the environment; complies with Federal and State requirements that are applicable or relevant and appropriate to the remedial action (unless justified by a waiver); is cost-effective when evaluated against the nine criteria described in the NCP, 40 Code of Federal Regulations Section 300.430(e)(9)(iii); and utilizes permanent solutions and treatment to the maximum extent practicable. The Selected Remedy provides the best balance of tradeoffs when compared to the other evaluated alternatives with respect to the balancing and modifying criteria specified in the NCP. They provide the greatest reduction of risk within the constraints imposed by environmental conditions and reasonably anticipated future land use at a reasonable cost when compared to the other alternatives. This remedy also satisfies the statutory preference for treatment as a principle element of the remedy. The Selected Remedy is also acceptable to the community and the State regulator.

USACE concluded from the results of the RI that there is no unacceptable human health or ecological risk at MRS 07 due to MC exposure; therefore, there were no contaminants of potential concern (COPC) or related MC risks/hazards to be addressed in the development of Remedial Action Objectives (RAO) (Ref. 7).

Because the Selected Remedy may result in potential explosive hazards remaining on site, a statutory review will be conducted every five years after initiation of the remedial action to ensure that the Selected Remedy is protective of human health and the environment.

1.6 DATA CERTIFICATION CHECKLIST

The following information is included in the Decision Summary section (Part 2) of this Decision Document. Additional information can be found in the Administrative Record file.

- Summary of characterization of nature and extent of Munitions and Explosives of Concern (MEC) and MC (Section 2.2.1).
- Potential hazards represented by MEC (Section 2.7).
- RAO established for MEC and the basis for this objective (Section 2.8).
- How DoD Military Munitions will be addressed (Section 2.9.4).
- Current and reasonably anticipated future land use assumptions (Section 2.6).
- Potential land and groundwater use that will be available at the site as a result of the Selected Remedy (Sections 2.12.3 and 2.6.3, respectively).
- Estimated Remedial Action costs and the included Five-Year Review costs (Section 2.12).
- Key factors that led to selecting the remedy (describing how the Selected Remedy provides the best balance of tradeoffs with respect to the balancing and modifying criteria, highlighting criteria key to the decision) (Section 2.10).

1.7 AUTHORIZING SIGNATURE

This Decision Document, prepared by USACE Los Angeles District, presents the Selected Remedy for MRS 07 – Grenade Courts 25 and 26, Project Number J09CA203107. USACE is the lead executing agency under the Defense Environmental Restoration Program (DERP) at MRS 07 and has developed this Decision Document in compliance with CERCLA, as amended by SARA and the NCP. This Decision Document will be incorporated into the larger Administrative Record file for MRS 07, which is available for public view at the San Luis Obispo Public Library, 995 Palm Street, San Luis Obispo, California 93403. This document, presenting the Selected Remedy (DGM and/or AGC with Surface/Subsurface Removal of DoD Military Munitions and ICs to Protect Current and Future Site Users) for MRS 07, with a total cost estimate of \$2,510,460, is approved by the undersigned, pursuant to Memorandum, CEMP-CED (200-1a), August 10, 2019, subject: Redelegation of Assignment of Mission Execution Functions Associated with Department of Defense Lead Agent Responsibilities for the Formerly Used Defense Sites Program.

APPROVED:

Cheree D. Peterson, SES

Director, Programs

South Pacific Division

28 August 20

Date

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PART 2: DECISION SUMMARY

The Decision Summary identifies the Selected Remedy, explains that remedial action is necessary to ensure protection of human health and the environment for a portion of the MRS, and provides a substantive summary of the Administrative Record file that supports the remedy selection decision.

2.1 NAME, LOCATION, AND BRIEF DESCRIPTION

MRS 07 is depicted on Figure 1 and Figure 2. MRS 07, located approximately 8 miles east of the Pacific Ocean (at Morro Bay) and approximately 5 miles northwest of U.S. Highway 101 between the cities of San Luis Obispo and Morro Bay, comprises 52.6 acres.

USACE Los Angeles District is the executing agency for the military munitions response at MRS 07 (Federal Facilities Identifier: CA99799F688000), which is a formerly-used hand grenade range. DTSC is the regulatory support agency for the military munitions response at MRS 07. The source of funding is the DERP.

MRS 07 is one of several MRSs that are collectively referred to as the CSLO MRSs. Historical records indicate the two grenade ranges associated with MRS 07 were designated as MRS 01 and MRS 02; however, records do not distinguish between MRS 01 and MRS 02 (MRS 02 overlaps MRS 01 to the north), and have therefore been addressed together as MRS 07. The land within MRS 07 is used mainly for recreation (ball fields) and educational purposes (San Luis Obispo Botanic Gardens), including the future expansion of the existing Botanic Gardens.

2.2 CSLO and MRS 07 HISTORY

CSLO was established in 1928 by the State of California as a National Guard Camp. Identified at that time as Camp Merriam, it originally consisted of 5,800 acres. The U.S. Army took over Camp Merriam and renamed it Camp San Luis Obispo in 1940. Additional lands (including MRS 07) were added in the early 1940s until the total acreage reached 14,959. Although the available historical information does not indicate how the land was transferred from the State of California to the Department of the Army, historical records do indicate that between 1945 and 1952, the Department of the Army owned and leased land used for CSLO. The records, which are inventories of owned, sponsored, and leased facilities, indicate that the maximum amount of land owned was 12,958 acres between 1946 and 1948, along with 6,069 acres leased through four leases (note that not all land was owned or leased at the same time and the maximum size of CSLO was 14,959 acres). During World War II (WWII), CSLO was used by the U.S. Army from 1943 to 1946 for infantry division training. Uses of the camp included artillery ranges, small arms ranges, mortar, rocket, and grenade practice ranges. There were 27 ranges and 13 training areas located on CSLO during WWII (Ref. 4).

Following the end of WWII, a small portion of the former camp land was returned to its former private owners. The U.S. Army was making arrangements to relinquish the rest of CSLO to the State of California and other government agencies when the conflict in Korea started in 1950. The camp was reactivated at that time (Ref. 4).

The U.S. Army used the former camp during the Korean Conflict from 1951 through 1953 when the Southwest Signal Center was established for the purpose of signal corps training. Eighteen ranges and sixteen training areas were present at CSLO during the Korean Conflict. Following the Korean Conflict, the camp was maintained in inactive status until it was relinquished by the Army in the 1960s and 1970s. Approximately 4,685 acres was relinquished to the General Services Administration (GSA) in 1965. GSA then transferred the property to other agencies and individuals beginning in the late-1960s through the 1980s. Most of the property was transferred for educational purposes (e.g., California Polytechnic State University [Cal Poly] and Cuesta College). A large portion of CSLO (the original 5,800 acres) has been retained by the California National Guard (CNG) and is not part of the FUDS program. In the ASR completed in 1994, 9,159 acres of CSLO were identified as eligible for the DERP FUDS (Ref. 1).

Grenade Court 25 (identified in previous investigations as MRS 01) and Grenade Court 26 (identified in previous investigations as MRS 02) consist of 52.6 combined acres and are now identified as MRS 07 (Figure 2). Previous investigations identified these grenade ranges as "standard grenade ranges" that were used for training activities. This area was swept for DoD Military Munitions by the USACE during a Time-Critical Removal Action (TCRA) in 1992; hand grenade fragments and expended fuzes were found (Ref. 10). During the ASR process, the site inspection team found one expended hand grenade fuze north of the baseball fields (Ref. 1). The following types of munitions are suspected or known to have been used in MRS 07:

- Rifle grenades.
- Practice hand grenades.
- High Explosive (HE) hand grenades.

The Final RI/FS Report for the CSLO MRSs was completed September 2018 by USACE (Ref. 3). Based on the findings and recommendations of the Final RI/FS Report, a Proposed Plan was developed for the CSLO MRSs, which included MRS 07 (Ref. 4 and Ref. 5). Although the Final RI/FS Report and Proposed Plan address the CSLO MRSs as a whole, this Decision Document addresses MRS 07.

2.2.1 Site Investigation History

In 1986, Congress established the DERP for cleanup of active and former military sites. Based on its past use as a combat training area, MRS 07 was designated a FUDS in 1994, and became eligible for cleanup funding under this program. Previous investigations were conducted at MRS 07 from 1946 to 2018. These investigations that are specifically related to MRS 07 are summarized below.

2.2.1.1 1946 Surface Clearance

According to U.S. Army correspondence from 1964, all the range impact areas (including MRS 07) were cleared by Explosive Ordnance Disposal personnel and recovered items disposed of in 1946. No information regarding types of munitions or disposition of munitions was noted (Ref. 2).

2.2.1.2 1986 and 1993 Preliminary Assessments

USACE Los Angeles District prepared multiple Preliminary Assessments (PAs) in 1986 for individual portions of CSLO. The individual PAs were superseded by a more comprehensive PA that included the entire CSLO acreage (including MRS 07) prepared in 1993 by USACE Los Angeles District. The 1993 PA determined that CSLO (including MRS 07) was used for various military activities (e.g., artillery and small arms training, including mortar, rocket, and grenade ranges) that included the use of DoD Military Munitions and could constitute a public safety hazard (Ref. 1).

2.2.1.3 1992 Time-Critical Removal Action

In 1992, USACE performed an Unexploded Ordnance (UXO) Removal Action on approximately 95 acres of MRS 05 and MRS 07. The 1992 TCRA Report indicated that eight UXO items (MKII HE hand grenades) and approximately 50 expended hand grenade fuzes were discovered within MRS 07 (north of the ball fields). Seven UXO items were detonated in place, and one was removed for disposal to the Defense Reutilization and Marketing Office at Vandenberg Air Force Base. Maps included in the *Camp San Luis Obispo - El Chorro Regional Park Removal Project Final Report; FUDS Project Number J09CA203105* present the location of the UXO items and 50 expended hand grenade fuzes found the site (Ref. 10).

2.2.1.4 1994 and 2004 Archives Search Report and Supplement

The ASR was completed by USACE Rock Island District in September 1994 (Ref. 1). The ASR presented its findings of an historical records search and site inspection for ordnance and explosive waste at the CSLO MRSs (including MRS 07) that included confirmed ordnance presence based on available records, as well as an evaluation of potential ordnance contamination based on site ordnance components and site information. During the ASR site visit (18-24 October 1993), the survey team discovered one expended hand grenade fuze (north of the ball fields in MRS 07). The ASR reported that 9,159 acres of CSLO was eligible for the DERP-FUDS. The CNG was active (and remains so) on 5,800 acres of the former camp and for that reason, those 5,800 acres were ineligible for DERP-FUDS. Included in Appendix E (Document E14) of the ASR is a reference to the 1992 UXO removal action completed at CSLO.

The ASR Supplement was completed by USACE Rock Island District in 2004 (Ref. 11) and summarized the information from the 1994 ASR and other associated investigations. The ASR Supplement provided a summary of the retained MRSs (including MRS 07), the acreage for each MRS, and other pertinent information. The ASR Supplement provided a breakdown for each MRS with the standard range configuration based on the use of each MRS. The MRSs identified in the ASR Supplement for CSLO, their suspected acreage, and types of munitions include:

- MRS 01 Grenade Court, Range 25; 10 acres; MKII, hand grenade; M21, practice hand grenade; M9A1, rifle grenade, anti-tank.
- MRS 02 Grenade Court, Range 26; 16 acres; MKII, hand grenade; M21, practice hand grenade; M9A1, rifle grenade, anti-tank.

- MRS 03 Grenade Court, Range 27; 24 acres; M21, practice hand grenade; M62, practice hand grenade.
- MRS 04 Grenade Court, Range 17; 2 acres; MKII, hand grenade; M21, practice hand grenade; M9A1, rifle grenade, anti-tank.
- MRS 05 Multi-Use Range Complex; 2,049 acres; small arms, general; M28, rocket, HE anti-tank, 3.5-inch.

2.2.1.5 2006 Draft Preliminary Historical Records Review

In July 2006, a Draft Preliminary HRR Report was completed for CSLO (including MRS 07) and Baywood Park Training Area by USACE St. Louis District. The HRR was primarily focused on identifying historical activities that might potentially generate the presence of hazardous substances with an emphasis on establishing the types, quantities, and areas of MEC and chemical warfare activities. The report concentrated on verifying findings of previous studies and supplementing them, if possible, with particular emphasis on filling "data gaps" (Ref. 2).

2.2.1.6 2007 Site Inspection

The SI was performed to evaluate evidence for the presence of DoD Military Munitions and MC at the CSLO MRSs (including MRS 07). The objective of the SI was to determine whether MRSs identified within CSLO warranted subsequent characterization as part of an RI/FS, No DoD Action Indicated, or a TCRA. To accomplish this objective, Qualitative Reconnaissance and MC sampling were performed (Ref. 3).

No MEC/MD was identified/observed in MRS 07 during the SI.

During the SI, no explosives were detected in surface soil, but copper exceeded its background concentration in MRS 07. Evaluation of this MC in a Screening Level Human Health Risk Assessment determined that exposures to the reported surface soil concentrations do not pose significant potential human health risks.

Only one MC (copper) slightly exceeded the ecological screening levels at MRS 07 during the Screening Level Ecological Risk Assessment (SLERA). The SLERA concluded that given the conservative nature of the screening concentration against which the maximum concentration was compared, the very slightly elevated value for copper did not suggest that further evaluation of surface soil for this MC was warranted and that copper is not present at a concentration that would pose an unacceptable potential for risk to the health of ecological receptors.

The Final SI Report recommended MRS 07 for RI/FS based on historical findings and recommended no further sampling for MC. "MEC and MD have been reported in the past and a removal action was recommended in 1992 but records have not identified if the removal action was completed".

2.2.1.7 2010 Historic Map and Aerial Photo Analysis

USACE St. Louis District completed historical map and aerial photography analysis of CSLO. In this report, MRS 01 was identified as a Practice Grenade Court and MRS 02 was identified as a Live Grenade Court (Ref. 12).

2.2.1.8 2011-2018 Remedial Investigation/Feasibility Study

USACE conducted an RI to characterize the nature and extent of DoD Military Munitions and MC, fill data gaps, and assess potential explosives safety hazards within the CSLO MRSs (including MRS 07). The FS evaluated remedial alternatives for their ability to eliminate the unacceptable explosives risks associated with munitions posed to property owners and the general public (Ref. 4).

RI field operations were conducted at the MRS 07 from September to December 2011. The RI included a geophysical survey using DGM towed-array and man-portable equipment. The RI also included environmental sampling, including sampling of background soil, and analysis. DoD Military Munitions were recovered during the intrusive investigation. The geophysical and soil sampling data collected during the RI identified the boundaries of the potential impact areas, while the results of previous investigations at the CSLO MRSs provided data to identify the potential munitions present. Collectively, these investigations, which bounded the impact areas and identified the munitions potentially present, satisfied the criteria for characterizing the nature and extent of munitions present.

Following the completion of the RI field operations, USACE performed a Treatability Study within a portion of MRS 05 to evaluate the AGC process (from data collection through data analysis and intrusive investigation). USACE used data collected during the Treatability Study in the Final RI/FS Report to develop anomaly densities and to calculate cost estimates for Remedial Action Alternatives involving AGC (Ref. 4). Cost estimates presented in the RI/FS Report have been revised to costs for completing the remedial actions as calculated using Remedial Action Cost Engineering and Requirements (RACER) version 11.6. Summary worksheets supporting the revised cost estimates are included in Attachment 6.

Munitions and Explosives of Concern Characterization

RI fieldwork within the 52.6 acres of MRS 07 included 8.3 line miles of DGM transects and 2.0 line miles of analog geophysical surveys. In addition, 1.2 line miles of DGM survey were completed outside the MRS boundary to ensure the extent of potential MEC contamination had been delineated. It was determined that the extent of potential MRS contamination was contained within the MRS boundary and no additional modification to the boundary was required.

Based on the results of the RI, two separate UXO/MD density-related areas have been identified within MRS 07 to facilitate the evaluation of the potential hazards to human health posed by the potential presence of MEC in these areas. Figure 3 describes the results of the RI at MRS 07. Figure 4 depicts the separate UXO/MD density-related areas (MRS 07 HDA and MRS 07 NIA). Figure 5 shows the anomaly density for MRS 07. The density areas are summarized below:

- MRS 07 HDA, consisting of 33.3 acres, was identified because UXO and MD items were recovered in sufficient quantity and distribution to verify the use of the MRS as a grenade training area and has a mean UXO/MD density of 29 per acre.
- MRS 07 NIA, consisting of 19.3 acres, was identified because no UXO or MD was observed in this area during the RI field operations (nor during previous investigations).

Table 2 summarizes the results of the geophysical investigation at MRS 07:

Table 2: Summary of RI Results at MRS 07					
MRS UXO/MD Density- related Areas	DoD Military Munitions Found	Average Calculated Geophysical Anomaly ⁽¹⁾ Density	Maximum ⁽²⁾ Calculated Geophysical Anomaly Density	Estimated High Anomaly Density Areas	Estimated Total Anomalies within Sub- area ⁽³⁾
MRS 07 HDA	5 UXO 252 MD	29/acre	454/acre	14.25 acres with >100/acre	2,165
MRS 07 NIA	None	N/A	N/A	None	None

⁽¹⁾ Anomaly is defined as subsurface metallic material that may or may not be MEC or MD.

N/A = Not Applicable

Munitions Constituents Characterization

Surface soil sampling (0-6 inches below ground surface [bgs]) within MRS 07 for MC was performed at selected locations where visual and geophysical data indicated the highest suspected contamination (i.e., areas with higher relative density of MD or instances of UXO). Samples were analyzed to evaluate whether the MCs identified as COPC (explosives and select metals [antimony, copper, lead, and zinc]) remained at MRS 07 as a result of prior military actions and if they would contribute to an environmental risk/hazard to human and ecological receptors. The locations of these biased samples were considered to be potential sources and were used to determine whether a release had occurred. Background soil samples were collected during the RI field activities to develop background concentrations. The information below summarizes MC characterization at the MRS 07.

- Five discrete surface soil samples collected:
 - o Explosives All analytical results for explosives were reported as non-detects at concentrations less than the risk-based screening limits.
 - Metals Samples were analyzed for antimony, copper, lead, and zinc. Analytical
 results for all the selected metals indicate the presence of metals in the soil samples.
 The detected concentrations of each metal analyte were compared statistically to
 background concentrations to determine if a potential release of MC had occurred.

⁽²⁾ Based on the available data, USACE determined that anomaly density of greater than 400 anomalies/acre may be indicative of potential impact areas.

⁽³⁾ Details regarding the calculations for estimated total anomalies are provided in Section 5.2.1.4 of the Final RI/FS Report (September 2018).

The detected metal concentrations were not significantly greater than background concentrations.

Remedial Investigation Results Conclusions

The primary objective and purpose of the RI was to characterize MEC and MC contamination present in the identified investigation areas at the CSLO MRSs and to assess potential MEC and MC risks/hazards to human health or the environment that might result from that potential contamination. The following are the conclusions for MRS 07 related to MEC.

- MRS 07 HDA, consisting of 33.3 acres, was identified because the area has the highest density of MD/UXO with an estimate mean density of 29 MD/UXO per acre, maximum density of 454 MD/UXO per acre, and 14.25 acres having an estimated density over 100 MD/UXO per acre. Five UXO items and 252 MD items were observed within the HDA during the RI field operations and UXO and MD were identified in the area during previous investigations. Current and future land use for MRS 07 HDA is expected to remain unchanged and continue to be used mainly for recreation and educational purposes, including the expansion of the San Luis Obispo Botanic Gardens.
 Educational/recreational/groundskeeping/administrative activities may intentionally disturb the ground surface to a depth of three feet (ft) bgs. Construction workers involved with expansion activities may intentionally disturb the ground to a depth greater than three ft bgs. Therefore, exposure pathways for human receptors to encounter MEC are considered potentially complete for MRS 07 HDA where UXO was identified during the RI field operations and MD have been identified.
- MRS 07 NIA, consisting of 19.3 acres, generally comprises the developed portion of the MRS (recreational [ball fields] and educational [Botanic Garden facilities]). No MEC or MD items were recovered from this area during the RI. During previous investigations, there have been no reports of MEC or MD discoveries in this area. Therefore, the MEC exposure pathway for MRS 07 NIA is considered incomplete.

A complete detailed listing of the investigation results for MRS 07 is contained in the Final RI/FS Report (Ref. 4).

2.2.2 Enforcement History

The DoD is the sole entity responsible for the potential presence of DoD Military Munitions and mitigation of any explosive hazards associated with the presence of munitions. No enforcement activities (other than the public notices regarding the RI/FS [Attachment 4]) have been undertaken to date.

2.3 COMMUNITY PARTICIPATION

In accordance with CERCLA, DoD, and U.S. Army regulations, USACE Los Angeles District has conducted public involvement activities and provided the public opportunities to participate throughout the RI/FS Report, Proposed Plan, and Decision Document processes by hosting public meetings during the site characterization and remedial alternative selection process, and establishing and maintaining a publicly accessible Administrative Record file for the site. While coordinating with property owners/managers to obtain Rights of Entry for field investigations, USACE Los

Angeles District also requested input regarding reasonably anticipated future land use at MRS 07. USACE Los Angeles District met with the current property owner on 30 May 2019 to discuss current and reasonably anticipated future land use. Community involvement was also facilitated through fact sheets, site visits, and public notices published in the *San Luis Obispo County Tribune* (local newspaper) and at public meetings during the site characterization and remedy selection process when community members were invited to provide comments and recommendations regarding munitions response investigations and results and input regarding reasonably anticipated future land uses. USACE considered the public comments in determining which proposed remedial alternative would be most appropriate for MRS 07. USACE also prepared a Community Relations Plan in 2018 to help ensure the public is informed about and involved in cleanup decisions at MRS 07, in accordance with CERCLA.

The Proposed Plan (Ref. 5) was presented during a public meeting. Notification of the Proposed Plan public comment period, schedule for the Public Meeting, and availability of the Administrative Record File were published in the San Luis Obispo County Tribune between May 2019 and June 2019 (Attachment 4). USACE Los Angeles District held the public meeting on 22 May 2019 at the Ludwick Community Center, to: (1) present the recommendations of the Proposed Plan; (2) update community members and stakeholders about the status of the Proposed Plan and Decision Document for the site; and (3) accept comments on the Proposed Plan and Preferred Alternatives for the site. Four community members attended the meeting in addition to a representative from DTSC and one representative from local media. The main concern expressed by the public was the schedule for completing work at MRS 07. There were no further questions or comments provided by meeting attendees that required revisions to the Proposed Plan. The transcript of the public meeting is included in Attachment 5. The Final RI/FS Report (Ref. 4) and the Proposed Plan (Ref. 5) documents were made available to the public prior to the comment period through the Administrative Record file located at:

San Luis Obispo Public Library 995 Palm Street, San Luis Obispo, California 93403 Contact: (805) 781-5991

Other public meetings have been held during the TCRA at MRS 05 in 2010, prior to the RI fieldwork in 2011, and during the development of the RI/FS Report in 2018 to present information to the community about the history and potential hazards associated with the CSLO MRSs. In addition, warning signs were posted along access points to the MRSs during the 2010 TCRA.

Comments to the Proposed Plan (Ref. 5) were accepted during a public comment period that began on 1 May 2019 and ended on 7 June 2019. All stakeholder (DTSC and California Department of Fish and Wildlife [CDFW]) and public comments included in the Responsiveness Summary were reviewed and considered in preparing this Decision Document. Note that the comments received addressed both MRS 07 specifically, as well as all of the CSLO MRSs. All comments were reviewed and taken into consideration.

2.4 SCOPE AND ROLE OF RESPONSE ACTION

Based on the findings presented in the Final RI/FS Report, there is no unacceptable human health or ecological risk at MRS 07 due to MC exposure; therefore, there were no COPCs or related MC risks/hazards to be addressed in the development of RAOs (Ref. 4). The scope of the response actions are only to address unacceptable explosives risks posed by the presence of DoD Military Munitions at MRS 07; therefore, the Selected Remedy for MRS 07 was designed to address unacceptable explosive risks posed by the presence of DoD Military Munitions potentially remaining at MRS 07. Actions for the Selected Remedy for MRS 07, Alternative 4, include:

- Boundary surveying.
- Vegetation clearance, as applicable and appropriate.
- Surface clearance.
- DGM and/or AGC.
- Intrusive investigation of geophysical anomalies and removal of subsurface munitions.
- 3Rs (Recognize, Retreat, Report) Education Awareness Program.
- Site-specific Emergency Contact Information.
- Informational signs.

This Decision Document presents the final response actions for MRS 07 and addresses unacceptable explosives risks at the MRS through the Selected Remedy. The Selected Remedy presented in this Decision Document complements USACE's overall strategy to address DoD Military Munitions at the property. This strategy, following the U.S. Environmental Protection Agency (USEPA) guidance, is to address DoD Military Munitions at the property and allow for the current use of the land to continue and allow for reasonably anticipated future land use (Refs. 13 and 14). MRS 05 will be remediated pursuant to a separate Decision Document.

2.5 MRS 07 SITE CHARACTERISTICS

This section provides an overview of the MRS 07 characteristics, including: surface and subsurface features, the RI munitions investigation strategies, the conclusions of the MC sampling program, and the expected hazards potentially posed by MEC that may be present based on investigation results.

2.5.1 Conceptual Site Model

Separate Exposure Pathway Diagrams for the revised Conceptual Site Models (CSM) for MRS 07 HDA and MRS 07 NIA, which were created based on the results of the RI, are provided as an attachment to this Decision Document (Figures 6 and 7). Each Exposure Pathway Diagram for the CSMs represents the relationships between the former military use of each MRS 07 density distribution area, current and future land use, the potential for people to encounter DoD Military Munitions, and any environmental features that may have an impact on proposed MRS 07 activities and/or decisions. Both CSMs created during the planning phase of the RI and then revised based on the results of the RI, were developed in accordance with the USACE's *Conceptual Site Models* - *Engineer Manual 200-1-12* (Ref. 15), to communicate MRS 07 HDA and MRS 07 NIA conditions,

at the time of development, to project team members and stakeholders and to identify data gaps. Accordingly, each CSM provides the basis for identifying and evaluating potential MEC exposure hazards to the public.

There are no complete or potentially complete exposure pathways for MCs at both MRS 07 HDA and MRS 07 NIA as illustrated on Figure 6 – Exposure Pathway Diagram for the Conceptual Site Model – MRS 07 HDA and Figure 7 – Exposure Pathway Diagram for the Conceptual Site Model – MRS 07 NIA.

For MRS 07 HDA, the CSM and exposure pathways for MEC have been reviewed and revised to incorporate new information concerning MEC presence, potential receptors, and site accessibility. Based on historical information for MRS 07 HDA, munitions-related activities likely occurred within MRS 07. MKII HE hand grenades and M1A1 mine fuzes (see Table 3) were observed and removed; the removal ranging from the surface to five inches bgs (or the depth of bedrock, if shallower than five inches) within MRS 07 HDA. Based on previous investigations results, there was sufficient evidence for the potential for MEC to be present and the exposure pathways for human receptors (i.e., residents, construction workers, commercial/industrial workers, visitors/recreational users) to encounter MEC to be complete (Figure 6).

For MRS 07 NIA, there are no complete or potentially complete exposure pathways for MEC at MRS 07 NIA as illustrated on Figure 7. Therefore, there is no expected exposure to MEC in this area. Based on the results of the RI, there was no evidence to support the potential for MEC to be present and the exposure pathways for human receptors (i.e., residents, construction workers, commercial/industrial workers, visitors/recreational users) to encounter MEC to be complete; therefore, these exposure pathways are incomplete (no expected exposure) (Figure 7).

2.5.2 MRS 07 Site Features

MRS 07 (52.6 acres) is situated along California State Highway 1, approximately 8 miles east of the Pacific Ocean (at Morro Bay) and approximately 5 miles northwest of U.S. Highway 101 between the cities of San Luis Obispo and Morro Bay on the western slopes of the Santa Lucia Range (Figure 1). The MRS consists mainly of rolling hills. Terrain is nearly level to moderately sloping and the elevation ranges from 300 to 1,500 ft.

2.5.3 Soil

MRS 07 consists of rolling hills and mountains with three categories of soils occurring: alluvial plains and fans, terrace soils, and hill/mountain soils. Soils associated with the alluvial plains and fans occur mainly adjacent to stream channels. Where the slope is nearly level to moderately sloping, the surface layer is coarse sandy loam to shaley loam.

2.5.4 Surface Water and Wetlands

MRS 07 is located in the Estero Bay and Salinas Hydrologic units and the Morro Creek-Frontal Pacific Ocean and Santa Margarita Creek-Salinas River watersheds. Chorro Creek-Frontal Morro Bay (draining west) is the predominant sub-watershed. An intermittent tributary of Chorro Creek, which drains west into the Pacific Ocean via Morro Bay, runs through the entire MRS 07.

The National Wetlands Inventory database, based on the Cowardin classification used by the U.S. Fish and Wildlife Service (USFWS), was used as a baseline to develop a general idea of how many acres and what types of wetlands are found within MRS 07. Three types of wetlands are found within the entire MRS 07: freshwater emergent wetland (0.63 acre), freshwater forested/shrub wetland (0.88 acre), and riverine (0.30 acre).

2.5.5 Sampling Strategy

2.5.5.1 Munitions and Explosives of Concern Investigation

USACE Los Angeles District performed the RI field investigations in 2011. A total of 8.3 line miles of DGM transects and 2.0 line miles of analog geophysical survey were collected at the entire MRS 07. Anomaly locations were identified for reacquisition, investigation, and recovery.

Based on the results of the RI, two separate UXO/MD density-related areas were identified within MRS 07to facilitate the evaluation of the potential hazards to human health posed by the potential presence of MEC in these areas (Figure 2). The separate areas are summarized below:

- MRS 07 HDA (33.3 acres) was identified because UXO and MD items were recovered in sufficient quantity and distribution to verify the use of the MRS as a grenade training area with an estimate mean density of 29 MD/UXO per acre, maximum density of 454 MD/UXO per acre, and 14.25 acres having an estimated density over 100 MD/UXO per acre. Five UXO items and 252 MD items were observed within the HDA during the RI field operations and UXO and MD were identified in the area during previous investigations.
- MRS 07 NIA (19.3 acres) was identified because no UXO or MD were observed in this area during the RI field operations (nor during previous investigations).

A description of all UXO, MD, and non-munitions-related debris recovered were recorded and incorporated into the project database (Ref. 4).

2.5.5.2 Media Sampling

MC sampling was conducted within MRS 07 as part of the RI fieldwork through a biased sampling program for explosives and metals (antimony, copper, lead, and zinc) in surface soil (0 to 6 inches bgs). According to the Final RI/FS Report, there is no unacceptable human health or ecological risk at the entire MRS 07 due to MC exposure (see Section 4.2) (Ref. 4).

2.5.5.3 Contaminants of Potential Concern

The Final RI/FS Report concludes that results from the RI field investigation and the MC soil sampling indicate there is no unacceptable human health or ecological risk at MRS 07 due to MC exposure; therefore, there were no COPC or related MC risks/hazards to be addressed in the development of RAOs (Ref. 4). MEC and MD (i.e., MKII HE hand grenades and M1A1 mine fuzes [see Table 3]) were observed and removed from the MRS.

2.6 CURRENT AND POTENTIAL FUTURE LAND AND RESOURCE USES

While coordinating with property owners/managers to obtain Rights of Entry for field investigations, USACE Los Angeles District also requested input regarding future land use at MRS 07. Current and reasonably anticipated future land use are presented below.

2.6.1 Current Land Use

MRS 07 is primarily used for recreation and educational purposes. Current land use is mainly for recreation (ball fields) and educational purposes (San Luis Obispo Botanic Gardens), including the expansion of the existing Botanic Gardens (Figure 2).

Current land use within adjacent properties surrounding MRS 07 is primarily recreational on property owned by the County of San Luis Obispo, including El Chorro Regional Park and the Botanic Gardens. Other adjacent properties are primarily owned and operated by Cal Poly School of Agriculture with student programs to demonstrate modern ranching practices (to the north), Dairy Creek Golf Course (to the north), and the CNG Camp San Luis Obispo (to the east and south).

2.6.2 Future Land Use

Projected land use is expected to remain the same for MRS 07.

2.6.3 Surface Water and Groundwater Use

As noted in Section 2.5.4, Chorro Creek and 1.8 acres of wetlands are present within MRS 07.

USACE regulates discharges of dredged and fill material into waters of the United States, which includes many streams and wetlands such as those in MRS 07. Prior to implementing any necessary remedial actions at MRS 07, additional evaluation of surface water features may be required to determine hydraulic connection between wetlands and waters of the U.S. to determine the requirements for meeting the substantive requirements of the Clean Water Act 33 USC §1344. MRS 07 is located north of the San Luis Obispo Valley Groundwater Basin and east of the Chorro Valley and Los Osos Valley groundwater basins. The Los Osos, Chorro, Walters, Chumash, Pennington, and Morro creeks provide drainage to the Los Osos Valley drainage basin, where water bearing formations are found. Groundwater in the Los Osos Valley is found at depths from 10 to 50 ft bgs. The water bearing zone is estimated to extend to a depth of 200 ft bgs and is drained by Chorro Creek and Los Osos Creek. Sediment debris is transported by these creeks into Morro Bay during hydrologic events (Ref. 4).

2.7 SUMMARY OF SITE POTENTIAL RISKS/HAZARDS

USACE Los Angeles District conducted a screening assessment for MC and Hazard Assessment (HA) for MEC at MRS 07 HDA as part of the RI.

MRS 07 HDA was assessed using the USEPA MEC HA, which assesses the current potential MEC hazard and how that hazard may be modified by the implementation of remedial alternatives. The MEC HA is based on the results of the RI and the historical information available from prior

studies. Detailed information regarding the MEC HA can be found in the Final RI/FS Report (Ref. 4). Because no MEC hazard was confirmed based on the results of previous investigations (including the RI), a separate MEC HA at MRS 07 NIA was not required.

It is USACE's current judgment that the Selected Remedy identified in this Decision Document is necessary to protect public health or the environment from potential surface or subsurface MEC explosive safety hazards at MRS 07.

The USACE FUDS Military Munitions Response Program Risk Management Methodology (Ref. 16) will be implemented after the completion of any potential Selected Remedy to determine the residual risk at the site. In the event USACE determines the remaining risk is unacceptable, USACE will evaluate the need to implement additional remedial action activities. The remedial action will not be considered complete until the RAO is achieved.

2.7.1 Human Health Risks/Hazards

Potential surface and subsurface pathways exist for exposure to explosive hazards at MRS 07. There is sufficient evidence for the potential for MEC to be present based on items that were identified during the RI field investigation. These included 5 UXO and 252 MD items.

Based on the results of the RI MC soil sampling at MRS 07, analytical result screening, and subsequent human health risk assessments, there is no indication of MC (explosives) releases at MRS 07 and no expectation of an unacceptable risk to human health from MC (metals). Detailed information on analytical results are provided in the Final RI/FS Report (Ref. 4).

2.7.2 Biological Resource Analysis

USACE previously conducted biological surveys at MRS 07 which indicated that USFWS-designated Critical Habitat for the California red-legged frog (*Rana draytonii*) (federally threatened species) is located within MRS 07 (Figure 2-3 in the Final RI/FS Report). RI MC soil sampling analytical result screening, and subsequent risk assessments, indicate no releases of MC (explosives) at MRS 07 and no expectation of an unacceptable risk to ecological receptors from MC (metals). Detailed information on analytical results are provided in the Final RI/FS Report (Ref. 4). The risk to ecological receptors associated with MEC is considered negligible because receptors are unlikely to interact with MEC in a way that may trigger a detonation.

2.8 REMEDIAL ACTION OBJECTIVES

RAOs drive the formulation and development of response actions. The aim is to achieve the NCP's threshold criteria of "Overall Protection of Human Health and the Environment."

Because USACE found that unacceptable ecological risks are unlikely from MC related to historical DoD operations within MRS 07, the RAOs do not address chemical contamination, including MC-related contamination. Instead, the RAOs focus on the unacceptable explosives risks posed by the presence of DoD Military Munitions.

RAOs address specific goals for eliminating the unacceptable risk due to the presence of munitions within an MRS to ensure protection of human health and the environment (Ref. 5).

A factor considered in the RAOs is the anticipated depth of intrusion (digging) during activities conducted within the MRS and the depth to which munitions may be present. USACE based the depth of intrusion on the current and anticipated future land uses. The depth at which various munitions may be present, which USACE based on previous investigations, is included in Table 3. The depth of intrusion for future land uses could be up to 36 inches bgs for the expansion of the San Luis Obispo Botanic Gardens. The maximum depth at which evidence of munitions has been observed is only six inches bgs (and does not extend below the top of bedrock). It is not anticipated that MKII HE hand grenades will be present below six inches bgs. According to the vertical CSM in the Final RI/FS Report, the detection depth for the munitions identified at MRS 07 using traditional DGM and AGC equipment is 10 inches (MKII HE hand grenade) and 90 inches (M1 practice mine with spotting charge). However, as noted in Table 3, no MEC items were identified during the RI at depth of greater than 5 inches bgs.

TABLE 3: POTENTIAL DOD MILITARY MUNITIONS SUMMARY FOR MRS 07						
MRS	Potential UXO	Description ⁽¹⁾	Maximum Depth of Recovery (RI Results)	Maximum Depth of Detection for AGC and DGM		
MRS 07	MKII HE hand grenade	Filler (smokeless powder-nitrocellulose, Potassium nitrate, Barium nitrate)	4 inches bgs	10 inches bgs		
	M1A1 mine fuzes	Filler (black powder)	5 inches bgs	90 inches bgs		

⁽¹⁾ Specific nomenclature regarding recovered DoD Military Munition is not available from the previous investigations; therefore, a best match was determined from the current Fragmentation Database dated 15 September 2015 (Final RI/FS Report, Appendix E).

Based on historical information, previous investigations, and anticipated future land use, the following RAO has been developed for MRS 07: To reduce unacceptable risk posed by the presence of DoD military munitions (MKII HE hand grenades and M1A1 mine fuzes) such that a negligible risk of encounter can be supported on the surface and to a depth of 36 inches bgs, which is based on the anticipated depth of future intrusive activities (and does not extend below the top of bedrock). As noted in Table 3, the depth at which MEC was recovered during the RI was 4 to 5 inches bgs; therefore, the RAO is designed to protect future site users by ensuring that no MEC will remain to the anticipated depth of future site work (36 inches bgs.)

2.9 DESCRIPTION OF ALTERNATIVES

Based on a review of MRS 07 characterization and hazard/risk assessment results, response action alternatives were identified, evaluated, comparatively analyzed, and recommended for implementation at MRS 07. The remedy implemented in MRS 07 related to DGM/AGC surface/subsurface removal will only be applied in the MRS 07 HDA portion of the MRS since no DoD military munitions or MD have been identified within MRS 07 NIA. Therefore, only remedy implementation related to ICs will be pursued at MRS 07 NIA. The possible response alternatives evaluated for MRS 07 are as follows:

- Alternative 1: No Further Action.
- Alternative 2: ICs to Protect Current and Future Site Users.
- Alternative 3: DoD Military Munitions Removal from the Surface and ICs to Protect Current and Future Site Users.
- Alternative 4: DGM and/or AGC with Surface/Subsurface Removal of DoD Military Munitions and ICs to Protect Current and Future Site Users.
- Alternative 5: Excavation, Sifting, Removal of DoD Military Munitions and Restoration.

2.9.1 Alternative 1 – No Further Action

The No Further Action Alternative provides a baseline for comparative analysis and is not protective of human health or the environment. Under Alternative 1, response actions would not be taken; therefore, compliance with ARARs (listed in Section 2.10.2) is not applicable. This alternative, which has no associated costs, does not either achieve the RAOs for MRS 07 or require time to implement.

2.9.2 Alternative 2 – Institutional Controls to Protect Current and Future Site Users

In implementing this alternative, USACE Los Angeles District will:

- Implement ICs, without removal of DoD Military Munitions, to address potential hazards associated with future activities (for example, digging and construction activities) and to inform of actions to take for any potential encounter in MRS 07. Description of the ICs would be detailed in an ICs Implementation Plan developed prior to beginning the ICs process. The following is a brief description of the components for ICs considered for MRS 07:
 - 1. 3Rs (Recognize, Retreat, Report) Education Awareness Program (3Rs Program): USACE would implement a 3Rs Program to inform landowners and the public about the potential to encounter a munitions within MRS 07 and actions to take should they encounter or suspect they have encountered a munition. Implementation of a 3Rs Program increases public awareness of the dangers associated with approaching, touching, disturbing, or moving a munition or suspect munition. Reducing the risk of encountering munitions is dependent upon the awareness and personal responsibility of landowners and the public who have access to MRS 07. If landowners and other members of the public are receptive to the awareness program and avoid activities that may result in encountering munitions, then the risk associated with interaction with munitions is reduced significantly.

Munitions awareness and education, acknowledgement of the potential explosive safety hazard involved, and reinforcement of the message will minimize the unacceptable explosives risks posed by the presence of DoD Military Munitions. The avenue for this education and awareness of MEC would be through printed media. Specific printed media in the information packages will take the form of brochures, fact sheets, and posters (presenting the "3Rs of Explosives Safety"). These information packages will be provided and distributed by USACE, as appropriate, by mail to stakeholders (San Luis

Obispo Botanic Gardens employees) and other local government entities (DTSC). Information regarding maintenance of ICs would be included in a work plan for the implementation of this Alternative.

- 2. *Emergency Contact Information*: A communications tree including emergency contact information will be developed by USACE for inclusion in 3Rs (Recognize, Retreat, Report) Education Awareness Program materials.
- 3. Informational Signs: USACE installed signage during the 2010 TCRA regarding the presence of potential MEC hazards and the emergency contact information to use if MEC is encountered. These signs are posted at access points to the MRS. Additional signage will be installed and all signage will be maintained in the future to present the "3Rs of Explosives Safety." USACE will be responsible for installing, maintaining, and replacing signs. Additional details regarding the signs will be identified during the remedial action implementation process and will be documented in a work plan or a memorandum of agreement with the stakeholders.

Alternative 2 complies with the ARARs.

2.9.3 Alternative 3 –DoD Military Munitions Removal from the Surface and ICs to Protect Current and Future Site Users

Under this alternative, USACE Los Angeles District would implement a remedy composed of:

- A global positioning system survey of the project site to delineate the areas within the MRS
 where surface removal can and cannot be performed due to the presence of listed species
 habitats.
- Vegetation trimming / removal of applicable areas (i.e., those areas with vegetation density
 that would make areas inaccessible to surface clearance operations) within the remedial
 action boundaries.
- UXO-qualified personnel would:
 - O Conduct a technology-aided surface removal to locate and remove DoD Military Munitions that are visible on the surface (on the surface means the munition is entirely or partially exposed above the ground surface [i.e., above the soil layer] or entirely or partially exposed above the surface of a water body).
 - Evaluate each DoD Military Munition encountered to determine whether it poses an explosive hazard (i.e., is MEC).
 - Mark MEC encountered for destruction by detonation either in place or at a location and in a manner that meets the DoD Explosive Safety Board (DDESB) and Resource Conservation and Recovery Act (RCRA) Subpart X criteria.
- Items encountered on the surface determined to pose an explosive hazard would be destroyed by detonation. Material documented as safe (MDAS) would be disposed of or recycled at an appropriate facility. Prior to recycling, military munitions that are determined not to be MEC, but are MDAS, that resemble a munition would be deformed (e.g., cut in

multiple sections, shredded or melted) so that they no longer resemble a munition.

 Develop and execute the ICs Implementation Plan prior to and after completing surface MEC removal.

To comply with ARARs (listed in Section 2.10.2), certain precautions would be implemented during implementation of Alternative 3. Consolidated demolition of munitions-related items must occur in a manner that will ensure protection of human health and the environment, as specified in RCRA, Subpart X. To accomplish the remedy in accordance with the substantive provisions of the Endangered Species Act (ESA), implementation would include limiting the remedial action area for surface removal of DoD Military Munitions, and vegetation trimming/removal. All work within the remedial action areas would be done in such a way to minimize effects to listed species on site so that the work does not cause a "take" as described in the ESA. (Note: "take" means to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct).

Prior to beginning the field activities, surveys of biological resources would be completed to identify sensitive areas (e.g., habitats, nesting areas, presence of that listed species) that may require mitigation during the fieldwork. Information from the survey would be used to develop the approach for munitions removal activities, which would include input from the stakeholders.

During the implementation of this alternative, a biologist would be onsite during all remedial activities to monitor the presence of birds and nests that may be protected under the Migratory Bird Treaty Act (MBTA), as well as federally-listed species and critical habitats in accordance with ESA requirements. If birds or nests are identified, relevant buffer areas would be established around the bird and/or nest and fieldwork would not be conducted in the area until the biologist could ensure that activities would not result in a take. Fieldwork would be scheduled for outside the bird breeding season 15 February to 30 August. During the surface clearance, if it is determined that an item cannot be removed or an area cannot be accessed due to the presence of sensitive resources, ICs will be implemented to reduce the potential for exposure to the remaining items. Certain activities conducted during the implementation of Alternative 3, such as vegetation clearance, may result in discharge of materials into jurisdictional waters; therefore, the impact to streams and wetlands would be evaluated prior to initiating any activities.

A post-remedy data assessment, using the USACE FUDS Military Munitions Response Program (MMRP) Risk Management Methodology will be implemented at the conclusion of any remedial action to evaluate the effectiveness of the alternative and to determine whether further remedial actions (e.g., ICs) are necessary to support acceptable risk conditions or whether no further action is necessary.

Alternative 3 would reduce or eliminate potential explosive hazards at the ground surface. As this is a surface-only clearance, any MEC present underground would remain in place. Implementing ICs across the MRS following the removal action provides potential site users an additional safety measure by providing notification that the area, or a limited area, may contain potential explosive hazards.

2.9.4 Alternative 4 – DGM and/or AGC with Surface/Subsurface Removal of DoD Military Munitions and ICs to Protect Current and Future Site Users

Under this alternative, USACE Los Angeles District will implement a remedy composed of:

- A global positioning system survey of the project site to delineate the areas within the MRS
 where surface and subsurface removal can and cannot be performed due to the presence of
 listed species habitats.
- Vegetation trimming/removal of applicable areas (i.e., those areas with vegetation density
 that will make areas inaccessible to surface and subsurface clearance operations) within the
 remedial action boundaries.
- UXO-qualified personnel would:
 - O Conduct a technology-aided surface removal to locate and remove DoD Military Munitions that are visible on the surface (on the surface means the munition is entirely or partially exposed above the ground surface [i.e., above the soil layer] or entirely or partially exposed above the surface of a water body).
 - o Evaluate each DoD Military Munition encountered to determine whether it poses an explosive hazard (i.e., is MEC).
 - o Mark MEC encountered for destruction by detonation either in place or at a location and in a manner that meets the DDESB and RCRA Subpart X criteria.
- Items encountered on the surface or in the subsurface determined to pose an explosive hazard will be destroyed by detonation. MDAS will be disposed of or recycled at an appropriate facility. Prior to recycling, DoD Military Munitions that are determined not to be MEC, and MDAS, that resembles a munition will be deformed (e.g., cut in multiple sections, shredded or melted) so that they no longer resemble a munitions.
- Geophysical investigation (including DGM and/or AGC) of 100% of the area within the site that is accessible to DGM and/or AGC equipment, and removal and destruction of subsurface MEC. The depth for removal of DoD Military Munitions identified the RAO (36 inches bgs) is based on the anticipated depth of future intrusive activities. USACE will evaluate the actual detection threshold during development of the remedial action work plan based on the available geophysical technology to ensure that the equipment will be capable of 100% detection of the DoD Military Munitions known to be associated with MRS 07 at appropriate depth (anticipated to be between one and three ft). All DoD Military Munitions detected and/or classified at that threshold will be removed, regardless of depth. Removal of MEC would require intrusive work in at the location where each MEC item was found and holes would be no greater than approximately five ft in diameter and three ft deep. Areas in which no MEC was identified would remain undisturbed.

Potential DoD Military Munitions will be mapped using technologies (AGC) that can discriminate anomalies that are most likely munitions from non-munitions items. Anomalies that cannot be discriminated will be investigated. The geophysical survey would adhere to the 2000 USEPA- Unexploded Ordnance Management Principles (Ref. 17) requiring the collection of digital geophysical data whenever possible.

• Develop and execute the ICs Implementation Plan, as outlined in Alternative 2, prior to and after completing surface and subsurface MEC removal.

To comply with ARARs (listed in Section 2.10.2), certain precautions will be taken during implementation of Alternative 4. Consolidated demolition of munitions-related items must occur in a manner that will ensure protection of human health and the environment, as specified in RCRA, Subpart X. To accomplish the remedy in accordance with the substantive provisions of the ESA, implementation would include limiting the remedial action area for surface removal of DoD Military Munitions, vegetation trimming/removal, DGM equipment, and subsurface removal of DoD Military Munitions. All work within the remedial action areas will be done in such a way to minimize effects to listed species on site so that the work does not cause a "take" as described in the ESA. Prior to beginning the field activities, surveys of biological resources would be completed to identify sensitive areas (e.g., habitats, nesting areas, presence of that listed species) that may require mitigation during the fieldwork. Information from the survey would be used to develop the approach for DGM and intrusive activities, which would include input from the stakeholders. During the implementation of DGM data collection activities, a biologist would be onsite to monitor the presence of birds and nests that may be protected under the MBTA, as well as federally-listed species and critical habitats in accordance with ESA requirements. If birds or nests are identified, relevant buffer areas would be established around the bird and/or nest and fieldwork would not be conducted in the area until the biologist could ensure that activities would not result in a take. Fieldwork would be scheduled for outside the bird breeding season February 15 to August 30. The DGM data will be reviewed in comparison to the locations of known sensitive areas to determine if intrusive investigations would result in a take as defined by the ESA. If it is determined that an item cannot be intrusively investigated, ICs will be implemented to reduce the potential for exposure to the remaining items. Certain activities conducted during the implementation of Alternative 4, such as vegetation clearance and intrusive investigation of subsurface anomalies, may result in discharge of materials into jurisdictional waters; therefore, the impact to streams and wetlands would be evaluated prior to initiating any activities.

A post-remedy data assessment, using the USACE FUDS MMRP Risk Management Methodology will be implemented at the conclusion of any remedial action to evaluate the effectiveness of the alternative and to determine whether further remedial actions (e.g., ICs) are necessary to support acceptable risk condition or whether no further action is necessary.

Alternative 4 will reduce and/or eliminate known explosive hazards and reduce the potential for human exposure to DoD Military Munitions. Under this alternative, it is possible that some potential explosive hazards may go undetected due to inaccessible areas associated with steep terrain or access restrictions associated with the Botanic Gardens or presence of listed species, and therefore, remain at MRS 07.

2.9.5 Alternative 5 – Excavation, Sifting, Removal of DoD Military Munitions and Restoration

Under this alternative, USACE Los Angeles District would:

• Perform land surveying to delineate remedial action boundaries, vegetation clearance, and surface clearance (as discussed in Alternative 3).

- Perform full vegetation removal prior to the excavation.
- Excavate areas where (1) DoD Military Munitions were identified and would pose the greatest potential hazard to human receptors and (2) very high densities of MD could cause the cost of other alternatives to be too high.
- Destruct DoD Military Munitions by detonation; and collect and/or remove MD from the surface of MRS 07 for disposal (i.e., MD may be disposed of [or recycled] at an appropriate facility depending upon the nature of the item [i.e., if the item resembles a munitions item, it would be recycled/shredded/melted so that it no longer resembles a munition]).
- Restoration: Sift and reuse the soil at the MRS 07 for backfill of the excavated area and revegetate with appropriate native plants.

Alternative 5 would eliminate known explosive hazards at the surface and subsurface and eliminate the potential for human exposure, which would result in Unlimited Use/Unrestricted Exposure (UU/UE); however, the extent of disturbance to the ground surface could result in the unacceptable destruction of sensitive habitat. This would not achieve the ESA ARAR.

2.9.6 Five-Year Reviews

Five-Year Reviews would be required for all remedial alternatives (with the exception of Alternative 5), as none of the alternatives are expected to allow for UU/UE. Five-Year Reviews are not part of the remedy; however, they would be implemented to determine if the remedy remains protective.

2.10 COMPARATIVE ANALYSIS OF ALTERNATIVES

All alternatives for MRS 07 were evaluated in accordance the nine criteria provided in the NCP Code of Federal Regulations (CFR) Section 300.430(f)(5)(i). Additional details on the comparative analysis of alternatives are provided in the Final RI/FS Report (Ref. 4).

In addition, the alternatives were compared to the RAO to assess their ability to achieve this requirement. Based on the description of alternatives presented in Section 2.9, Alternatives 1, 2, and 3 do not achieve the RAO; however, Alternatives 4 and 5 do achieve the RAO.

2.10.1 Overall Protection of Human Health and the Environment

The overall protection of human health and the environment criterion is used to determine whether an alternative provides adequate protection and describes how MEC hazards are eliminated, reduced, or controlled through removal and/or ICs. This threshold criterion relates to a statutory requirement that must be satisfied in order for an alternative to be eligible for selection.

As presented in Section 11.3.1 of the Final RI/FS Report, the alternatives that help to protect both human health and the environment are Alternatives 2, 3, and 4. Alternative 2 uses education and printed media awareness programs to modify the community's behavior in order to prevent them from exposing themselves to the dangers of the MEC. No removal actions are conducted so the environment is not affected. Alternative 3 would provide some protection to human health and the

environment by reducing the amount of potential MEC the public may be exposed to through surface removal of MEC within MRS 07. Alternative 4 would reduce the volume of potential explosive safety hazards (i.e., MEC) through removal of both surface and buried MEC. Alternative 1 does not reduce any risk since no further actions are taken and the conditions at MRS 07 remain the same. Alternative 5 does protect human health by permanently removing MEC that is detected by the currently available technology but it does not protect the environment due to the 100% vegetation removal and earth sifting required within the identified footprint of concern (Ref. 4).

2.10.2 Compliance with Applicable or Relevant and Appropriate Requirements

In accordance with CERCLA and NCP requirements, all remedial actions at CERCLA sites must at least attain legally applicable or relevant and appropriate federal and state requirements, standards, criteria, and limitations (collectively referred to as ARARs), unless such ARARs are waived under CERCLA Section 121(d)(4).

ARARs are divided into three categories: action-specific, location-specific, and chemical-specific. ARARs were identified and evaluated in the Final RI/FS Report. The results of the evaluation of ARARs for MRS 07 are described below. The ARARs apply to all alternatives that involve completion of removal actions (e.g., removal of surface and subsurface MEC); therefore, compliance with ARARs would be attained for Alternatives 3, 4 (Selected Remedy for MRS 07A) and 5 by designing and scheduling project activities to meet the requirements of the ARARs.

- Action-specific: two action-specific ARARs have been identified:
 - o Resource Conservation and Recovery Act, Subpart X, 40 CFR §264.601, Environmental performance standards for impacted soils. The listed document delineates environmental performance standards to be complied with during disposition of munitions-related items (e.g., blow-in-place or consolidated demolition). Consolidated demolition of munitions-related items must occur in a manner that will ensure protection of human health and the environment, as specified in this section.
 - O California Health and Safety Code, Title 22 §66265.382. The substantive requirement under this code is to ensure that detonation of waste explosives is done in a manner that does not threaten human health or the environment.
- Location-specific: two location-specific ARARs have been identified:
 - o Endangered Species Act, 16 United States Code (USC) §1538(a). The substantive standards of the Endangered Species Act require that a Federal agency must insure that any action it takes is not likely to jeopardize the continued existence of any threatened or endangered species, is not likely to result in the destruction or adverse modification of designated critical habitat, and will not unlawfully "take" any threatened or endangered species. Known occurrences of California red-legged frogs have been documented in the vicinity of MRS 07; however, information regarding exact locations is not provided, but there is a potential for the species to be present on the MRS. In addition, all of the MRS 07 is within USFWS-designated critical habitat for the California red-legged frog. The vegetation clearing and ordnance removal and/or detonation activities required at the MRS under the Surface Removal and ICs alternative and the Surface and Subsurface Removal alternative would potentially adversely impact the environment in the short-

term by disturbing wildlife habitat that is used by federally-listed species and critical habitat. Coordination with state and federal agencies during planning stages would lay out site-specific measures to be implemented during clearance activities including what areas may need to be avoided or have restrictions on the methods and extent of vegetation removal to facilitate surface clearance activities. In order to avoid these habitats and species, a biologist familiar with the resources would conduct biological and habitat surveys prior to initiating any fieldwork in order to identify species of concern and to delineate any sensitive habitat (including critical habitat) areas that may need to be avoided. Based on the results of the survey, a biologist would accompany fieldwork teams to determine presence of the species and proximity to potential MEC. If the species is present, work in the area would be modified to minimize impact to the resources. The biologists would also ensure that adverse modifications to critical habitat do not occur, consistent with USFWS coordination. Additionally, fieldwork would be scheduled for times of the year when movement of California red-legged frogs to and from riparian areas is at a minimum. The ICs only alternative would not impact critical habitat or federally-listed species.

- Migratory Bird Treaty Act, 16 USC §703(a) (prohibition on take of migratory birds). MBTA prohibits pursuit, hunting, taking, capture, or killing or attempting the same, of migratory birds native to the United States. There have been observations of birds, such as Hutton's vireo (forest-nesting), oak titmouse (forest- and ground-nesting), blue grosbeak (forest [shrub]-nesting), and lazuli bunting (forest [shrub]-nesting), which are subject to the MBTA, onsite during the breeding season of early March through mid-July (with the season extended from February 15 to August 30, to ensure the protection of birds and nests). In addition, red-breasted and red-napped sapsuckers (forest-nesting), which are subject to the MBTA, have been observed onsite during the winter. The vegetation clearing and ordnance removal and/or detonation activities required at the MRS under the Surface Removal and ICs alternative and the Surface and Subsurface Removal alternative would potentially adversely impact the environment in the shortterm by disturbing wildlife habitat that is used by ground- and forest-nesting birds. To avoid this potential impact, a biologist would be onsite during all remedial action activities to monitor for birds and nests. If birds or nests are identified (during the winter or during nesting season), relevant buffer areas would be established around the bird and/or nest and fieldwork would not be conducted in the area until the biologist could ensure that activities would not result in a take. In addition, vegetation removal would be restricted by not clearing vegetation during the February 15 to August 30 timeframe. Ordnance removal and demolition operations would be scheduled and implemented based on this time restriction as well. The ICs only alternative would not impact habitat that is used by ground- and forest-nesting birds.
- O Clean Water Act, 33 USC §1344. Regulates the discharge of dredged or fill material into the waters of the U.S., including wetlands. Applicable because jurisdictional waters, including ephemeral streams and wetlands, are present within MRS 07. Remedial action activities, such as vegetation clearance and intrusive investigation of subsurface anomalies, could result in the discharge of materials into jurisdictional waters; therefore, the impact to streams and wetlands may need to be evaluated prior to initiating any activities.

• Chemical-specific: no chemical-specific ARARs have been identified.

2.10.3 Long-term Effectiveness and Permanence

Long-term effectiveness and permanence refers to expected residual risk and the ability of a remedy to maintain reliable protection of human health and the environment over time, once cleanup levels have been met. This criterion includes consideration of residual risk that will remain at MRS 07 following remediation as well as the adequacy and reliability of controls.

Alternative 1 does not meet the criteria for Long-Term Effectiveness and Permanence because no further action would be taken. Alternative 2 ranks second lowest because it would reduce potential exposure to exposure hazards through education. Alternative 3 would rank third highest because it would eliminate surface MEC at MRS 07. Alternative 4 and 5 rank highest in terms of long-term effectiveness and permanence because they would eliminate both surface and buried MEC at MRS 07.

2.10.4 Reduction of Toxicity, Mobility, or Volume of Contaminants through Treatment

Alternatives 1 and 2 do not satisfy the preference for treatment inherent in the Criteria for Reduction of Mobility and Volume of Contaminants through Treatment because no reduction in the amount of MEC will take place under these alternatives. Alternative 3 only reduces the surface volume of potential MEC. Alternative 3 would provide some reduction in mobility of MEC items (removed from the surface). Mobility of MEC items is associated with erosion that may occur due to weather events. Alternatives 4 and 5 would achieve reduction in both surface and buried MEC at MRS 07; however, implementing Alternative 5 could cause destruction of ecological habitats. Alternative 4 would reduce the volume of potential explosive safety hazards (i.e., MEC) through removal of both surface and buried MEC at MRS 07 without this negative ecological impact.

2.10.5 Short-term Effectiveness

Short-term effectiveness addresses the period of time needed to implement the remedy and any adverse impacts that may be posed to workers, the community, and the environment during implementation and operation of the remedy.

Under Alternative 1, there is no short-term effectiveness because no remedial actions would be executed. Alternative 2 ranks highest for short-term effectiveness, because it reduces potential exposure to hazards upon implementation, requires little time to implement, and has minimal adverse effect on the human health and the environment. The use of a 3Rs Program may involve a level of uncertainty not inherent in alternatives that include MEC removal actions. Alternatives 3, 4, and 5 rank lower in short-term effectiveness, as they reduce potential hazards upon implementation and minimize human health and environmental impacts; however, they take longer to implement and have greater risk for exposure to site workers during implementation.

The following are estimates of the potential time-frame for implementation of each evaluated alternative after remedial action funding is allocated:

- Alternative 1: no applicable time-frame.
- Alternative 2: approximately 1 year time-frame.
- Alternative 3: approximately 4 year time-frame.
- Alternative 4: approximately 4 year time-frame.
- Alternative 5: approximately 6 year time-frame.

2.10.6 Implementability

Implementability addresses the technical and administrative feasibility of a remedy from design through construction and operation. Factors such as the availability of services and materials, administrative feasibility, and coordination with other governmental entities are also considered as aspects of implementability.

Alternative 2 ranks highest in terms of implementability, since the resources are available to implement a public education program and develop an emergency contact list. Alternatives 3 and 4 rank next, since they require more personnel resources, materials, and services over time to implement than does Alternative 2. Certain factors, including Location-specific ARARs and property owner precautions (see Section 2.9.4), may result in the need to modify the schedule for implementing Alternatives 3 and 4; however, these factors will not prevent the successful implementation of these alternatives. Alternative 5 has limited implementability due to complete removal of ecological receptor habitat.

2.10.7 Cost

The Selected Remedy (Alternative 4) is cost-effective and represents a reasonable value for the expected expenditures. In making this determination, the following definition was used: "A remedy shall be cost-effective if its costs are proportional to its overall effectiveness." (NCP Section 300.430(f)(1)(ii)(D)). Overall effectiveness of those alternatives that satisfied the threshold criteria (i.e., were protective of human health and the environment and compliance with ARARs) was evaluated by assessing balancing criteria (long-term effectiveness and permanence; reduction of toxicity, mobility, and volume through treatment; and short-term effectiveness) compared to costs. The estimated Capital Costs for the five alternatives are listed below and indicate the expenditures that are included in the costs. Costs were calculated using RACER version 11.6 and summary reports from RACER are included in Attachment 6. The only Operations and Maintenance (O&M) Costs associated with the Remedial Actions at the MRS are associated with warning sign inspection and maintenance and updates to the 3Rs program. The O&M Costs are included in the Alternative Costs and amount to \$130,638. In addition to the default markups calculated in the RACER software, all costs include a 25% contingency. For those alternatives (Alternative 2, 3, to 4) that will involve Five-Year Reviews (Periodic Costs), the added cost associated with conducting the six Five-Year Reviews over 30 years is \$264,163.

- Alternative 1 is a no cost alternative.
- Alternative 2 has an estimated total cost of \$738,654 (based on the total cost of installation of 11 signs, two site visits to inspect and maintain signs, and all printed educational media, training and updates to the 3Rs program).

- Alternative 3 has an estimated total cost of \$1,605,171 (based on the cost of the MEC surface removal and cost of implementing ICs as noted for Alternative 2).
- Alternative 4 has an estimated total cost of \$2,510,460 (based on the combined cost of the MEC surface and subsurface removal and cost of implementing ICs as noted for Alternative 2).
- Alternative 5 has an estimated total cost of \$7,476,728 (based on the combined cost of the Excavation, Sifting, Removal of DoD Military Munitions and Restoration.

2.10.8 State/Support Agency Acceptance

The State of California DTSC concurs with and supports the Selected Remedy for MRS 07 as the final remedy. DTSC reviewed the Proposed Plan and submitted correspondence to USACE on 15 May 2019 indicating that they had no further comments on the Preferred Remedy. Documentation of DTSC's concurrence is included in Attachment 1.

2.10.9 Community Acceptance

Based on stakeholder input during public meetings, the community supports the Selected Remedy for MRS 07 as the final remedy. USACE Los Angeles District received comments from stakeholders (i.e., San Luis Obispo Botanic Gardens) throughout the development period and during the public comment period for the Proposed Plan. USACE Los Angeles District considered the comments, provided responses (refer to Part 3 - Responsiveness Summary), and included them in this Decision Document. The San Luis Obispo Botanic Gardens reviewed the Proposed Plan and submitted correspondence to USACE on 31 May 2019 indicating their support of the Preferred Alternative (Alternative 4).

2.11 TREATMENT TO ADDRESS MEC EXPLOSIVE HAZARD

As presented in Section 2.2.1 of this Decision Document, previous investigations have identified items that may pose a potential explosive safety hazard at MRS 07. The Selected Remedy utilizes treatment to address unacceptable explosives risks posed by the presence of DoD Military Munitions. The remedy incorporates removal technologies to reduce the volume (and potential movement or mobility) of materials similar to those encountered during the RI (see Table 3).

2.12 SELECTED REMEDY FOR MRS 07

Based on detailed and comparative analyses of alternatives, it is USACE's current judgment that Alternative 4 – DGM and/or AGC with Surface/Subsurface Removal of DoD Military Munitions and ICs to Protect Current and Future Site Users, the Preferred Alternative identified in the Proposed Plan, is necessary to protect public health, welfare and the environment from actual or threatened releases of hazardous substances into the environment.

Alternative 4 is selected as the remedy because it would achieve substantial hazard reduction by minimizing exposure to explosive safety hazards potentially remaining at the site and will achieve the RAO (prevent encounter with DoD Military Munitions to a depth of 36 inches bgs). Alternative 4 is also: (1) protective of human health and the environment; (2) effective in both the short- and long-term at mitigating potentially remaining explosive hazards to human receptors

conducting surface and subsurface activities during reuse of the site; and (3) administratively and technically feasible to implement.

Because no MEC or MC hazard has been identified within MRS 07 NIA during the RI or previous investigations; only the selected remedy elements with regard to ICs will be implemented in the MRS 07 NIA portion of the MRS.

Based on information currently available, USACE believes the Selected Remedy both meets the threshold criteria and provides the best balance of tradeoffs among the other alternatives with respect to the balancing and modifying criteria. The Selected Remedy provides the greatest reduction of risk within the constraints imposed by the environmental conditions at a reasonable cost when compared to the other options. USACE expects the Selected Remedy to satisfy the following statutory and regulatory requirements of Section 121(b) of CERCLA: (1) be protective of human health and the environment, (2) comply with ARARs, (3) be cost-effective, and (4) provide a permanent remedial solution. However, if new information is discovered during remedial action implementation or recurring reviews (e.g., assumptions regarding site accessibility and the density of MD observed at the site does not match with expectations, and/or unexpected sensitive biological or archaeological resources are observed) requiring a new or supplementary response, the alternative preference and/or selection may be revisited.

Alternative 4 was selected with consideration for public interest, as well as economic, social, cultural, and environmental impacts. Stakeholder comments (included in Section 3, the Responsiveness Summary) were reviewed with regard to future land use requirements involving continued use of the land for recreational and educational purposes (including the expansion of the San Luis Obispo Botanic Gardens). In addition, the Selected Remedy minimizes future exposure to munitions potentially remaining at MRS 07. The supporting agency, DTSC, concurs that the selection of Alternative 4 is appropriate and provides the best balance of tradeoffs with respect to the balancing and modifying criteria (Ref. 9).

2.12.1 Summary and Description

The Selected Remedy for MRS 07 is Alternative 4 – DGM and/or AGC with Surface/Subsurface Removal of DoD Military Munitions and ICs to Protect Current and Future Site Users. Descriptions in Section 1, Section 2.9.2, and Section 2.9.4 of this Decision Document detail how USACE Los Angeles District will implement the Selected Remedy at MRS 07.

The Selected Remedy includes implementation of measures undertaken to limit public exposure to residual explosive materials. This alternative involves development of a 3Rs (Recognize, Retreat, Report) Education Awareness Program and installation of signage, which will be presented in the remedial action work plan and in the ICs Implementation Plan. The Education Awareness Program will be programmatic in nature and consist of educational tools and materials (e.g., brochures and fact sheets); and emergency contact information (e.g., emergency contact information for use during potential construction activities). Caution signs are typically installed to inform the public either that entry to an area is prohibited, that activities within the property are restricted in some manner, or that potential hazards exist within an area. These caution signs will warn visitors, in English or Spanish, about the potential for encountering munitions items, and provide contact information in the event a potential munitions item is discovered. The exact wording of the signs and the sign locations will be

finalized during the systematic planning process for the remedial action and will be documented in the ICs Implementation Plan.

Under the Selected Remedy, it is possible that some potential explosive hazards may go undetected due to inaccessible areas associated with steep terrain or access restrictions associated with the Botanic Gardens or presence of listed species, and therefore, remain at MRS 07. As required by CERCLA and the NCP, USACE Los Angeles District will perform Five-Year Reviews, because the alternative does not achieve UU/UE. The reviews will involve returning to MRS 07 after the selected munitions remedial actions have been initiated to assess their continued protectiveness.

2.12.2 Cost Estimate

The cost estimate for the MRS 07 Selected Remedy is \$2,510,460. Costs (Table 4) are based on information regarding the anticipated scope of the Selected Remedy, including anomaly densities based on the results of the RI and anticipated depth of removal for subsurface activities. The assumptions used to develop the cost estimates are included in Attachment 6a. The detailed cost information for the Selected Remedy for MRS 07 is provided in Attachment 6b and the cost information for the remaining alternatives are included in Attachment 6c. Changes in the cost element may occur as new information and data is collected during the remedial action design process. The type of document used to record changes (e.g., memorandum to the post-Decision Document file, Explanation of Significant Differences, or Decision Document amendment) will be based on the nature of the change. Costs for the MRS 07 Selected Remedy are an order-of-magnitude engineering cost estimate that is expected to be within 30% to 50% of the actual project cost.

TABLE 4 MRS 07 SELECTED REMEDY COSTS						
	Evaluated Alternatives for MRS 07					
Site	Alternative 1 – No Further Action	Alternative 2 – ICs to Protect Current and Future Site Users	Alternative 3 – Removal of DoD Military Munitions from the Surface and ICs to Protect Current and Future Site Users	Alternative 4 – DGM and/or AGC with Surface/Subsurface Removal of DoD Military Munitions and ICs to Protect Current and Future Site Users	Alternative 5 – Excavation, Sifting, Removal of DoD Military Munitions and Restoration	
MRS 07	\$0	\$738,654	\$1,605,171	<u>\$2,510,460</u>	\$7,476,728	

Notes:

Selected Remedy is presented in **Bold Underline**.

The estimated cost for the alternatives shown in this table were calculated using RACER version 11.6.

All cost information is provided as an estimate, with an accuracy expectation of +50 to -30%. The cost estimates will be refined as the remedy is designed and implemented.

Details regarding the itemized cost and assumptions used in developing the cost estimates for each alternative are provided in Attachment 6.

2.12.3 Estimated Outcomes

The timeframe for completion is dependent on receipt of Federal funding and an award of a contract for MRS 07. Once required funding is received, completion of the remedial action project would be

expected to take no longer than four years from the time of project initiation. The expected outcome of the selected remedy for MRS 07 HDA (33.3 acres) is:

- Elimination or minimization of surface and subsurface DoD Military munitions.
- Elimination or minimization of encounters with DoD Military Munitions after implementation of ICs.
- Maintaining current and future available uses of land (e.g., recreational and educational use).

2.13 STATUTORY DETERMINATIONS

In accordance with CERCLA Section 121 (as required by NCP Section 300.430(f)(5)(ii)), USACE Los Angeles District has identified a Selected Remedy for MRS 07 that is protective of human health and the environment, complies with Federal and State requirements that are applicable or relevant and appropriate to the remedial action (unless justified by a waiver), is cost-effective, and utilizes permanent solutions and alternative treatment technologies or resource recovery technologies to the maximum extent practicable.

Overall effectiveness was evaluated by assessing the long-term effectiveness and permanence; reduction in toxicity, mobility, and volume through treatment; and short-term effectiveness. The requirement to reduce toxicity (hazardous substances, pollutants, or contaminants) does not apply because the RI concluded that there is no unacceptable human health or ecological risk at MRS 07 due to MC exposure; therefore, there were no COPC or related MC risks/hazards to be addressed in the development of RAOs.

Human health and the environment will be protected through removal of DoD Military Munitions and implementation of ICs. Relevant considerations for the cost-effectiveness determination are presented in Table 5.

Because the Selected Remedy for MRS 07 will result in hazardous substances, pollutants, or contaminants remaining on-site above levels that allow for unlimited use and unrestricted exposure, a review will be conducted within five years after initiation of remedial action to ensure that the remedy is, or will be, protective of human health and the environment.

2.14 DOCUMENTATION OF SIGNIFICANT CHANGES

The Proposed Plan was released for public comment on 1 May 2019. It identified the Selected Remedy for MRS 07, as detailed in Section 2.12. USACE Los Angeles District reviewed all comments that were received during the public comment period and determined that no significant changes to the Preferred Alternative identified in the Proposed Plan are necessary.

TABLE 5 RELEVANT CONSIDERATIONS FOR COST EFFECTIVENESS DETERMINATION						
Alternative	Estimated Response Action Cost (Capital Cost)	Estimated IC Cost ⁽¹⁾	Estimated Total Cost	Estimated Five- Year Reviews Cost (Periodic Cost)	Long-Term Effectiveness and Permanence	Short-Term Effectiveness
Alternative 1	\$0	\$0		\$0	No reduction of risk to human health or the environment	No removal of DoD Military Munitions potentially present
Alternative 2	N/A	\$738,654	\$738,654	\$264,163	Reduces risk of human contact with DoD Military Munitions through educational means.	Public education; no removal of DoD Military Munitions potentially present
Alternative 3	\$866,517	\$738,654	\$1,605,171	\$264,163	Reduces risk of human contact with DoD Military Munitions at the site	Public education; removal of detected DoD Military Munitions on the surface of the site
Alternative 4	\$1,771,806	\$738,654	\$2,510,460	\$264,163	Reduces risk of human contact with DoD Military Munitions at the site	Public education; removal of detected DoD Military Munitions at the site
Alternative 5	\$7,473,728	\$0	\$7,476,728	\$0	Reduces risk of human contact with DoD Military Munitions at the site	Removal of all detected DoD Military Munitions at the site

⁽¹⁾ The O&M Costs associated with ICs include warning sign inspection and maintenance and 3Rs program. These costs are included in the Alternative Costs and amount to \$130,638.

PART 3: RESPONSIVENESS SUMMARY

This Responsiveness Summary presents all comments on the Proposed Plan that were received from stakeholders (i.e., DTSC and San Luis Obispo Botanic Garden) regarding the Selected Remedy as well as any general concerns that were expressed related to MRS 07. No public comments were received on the Proposed Plan.

3.1 STAKEHOLDER COMMENTS AND LEAD AGENCY RESPONSES

USACE Los Angeles District provided information to the local community on the Preferred Alternatives for MRS 07 at a public meeting held on 22 May 2019. The meeting was attended by representatives from Cal Poly, the San Luis Obispo Botanic Garden, and DTSC. There were no further questions or comments provided by meeting attendees that required revisions to the Proposed Plan. A comment period began on 1 May 2019 and ended on 7 June 2019, which allowed the public an opportunity to convey any questions and/or concerns about MRS 07 to the lead agency for consideration in the remedial selection process. As noted above, within MRS 07 two areas have been identified to facilitate the evaluation: MRS 07 HDA and MRS 07 NIA (previously known as MRS 07A and MRS 07B, respectively).

3.1.1 DTSC Comment/Response

The following DTSC comments were provided for the Proposed Plan in May/June 2019 and were responded to by USACE. The comments are organized with those specifically related to MRS 07 appearing first followed by general comments and those related to all of the CSLO MRSs.

3.1.1.1 DTSC MRS 07 Site-Specific Comments

DTSC Specific Comment No. 6: Each MRS or MRS sub-area should discuss any uncertainties or contingency measures that could be found or needed for the Preferred Alternative.

USACE Response: A – Accepted/Concur. The subject summaries have been revised to add text regarding uncertainties/contingency measures. The following text has been added to the discussion of each Preferred Alternative: "MRS 07A - If new information is discovered during remedial action implementation, general site use and construction activities, or recurring reviews (e.g., unexpected sensitive biological or archaeological resources) requiring a new or supplementary response, the alternative preference and/or selection may be revisited."

3.1.1.2 DTSC General Comments for the CSLO MRSs

DTSC General Comment No. 1: Based upon US EPA guidance found in EPA 540-R.98-031, OSWER 9200.1-23P of July 1999 a statement similar to: "It is the lead agency's judgment that the Preferred Alternatives identified in this Proposed Plan, or one of the other active measures considered in the Proposed Plan, is necessary to protect public health or welfare or the environment from actual or threatened exposure to DoD Military Munitions," should be included in this section

USACE Response: A – Accept/Concur. The subject section has been revised to add the recommended text per the guidance.

DTSC General Comment No. 2: Is this list of ARARS only what you consider key ARARs or is this a list of all ARARs identified in the RI/FS? If it is the entire list of ARARs identified in the RI/FS please update this section to include all ARARs identified in the final RI/FS.

USACE Response: A – Accepted/Concur. The subject list of ARARs, revised based on further internal USACE commentary, is considered the ARARs pertinent to the MRS subareas and remedial alternatives evaluated for this site.

DTSC General Comment No. 3: How and when will the IC's be evaluated as to successful implementation? Is there a report summary that will document discovery by users of military munitions?

USACE Response: A – Accept/Concur. A completion report would be developed at the conclusion of the remedial action implementation regardless of the alternative selected and recurring reviews would be implemented to determine whether the institutional controls and previous work conducted at the site continue to minimize explosives safety risks and continue to be protective of human health, safety, and the environment. The second paragraph of the Long-term Management section has been revised to read as follows: "Recurring reviews would be required for each alternative except Alternative 1, the No Further Action alternative, and Alternative 5, which would allow for UU/UE. These recurring reviews would be conducted to monitor the effectiveness of the remedy and determine if the response action continues to minimize human health risks and be protective of human health and safety and of the environment. Evidence of changes to anticipated land use (i.e., construction of buildings) or increased activity in the area could influence this assessment."

DTSC General Comment No. 4: Should discuss who will maintain, and how frequently they will be checked for damage and decay.

USACE Response: A – Accept/Concur. As part of the remedy implementation process, USACE will coordinate with stakeholders to evaluate and determine the approach for installing and maintaining signs. These responsibilities will be identified in an Institutional Controls Plan or a memorandum of agreement with the stakeholders. The following text has been added to the 3rd item under the alternative: "Responsibilities for installing, maintaining, and replacing signs will be identified during the remedial action implementation process and will be documented in an ICs Plan or a memorandum of agreement with the stakeholders."

DTSC General Comment No. 5: Per US EPA guidance found in EPA 540-R.98-031, OSWER 9200.1-23P of July 1999, this section should include a statement: "The preferred Alternative can change in response to public comment or new information", in this section

USACE Response: A – Accept/Concur. The following text has been added to the Summary of Preferred Alternative section: "The preferred Alternative can change in response to public comment or new information, such as a change in land use or identification of new hazards."

DTSC ARARs Comment: The response to DTSC Comment 2 indicated to DTSC that the list of Applicable or Relevant and Appropriate Requirements (ARARs) presented in the CSLO Proposed Plan is incomplete and inadequate. The final Remedial Investigation and Feasibility Study (RI/FS) for CSLO MRS 07-Grenade Courts 25 and 26 and MRS 05 had 9 specific ARARs that the State and USACE had agreed to as appropriate for the preferred remedies for the MRS in question, which were as a point of fact the remedies selected in this Proposed Plan. However, the Proposed Plan only identified 2 ARARs, and provided no explanation to the State why the other 7 ARARs were omitted. DTSC has the following findings regarding ARARs for the proposed remedies for CSLO MRS 07-Grenade Courts 25 and 26 and MRS 05:

- 1. Omission of RCRA Subpart X 40 CFR 264.601 implies that no consolidation and storage of munitions-related items and consolidation of shots can take place at CSLO. All munitions-related items must be blown in place individually as discovered, and any remedial work plan submitted to DTSC must reflect this.
- 2. The 49 CFR Part 172.101 requirements must be [met] as a point of law, violation of these regulatory requirements during your remedial work involving public roadways could result in vehicle operators being investigated, charged and subject to civil violations and penalties of up to \$186,610 by the appropriate public roadway authorities (federal, State and local).
- 3. California Code of Regulations, Title 22, Section 66265.382. Open Burning; Waste Explosives is an ARAR for the selected remedies for all munitions-related items that will be discovered and blown in place. Responsible parties choosing to open burn or detonate waste explosives shall do so in accordance with the following table and in a manner that does not threaten human health or the environment:

Pounds of Waste Explosive	Minimum Set Back Distance
0 to 100	204 meters
101 to 1,000	380 meters
1,001 to 10,000	530 meters
10,001 to 30,000	690 meters

This was an ARAR negotiated and agreed to by DTSC and USACE in the final CSLO MRS 07-Grenade Courts 25 and 26 and MRS 05 RI/FS, and would be a matter of formal dispute if not included in the Proposed Plan.

4. Migratory Bird Treaty Act (MBTA), 16 U.S.C. Section 703 (a) and/or Fish and Game Code (FGC) Chapter 1 Section 3503. "It is unlawful to take, possess, or needlessly destroy the nest or eggs of any bird..." The MBTA ARAR was negotiated and agreed to as an ARAR in the CSLO MRS 07-Grenade Courts 25 and 26 and MRS 05 RI/FS to address the need to plan to protect nesting birds during the breeding season (15 February to 30 August) in the MRS fieldwork area during the remedial effort. This would include planning and conducting pre-field mobilization work biological surveys and planned avoidance methods or the incorporation of biological support staff with field teams to identify and avoid nesting birds, since the Proposed Plan indicated that fieldwork will take place outside of the wet season and thus most likely during the bird breeding season. If USACE chooses not to apply the MBTA, then FGC 3503 must be included in the Proposed Plan as an ARAR.

DTSC would consider this a matter for formal dispute if neither the MBTA nor the FGC 3503 ARARs were include in the Proposed Plan.

5. California Endangered Species Act (CESA), Fish and Game Code Section 2080 requires that: "No person shall import into this state, export out of this state, or take, possess, purchase, or sell within this state, any species, or any part or product thereof, that the commission determines to be an endangered species or a threatened species, or attempt any of those acts..." The California Endangered Species Act lists species that are not included under the federal Endangered Species Act 16 U.S.C. Section 1538 (a). The California Natural Diversity Database (https://www.wildlife.ca.gov/data/cnddb) provides information on the types of California-listed threatened and endangered plants and animals found in California, to include the San Luis Obispo area. A number of these listed plants and animals exist or may exist in the MRS fieldwork area. The CESA and CFG Section 2080 ARAR was negotiated and agreed to as an ARAR in the CSLO MRS 07-Grenade Courts 25 and 26 and MRS 05 RI/FS to address the need to plan to protect California listed threatened and endangered species in the MRS fieldwork area during the remedial effort. The remedial work plan must include plans to conduct pre-fieldwork mobilization biological surveys and planned avoidance methods, or the incorporation of biological support staff with field teams to identify and avoid listed California threatened and endangered species. DTSC would consider this a matter for formal dispute if the CESA and FGC 2080 ARARs were not include in the Proposed Plan.

USACE Response: A – Accept/Concur. DTSC telephoned Mr. Bruce James, USACE Project Manager, on February 12, 2019, to request clarification regarding ARARs associated with this document. DTSC also sent a letter dated March 8, 2019, requesting further explanation regarding the list of potential ARARs, specifically:

- a. Resource Conservation and Recovery Act (RCRA), Subpart X, 40 Code of Federal Regulations (CFR) §264.601
- b. Hazardous Materials Transportation Act regulations, 49 CFR §172.101
- c. California Health and Safety Code, Title 22 §66265.382
- d. Migratory Bird Treaty Act, 16 United States Code (USC) §703(a) and/or California Fish and Game Code (FGC) Chapter 1 §3503
- e. California Fish and Game Code §2080, California Endangered Species Act (CESA)

Section 3.3 of the Camp SLO Final Remedial Investigation/Feasibility Study Report (RI/FS) identified potential ARARs USACE was considering at the time of development of the RI/FS. As further investigation, evaluation, and coordination is conducted by USACE and stakeholders, including the state regulatory agency, as required by the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), this list of potential ARARs can be refined before final ARARs are listed in the Decision Document. Below is further clarification as to each of the above-mentioned requirements as they relate to the Camp SLO Proposed Plan:

a. **RCRA**, **Subpart X**, **40 CFR §264.601** - This requirement was included as an ARAR in the Draft Final Proposed Plan, as described on page 25 of the document.

- b. **Hazardous Materials Transportation Act regulations, 49 CFR §172.101 -** Upon further review of this requirement since development of the RI/FS, it has been determined this requirement is not a promulgated environmental law, rather a transportation law, and does not meet the definition of an ARAR for on-site activities conducted under CERCLA, as indicated in 42 U.S.C. §9621(d)(2). If transportation of materials that are regulated under the Hazardous Materials Transportation Act and its regulations, including 49 CFR §172.01, is to occur, USACE will comply with all applicable elements of the law and regulations.
- c. California Health and Safety Code, Title 22 §66265.382 This requirement was included as an ARAR in the Draft Final Proposed Plan, as described on page 25 of the document.
- d. **Migratory Bird Treaty Act, 16 USC §703(a) and/or FGC Chapter 1 §3503 -** This requirement was not included in the Draft Final Proposed Plan as a result of internal USACE coordination; however, after USACE's further evaluation of the proposed remedial activities and site-specific conditions, MBTA will be included as an ARAR in the Proposed Plan. FGC Chapter 1 §3503 is not an ARAR. The state requirement is not more stringent than the Federal MBTA, as required by CERCLA (42 U.S.C. § 9621(d)(2)(A)(ii).) The following text has been added to the ARAR section on pages 25-26 of the Proposed Plan:

"Migratory Bird Treaty Act, 16 USC §703(a) - (prohibition on take of migratory birds). The Migratory Bird Treaty Act (MBTA) prohibits pursuit, hunting, taking, capture, or killing or attempting the same, of migratory birds native to the United States. There have been observations of birds, such as Hutton's vireo (forest-nesting), oak titmouse (forest- and ground-nesting), blue grosbeak (forest [shrub]-nesting), and lazuli bunting (forest [shrub]-nesting), which are subject to the MBTA, onsite during the breeding season of early March through mid-July (with the season extended from February 15 to August 30, to ensure the protection of birds and nests). In addition, redbreasted and red-napped sapsuckers (forest-nesting), which are subject to the MBTA, have been observed onsite during the winter (Ref. 15). The vegetation clearing and ordnance removal and/or detonation activities required at the MRS under the Surface Removal with ICs alternative and the Surface and Subsurface Removal alternative would potentially adversely impact the environment in the short-term by disturbing wildlife habitat that is used by ground- and forest-nesting birds. To avoid this potential impact, a biologist would be onsite during all remedial action activities to monitor for birds and nests. If birds or nests are identified (during the winter or during nesting season), relevant buffer areas would be established around the bird and/or nest and fieldwork would not be conducted in the area until the biologist could ensure that activities would not result in a take. In addition, vegetation clearing would not occur during the February 15 to August 30 time-frame. Ordnance removal and demolition operations would be scheduled and implemented based on this time restriction as well. The ICs only alternative would not impact habitat that is used by ground- and forest-nesting birds."

In addition, the following text has been added to the descriptions of Alternatives 3 and 4: "During the implementation of this alternative, a biologist would be onsite during all

remedial activities to monitor the presence of birds and nests that may be protected under the MBTA. If birds or nests are identified, relevant buffer areas would be established around the bird and/or nest and fieldwork would not be conducted in the area until the biologist could ensure that activities would not result in a take. Fieldwork would be scheduled for outside the bird breeding season February 15 to August 30."

e. California Fish and Game Code §2080, California Endangered Species Act -This requirement was considered as a potential ARAR during development of the RI/FS. However, upon further evaluation of this requirement, it has been determined that this state endangered species law is not an ARAR. In addition, as can be seen on Table 3 of the Draft Final Proposed Plan, each of the relevant species listed as endangered or threatened under this state law is already subject to protection under the Federal ESA or MBTA. The CESA, including FGC §2080, is not more stringent than these Federal laws. As part of compliance with the Federal ESA and MBTA, please note that USACE would complete biological and habitat surveys prior to initiating any fieldwork to identify species of concern and to delineate any sensitive habitat (including federally designated critical habitat) areas that may need to be avoided. A biologist would be onsite during all remedial action activities and fieldwork would be scheduled to avoid impacting species to the extent possible. In addition, coordination with state and federal agencies during planning stages would lay out site-specific measures to be implemented during clearance activities including what areas may need to be avoided or whether there should be restrictions on the amount and type of vegetation that may be removed to facilitate surface clearance activities.

3.1.2 San Luis Obispo Botanic Garden General Comments for the CSLO MRSs

San Luis Obispo Botanic Garden Comment No. 1: We are writing to provide comments for the public record regarding the Proposed Plan for Formerly Used Defense Site Program (FUDS) at Camp San Luis Obispo (CSLO) Munitions Response Site (MRS) 07 and MRS 05.

The San Luis Obispo Botanic Gardens (SLO BG) comprises a currently developed area (4 acres), as well as a planned expansion area under our Master Plan (150 acres); both of which overlap the area under the MRS 07 designations.

We support the Preferred Alternative (Alternative 4) to "conduct Digital Geophysical Mapping, and Advanced Geophysical Classification with Surface/Subsurface Removal of DoD Military Munitions to a depth of 36 inches to Protect Current and Future Site Users" for MRS 07A.

We encourage the Army Corps of Engineers to begin work to implement this Alternative as soon as possible, so that schedules can be coordinated with our trail, road, and infrastructure construction work for the planned expansion of the SLO BG. We also request that the U.S. Army Corps of Engineers and/or their contractors work in close consultation with the SLO BG staff before beginning any scoping, mapping, or removal activities at MRS 07A which overlaps with the current or planned future grounds of the SLO BG. In addition to managing current public recreational usage of this area, we wish to minimize any disturbance to existing plantings, structures, or

infrastructure of the SLO BG as this process moves forward. We understand that the Army Corps of Engineers is willing to assist the SLO BG with interpretive signage during and after project implementation, and we appreciate this collaboration.

Chenda Lor, the SLO BG Executive Director, attended and provided public comments at the Army Corps of Engineers public comment meeting on 5/22/19 for this project, and will continue to be the SLO BG contact as this process moves forward. Please continue to keep her in the loop regarding schedule and activities associated with this project. She can be reached at 805-541-1400 x 300 and Chenda@slobg.org.

USACE Response: A – Accept/Concur. USACE will continue to coordinate with San Luis Obispo Botanic Gardens with regard to the remedial action phase at CSLO.

3.2 TECHNICAL AND LEGAL ISSUES

Surface and subsurface removal of DoD Military Munitions along with a 3Rs (Recognize, Retreat, Report) Education Awareness Program will be implemented to minimize potential explosive hazards and to raise public awareness of DoD Military Munitions hazards at MRS 07. After the remedial action is complete, property owners may find munitions items that were not detectable or not removed from MRS 07. The owners should be advised to contact their local law enforcement agency.

REFERENCES

- 1. CEMVR. 1994. Archives Search Report Findings for Camp San Luis Obispo, San Luis Obispo, California. September.
- 2. CEMVS. 2006. Preliminary Historical Records Review Camp San Luis Obispo and Baywood Park Training Area, San Luis Obispo, California. 6 July.
- 3. USACE. 2007. Final Site Inspection Report, Former Camp San Luis Obispo, San Luis Obispo, California. Prepared for U.S. Army Corps of Engineers Southwest IMA Region. September.
- 4. USACE. 2018. Final Remedial Investigation/Feasibility Study Report, Camp San Luis Obispo San Luis Obispo County, California, MRS 01/02 and MRS 05. FUDS Military Munitions Response Program Project Number J09CA203107 (MRS 01/02) and J09CA203105 (MRS 05). Contract No. W912PL-12-D-0005, Task Order 0008. September.
- 5. USACE. 2019. Formerly Used Defense Sites Program Proposed Plan for Camp San Luis Obispo, MRS 01/02 Grenade Courts 25 and 26, San Luis Obispo County California Formerly Used Defense Sites (FUDS) Project No. J0CA203107. May.
- 6. Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), 11 December 1980, 42 United States Code (USC) 9601-9675, Public Law (PL) 96-510, as amended by the Superfund Amendment and Reauthorization Act (SARA). 17 October 1986.
- 7. National Oil and Hazardous Substances Pollution Contingency Plan (NCP), 40 CFR Part 300.
- 8. USEPA. 1999. A Guide to Preparing Superfund Proposed Plans, Records of Decision, and Other Remedy Selection Decision Documents. July.
- 9. DTSC. 2019. Concurrence Correspondence from DTSC to U.S. Army Corps of Engineers, Los Angeles District, May 15.
- 10. USACE. 1992. Camp San Luis Obispo El Chorro Regional Park Removal Project Final Report, FUDS Project Number J09CA203105, San Luis Obispo. April.
- 11. CEMVR. 2004. Archives Search Report Findings for Camp San Luis Obispo, Supplement, San Luis Obispo, California.
- 12. CEMVS. 2010. Draft Military Munitions Response Program Historic Map and Aerial Photo Analysis, Camp San Luis Obispo, California. FUDS Property Number J09CA2031. 11 April.
- 13. USEPA. 1988. Guidance for Conducting Remedial Investigations and Feasibility Studies under CERCLA, EPA/540/G-89/004, OSWER Directive 9355.3-01, pp. 186.
- 14. USEPA. 1999. A Guide to Preparing Superfund Proposed Plans, Records of Decision, and Other Remedy Selection Decision Documents, EPA/540/R-98/031, OSWER Directive 9200.1-23P, Section 6.3.4.
- 15. USACE. 2012. Conceptual Site Models Engineer Manual 200-1-12. December.
- 16. USACE. 2017. Memorandum Establishing Guidance and Implementing Trial Period for Risk Management Methodology at FUDS MMRP Projects. 3 January.
- 17. USEPA-DoD. 2000. Unexploded Ordnance Management Principles.

ATTACHMENTS

Attachment 1

Documentation of California Department of Toxic Substances Control Concurrence on MRS 07 Selected Remedy





Jared Blumenfeld
Secretary for
Environmental Protection

Department of Toxic Substances Control



Meredith Williams, Ph.D.
Acting Director
8800 Cal Center Drive
Sacramento, California 95826-3200

May 15, 2019

Mr. Bruce R. James
Project Manager EQ/IRP Program Manager
Department of the Army
Los Angeles District U.S. Army Corps of Engineers
Attn: CESPL-PM-M (Bruce James)
915 Wilshire Blvd, Suite 930
Los Angeles, California 90017

FINAL PROPOSED PLAN CAMP SAN LUIS OBISPO MUNITIONS RESPONSE SITES (MRS) 01/02- GRENADE COURTS 25 AND 26 AND MRS 05 – MULTI-USE RANGE COMPLEX

Dear Mr. James:

The Department of Toxic Substances Control (DTSC) has reviewed the Final Proposed Plan Camp San Luis Obispo (CSLO), California, Munitions Response Site (MRS) 01/02 - Grenade Courts 25 and 26 and MRS0 05 - Multi Use Range Complex received on May 6, 2019. The Proposed Plan for CSLO MRS 01/02 and MRS 05 and Grenade Courts 25 and 26 was prepared for the U.S. Army Corps of Engineers (USACE), Los Angeles District by Bristol Environmental Remediation Services, LLC.

DTSC has no comments on the Final Proposed Plan Camp San Luis Obispo, California, Munitions Response Site (MRS) 01/02 - Grenade Courts 25 and 26 and MRS 05 - Multi Use Range Complex.

If you have any questions, please contact me at (916) 255-6403, or via email at Stephen.Pay@dtsc.ca.gov.

Sincerely,

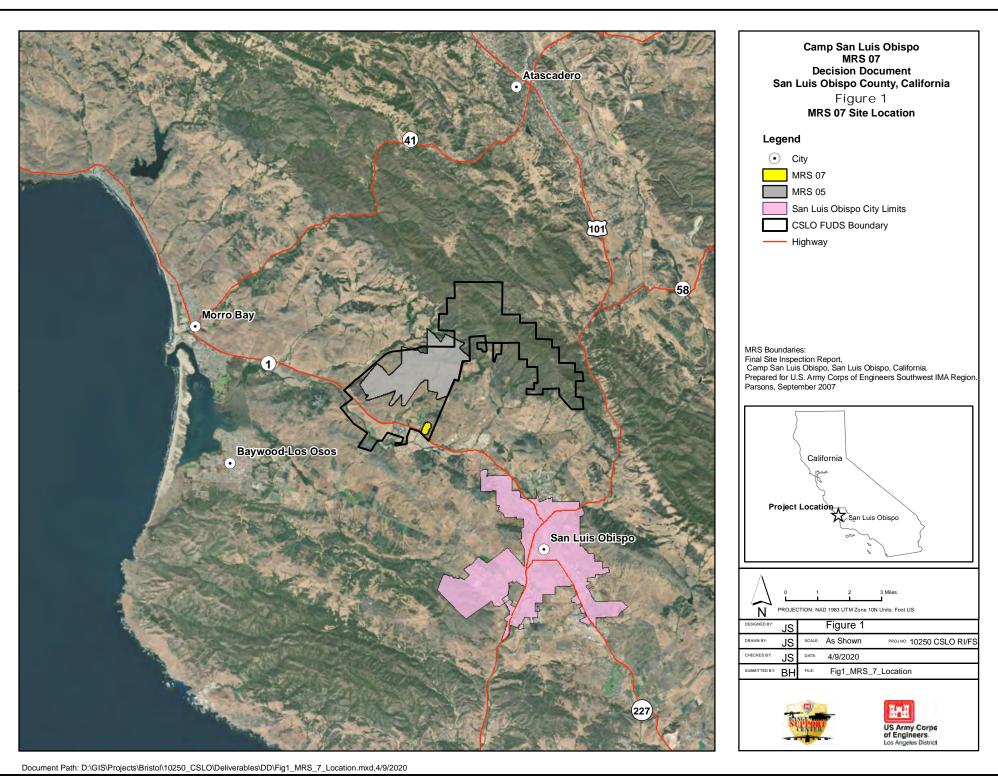
Stephen Pay, P.G., M. Sc.

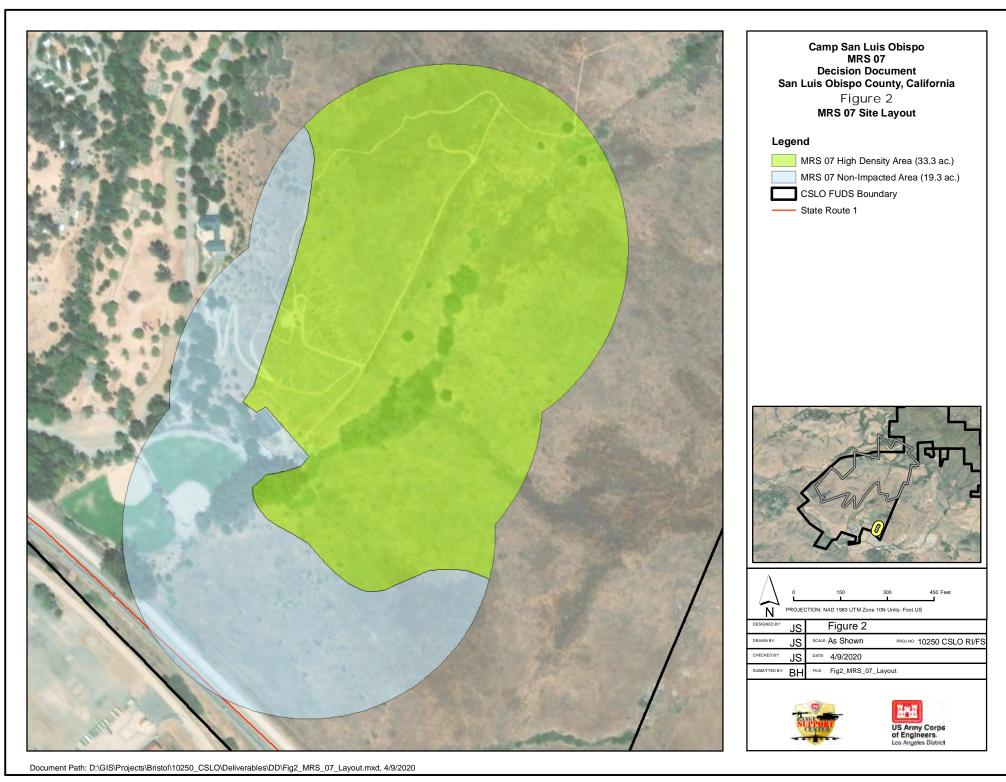
Project Manager Federal Facilities Unit

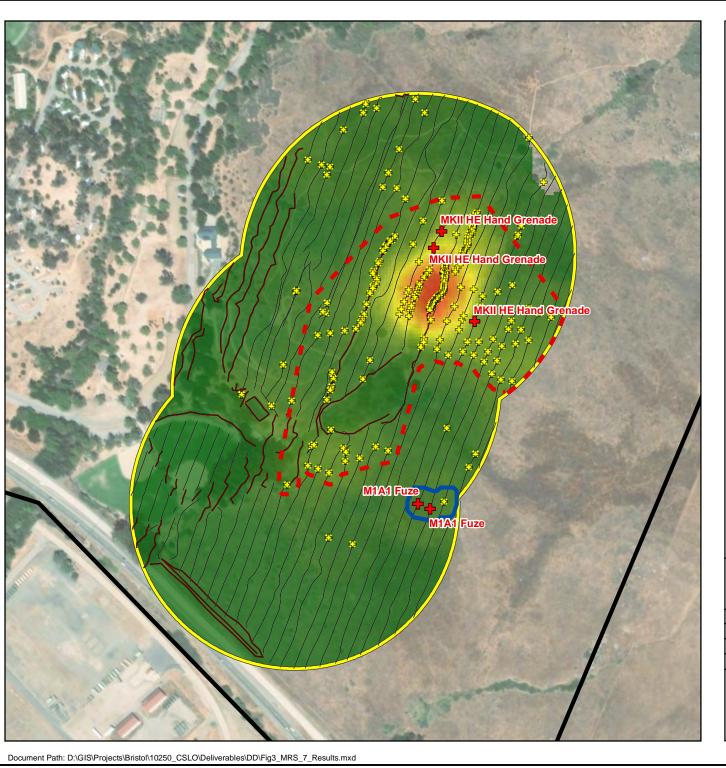
Site Mitigation and Restoration Program

Attachment 2

Site Figures







Camp San Luis Obispo MRS 07 Decision Document San Luis Obispo County, California Figure 3 Results of the RI at MRS 07

Legend

Munitions and Explosives of Concern

Munitions Debris

— DGM Transects

Analog Geophysical Transects

■ High Density Area (14.3 acres)

Medium Density Area 2 (0.4 acres)

___ MRS 07

CSLO FUDS Boundary

Estimated Density from Kriging (MD / MEC per Ac.)

450

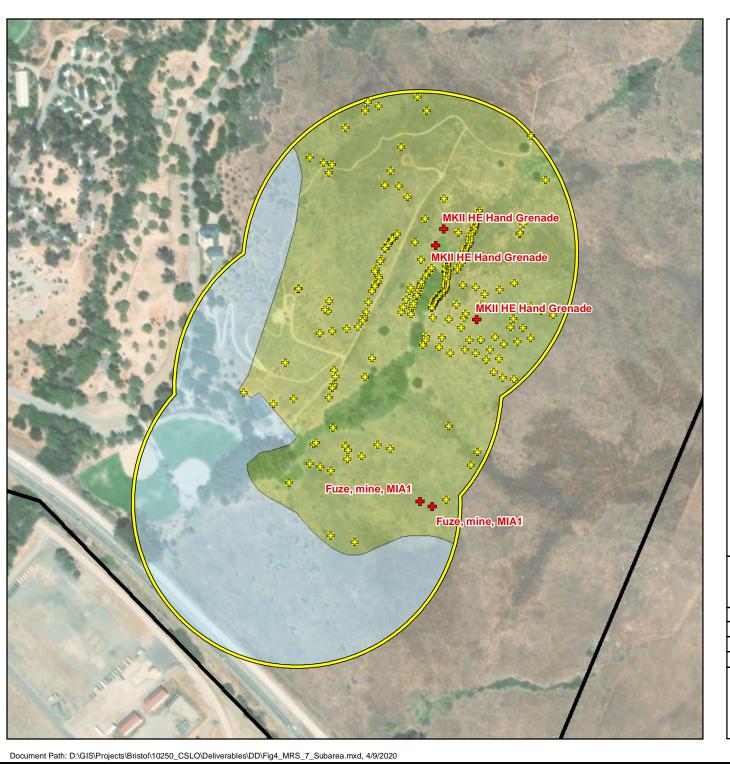
Mean MD/UXO Density per Acre: 29.03 Total Estimated MD /UXO Targets: 1526



DESIGNED BY:	JS	Figure 3	FINAL
DRAWN BY:	JS	SCALE: As Shown	PROJ NO: 10250 CSLO RI/FS
CHECKED BY:	JS	DATE: 4/9/2020	
SUBMITTED BY:	ВН	FILE: Fig3_MRS_7_Results	







Camp San Luis Obispo MRS 07 Decision Document San Luis Obispo County, California Figure 4 Density Delineation Summary

Legend

Munitions and Explosives of Concern

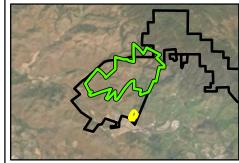
Munitions Debris

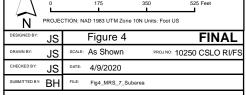
MRS 07

MRS 07 High Density Area (33.3 ac.)

MRS 07 Non-Impacted Area (19.3 ac.)

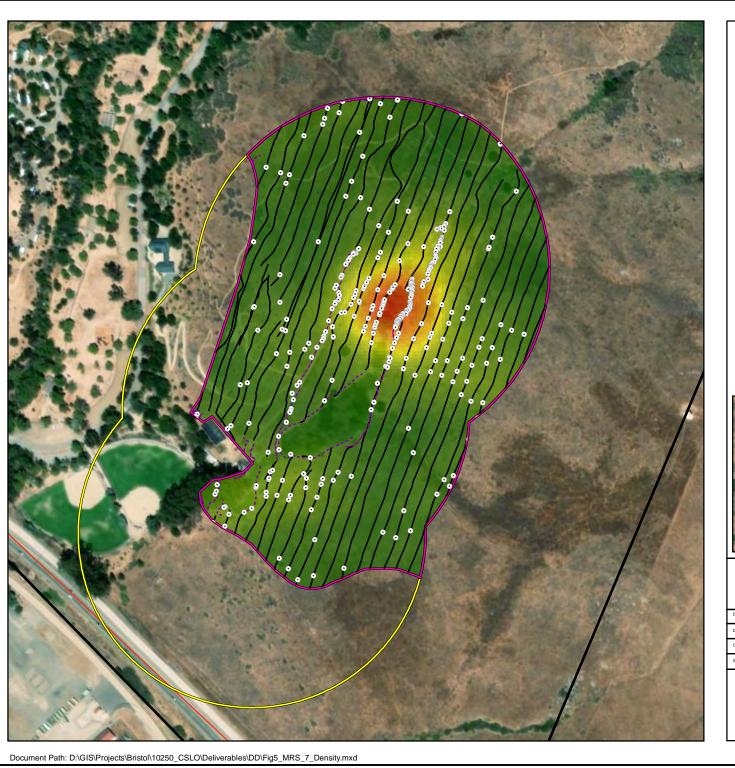
CSLO FUDS Boundary







US Army Corps of Engineers. Los Angeles District



Camp San Luis Obispo MRS 07 **Decision Document** San Luis Obispo County, California

Figure 5

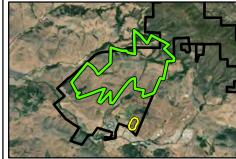
Anomaly Density for MRS 07

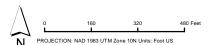
Legend

- Geophysical Targets
- ---- Analog Geophysical Transects
- DGM Transects
 - MRS 07 High Density Area
- CSLO FUDS Boundary
- MRS 07 Non-Impacted Area
 - State Route 1

Estimated Density from Kriging (Anomalies per Ac.)

Mean Anomaly Density per Acre: 42.42 Total Estimated Targets: 2,165





DESIGNED BY:	JS		Figure 5	FINAL
DRAWN BY:	JS	SCALE:	As Shown	PROJ NO: 10250 CSLO RI/FS
CHECKED BY:	JS	DATE:	4/9/2020	
SUBMITTED BY: BH		FILE:	Fig5_MRS_7	Density





Figure 6: Conceptual Site Exposure Model, Munitions Response Sites 07 High Density Area

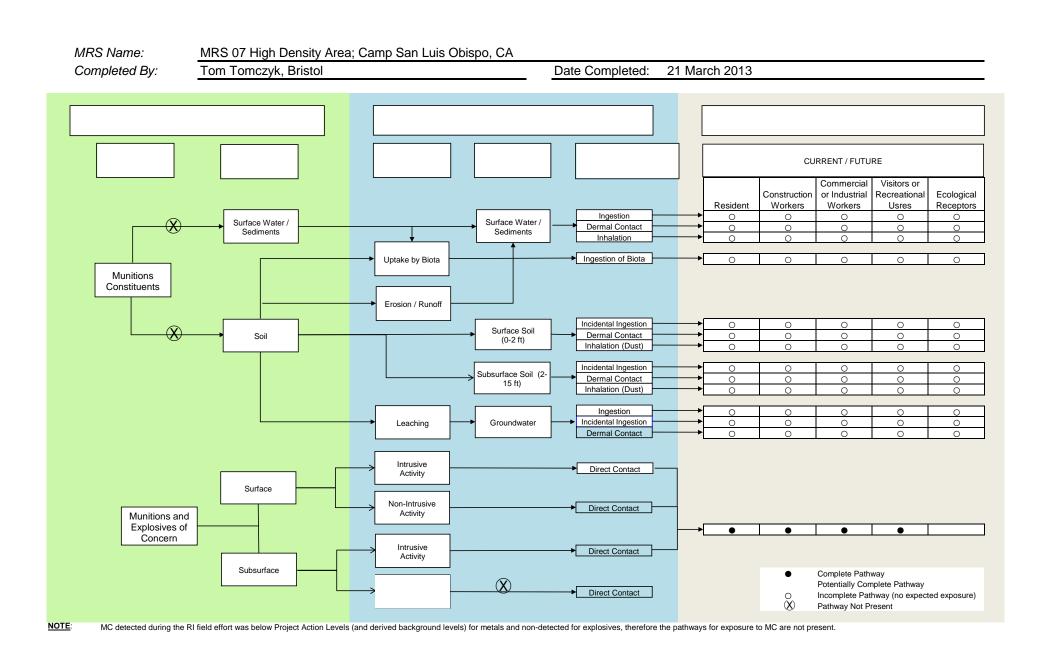
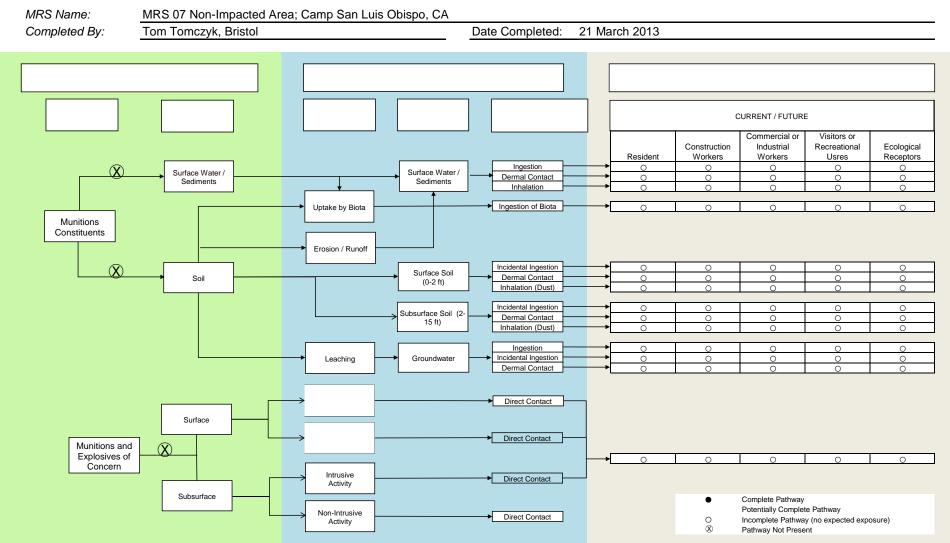


Figure 7: Conceptual Site Exposure Model, Munitions Response Sites 07 Non-Impacted Area



Note: MC detected during the RI field effort was below Project Action Levels (and derived background levels) for metals and non-detected for explosives, therefore the pathways for exposure to MC are not present.

MEC was not encountered during the RI field effort. Based on RI field effort results, the pathways for exposure to MEC are not present.

Attachment 3 Administrative Record Index

Administrative Record File Document Index Camp San Luis Obispo, Grenade Courts 25 and 26 (MRS07) - MMRP Project FUDS Project No. J09CA203107

			: 020::0,0	Ct NO. 303CA203107					
ARIMS	File Name	Document Title/Description	Author(s)	Author Affiliation	Recipient(s)	Date	Approx No. of Pages	Redacted	Location
01 - Site	Management Records								
	01 - Correspondence								
200-1e	J09CA203105 01.01 0501 a.pdf	Review Comments for Draft Preliminary Assessment	Briggs, Roger	CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD	Fabersunne, Mikos (CALIFORNIA DEPARTMENT OF TOXIC SUBSTANCES CONTROL)	11/16/1995	5	No	Administrative Record for Project J09CA203105 Volume 1
200-1e	J09CA203105_01.01_0502_a.pdf	Transmittal of Comments on the Preliminary Assessment	Fabersunne, Mikos	CALIFORNIA DEPARTMENT OF TOXIC SUBSTANCES CONTROL	Wells, Mike (MILITARY DEPARTMENT, OFFICE OF THE ADJUTANT GENERAL - SACRAMENTO)	12/29/1995	2		Administrative Record for Project J09CA203105 Volume 1
200-1e	J09CA203105_01.01_0517_a.pdf	Review Comments for the Preliminary Assessment Report	Briggs, Roger	CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD	DEPARTMENT OF TOXIC SUBSTANCE CONTROL	8/23/1996	6	No	Administrative Record for Project J09CA203105 Volume 1
200-1e	J09CA203105_01.01_0524_a.pdf	Owner for Each Property Should Participate in Upcoming Technical Project Planning Process	Walker, Ed	CALIFORNIA DEPARTMENT OF TOXIC SUBSTANCES CONTROL	Tran, Tawny (LOS ANGELES DISTRICT (CESPL))	1/31/2006	1	No	Administrative Record for Project J09CA203105 Volume 1
200-1e	J09CA203105 01.01 0526 a.pdf	Transmittal of the Draft Final TPP Memorandum to Regulator	Tran, Tawny	USACE, LOS ANGELES DISTRICT (CESPL)	Walker, Ed (CALIFORNIA DEPARTMENT OF TOXIC SUBSTANCES CONTROL)	3/3/2006	1	No	Administrative Record for Project J09CA203105 Volume 1
200-1e	J09CA203105_01.01_0530_a.pdf	DTSC Review of Technical Project Planning Memorandum	Walker, Ed	CALIFORNIA DEPARTMENT OF TOXIC SUBSTANCES CONTROL	Tran, Tawny (LOS ANGELES DISTRICT (CESPL))	//	4	No	Administrative Record for Project J09CA203105 Volume 1
200-1e	J09CA203105_01.01_0535_a.pdf	DTSC Agrees With Final TPP Memorandum	Walker, Ed	CALIFORNIA DEPARTMENT OF TOXIC SUBSTANCES CONTROL	Tran, Tawny (LOS ANGELES DISTRICT (CESPL))	10/19/2006	1	No	Administrative Record for Project J09CA203105 Volume 1
200-1e	J09CA203105 01.01 0537 a.pdf	Transmittal of Draft Site Specific Work Plan to Regulator	Tran, Tawny	USACE, LOS ANGELES DISTRICT (CESPL)	Walker, Ed (CALIFORNIA DEPARTMENT OF TOXIC SUBSTANCES CONTROL)	11/29/2006	1	No	Administrative Record for Project J09CA203105 Volume 1
200-1e	J09CA203105_01.01_0538_a.pdf	DTSC Not Intending to Move Sample Points	Walker, Ed	CALIFORNIA DEPARTMENT OF TOXIC SUBSTANCES CONTROL	Tran, Tawny (LOS ANGELES DISTRICT (CESPL))	1/23/2007	4	No	Administrative Record for Project J09CA203105 Volume 1
200-1e	J09CA203105_01.01_0541_a.pdf	DTSC Forwarding Shape Files	Walker, Ed	CALIFORNIA DEPARTMENT OF TOXIC SUBSTANCES CONTROL	Tran, Tawny (LOS ANGELES DISTRICT (CESPL))	3/1/2007	2	No	Administrative Record for Project J09CA203105 Volume 1
200-1e	J09CA203105 01.01 0542 a.pdf	Transmittal of Final Site Specific Work Plan to Regulator	Tran, Tawny	USACE, LOS ANGELES DISTRICT (CESPL)	Walker, Ed (CALIFORNIA DEPARTMENT OF TOXIC SUBSTANCES CONTROL)	4/11/2007	1	No	Administrative Record for Project J09CA203105 Volume 1
200-1e	J09CA203105 01.01 0549 a.pdf	DTSC Review of Draft Site Specific Work Plan	Walker, Ed	CALIFORNIA DEPARTMENT OF TOXIC SUBSTANCES CONTROL	Tran, Tawny (LOS ANGELES DISTRICT (CESPL))	1/11/2007	2	No	Administrative Record for Project J09CA203105 Volume 1
1200C PERM	J09CA203105_01.01_0552_a.pdf	DTSC Comments on the Draft Final Site Inspection Report	Walker, Ed	CALIFORNIA DEPARTMENT OF TOXIC SUBSTANCES CONTROL	Godard, Lloyd (LOS ANGELES DISTRICT (CESPL))	10/16/2007	3	No	Administrative Record for Project J09CA203105 Volume 1
1200C PERM	J09CA203105 01.01 0553 a.pdf	USACE Response to Comments on the Draft Final Site Inspection Report	Godard, Lloyd	USACE, LOS ANGELES DISTRICT (CESPL)	Walker, Ed (CALIFORNIA DEPARTMENT OF TOXIC SUBSTANCES CONTROL)	7/10/2008	3	No	Administrative Record for Project J09CA203105 Volume 1
1200C PERM	J09CA203105 01.01 0554 a.pdf	Transmittal of the Final Site Inspection Report to DTSC	Godard, Lloyd	USACE, LOS ANGELES DISTRICT (CESPL)	Diebert, Donn (CALIFORNIA DEPARTMENT OF TOXIC SUBSTANCES CONTROL); Walker, Ed (CALIFORNIA DEPARTMENT OF TOXIC SUBSTANCES CONTROL)	7/10/2008	2	No	Administrative Record for Project J09CA203105 Volume 1
1200C PERM	J09CA203105 01.01 0555 a.pdf	Transmittal of the Final Site Inspection Report to the U.S. Environmental Protection Agency	Godard, Lloyd	USACE, LOS ANGELES DISTRICT (CESPL)	Hamill, John (US ENVIRONMENTAL PROTECTION AGENCY, REGION 9)	7/10/2008	1	No	Administrative Record for Project J09CA203105 Volume 1
1200C PERM	J09CA203105_01.01_0556_a.pdf	Transmittal of the Revised Inventory Project Report and the Realignment of Project 05 into Two New Projects	Armentrout, Jeffery	USACE, LOS ANGELES DISTRICT (CESPL)	Walker, Ed (CALIFORNIA DEPARTMENT OF TOXIC SUBSTANCES CONTROL)	11/7/2013	1	No	Administrative Record for Project J09CA203105 Volume 1

ARIMS	File Name	Document Title/Description	Author(s)	Author Affiliation	Recipient(s)	Date	Approx No. of Pages	Redacted	Location
	02 - Archive Search Reports						•		
200-1e	J09CA203105 01.02 0500 a.pdf	Final ASR for Camp San Luis Obispo	USACE	USACE, ROCK ISLAND DISTRICT	PUBLIC	8/6/1998	312	Yes	Administrative Record for Project J09CA203105 Volume 1
200-1e	J09CA203105_01.02_0501_a.pdf	Preliminary Historical Records Review	USACE	USACE, ST. LOUIS DISTRICT	PUBLIC	6/11/2007	880	No	Administrative Record for Project J09CA203105 Volume 1
200-1e	J09CA203105 01.02 0502 a.pdf	ASR Supplement for Camp San Luis Obispo	USACE	USACE, ROCK ISLAND DISTRICT	PUBLIC	11/26/2004	53	No	Administrative Record for Project J09CA203105 Volume 2
	06 - Reference Documents								
200-1e	J09CA203105 01.06 0504 a.pdf	Preliminary Assessment Report	GEOSYSTEM CONSULTANTS, INC.	GEOSYSTEM CONSULTANTS, INC.	DIVISION OF THE STATE ARCHITECT	5//1996	349	No	Administrative Record for Project J09CA203105 Volume 2
	08 - Inventory Project Reports (INPR	8)							
1200C PERM	J09CA203107_01.08_0500_a.pdf	Revised Inventory Project Report Packet	Arocho, Julio	USACE, SOUTH PACIFIC DIVISION (CESPD)	USACE, LOS ANGELES DISTRICT (CESPL)	10/1/2013	22	No	Volume 1
200-1e	J09CA203105 01.08 0500 a.pdf	South Pacific Division Authorizing HTRW and OE Projects	Madsen, Peter	USACE, SOUTH PACIFIC DIVISION (CESPD)	Commander, (USACE - WASHINGTON, DC (HEADQUARTERS)); Commander, (USACE - HUNTSVILLE DIVISION)	4/28/2000	2	No	Administrative Record for Project J09CA203105 Volume 2
200-1e	J09CA203105 01.08 0506 a.pdf	Findings and Determination of Eligibility	Madsen, Peter	USACE, SOUTH PACIFIC DIVISION (CESPD)	Unknown	4/26/2000	2	No	Administrative Record for Project J09CA203105 Volume 2
1200C PERM	J09CA203105 01.08 0507 a.pdf	Site Survey Summary Sheet	USACE	USACE	Unknown	3/29/1999	5	No	Administrative Record for Project J09CA203105 Volume 2
1200C PERM	J09CA203105_01.08_0511_a.pdf	05 OE Project Summary Sheet	USACE	USACE	Unknown	3/29/1999	1	No	Administrative Record for Project J09CA203105 Volume 2
1200C PERM	J09CA203105 01.08 0532 a.pdf	Revised Inventory Project Report Packet	USACE	USACE, LOS ANGELES DISTRICT (CESPL)	Unknown	10/1/2013	22	No	Administrative Record for Project J09CA203105 Volume 2
1200C PERM	J09CA203105 01.08 0533 a.pdf	Los Angeles District Recommending Approval of Inventory Project Report	Castens, Debra	USACE, LOS ANGELES DISTRICT (CESPL)	USACE, SOUTH PACIFIC DIVISION (CESPD)	9/21/1999	1	No	Administrative Record for Project J09CA203105 Volume 2
	09 - Abbreviated PAs (APA), Prelimi	nary Assessments (PA), and Site Inspection (SI	Reports [and any other repor	t done prior to RI, FS, PP, DD), and removal or remedial activities]				
1200C PERM	J09CA203105_01.09_0524_a.pdf	Final Site Inspection Report for Former Camp San Luis Obispo (J09CA203105)	USACE	USACE, LOS ANGELES DISTRICT (CESPL)	Unknown	9/27/2007	458	Yes	Administrative Record for Project J09CA203105 Volume 2
	12 - Meeting Documents								
200-1e	J09CA203105_01.12_0500_a.pdf	Final Technical Project Planning Memorandum & Associated Documentation for Former Camp San Luis Obispo (J09CA203105)	USACE	USACE, LOS ANGELES DISTRICT (CESPL)	PUBLIC	10/12/2006	98	No	Administrative Record for Project J09CA203105 Volume 2
	14 - Site Assessment Work Plans								
200-1e	J09CA203105_01.14_0500_a.pdf	Final Site Specific Work Plan Addendum to the Programmatic Work Plan for Former Camp San Luis Obispo (J09CA203105)	USACE	USACE, LOS ANGELES DISTRICT (CESPL)	PUBLIC	4/3/2007	153	No	Administrative Record for Project J09CA203105 Volume 3
02 - Rem	noval Response Records								
	13 - Removal Response Reports, Ta	nk Closure Reports/Removal Action Reports		<u> </u>					T
200-1e	J09CA203105_02.13_0502_a.pdf	Final Removal Action Report for Camp San Luis Obispo (El Chorro Regional Park)	USACE	USACE - HUNTSVILLE DIVISION	PUBLIC	4//1992	328	No	Administrative Record for Project J09CA203105 Volume 3
	nedial Investigation (RI) Records 01 - Correspondence								
200-1e	J09CA203105_03.01_0500_a.pdf	Study Phase	Armentrout, Jeffery	USACE, LOS ANGELES DISTRICT (CESPL)	Walker, Ed (CALIFORNIA DEPARTMENT OF TOXIC SUBSTANCES CONTROL)	5/28/2010	1	No	Administrative Record for Project J09CA203105 Volume 4
200-1e	J09CA203105 03.01 0501 a.pdf	Study Phase	Armentrout, Jeffery	USACE, LOS ANGELES DISTRICT (CESPL)	Tan, Lida (UNITED STATES ENVIRONMENTAL PROTECTION AGENCY)	5/28/2010	1	No	Administrative Record for Project J09CA203105 Volume 4
200-1e	J09CA203105 03.01 0502 a.pdf	Invitation to 2nd Technical Project Planning Meeting for Remedial Investigation/Feasibility Study Phase	Armentrout, Jeffery	USACE, LOS ANGELES DISTRICT (CESPL)	Walker, Ed (CALIFORNIA DEPARTMENT OF TOXIC SUBSTANCES CONTROL)	11/2/2010	1	No	Administrative Record for Project J09CA203105 Volume 4
200-1e	J09CA203105_03.01_0504_a.pdf	Transmittal of Final Remedial Investigation/Feasibility Study Work Plan	Armentrout, Jeffery	USACE, LOS ANGELES DISTRICT (CESPL)	Walker, Ed (CALIFORNIA DEPARTMENT OF TOXIC SUBSTANCES CONTROL)	9/2/2011	1	No	Administrative Record for Project J09CA203105 Volume 4

ARIMS	File Name	Document Title/Description	Author(s)	Author Affiliation	Recipient(s)	Date	Approx No. of Pages	Redacted	Location
200-1e	J09CA203105_03.01_0510_a.pdf	Transmittal of Draft Final Remedial Investigation/Feasibility Study Report and Invitation to Technical Project Planning Meeting	Armentrout, Jeffery	USACE, LOS ANGELES DISTRICT (CESPL)	Walker, Ed (CALIFORNIA DEPARTMENT OF TOXIC SUBSTANCES CONTROL)	6/18/2013	1	No	Administrative Record for Project J09CA203105 Volume 4
200-1e	J09CA203105_03.01_0511_a.pdf	Invitation to Stakeholder Meeting to Discuss the Results of the Remedial Investigation Field Work	Armentrout, Jeffery	USACE, LOS ANGELES DISTRICT (CESPL)	Tatoian-Cain, Carolyn (CALIFORNIA DEPARTMENT OF TOXIC SUBSTANCES CONTROL)	6/18/2013	1	No	Administrative Record for Project J09CA203105 Volume 4
200-1e	J09CA203105 03.01 0512 a.pdf	Invitation to Stakeholder Meeting to Discuss the Results of the Remedial Investigation Field Work	Armentrout, Jeffery	USACE, LOS ANGELES DISTRICT (CESPL)	Huang, Judy (U.S. ENVIRONMENTAL PROTECTION AGENCY - REGION 9)	6/18/2013	1	No	Administrative Record for Project J09CA203105 Volume 4
1200C PERM	J09CA203105 03.01 0513 a.pdf	Invitation to First Technical Project Planning Meeting for the Treatability Study	USACE	USACE, LOS ANGELES DISTRICT (CESPL)	Walker, Ed (CALIFORNIA DEPARTMENT OF TOXIC SUBSTANCES CONTROL); Racca, Roman (CALIFORNIA DEPARTMENT OF TOXIC SUBSTANCES CONTROL)	4/7/2014	2	No	Administrative Record for Project J09CA203105 Volume 4
1200C PERM	J09CA203105_03.01_0514_a.pdf	Transmittal of the Draft Uniform Federal Policy- Quality Assurance Project Plan (UFP-QAPP)	USACE	USACE, LOS ANGELES DISTRICT (CESPL)	Racca, Roman (CALIFORNIA DEPARTMENT OF TOXIC SUBSTANCES CONTROL); Walker, Ed (CALIFORNIA DEPARTMENT OF TOXIC SUBSTANCES CONTROL)	5/9/2014	2	No	Administrative Record for Project J09CA203105 Volume 4
1200C PERM	J09CA203105_03.01_0515_a.pdf	Transmittal of the Final Uniform Federal Policy- Quality Assurance Project Plan (UFP-QAPP)	USACE	USACE, LOS ANGELES DISTRICT (CESPL)	Racca, Roman (CALIFORNIA DEPARTMENT OF TOXIC SUBSTANCES CONTROL); Walker, Ed (CALIFORNIA DEPARTMENT OF TOXIC SUBSTANCES CONTROL)	6/30/2014	2	No	Administrative Record for Project J09CA203105 Volume 4
1200C PERM	J09CA203105 03.01 0516 a.pdf	Transmittal of the Draft-Final Treatability Study Report for Review and Comment	USACE	USACE, LOS ANGELES DISTRICT (CESPL)	Walker, Ed (CALIFORNIA DEPARTMENT OF TOXIC SUBSTANCES CONTROL); Racca, Roman (CALIFORNIA DEPARTMENT OF TOXIC SUBSTANCES CONTROL)	7/15/2015	2	No	Administrative Record for Project J09CA203105 Volume 4
	04 - Work Plans, Site Safety & Health	n Plans, Progress Reports, UFP-QAPPs, Sampli	ng and Analysis Data and Pla	ins					
200-1e	J09CA203105 03.04 0503 a.pdf	Final Remedial Investigation/Feasibility Study Work Plan	USACE	USACE, LOS ANGELES DISTRICT (CESPL)	Unknown	8//2011	1278	Yes	Administrative Record for Project J09CA203105 Volume 4
200-1e	J09CA203105 03.04 0504 a.pdf	Explosive Site Plan for Remedial Investigation at Camp San Luis Obispo	USACE	USACE, HUNTSVILLE ENGINEERING AND SUPPORT CENTER (CEHNC)	Unknown	8/31/2011	18	No	Administrative Record for Project J09CA203105 Volume 4
200-1e	J09CA203105_03.04_0505_a.pdf	Final Uniform Federal Policy (UFP) Quality Assurance Project Plan (QAPP) for the Treatability Study	USACE	USACE, LOS ANGELES DISTRICT (CESPL)	Unknown	6//2014	603	Yes	Administrative Record for Project J09CA203105 Volume 5
	10 - RI Reports (and other RI related	reports)							
200-1e	J09CA203105_03.10_0502_a.pdf	Final Treatability Study Report for Former Camp San Luis Obispo	USACE	USACE, LOS ANGELES DISTRICT (CESPL)	Unknown	10//2015	265	Yes	Administrative Record for Project J09CA203105 Volume 5
	12 - Meeting Documents								
200-1e	J09CA203105_03.12_0500_a.pdf	Camp San Luis Obispo Remedial Investigation/Feasibility Study Technical Project Planning Meeting #1	USACE	USACE, LOS ANGELES DISTRICT (CESPL)	Unknown	6/16/2010	68	No	Administrative Record for Project J09CA203105 Volume 5
200-1e	J09CA203105 03.12 0501 a.pdf	Camp San Luis Obispo Remedial Investigation/Feasibility Study Technical Project Planning Meeting #2	USACE	USACE, LOS ANGELES DISTRICT (CESPL)	Unknown	11/18/2010	139	No	Administrative Record for Project J09CA203105 Volume 5
04 - Fea	sibility Study (FS) Records								
	09 - FS Reports	T	1	Luc			1		
1200C PERM	J09CA203107 04.09 0001 a.pdf J09CA203105 04.09 0001 a.pdf	Final Remedial Investigation/Feasibility Study Report	U.S. ARMY CORPS OF ENGINEERS	U.S. ARMY CORPS OF ENGINEERS, LOS ANGELES DISTRICT	Unknown	9//2018	1868	No	Administrative Record for Project J09CA203105 Volume 6
08 - Pub	lic Affairs/Community Relations Rec	ords							
—	01 - Correspondence	T	l e	STATE OF CALIFORNIA,	1		1	1	Administrative Desert for
200-1e	J09CA203105 08.01 0500 a.pdf	Determination That There is No DERA Project	Salvato, C.J.	DEPARTMENT OF CORRECTIONS	Townsend, Paul (LOS ANGELES DISTRICT (CESPL))	3/23/1987	1	No	Administrative Record for Project J09CA203105 Volume 6
200-1e	J09CA203105 08.01 0501 a.pdf	No Intention to Request a DERA Project	Guenther, Keith	UNITED STATES DEPARTMENT OF AGRICULTURE	Townsend, Paul (LOS ANGELES DISTRICT (CESPL))	1/20/1987	1	No	Administrative Record for Project J09CA203105 Volume 6

ARIMS	File Name	Document Title/Description	Author(s)	Author Affiliation	Recipient(s)	Date	Approx No. of Pages	Redacted	Location
200-1e	J09CA203105_08.01_0502_a.pdf	Site Inspection to be Performed Following Recent Discovery of Unexploded Ordnance	Tran, Tawny	USACE, LOS ANGELES DISTRICT (CESPL)	Jarvis, Mary (SAN LUIS OBISPO COUNTY SCHOOLS, OFFICE OF EDUCATION)	11/29/2005	1	No	Administrative Record for Project J09CA203105 Volume 6
200-1e	J09CA203105 08.01 0503 a.pdf	Fish and Game Property Being Used as a Shooting Range	Ragsdale, David	CALIFORNIA POLYTECHNIC STATE UNIVERSITY	Tran, Tawny (LOS ANGELES DISTRICT (CESPL))	1/19/2006	2	No	Administrative Record for Project J09CA203105 Volume 6
200-1e	J09CA203105 08.01 0504 a.pdf	Invitation for Upcoming Site Inspection Meeting	Tran, Tawny	USACE, LOS ANGELES DISTRICT (CESPL)	Jarvis, Mary (SAN LUIS OBISPO COUNTY SCHOOLS, OFFICE OF EDUCATION)	1/23/2006	1	No	Administrative Record for Project J09CA203105 Volume 6
200-1e	J09CA203105_08.01_0508_a.pdf	Transmittal of Advance Information Packet for Review Prior to Site Inspection Meeting	Tran, Tawny	USACE, LOS ANGELES DISTRICT (CESPL)	Maduli, Ed (CUESTA COLLEGE, SAN LUIS OBISPO COMMUNITY COLLEGE DISTRICT)	1/27/2006	2	No	Administrative Record for Project J09CA203105 Volume 6
200-1e	J09CA203105_08.01_0510_a.pdf	Contact Information for San Luis Obispo County Schools	Maddalena, Caryn	SAN LUIS OBISPO COUNTY PARKS	Tran, Tawny (LOS ANGELES DISTRICT (CESPL))	1/31/2006	1	No	Administrative Record for Project J09CA203105 Volume 6
200-1e	J09CA203105 08.01 0511 a.pdf	Forest Service Will Attend Meeting	Tran, Tawny	USACE, LOS ANGELES DISTRICT (CESPL)	Crain, Michael (LOS PADRES NATIONAL FOREST SANTA LUCIA RANGER DISTRICT); Walker, Ed (CALIFORNIA DEPARTMENT OF TOXIC SUBSTANCES CONTROL)	2/2/2006	2	No	Administrative Record for Project J09CA203105 Volume 6
200-1e	J09CA203105 08.01 0512 a.pdf	Active National Guard Property Not Eligible for Site Inspection	Tran, Tawny	USACE, LOS ANGELES DISTRICT (CESPL)	Holder, Michael (CALIFORNIA ARMY NATIONAL GUARD)	2/3/2006	2	No	Administrative Record for Project J09CA203105 Volume 6
200-1e	J09CA203105 08.01 0513 a.pdf	Los Padres National Forest's Tribal Liaison (Chumash) Contact Information	Crain, Michael	LOS PADRES NATIONAL FOREST SANTA LUCIA RANGER DISTRICT	Tran, Tawny (LOS ANGELES DISTRICT (CESPL))	2/7/2006	1	No	Administrative Record for Project J09CA203105 Volume 6
200-1e	J09CA203105_08.01_0514_a.pdf	Fenced Off Area Erected After 1992 UXO Cleanup	Philbin, Denis	SAN LUIS OBISPO COUNTY PARKS	Tran, Tawny (LOS ANGELES DISTRICT (CESPL))	2/10/2006	1	No	Administrative Record for Project J09CA203105 Volume 6
200-1e	J09CA203105 08.01 0515 a.pdf	Draft Technical Project Planning (TPP) Memorandum Reviewed and Concur	Ragsdale, David	CALIFORNIA POLYTECHNIC STATE UNIVERSITY	Tran, Tawny (LOS ANGELES DISTRICT (CESPL))	3/8/2006	1	No	Administrative Record for Project J09CA203105 Volume 6
200-1e	J09CA203105 08.01 0516 a.pdf	Property Used as Grenade Court During DoD Occupancy	Tran, Tawny	USACE, LOS ANGELES DISTRICT (CESPL)	Maduli, Ed (CUESTA COLLEGE, SAN LUIS OBISPO COMMUNITY COLLEGE DISTRICT)	3/9/2006	1		Administrative Record for Project J09CA203105 Volume 6
200-1e	J09CA203105_08.01_0517_a.pdf	Transmittal of Final TPP Memorandum to Various Stakeholders	Tran, Tawny	USACE, LOS ANGELES DISTRICT (CESPL)	Various	3/6/2006	4	No	Administrative Record for Project J09CA203105 Volume 6
200-1e	J09CA203105 08.01 0520 a.pdf	Bomb Task Force was Funded by Memorandum of Understanding	Tran, Tawny	USACE, LOS ANGELES DISTRICT (CESPL)	Mulhall, Jim (SAN LUIS OBISPO SHERRIFF DEPARTMENT)	4/10/2006	3	No	Administrative Record for Project J09CA203105 Volume 6
200-1e	J09CA203105 08.01 0522 a.pdf	Transmittal of Draft Site Specific Work Plan (SSWP) to Stakeholders	Tran, Tawny	USACE, LOS ANGELES DISTRICT (CESPL)	Various	11/29/2006	5	No	Administrative Record for Project J09CA203105 Volume 6
200-1e	J09CA203105_08.01_0523_a.pdf	Cuesta College Concurs With Proposed Technical Approach	Maduli, Ed	CUESTA COLLEGE, SAN LUIS OBISPO COMMUNITY COLLEGE DISTRICT	Tran, Tawny (LOS ANGELES DISTRICT (CESPL))	11/2/2006	1	No	Administrative Record for Project J09CA203105 Volume 6
200-1e	J09CA203105_08.01_0524_a.pdf	Forest Service Areas of Concern	Tran, Tawny	USACE, LOS ANGELES DISTRICT (CESPL)	Martinez, Tony (U.S. DEPARTMENT OF AGRICULTURE - FOREST SERVICE)	12/18/2006	2	No	Administrative Record for Project J09CA203105 Volume 6
200-1e	J09CA203105 08.01 0525 a.pdf	Forest Service Review and Comments on Draft Site Specific Work Plan	Phelps, Kathleen	LOS PADRES NATIONAL FOREST SANTA LUCIA RANGER DISTRICT	Tran, Tawny (LOS ANGELES DISTRICT (CESPL))	12/19/2006	2	No	Administrative Record for Project J09CA203105 Volume 6
200-1e	J09CA203105_08.01_0526_a.pdf	Transmittal of Requested Shape Files for Project Boundary	Tran, Tawny	USACE, LOS ANGELES DISTRICT (CESPL)	Martinez, Tony (U.S. DEPARTMENT OF AGRICULTURE - FOREST SERVICE)	12/19/2006	1	No	Administrative Record for Project J09CA203105 Volume 6
200-1e	J09CA203105_08.01_0527_a.pdf	Transmittal of Final Site Specific Work Plan to Stakeholders	Tran, Tawny	USACE, LOS ANGELES DISTRICT (CESPL)	Various	4/11/2007	7	No	Administrative Record for Project J09CA203105 Volume 6
200-1e	J09CA203105 08.01 0530 a.pdf	Transmittal of Draft Technical Project Planning (TPP) Memorandum	Tran, Tawny	USACE, LOS ANGELES DISTRICT (CESPL)	Various, (STAKEHOLDERS); Walker, Ed (CALIFORNIA DEPARTMENT OF TOXIC SUBSTANCES CONTROL)	3/8/2006	1	No	Administrative Record for Project J09CA203105 Volume 6
200-1e	J09CA203105_08.01_0531_a.pdf	Teleconference Set with Goal of Team Concurrence	Tran, Tawny	USACE, LOS ANGELES DISTRICT (CESPL)	Various, (STAKEHOLDERS)	9/12/2006	2	No	Administrative Record for Project J09CA203105 Volume 6
200-1e	J09CA203105_08.01_0532_a.pdf	Last Minute Changes Delays Scheduled Field Work	Tran, Tawny	USACE, LOS ANGELES DISTRICT (CESPL)	Various, (STAKEHOLDERS)	2/20/2007	2	No	Administrative Record for Project J09CA203105 Volume 6

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200-1e	J09CA203105_08.01_0533_a.pdf	Advance Notice to Regulator and Stakeholders that Field Work will Begin the Week of April 30th	Tran, Tawny	USACE, LOS ANGELES DISTRICT (CESPL)	Various, (STAKEHOLDERS)	4/12/2007	3		Administrative Record for Project J09CA203105 Volume 6
200-1e	J09CA203105 08.01 0534 a.pdf	Request for Ordnance Investigation of Rancho El Chorro Property	Canale, Salvatore; Gurican, Joseph	SAN LUIS OBISPO COUNTY - OFFICE OF EDUCATION	Townsend, Paul (LOS ANGELES DISTRICT (CESPL))	6/22/1987	8		Administrative Record for Project J09CA203105 Volume 6
200-1e	J09CA203105 08.01 0543 a.pdf	Invitation to 1st Technical Project Planning Meeting for Remedial Investigation/Feasibility Study Phase	Armentrout, Jeffery	USACE, LOS ANGELES DISTRICT (CESPL)	Dumouchelle, Richard (SAN LUIS OBISPO SPORTSMAN'S ASSOCIATION)	5/28/2010	1		Administrative Record for Project J09CA203105 Volume 6
200-1e	J09CA203105_08.01_0544_a.pdf	Invitation to 1st Technical Project Planning Meeting for Remedial Investigation/Feasibility Study Phase	Armentrout, Jeffery	USACE, LOS ANGELES DISTRICT (CESPL)	Hoover, Debbie (SAN LUIS OBISPO BOTANICAL GARDEN)	5/28/2010	1		Administrative Record for Project J09CA203105 Volume 6
200-1e	J09CA203105_08.01_0545_a.pdf	Invitation to 1st Technical Project Planning Meeting for Remedial Investigation/Feasibility Study Phase	Armentrout, Jeffery	USACE, LOS ANGELES DISTRICT (CESPL)	Lee, Paul (SAN LUIS OBISPO COUNTY FIRE DEPARTMENT)	5/28/2010	1		Administrative Record for Project J09CA203105 Volume 6
200-1e	J09CA203105 08.01 0546 a.pdf	Invitation to 1st Technical Project Planning Meeting for Remedial Investigation/Feasibility Study Phase	Armentrout, Jeffery	USACE, LOS ANGELES DISTRICT (CESPL)	Phelps, Kathleen (LOS PADRES NATIONAL FOREST SANTA LUCIA RANGER DISTRICT)	5/28/2010	1		Administrative Record for Project J09CA203105 Volume 6
200-1e	J09CA203105_08.01_0547_a.pdf	Invitation to 1st Technical Project Planning Meeting for Remedial Investigation/Feasibility Study Phase	Armentrout, Jeffery	USACE, LOS ANGELES DISTRICT (CESPL)	Philbin, Denis (SAN LUIS OBISPO COUNTY PARKS)	5/28/2010	1		Administrative Record for Project J09CA203105 Volume 6
200-1e	J09CA203105_08.01_0548_a.pdf	Invitation to 1st Technical Project Planning Meeting for Remedial Investigation/Feasibility Study Phase	Armentrout, Jeffery	USACE, LOS ANGELES DISTRICT (CESPL)	Richardson, April (CITY OF SAN LUIS OBISPO)	5/28/2010	1	No	Administrative Record for Project J09CA203105 Volume 6
200-1e	J09CA203105 08.01 0549 a.pdf	Invitation to 1st Technical Project Planning Meeting for Remedial Investigation/Feasibility Study Phase	Armentrout, Jeffery	USACE, LOS ANGELES DISTRICT (CESPL)	Ragsdale, David (CALIFORNIA POLYTECHNIC STATE UNIVERSITY)	5/28/2010	1		Administrative Record for Project J09CA203105 Volume 6
200-1e	J09CA203105_08.01_0550_a.pdf	Invitation to 1st Technical Project Planning Meeting for Remedial Investigation/Feasibility Study Phase	Armentrout, Jeffery	USACE, LOS ANGELES DISTRICT (CESPL)	Royer, Celeste (RANCHO EL CHORRO OUTDOOR SCHOOL)	5/28/2010	1		Administrative Record for Project J09CA203105 Volume 6
200-1e	J09CA203105_08.01_0551_a.pdf	Invitation to 1st Technical Project Planning Meeting for Remedial Investigation/Feasibility Study Phase	Armentrout, Jeffery	USACE, LOS ANGELES DISTRICT (CESPL)	SAN LUIS OBISPO FFS - STATION 12	5/28/2010	1		Administrative Record for Project J09CA203105 Volume 6
200-1e	J09CA203105 08.01 0552 a.pdf	Invitation to 1st Technical Project Planning Meeting for Remedial Investigation/Feasibility Study Phase	Armentrout, Jeffery	USACE, LOS ANGELES DISTRICT (CESPL)	Veneris, Phill (CAL FIRE SAN LUIS OBISPO COUNTY FIRE DEPARTMENT)	5/28/2010	1		Administrative Record for Project J09CA203105 Volume 6
200-1e	J09CA203105_08.01_0553_a.pdf	Invitation to 1st Technical Project Planning Meeting for Remedial Investigation/Feasibility Study Phase	Armentrout, Jeffery	USACE, LOS ANGELES DISTRICT (CESPL)	Walker, Dave (SAN LUIS OBISPO BOMB TASK FORCE)	5/28/2010	1		Administrative Record for Project J09CA203105 Volume 6
200-1e	J09CA203105_08.01_0554_a.pdf	Invitation to 1st Technical Project Planning Meeting for Remedial Investigation/Feasibility Study Phase	Armentrout, Jeffery	USACE, LOS ANGELES DISTRICT (CESPL)	Yetter, Bob (COUNTY OF SAN LUIS OBISPO)	5/28/2010	1	No	Administrative Record for Project J09CA203105 Volume 6
200-1e	J09CA203105 08.01 0555 a.pdf	Invitation to 2nd Technical Project Planning Meeting for Remedial Investigation/Feasibility Study Phase	Armentrout, Jeffery	USACE, LOS ANGELES DISTRICT (CESPL)	Bender, David (SAN LUIS OBISPO COUNTY, COURT & COMMUNITY SCHOOLS)	11/2/2010	1		Administrative Record for Project J09CA203105 Volume 6
200-1e	J09CA203105 08.01 0556 a.pdf	Invitation to 2nd Technical Project Planning Meeting for Remedial Investigation/Feasibility Study Phase	Armentrout, Jeffery	USACE, LOS ANGELES DISTRICT (CESPL)	Dumouchelle, Richard (SAN LUIS OBISPO SPORTSMAN'S ASSOCIATION)	11/2/2010	1		Administrative Record for Project J09CA203105 Volume 6
200-1e	J09CA203105_08.01_0557_a.pdf	Invitation to 2nd Technical Project Planning Meeting for Remedial Investigation/Feasibility Study Phase	Armentrout, Jeffery	USACE, LOS ANGELES DISTRICT (CESPL)	Hoover, Debbie (SAN LUIS OBISPO BOTANICAL GARDEN)	11/2/2010	1		Administrative Record for Project J09CA203105 Volume 6
200-1e	J09CA203105 08.01 0558 a.pdf	Invitation to 2nd Technical Project Planning Meeting for Remedial Investigation/Feasibility Study Phase	Armentrout, Jeffery	USACE, LOS ANGELES DISTRICT (CESPL)	Lee, Paul (SAN LUIS OBISPO COUNTY FIRE DEPARTMENT)	11/2/2010	1	No	Administrative Record for Project J09CA203105 Volume 6
200-1e	J09CA203105 08.01 0559 a.pdf	Invitation to 2nd Technical Project Planning Meeting for Remedial Investigation/Feasibility Study Phase	Armentrout, Jeffery	USACE, LOS ANGELES DISTRICT (CESPL)	Phelps, Kathleen (LOS PADRES NATIONAL FOREST SANTA LUCIA RANGER DISTRICT)	11/2/2010	1	No	Administrative Record for Project J09CA203105 Volume 6
200-1e	J09CA203105_08.01_0560_a.pdf	Invitation to 2nd Technical Project Planning Meeting for Remedial Investigation/Feasibility Study Phase	Armentrout, Jeffery	USACE, LOS ANGELES DISTRICT (CESPL)	Philbin, Denis (SAN LUIS OBISPO COUNTY PARKS)	11/2/2010	1		Administrative Record for Project J09CA203105 Volume 6
200-1e	J09CA203105 08.01 0561 a.pdf	Invitation to 2nd Technical Project Planning Meeting for Remedial Investigation/Feasibility Study Phase	Armentrout, Jeffery	USACE, LOS ANGELES DISTRICT (CESPL)	Ragsdale, David (CALIFORNIA POLYTECHNIC STATE UNIVERSITY)	11/2/2010	1	No	Administrative Record for Project J09CA203105 Volume 6
200-1e	J09CA203105 08.01 0562 a.pdf	Invitation to 2nd Technical Project Planning Meeting for Remedial Investigation/Feasibility Study Phase	Armentrout, Jeffery	USACE, LOS ANGELES DISTRICT (CESPL)	Richardson, April (CITY OF SAN LUIS OBISPO)	11/2/2010	1		Administrative Record for Project J09CA203105 Volume 6
200-1e	J09CA203105_08.01_0563_a.pdf	Invitation to 2nd Technical Project Planning Meeting for Remedial Investigation/Feasibility Study Phase	Armentrout, Jeffery	USACE, LOS ANGELES DISTRICT (CESPL)	Stafford, Bob (CALIFORNIA DEPARTMENT OF FISH AND GAME)	11/2/2010	1		Administrative Record for Project J09CA203105 Volume 6

ARIMS	File Name	Document Title/Description	Author(s)	Author Affiliation	Recipient(s)	Date	Approx No. of Pages	Redacted	Location
200-1e	J09CA203105_08.01_0564_a.pdf	Invitation to 2nd Technical Project Planning Meeting for Remedial Investigation/Feasibility Study Phase	Armentrout, Jeffery	USACE, LOS ANGELES DISTRICT (CESPL)	SAN LUIS OBISPO FFS - STATION 12	11/2/2010	1	No	Administrative Record for Project J09CA203105 Volume 6
200-1e	J09CA203105 08.01 0565 a.pdf	Invitation to 2nd Technical Project Planning Meeting for Remedial Investigation/Feasibility Study Phase	Armentrout, Jeffery	USACE, LOS ANGELES DISTRICT (CESPL)	Veneris, Phill (CAL FIRE SAN LUIS OBISPO COUNTY FIRE DEPARTMENT)	11/2/2010	1	No	Administrative Record for Project J09CA203105 Volume 6
200-1e	J09CA203105 08.01 0566 a.pdf	Invitation to 2nd Technical Project Planning Meeting for Remedial Investigation/Feasibility Study Phase	Armentrout, Jeffery	USACE, LOS ANGELES DISTRICT (CESPL)	Walker, Dave (SAN LUIS OBISPO BOMB TASK FORCE)	11/2/2010	1	No	Administrative Record for Project J09CA203105 Volume 6
200-1e	J09CA203105_08.01_0567_a.pdf	Invitation to 2nd Technical Project Planning Meeting for Remedial Investigation/Feasibility Study Phase	Armentrout, Jeffery	USACE, LOS ANGELES DISTRICT (CESPL)	Yetter, Bob (COUNTY OF SAN LUIS OBISPO)	11/2/2010	1	No	Administrative Record for Project J09CA203105 Volume 6
200-1e	J09CA203105_08.01_0568_a.pdf	Transmittal of Final Remedial Investigation/Feasibility Study Work Plan	Armentrout, Jeffery	USACE, LOS ANGELES DISTRICT (CESPL)	Bender, David (SAN LUIS OBISPO COUNTY, COURT & COMMUNITY SCHOOLS)	9/8/2011	1	No	Administrative Record for Project J09CA203105 Volume 6
200-1e	J09CA203105 08.01 0569 a.pdf	Transmittal of Final Remedial Investigation/Feasibility Study Work Plan	Armentrout, Jeffery	USACE, LOS ANGELES DISTRICT (CESPL)	Cooper, Shaun (SAN LUIS OBISPO COUNTY PARKS)	9/8/2011	1	No	Administrative Record for Project J09CA203105 Volume 6
200-1e	J09CA203105_08.01_0570_a.pdf	Transmittal of Final Remedial Investigation/Feasibility Study Work Plan	Armentrout, Jeffery	USACE, LOS ANGELES DISTRICT (CESPL)	Dumouchelle, Richard (SAN LUIS OBISPO SPORTSMAN'S ASSOCIATION)	9/2/2011	1	No	Administrative Record for Project J09CA203105 Volume 6
200-1e	J09CA203105_08.01_0571_a.pdf	Transmittal of Final Remedial Investigation/Feasibility Study Work Plan	Armentrout, Jeffery	USACE, LOS ANGELES DISTRICT (CESPL)	Lee, Paul (CAL FIRE SAN LUIS OBISPO COUNTY FIRE DEPARTMENT)	9/2/2011	1	No	Administrative Record for Project J09CA203105 Volume 6
200-1e	J09CA203105 08.01 0572 a.pdf	Transmittal of Final Remedial Investigation/Feasibility Study Work Plan	Armentrout, Jeffery	USACE, LOS ANGELES DISTRICT (CESPL)	Hoover, Debbie (SAN LUIS OBISPO BOTANICAL GARDEN)	9/2/2011	1	No	Administrative Record for Project J09CA203105 Volume 6
200-1e	J09CA203105_08.01_0573_a.pdf	Transmittal of Final Remedial Investigation/Feasibility Study Work Plan	Armentrout, Jeffery	USACE, LOS ANGELES DISTRICT (CESPL)	Oviatt, Kim (SAN LUISITO RANCH CO., LLC)	9/8/2011	1	No	Administrative Record for Project J09CA203105 Volume 6
200-1e	J09CA203105_08.01_0574_a.pdf	Transmittal of Final Remedial Investigation/Feasibility Study Work Plan	Armentrout, Jeffery	USACE, LOS ANGELES DISTRICT (CESPL)	Phelps, Kathleen (LOS PADRES NATIONAL FOREST SANTA LUCIA RANGER DISTRICT)	9/8/2011	1	No	Administrative Record for Project J09CA203105 Volume 6
200-1e	J09CA203105 08.01 0575 a.pdf	Transmittal of Final Remedial Investigation/Feasibility Study Work Plan	Armentrout, Jeffery	USACE, LOS ANGELES DISTRICT (CESPL)	Ragsdale, David (CALIFORNIA POLYTECHNIC STATE UNIVERSITY)	9/2/2011	1	No	Administrative Record for Project J09CA203105 Volume 6
200-1e	J09CA203105_08.01_0576_a.pdf	Transmittal of Final Remedial Investigation/Feasibility Study Work Plan	Armentrout, Jeffery	USACE, LOS ANGELES DISTRICT (CESPL)	Royer, Celeste (RANCHO EL CHORRO OUTDOOR SCHOOL)	9/8/2011	1	No	Administrative Record for Project J09CA203105 Volume 6
200-1e	J09CA203105_08.01_0577_a.pdf	Transmittal of Final Remedial Investigation/Feasibility Study Work Plan	Armentrout, Jeffery	USACE, LOS ANGELES DISTRICT (CESPL)	Stafford, Bob (CALIFORNIA DEPARTMENT OF FISH AND GAME)	9/8/2011	1	No	Administrative Record for Project J09CA203105 Volume 6
200-1e	J09CA203105 08.01 0578 a.pdf	Transmittal of Final Remedial Investigation/Feasibility Study Work Plan	Armentrout, Jeffery	USACE, LOS ANGELES DISTRICT (CESPL)	Van Fleet, Linda (COUNTY OF SAN LUIS OBISPO)	9/8/2011	1	No	Administrative Record for Project J09CA203105 Volume 6
200-1e	J09CA203105 08.01 0579 a.pdf	Transmittal of Final Remedial Investigation/Feasibility Study Work Plan	Armentrout, Jeffery	USACE, LOS ANGELES DISTRICT (CESPL)	Wagner, Mark (COUNTY OF SAN LUIS OBISPO)	9/2/2011	1	No	Administrative Record for Project J09CA203105 Volume 6
200-1e	J09CA203105_08.01_0580_a.pdf	Transmittal of Draft Final Remedial Investigation/Feasibility Study Report and Invitation to TPP Meeting	Armentrout, Jeffery	USACE, LOS ANGELES DISTRICT (CESPL)	Cooper, Shaun (SAN LUIS OBISPO COUNTY PARKS)	6/18/2013	1	No	Administrative Record for Project J09CA203105 Volume 6
200-1e	J09CA203105 08.01 0581 a.pdf	Transmittal of Draft Final Remedial Investigation/Feasibility Study Report and Invitation to TPP Meeting	Armentrout, Jeffery	USACE, LOS ANGELES DISTRICT (CESPL)	Crain, Michael (LOS PADRES NATIONAL FOREST SANTA LUCIA RANGER DISTRICT)	6/18/2013	1	No	Administrative Record for Project J09CA203105 Volume 6
200-1e	J09CA203105 08.01 0582 a.pdf	Transmittal of Draft Final Remedial Investigation/Feasibility Study Report and Invitation to TPP Meeting	Armentrout, Jeffery	USACE, LOS ANGELES DISTRICT (CESPL)	Hoover, Debbie (SAN LUIS OBISPO BOTANICAL GARDEN)	6/18/2013	1	No	Administrative Record for Project J09CA203105 Volume 6
200-1e	J09CA203105_08.01_0583_a.pdf	Transmittal of Draft Final Remedial Investigation/Feasibility Study Report and Invitation to TPP Meeting	Armentrout, Jeffery	USACE, LOS ANGELES DISTRICT (CESPL)	Oviatt, Kim (SAN LUISITO RANCH CO., LLC)	6/18/2013	1	No	Administrative Record for Project J09CA203105 Volume 6
200-1e	J09CA203105 08.01 0584 a.pdf	Transmittal of Draft Final Remedial Investigation/Feasibility Study Report and Invitation to TPP Meeting	Armentrout, Jeffery	USACE, LOS ANGELES DISTRICT (CESPL)	Phelps, Kathleen (LOS PADRES NATIONAL FOREST SANTA LUCIA RANGER DISTRICT)	6/18/2013	1	No	Administrative Record for Project J09CA203105 Volume 6
200-1e	J09CA203105 08.01 0585 a.pdf	Transmittal of Draft Final Remedial Investigation/Feasibility Study Report and Invitation to TPP Meeting	Armentrout, Jeffery	USACE, LOS ANGELES DISTRICT (CESPL)	Plummer, William (SAN LUIS OBISPO SPORTSMAN'S ASSOCIATION)	6/18/2013	1	No	Administrative Record for Project J09CA203105 Volume 6
200-1e	J09CA203105_08.01_0586_a.pdf	Transmittal of Draft Final Remedial Investigation/Feasibility Study Report and Invitation to TPP Meeting	Armentrout, Jeffery	USACE, LOS ANGELES DISTRICT (CESPL)	Ragsdale, David (CALIFORNIA POLYTECHNIC STATE UNIVERSITY)	6/18/2013	1	No	Administrative Record for Project J09CA203105 Volume 6

ARIMS	File Name	Document Title/Description	Author(s)	Author Affiliation	Recipient(s)	Date	Approx No. of Pages	Redacted	Location
200-1e	J09CA203105_08.01_0587_a.pdf	Transmittal of Draft Final Remedial Investigation/Feasibility Study Report and Invitation to TPP Meeting	Armentrout, Jeffery	USACE, LOS ANGELES DISTRICT (CESPL)	Stafford, Bob (CALIFORNIA DEPARTMENT OF FISH AND GAME)	6/18/2013	1	No	Administrative Record for Project J09CA203105 Volume 6
200-1e	J09CA203105 08.01 0588 a.pdf	Transmittal of Draft Final Remedial Investigation/Feasibility Study Report and Invitation to TPP Meeting	Armentrout, Jeffery	USACE, LOS ANGELES DISTRICT (CESPL)	Van Fleet, Linda (COUNTY OF SAN LUIS OBISPO)	6/18/2013	1	No	Administrative Record for Project J09CA203105 Volume 6
200-1e	J09CA203105 08.01 0589 a.pdf	Invitation to Stakeholder Meeting to Discuss the Results of the Remedial Investigation Field Work	Armentrout, Jeffery	USACE, LOS ANGELES DISTRICT (CESPL)	Bender, David (SAN LUIS OBISPO COUNTY, COURT & COMMUNITY SCHOOLS)	6/18/2013	1	No	Administrative Record for Project J09CA203105 Volume 6
200-1e	J09CA203105_08.01_0590_a.pdf	Invitation to Stakeholder Meeting to Discuss the Results of the Remedial Investigation Field Work	Armentrout, Jeffery	USACE, LOS ANGELES DISTRICT (CESPL)	Hall, Mike (CALIFORNIA POLYTECHNIC STATE UNIVERSITY)	6/18/2013	1	No	Administrative Record for Project J09CA203105 Volume 6
200-1e	J09CA203105_08.01_0591_a.pdf	Invitation to Stakeholder Meeting to Discuss the Results of the Remedial Investigation Field Work	Armentrout, Jeffery	USACE, LOS ANGELES DISTRICT (CESPL)	Hill, Debi (COUNTY OF SAN LUIS OBISPO, OFFICE OF EDUCATION - LOMA VISTA SCHOOL)	6/18/2013	1	No	Administrative Record for Project J09CA203105 Volume 6
200-1e	J09CA203105 08.01 0592 a.pdf	Invitation to Stakeholder Meeting to Discuss the Results of the Remedial Investigation Field Work	Armentrout, Jeffery	USACE, LOS ANGELES DISTRICT (CESPL)	Keil, Dave (COUNTY OF SAN LUIS OBISPO, OFFICE OF EDUCATION - EL CHORRO OUTDOOR SCHOOL)	6/18/2013	1	No	Administrative Record for Project J09CA203105 Volume 6
200-1e	J09CA203105_08.01_0593_a.pdf	Invitation to Stakeholder Meeting to Discuss the Results of the Remedial Investigation Field Work	Armentrout, Jeffery	USACE, LOS ANGELES DISTRICT (CESPL)	Kiser, Betsy (CITY OF SAN LUIS OBISPO PARKS DEPARTMENT)	6/18/2013	1	No	Administrative Record for Project J09CA203105 Volume 6
200-1e	J09CA203105_08.01_0594_a.pdf	Invitation to Stakeholder Meeting to Discuss the Results of the Remedial Investigation Field Work	Armentrout, Jeffery	USACE, LOS ANGELES DISTRICT (CESPL)	Lee, Paul (CAL FIRE SAN LUIS OBISPO COUNTY FIRE DEPARTMENT)	6/18/2013	1	No	Administrative Record for Project J09CA203105 Volume 6
200-1e	J09CA203105 08.01 0595 a.pdf	Invitation to Stakeholder Meeting to Discuss the Results of the Remedial Investigation Field Work	Armentrout, Jeffery	USACE, LOS ANGELES DISTRICT (CESPL)	Lewin, Robert (SAN LUIS OBISPO COUNTY FIRE DEPARTMENT)	6/18/2013	1	No	Administrative Record for Project J09CA203105 Volume 6
200-1e	J09CA203105_08.01_0596_a.pdf	Invitation to Stakeholder Meeting to Discuss the Results of the Remedial Investigation Field Work	Armentrout, Jeffery	USACE, LOS ANGELES DISTRICT (CESPL)	Lichtig, Katie (CITY OF SAN LUIS OBISPO)	6/18/2013	1	No	Administrative Record for Project J09CA203105 Volume 6
200-1e	J09CA203105_08.01_0597_a.pdf	Invitation to Stakeholder Meeting to Discuss the Results of the Remedial Investigation Field Work	Armentrout, Jeffery	USACE, LOS ANGELES DISTRICT (CESPL)	Lowe, Chuck (COUNTY OF SAN LUIS OBISPO PARKS DEPARTMENT)	6/18/2013	1	No	Administrative Record for Project J09CA203105 Volume 6
200-1e	J09CA203105 08.01 0598 a.pdf	Invitation to Stakeholder Meeting to Discuss the Results of the Remedial Investigation Field Work	Armentrout, Jeffery	USACE, LOS ANGELES DISTRICT (CESPL)	McFarland, Becky (COUNTY OF SAN LUIS OBISPO, OFFICE OF EDUCATION - EL CHORRO OUTDOOR SCHOOL)	6/18/2013	1	No	Administrative Record for Project J09CA203105 Volume 6
200-1e	J09CA203105 08.01 0599 a.pdf	Invitation to Stakeholder Meeting to Discuss the Results of the Remedial Investigation Field Work	Armentrout, Jeffery	USACE, LOS ANGELES DISTRICT (CESPL)	Mulhall, Jim (SAN LUIS OBISPO SHERRIFF DEPARTMENT)	6/18/2013	1	No	Administrative Record for Project J09CA203105 Volume 6
200-1e	J09CA203105_08.01_0600_a.pdf	Invitation to Stakeholder Meeting to Discuss the Results of the Remedial Investigation Field Work	Armentrout, Jeffery	USACE, LOS ANGELES DISTRICT (CESPL)	Plummer, William (SAN LUIS OBISPO SPORTSMAN'S ASSOCIATION)	6/18/2013	1	No	Administrative Record for Project J09CA203105 Volume 6
200-1e	J09CA203105_08.01_0601_a.pdf	Invitation to Stakeholder Meeting to Discuss the Results of the Remedial Investigation Field Work	Armentrout, Jeffery	USACE, LOS ANGELES DISTRICT (CESPL)	CAMP SAN LUIS OBISPO RANGE CONTROL	6/18/2013	1	No	Administrative Record for Project J09CA203105 Volume 6
200-1e	J09CA203105 08.01 0602 a.pdf	Invitation to Stakeholder Meeting to Discuss the Results of the Remedial Investigation Field Work	Armentrout, Jeffery	USACE, LOS ANGELES DISTRICT (CESPL)	Richardson, April (CITY OF SAN LUIS OBISPO)	6/18/2013	1	No	Administrative Record for Project J09CA203105 Volume 6
200-1e	J09CA203105_08.01_0603_a.pdf	Invitation to Stakeholder Meeting to Discuss the Results of the Remedial Investigation Field Work	Armentrout, Jeffery	USACE, LOS ANGELES DISTRICT (CESPL)	Righello, Ltc Joseph (CAMP SAN LUIS OBISPO)	6/18/2013	1	No	Administrative Record for Project J09CA203105 Volume 6
200-1e	J09CA203105_08.01_0604_a.pdf	Invitation to Stakeholder Meeting to Discuss the Results of the Remedial Investigation Field Work	Armentrout, Jeffery	USACE, LOS ANGELES DISTRICT (CESPL)	Royer, Celeste (RANCHO EL CHORRO OUTDOOR SCHOOL)	6/18/2013	1	No	Administrative Record for Project J09CA203105 Volume 6
200-1e	J09CA203105 08.01 0605 a.pdf	Invitation to Stakeholder Meeting to Discuss the Results of the Remedial Investigation Field Work	Armentrout, Jeffery	USACE, LOS ANGELES DISTRICT (CESPL)	Single, Jeffrey (CALIFORNIA DEPARTMENT OF FISH AND GAME)	6/18/2013	1	No	Administrative Record for Project J09CA203105 Volume 6
200-1e	J09CA203105_08.01_0606_a.pdf	Invitation to Stakeholder Meeting to Discuss the Results of the Remedial Investigation Field Work	Armentrout, Jeffery	USACE, LOS ANGELES DISTRICT (CESPL)	Stork, Gilbert (CUESTA COLLEGE)	6/18/2013	1	No	Administrative Record for Project J09CA203105 Volume 6
200-1e	J09CA203105_08.01_0607_a.pdf	Invitation to Stakeholder Meeting to Discuss the Results of the Remedial Investigation Field Work	Armentrout, Jeffery	USACE, LOS ANGELES DISTRICT (CESPL)	Veneris, Phill (CAL FIRE SAN LUIS OBISPO COUNTY FIRE DEPARTMENT)	6/18/2013	1	No	Administrative Record for Project J09CA203105 Volume 6
200-1e	J09CA203105 08.01 0608 a.pdf	Invitation to Stakeholder Meeting to Discuss the Results of the Remedial Investigation Field Work	Armentrout, Jeffery	USACE, LOS ANGELES DISTRICT (CESPL)	Wagner, Mark (COUNTY OF SAN LUIS OBISPO)	6/18/2013	1	No	Administrative Record for Project J09CA203105 Volume 6

ARIMS	File Name	Document Title/Description	Author(s)	Author Affiliation	Recipient(s)	Date	Approx No. of Pages	Redacted	Location
200-1e	J09CA203105_08.01_0609_a.pdf	Invitation to Stakeholder Meeting to Discuss the Results of the Remedial Investigation Field Work	Armentrout, Jeffery	USACE, LOS ANGELES DISTRICT (CESPL)	Walker, Dave (SAN LUIS OBISPO BOMB TASK FORCE)	6/18/2013	1	No	Administrative Record for Project J09CA203105 Volume 6
200-1e	J09CA203105 08.01 0610 a.pdf	Draft Site Specific Work Plan Review Comments and Actions	Phelps, Kathleen	LOS PADRES NATIONAL FOREST SANTA LUCIA RANGER DISTRICT	Unknown	12/19/2006	1	No	Administrative Record for Project J09CA203105 Volume 6
200-1e	J09CA203105 08.01 0611 a.pdf	Fenced Off Area in El Chorro County Park Needs to be Mitigated	Mulhall, Jim	SAN LUIS OBISPO SHERRIFF DEPARTMENT	Hall, Bradley (ENGINEERING/REMEDIATION RESOURCES GROUP, INC.); Tran, Tawny (LOS ANGELES DISTRICT (CESPL))	4/3/2006	2	No	Administrative Record for Project J09CA203105 Volume 6
1200C PERM	<u>J09CA203105_08.01_0612_a.pdf</u>	Invitation to First Technical Project Planning Meeting for the Treatability Study	USACE	USACE, LOS ANGELES DISTRICT (CESPL)	Ragsdale, David (CALIFORNIA POLYTECHNIC STATE UNIVERSITY); Hall, Mike (CALIFORNIA POLYTECHNIC STATE UNIVERSITY)	4/7/2014	2	! No	Administrative Record for Project J09CA203105 Volume 6
1200C PERM	J09CA203105 08.01 0613 a.pdf	Transmittal of the Draft Uniform Federal Policy- Quality Assurance Project Plan (UFP-QAPP)	USACE	USACE, LOS ANGELES DISTRICT (CESPL)	Lazanoff, Aaron (CALIFORNIA POLYTECHNIC STATE UNIVERSITY); Ragsdale, David (CALIFORNIA POLYTECHNIC STATE UNIVERSITY)	5/9/2014	2	! No	Administrative Record for Project J09CA203105 Volume 6
1200C PERM	J09CA203105 08.01 0614 a.pdf	Transmittal of the Draft Uniform Federal Policy- Quality Assurance Project Plan (UFP-QAPP)	USACE	USACE, LOS ANGELES DISTRICT (CESPL)	Various, (SAN LUIS OBISPO COUNTY FIRE DEPARTMENT)	5/9/2014	3	No	Administrative Record for Project J09CA203105 Volume 6
1200C PERM	J09CA203105_08.01_0615_a.pdf	Transmittal of the Draft Uniform Federal Policy- Quality Assurance Project Plan (UFP-QAPP)	USACE	USACE, LOS ANGELES DISTRICT (CESPL)	Walker, Dave (COUNTY OF SAN LUIS OBISPO SHERIFF'S DEPARTMENT)	5/9/2014	1	No	Administrative Record for Project J09CA203105 Volume 6
1200C PERM	J09CA203105 08.01 0616 a.pdf	Transmittal of the Final Uniform Federal Policy- Quality Assurance Project Plan (UFP-QAPP)	USACE	USACE, LOS ANGELES DISTRICT (CESPL)	Ragsdale, David (CALIFORNIA POLYTECHNIC STATE UNIVERSITY); Lazanoff, Aaron (CALIFORNIA POLYTECHNIC STATE UNIVERSITY)	6/30/2014	2	. No	Administrative Record for Project J09CA203105 Volume 6
1200C PERM	J09CA203105 08.01 0617 a.pdf	Transmittal of the Final Uniform Federal Policy- Quality Assurance Project Plan (UFP-QAPP)	USACE	USACE, LOS ANGELES DISTRICT (CESPL)	Various, (SAN LUIS OBISPO COUNTY FIRE DEPARTMENT)	6/30/2014	4	No	Administrative Record for Project J09CA203105 Volume 6
1200C PERM	J09CA203105 08.01 0618 a.pdf	Transmittal of the Final Uniform Federal Policy- Quality Assurance Project Plan (UFP-QAPP)	USACE	USACE, LOS ANGELES DISTRICT (CESPL)	Walker, Dave (COUNTY OF SAN LUIS OBISPO SHERIFF'S DEPARTMENT)	6/30/2014	1	No	Administrative Record for Project J09CA203105 Volume 6
1200C PERM	J09CA203105_08.01_0619_a.pdf	Transmittal of the Draft-Final Treatability Study Report for Review and Comment	USACE	USACE, LOS ANGELES DISTRICT (CESPL)	Ragsdale, David (CALIFORNIA POLYTECHNIC STATE UNIVERSITY); Lazanoff, Aaron (CALIFORNIA POLYTECHNIC STATE UNIVERSITY)	7/15/2015	2	! No	Administrative Record for Project J09CA203105 Volume 6
1200C PERM	J09CA203105_08.01_0620_a.pdf	Transmittal of the Final Site Inspection Report	Godard, Lloyd	USACE, LOS ANGELES DISTRICT (CESPL)	Ragsdale, David (CALIFORNIA POLYTECHNIC STATE UNIVERSITY); Hall, Mike (CALIFORNIA POLYTECHNIC STATE UNIVERSITY)	7/10/2008	2	! No	Administrative Record for Project J09CA203105 Volume 6
1200C PERM	J09CA203105_08.01_0621_a.pdf	Transmittal of the Final Site Inspection Report to Forest Service	Godard, Lloyd	USACE, LOS ANGELES DISTRICT (CESPL)	Crain, Michael (LOS PADRES NATIONAL FOREST SANTA LUCIA RANGER DISTRICT)	7/10/2008	1	No	Administrative Record for Project J09CA203105 Volume 6
1200C PERM	J09CA203105 08.01 0622 a.pdf	Transmittal of the Final Remedial Investigation/Feasibility Study Report to Stakeholders	Unknown	Unknown	Unknown	9/26/2018	2	! No	Administrative Record for Project J09CA203105 Volume 6
	10 - Public Meeting Minutes/Announ	cements/Transcripts/Restoration Advisory Boa	rds (RAB) and Technical Revi	iew Committee (TRC) Meeting	S				
200-1e	J09CA203105 08.10 0500 a.pdf	Camp SLO November 2005 Slide Presentation for Cal Poly San Luis Obispo	Unknown	Unknown	Unknown	11/8/2005	10	No	Administrative Record for Project J09CA203105 Volume 6
200-1e	J09CA203105_08.10_0501_a.pdf	Presentation for Public Informational Meeting	Godard, Lloyd	USACE, LOS ANGELES DISTRICT (CESPL)	PUBLIC	6/16/2010	31	No	Administrative Record for Project J09CA203105 Volume 6
	11 - Fact Sheets/Newsletters								
200-1e	J09CA203105_08.11_0500_a.pdf	Fact Sheet for Former Camp San Luis Obispo	USACE	USACE, LOS ANGELES DISTRICT (CESPL)	Unknown	//2010	2	! No	Administrative Record for Project J09CA203105 Volume 6
	13 - Public Notices								
200-1e	J09CA203105 08.13 0500 a.pdf	Community Information Meeting for the Former Camp SLO	Unknown	Unknown	PUBLIC	//	1	No	Administrative Record for Project J09CA203105 Volume 6

Attachment 4 Newspaper Publications

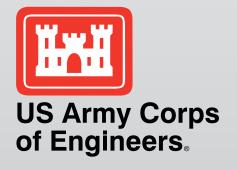
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Public Comment Period & Public Meeting

for Camp San Luis Obispo

a Formerly Used Defense Site







Public Comment Period

Proposed Plan for Camp San Luis Obispo Formerly Used Defense Site

The U.S. Army Corps of Engineers invites the public to review and comment on the Proposed Plan for the Camp San Luis Obispo Formerly Used Defense Site, located northwest of the city of San Luis Obispo along Highway 1. The Plan presents the preferred alternatives for remediating potential munitions and explosives of concern that are a result of past military training.

The U.S. Army Corps of Engineers encourages you to comment on the Proposed Plan during the public comment period from May 1 to June 7, 2019. The plan is available at the San Luis Obispo Public Library located at 995 Palm Street, San Luis Obispo, CA 93401. The plan will also be discussed during a public meeting on May 22, 2019, at 5:30 p.m., at the Ludwick Community Center, 864 Santa Rosa St., San Luis Obispo.



US Army Corps of Engineers_®

Los Angeles District

Comments may be emailed to *bruce.r.james@usace.army.mil* or mailed and postmarked no later than June 7, to:

Bruce James

Project Manager

U.S. Army Corps of Engineers, LA District 915 Wilshire Blvd, Suite 930

Los Angeles, CA 90017-3401

Comments received during this period will be considered in the final decision. https://www.spl.usace.army.mil/Missions/Formerly-Used-Defense-Sites/Camp-San-Luis-Obispo/

Public Meeting

Camp San Luis Obispo Formerly Used Defense Site

The U.S. Army Corps of Engineers invites you to a public meeting regarding recommendations for munitions remediation at the Camp San Luis Obispo Formerly Used Defense Site, located northwest of the city of San Luis Obispo along Highway 1.

May 22, 2019 at 5:30 pm Ludwick Community Center 864 Santa Rosa St, San Luis Obispo, CA 93401

During the meeting, the Army Corps of Engineers will discuss the Proposed Plan and environmental recommendations for the site. As part of the public comment period from May 1 to June 7, 2019, community comments and questions will be accepted during the meeting. The plan is available at the San Luis Obispo Public Library located at 995 Palm Street, San Luis Obispo, CA 93401.



Additional Information

U.S. Army Corps of Engineers Public Affairs Office at 213-452-3921 or publicaffairs.spl@usace.army.mil

Comments received during this period will be considered in the final decision. https://www.spl.usace.army.mil/Missions/Formerly-Used-Defense-Sites/Camp-San-Luis-Obispo/

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Attachment 5 CSLO MRSs Public Meeting Transcript

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PROPOSED PLAN PUBLIC MEETING FOR THE CAMP SAN LUIS OBISPO FORMERLY USED DEFENSE SITE SAN LUIS OBISPO, CALIFORNIA WEDNESDAY, MAY 22, 2019

5:36 P.M.

REPORTED BY CAROLYNN E. SPERE, CSR #10091

1	APPEARANCES:
2	BRUCE JAMES - USACE FUDS PROJECT MANAGER
3	JONATHAN WHIPPLE - USACE PROJECT CHEMIST
4	JIM LUKASKO - USACE TECHNICAL TEAM LEAD
5	CHERYL WEBSTER - USACE GEOPHYSICIST
6	DENA O'DELL - USACE PUBLIC AFFAIRS
7	SYLVESTER WILLIS - USACE ORDNANCE/EXPLOSIVES SAFETY SPECIALIST
8	MARY FRANQUEMONT, BRISTOL PROJECT MANAGER
9	HEATHER PFEIFFER - BRISTOL COMMUNITY RELATIONS PROJECT MANAGER
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WEDNESDAY, MAY 22, 2019
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                              5:36 P.M.
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              MR. JAMES: Okay. Welcome to our public meeting
    for Camp San Luis Obispo. We're talking about the
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    proposed plan, what we propose to do out there. Hopefully
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    clean it up.
              This is what we are going to be doing. We are
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    going to introduce the team and talk about where we are
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    going, the history, what we found in -- "RI" means --
    you'll see these later -- remedial investigation. Then
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    talk about the Feasibility Study. That's FS. Our
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    alternatives. Our community participation, which is
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    everybody here. And our schedule, safety reminders, and
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    then points of contact.
              So our acronyms, if you have any questions,
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    please ask and we'll answer them. And I know you are
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    probably -- we will see this a lot, as well as this one.
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              So the project team, I'm the FUDS project
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    manager, Bruce James. Our Ordnance and Safety Specialist,
    Jim Hug, is not here, but J.R. is here. We have got our
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    biologist, Robin Rosenau. We have an archaeologist, she
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    is not here today. Public affairs is being represented by
24
    Dena O'Dell. Our geophysicist, Cheryl Webster, is in the
25
    back here. Our risk assessor is up in Sacramento. He got
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- 1 pulled into something else, he didn't really want to go
- 2 to. Our environmental engineer, Mr. Jim Lukasko, back
- 3 there, smiley guy. And then quality control and our
- 4 chemist, Jonathan Whipple, is behind you.
- 5 So we've been working with the California
- 6 Department of Toxic Substances Control. Their project
- 7 manager is Mr. Steven Pay. He is up out of Sacramento.
- 8 Our project team with our contractor, Bristol Services.
- 9 Project manager is Mary Franquemont. And then public
- 10 relations specialist, Heather, back there. And their
- 11 scientist is Mr. Jeff Speck on the computer. And their
- 12 geophysicists and a risk assessor.
- And our other project stakeholders, U.S. EPA,
- 14 Fish and Wildlife, both state and federal. Forest
- 15 Service, County of San Luis Obispo. You might recognize
- 16 some of these names. Obviously, you are from here, right?
- 17 Good. And so the college, National Guard, what's left of
- 18 Camp SLO, the University, Cuesta College, everybody and
- 19 their brother. We're not doing this in a vacuum.
- 20 So this is our process, RI/FS, Remedial
- 21 Investigation/Feasibility Study Process. First we
- 22 identify -- we have an inventory. We do a preliminary
- 23 assessment and site investigation, and that tells us if
- 24 there is something out here and we think we want to do
- 25 more stuff. So then we do the investigation where we

- 1 actually get out here and we go out and investigate.
- 2 Geophysicists go out there and walk the place, check to
- 3 see what's underground, check those out. And then we
- 4 write up a Feasibility Study, which is this part right
- 5 here, and we put together a Proposed Plan of what we would
- 6 like to do. I think you have a copy of it right there.
- 7 And now we are soliciting public comment. And
- 8 then we will do a Decision Document. That's drafted, but
- 9 depending on what comes out of this meeting and the public
- 10 comments, will potentially change what we want to do. And
- 11 then we go into the design, the remedial, what we are
- 12 going to do. We will do the design. Then we will do it.
- 13 Obviously, we will tell you what we're going to do, then
- 14 we'll do it, and we'll tell you what we did type of thing.
- 15 And then we will do response complete, pardon me.
- And then management, if this were groundwater,
- 17 we would be monitoring the groundwater and every five
- 18 years, we would come back and say, "Is what we put in
- 19 place protective of what we want to do for human health
- 20 and the environment?" And we may end up finding no action
- 21 indicated, if we are really lucky.
- 22 So here we are. This is the old Camp SLO. We
- 23 are going to be talking about this area here and that area
- 24 right there. So the yellow part is 1 and 2, and the other
- 25 slide is the other one. And I'll tell you what those are

- 1 in a little bit.
- 2 So description, located 5 miles northwest. The
- 3 Site 2 is the grenade courts, 52 acres. No. 5 was the
- 4 multi-use range complex, 2600 acres. And now this land is
- 5 owned by the federal government, state, local, and there
- 6 is a private entity out there, a little ranch. So the
- 7 state -- SLO, Cal Poly owns part of it, Cuesta College.
- 8 Botanical Garden is on part of it.
- And response, current land use, we can go into
- 10 that. Here is the boundary that we are looking at and
- 11 then this one down here. This is public and this is
- 12 recreation.
- 13 Short history was Cal Guard site back in the
- 14 '20s. Army took it over because they needed some training
- 15 areas. Expanded it and then used it for a couple of
- 16 training sites for several years. Put a lot of ranges on
- 17 there, so they could train -- artillery, small arms, all
- 18 kinds of fun stuff. Deactivated it and then reactivated
- 19 it for Korea. And then they shut it down and finally
- 20 relinquished it.
- 21 So fieldwork, we went out -- initial fieldwork
- 22 was back in 2011. They did geophysical surveys where they
- 23 mapped everything digitally, as well as analog.
- 24 And Mary, can you describe the difference or
- 25 should I ask Jim or Jonathan?

1 MS. FRANQUEMONT: Cheryl. 2 MR. JAMES: I didn't see her. She was hiding. 3 MS. WEBSTER: Geophysical mapping is basically 4 using a -- it's called a electro-magnetometer, and going 5 over the site, mapping the electrical signal. And the analog is more like waving a stick, like you would at the 6 beach. So the difference is one is recorded and the other 7 8 is not. And you use analog in places where you can't physically move the digital instrument. 9 10 MR. JAMES: Some of the digital instruments are 11 about this big. It's not real light. 12 So then they dug up some of the metal to see 13 what was there, whether it was a piece of metal or I will 14 say shrapnel or a live round. And if they found a live 15 round, they exploded it. So Munitions Constituent Characterization, so 16 17 they look for metals, antimony, copper, lead, zinc in the 18 soil and stuff. Sampling, have it analyzed to see the 19 concentrations both there and they picked a background 20 outside the area that they were investigating so we could compare them, see if the inside was raised higher than 21 22 outside. 23 So the Remedial Investigation Fieldwork Results, they did 8 miles of digital, 2 miles of analog and, 24 25 basically, this is what they found. Instead of trying to

- 1 read it all to you, they found five items that they
- 2 exploded, and they will tell you, here is what they --
- 3 three hand grenades, a mine fuze. And the depth, actually
- 4 they were fairly shallow. It was less than a foot.
- 5 And you can see here where they -- these were
- 6 the finds, the ones where they found it. And the yellow
- 7 is debris, just pieces. And then other debris, you know,
- 8 that wasn't related to munitions at all. There's a lot of
- 9 information stuck into a small spot.
- 10 And then sampling, they took soil samples here.
- 11 Sediment is usually from a water -- if there was a creek,
- 12 or a pond, or something like that, as opposed to -- that's
- 13 the difference between a soil sample. Am I right?
- MR. WHIPPLE: Sediment, yeah.
- 15 MR. JAMES: Okay. I quess so. So they did
- 16 33 acres, UXO and munitions debris was identified during
- 17 the RI. The exposure pathways for humans to be exposed to
- 18 this were considered complete, that means it definitely
- 19 could happen. They further evaluated during the
- 20 Feasibility Study. And the same thing with the Site B, so
- 21 they didn't go further in that area, 19 acres of it,
- 22 because there was no pathway to get -- to be exposed.
- 23 So the sub-areas, this is the area, let's say,
- 24 A and B. Yeah, this is A and this is B, so we are not
- 25 going to be doing more here but you can see this is where

- 1 the unexploded ordnance was, most areas of concern right
- 2 there.
- 3 So Response Site 5 is a much larger site. They
- 4 did all their analog and their digital, their
- 5 investigation. And they found 14 items of UXO that they
- 6 exploded -- practice mine, mortars, projectiles, small
- 7 rockets. And the deepest was 30 inches, which is almost 3
- 8 feet below ground.
- And you can see here is the ones that they
- 10 found, the spots, unexploded ordnances, and did what they
- 11 could do everywhere here. So there is the boundary here
- 12 which is why this is clear.
- 13 Fieldwork, and you can see the boundary again.
- 14 So here is the old SLO boundary, but this is our boundary
- 15 that we are looking at, so it goes outside in some cases.
- 16 And the soil samples are green. Those sediments, those
- 17 are taken prior. Those were the -- site investigations
- 18 was taken earlier, and so we are looking -- and blue is
- 19 sediment samples.
- 20 And conclusions, basically, here we go, is
- 21 divided into three sub-areas -- North, South, and then a
- 22 Shooting Range that's out there.
- 23 So we determined that 05-North needed further
- 24 evaluation, as well as the South, and also the Shooting
- 25 Range area, so we describe those in the Proposed Plan.

- 1 And you can see the sub-areas -- North, the South, and
- 2 then the Shooting Range right here.
- 3 So they brought up and they looked at it in the
- 4 Feasibility Study, so that North, no further actions were
- 5 recommended in 2B, the Feasibility Study process. So A,
- 6 we are doing; B not.
- 7 And the Remedial Action Objectives for specific
- 8 goals. And in a study, we evaluate each one of these
- 9 Remedial Action Alternatives to see if they meet the
- 10 objectives that we are looking for.
- 11 And we went through Munitions Response Site
- 12 01/02A. The objective is to prevent human interaction
- 13 with surface and subsurface munitions and under current
- 14 and reasonably anticipated future activities. And the
- 15 same with the North and the South. And so you can see
- 16 that we went 3 feet here below ground surface,
- 17 agricultural. And this one for 05-South is 2 feet, and
- 18 the Shooting Range is 2 feet. So we are looking at
- 19 different depths and whatnot.
- 20 So the Feasibility Study Summary, Remedial
- 21 Action Alternatives. Alternative 1 was no further action,
- 22 we just leave it like it is. We put in institutional
- 23 controls, basically a fence or a sign, or something like
- 24 that. 3 is where we go in and remove the surface, the
- 25 munitions surface and put in institutional controls. 4,

- 1 we would actually do the surface and subsurface removal to
- 2 the depth of 36 inches, and then put in institutional
- 3 controls, the signage, or we go through and pretty much
- 4 strip mine the area out there.
- 5 The criteria threshold, first off, it has to
- 6 meet these two, or else we don't do much, go any further.
- 7 Balancing factors, long-term effectiveness, reduction in
- 8 toxicity, mobility or volume through treatment. And then
- 9 modifying factors, community acceptance or in the end,
- 10 state/regulatory acceptance.
- So for Site 01/02A, as you can see, 1 and 5 does
- 12 not meet the threshold criteria. 2 through 4 meet the
- 13 threshold criteria. 2 and 3 did not meet our objectives,
- 14 so 4 has a lower qualitative assessment with regard to
- 15 short-term effectiveness. We feel that Alternative 4
- 16 provides a permanent solution with regard to the munitions
- 17 hazards out there. And we anticipate -- we're talking the
- 18 Botanical Garden wants to expand, so we are looking at
- 19 that that will help them a little bit.
- 20 So we did the same comparison to Site 05-North
- 21 and came down, we are looking at 3 and 4 have the best
- 22 assessment for long-term effectiveness; that is, however,
- 23 based on the MEC covered, there is no acceptable hazard
- 24 there. And we talk about these more in the Proposed Plan
- 25 that we are doing.

- 1 Here is what we came through with Site 05-South,
- 2 and we talk about those. And we feel 4 looks like it
- 3 provides a better solution, more permanent.
- 4 For the Shooting Range, it looks like
- 5 Alternative 4, again, provides a better solution. So here
- 6 is our preferred alternatives in the plan that you have
- 7 got is on Site 01/02A, we are looking at Site -- or
- 8 Alternative 4. On 05-North, we are looking at
- 9 Alternative 2 for institutional control signage. If you
- 10 have been out there, you might have seen some of those
- 11 signs. For 05-South, we are looking at Alternative 4.
- 12 For the Shooting Range, again Alternative 4, which is
- 13 removal of the surface and subsurface of that stuff that
- 14 we've got out there.
- 15 Here is our implementation time line, and there
- 16 is days, but we don't know when this is going to be funded
- 17 so there is no years on here. We are hoping it will be
- 18 funded the next year or the year after. And as you can
- 19 see, we are probably not going to be out there during the
- 20 February-to-August time frame because of migratory birds.
- 21 Those are a big deal. And then as soon as we are done
- 22 with the remedial action, every five years for about
- 23 thirty years, we will be out there doing our five-year
- 24 review to make sure that the remedy that we put in place
- 25 is effective. If we find out that it's not, then we will

change something. 1 2 The Proposed Plan has been prepared. We're in 3 the public comment period right now, if you would please 4 provide us with your comments. And it will be finalized. 5 And after it's been finalized, we'll finalize the Decision Documents that we will be sending up. And that will be 6 7 our determination of what we are going to be doing. 8 Your input, the public's input, is a key 9 element. Our experts, our technical experts that are 10 here, plus the State, have provided their inputs on the proposed alternatives through -- we've had public meetings 11 12 and we have administrative record, and we encourage the 13 public to gain a comprehensive idea of what we are doing. 14 Again, the comment period ends on June 7th. And if you 15 have got any comments, please either today or send them to us to myself or the website we will give you -- or the 16 17 e-mail, pardon me. And here is where the administrative 18 record is, if you choose to go in and look at all the documents we have and all the information we've compiled. 19 20 And Remedy Selection, here is how we do it. So the Preferred Alternatives, make sure that they meet the 21 requirements of -- the special requirements. And we will 22 23 describe those in the Decision Documents, which will be 24 available for review in the administrative record.

And here is our schedule right now. We have --

25

- 1 we are down here right now, which is Proposed Plan Public
- 2 Review. And later on this year, we will have the Decision
- 3 Documents put together based on everything we have in the
- 4 Proposed Plan.
- 5 And if you are out there and you see something,
- 6 here's the Three R's -- Recognize, Retreat and Report.
- 7 Any questions? I went through that rather
- 8 quickly.
- 9 MR. PIPER: My name is Kevin Piper. I'm the
- 10 director of agriculture operations at Cal Poly and work on
- 11 that ground quite a bit. My question is, can you go into
- 12 a little more detail about Alternative 4, and what that is
- 13 going to entail out on the landscape as far as any, you
- 14 know, disturbance or changing of the ground area.
- MR. JAMES: We're going to go out and just
- 16 destroy everything, take a tank and just run over it and
- 17 leave it like a moonscape.
- 18 MR. PIPER: No, I understand that, but it would
- 19 be nice to just hear a little bit more about how you are
- 20 going to approach that.
- 21 MR. JAMES: Mary and I talked about that,
- 22 Alternative 4.
- 23 MR. PIPER: Basically, on the Cal Poly ground
- 24 where we have the Escuela and Walter's Creek Ranch. I
- 25 think you spent time with Aaron today.

1 MS. FRANQUEMONT: Mary Franquemont with Bristol, 2 the current Remedial Investigation project manager. When 3 this project moves forward into the remedial action, it 4 will be a different contractor, probably, working with the 5 Corps. But the approach that will be used is that they would go back out with the DGM equipment or advanced 6 classification, which is similar but just a little bit 7 more kind of up-to-date sort of equipment, and they would 8 9 -- instead of just walking that transect lines, they would 10 walk the whole thing, a hundred percent coverage, to map all the subsurface anomalies they had out there. 11 12 And then based on what their readings were, they 13 would identify what needed to be dug up. And it would not 14 be with big, heavy equipment. It would just actually be 15 manual digging. If they found a debris area where there was a really high density of items, they would maybe clear 16 17 it and then dig it up that way. But generally, it's just 18 individual holes. So they would really go out and they 19 dig, you know, a hole this big until they find the item 20 that set off the metal detector, and then they move on to 21 the next one. 22 So what we talked about with Aaron is trying to 23 plan it when the grasses are the best for reseeding for 24 purposes of maintaining the grass culture out there. And 25 then also we talked about the roads and not doing it

- 1 during the really wet season where the roads would be
- 2 damaged. And we encouraged him to participate in the
- 3 future because those are all things that the next
- 4 contractor, along with the Corps of Engineers, would need
- 5 to plan for in the process.
- 6 MR. PIPER: Aaron and I work together on a lot
- 7 of that stuff, so either one of us to address those things
- 8 that Aaron brought up to you. We've worked really hard on
- 9 implementing a program during the winter where we don't
- 10 like to access those roads with vehicles because we have
- 11 tried to put those -- some of those roads to bed and
- 12 reduce the erosion coming off because we've been working
- 13 with the Morro Bay Estuary Program. So just coordinating
- 14 things with people when they want access to do things
- 15 would be great.
- 16 MS. FRANQUEMONT: Yeah. And it would be very
- important to the Corps to work through all that, talking
- 18 about where the cattle are and the different grazing plots
- 19 and all that kind of stuff.
- 20 MR. PIPER: And then sometimes we have labs and
- 21 classes scheduled, so we'd have to do some workarounds and
- 22 whatnot, but that's great.
- MR. JAMES: Also, if you have a particular seed
- 24 mix or something that you can give us or the contractor,
- 25 we'll work very hard with you to make sure that those

- 1 seeds go back, because I have done that in other places.
- 2 We can do that. We ask the base for a preferred seed mix
- 3 for stuff, and they gave us a laundry list of -- a mix of
- 4 this, this and that.
- 5 MR. PIPER: We can identify several species.
- 6 Our grazing program is kind of based on promoting the
- 7 perennial grasses out there. And the annuals are going to
- 8 -- that's a whole other -- there is a lot of them.
- 9 MR. JAMES: Again, if we have a seed mix and
- 10 after they actually dig the hole up, they throw some down
- 11 and whatever.
- 12 MR. PIPER: Replace your divot and seed it.
- 13 MR. JAMES: Just like you do on the golf course.
- 14 MR. PIPER: Great. Thank you.
- 15 MR. JAMES: Any other questions?
- 16 MS. LOR: I'm Chanda Lor. I'm the executive
- 17 director for the Botanical Garden. I was just informed of
- 18 this today, so getting up to speed and thinking that the
- 19 area that's already been surveyed and logged is not the
- 20 full area that the garden intends to develop. So in our
- 21 master plan, we actually have plans to develop and plant
- 22 at least 80 of the acres, the 150 that we occupy. And
- 23 seeing that there is going to be a need for further
- 24 investigation on our property, seeing that we had five
- 25 unexploded ordnances, and we intend to be digging, and

- 1 planting within that 30-inch subsurface, it's very much
- 2 going to be a priority in my mind to get you guys back out
- 3 there.
- 4 MR. JAMES: Yeah. And if you will remain in
- 5 contact with the Corps, we will be glad to help you with
- 6 that.
- 7 MS. LOR: Thank you.
- 8 And also, I was wondering what the funding and
- 9 funding sources that you guys had.
- 10 MR. JAMES: Funding source is Department of
- 11 Defense, so we are not going to levy a tax on you. So
- 12 it's going to be funded by the Formerly Used Defense Sites
- 13 that's programmed separately under budgets for this.
- MS. LOR: And also we have a lot of sensitive
- 15 vegetation that's very rare on the property too, many
- 16 species actually that we would have to work closely with
- 17 you guys to identify and make sure that you are well aware
- 18 of before you go up there.
- 19 MR. JAMES: Yeah. And there is no reason we
- 20 shouldn't coordinate with you. And if we don't, if
- 21 something happens and somebody comes out, then just get
- 22 ahold of us, the Corps.
- 23 MS. FRANQUEMONT: Is this vegetation that's
- 24 already out there already? I don't know if it's planted
- 25 yet or not.

- 1 MR. JAMES: No, they are trying to plant.
- MS. LOR: Well, some of it is out there already.
- 3 That is the native sensitive and endangered vegetation we
- 4 just discovered also, which is very exciting.
- 5 MR. JAMES: Well, not so much for us.
- 6 MS. LOR: I know, but very exciting for us to
- 7 have some rare species out there that only blooms every
- 8 once in a while, and it just happens to be blooming right
- 9 now.
- 10 MR. JAMES: What is it?
- 11 MS. LOR: Dudleya, there is a species of
- 12 Dudleya. There's a species of Dudleya that's buried.
- 13 MR. JAMES: Another project you have got, two
- 14 species of a plant, one is rare and one isn't, and you
- 15 can't tell them until they flower. It is so much fun. We
- 16 will work around those as much as we can. Sometimes in
- 17 the case of -- let's say there is endangered Dudleya,
- 18 non-endangered, and they find right in between them
- 19 something that has to be dug up, they will do everything
- 20 they can to protect it, the plant. But in some cases,
- 21 there is a take, if you will, and --
- 22 MS. LOR: We are okay transplanting species.
- 23 That's been done before, and we have done that for the
- 24 golf course.
- MR. JAMES: So when we get done, there is a

- 1 follow on, another project is going to do what we just
- 2 finished here for area -- what they call Area 9, which is
- 3 another area. So there is a potential that everything --
- 4 that the follow-on will effect you, well everybody to some
- 5 extent, that is out there. Some a little more; some a
- 6 little less. And the idea is to make sure that the
- 7 long-term effects are taken care of and you don't have the
- 8 impact, but sometimes, we can't always. You know, when we
- 9 are trying to clean up something that's dangerous, we do
- 10 the best we can.
- MS. LOR: Well, I am excited that this program
- 12 is going forward because it's been interesting to learn,
- 13 surprisingly, actually.
- 14 MR. JAMES: And if you've got any questions,
- 15 e-mail there, and you can call or e-mail me.
- MS. LOR: So I have another question about what
- 17 the chances are -- I know you can't guarantee anything and
- 18 their probability is pretty -- I don't know the
- 19 percentage. I am a stats person, so statistically
- 20 speaking, if where we've got interns and volunteers and we
- 21 are trying to scope out and scout out a new pathway, new
- 22 further trails this year, likelihood of hitting anything
- 23 dangerous beyond the site that's already been surveyed,
- 24 because we are planning on going beyond the site that's
- 25 been surveyed.

MS. FRANQUEMONT: You mean outside of that kind 1 2 of figure 8 boundary? 3 MS. LOR: Yes. 4 MS. FRANQUEMONT: That's where the grenade 5 courts and the historical ground for the grenade courts were. So when the army used that area, that's where the 6 7 ranges were. Outside now, Cheryl, you were showing her 8 another site that might be close --9 MS. WEBSTER: No. It's further away. 10 MS. FRANQUEMONT: Based on historical information, we don't anticipate that outside of that 11 12 figure 8 shape, that there is an issue because the area 13 wasn't used for anything else other than those grenade 14 That being said -courts. 15 MR. WHIPPLE: There is always a chance --MS. FRANQUEMONT: I mean, in World War II, they 16 17 trained heavily and extensively, and so they could have 18 chosen to use places that aren't on historical maps, and 19 people should always proceed with caution in proximity to 20 historical ranges. 21 MS. LOR: In the meantime, though, are you 22 planning on posting any signage up or should we, as a 23 garden, educate our members and visitors on what you have 24 found? 25 MR. JAMES: I would suggest until we get started

on doing the remedial action, which is --1 2 MS. LOR: A couple years. 3 MR. JAMES: -- we do design first and then the 4 action, and that you educate your members. We can help 5 you with posters, like the three R's. And I would also recommend that if you are going to be out there doing any 6 7 moving of dirt or digging, that you maybe get a UXO 8 specialist that has experience, that has some experience. 9 MS. LOR: Would you like to join the board? 10 MR. JAMES: I am not coming down from 11 Sacramento. 12 MS. LOR: Anyone else here? 13 MR. JAMES: I'm not UXO trained. J.R. is. 14 actually was trained by the EOD in the Army. He's an air 15 force guy with military training. I was the tanker. I used to shoot big guns, which is part of the problem out 16 17 here now. And then I used to supply the ammunition and 18 the food and everything else to keep the troops going when 19 I was -- later when I wasn't jumping out of airplanes, so 20 I am not experienced like J.R., but it would be a good idea -- we might be able to provide some resources of who 21 22 you could contact, but we can't come out and do it unless 23 the contractors are there. MS. LOR: Okay. All right. So I can get some 24 25 posters immediately?

MR. JAMES: Yes. Well, immediately, I don't 1 2 know about immediately. 3 But Dena, do you have the resource for the 4 posters? 5 MS. O'DELL: We will talk after. MS. LOR: Okay. 6 MR. JAMES: So any more questions or further 7 8 questions? 9 MS. LOR: Thank you. 10 MR. JAMES: That's fine. These aren't stupid questions because you just found out about this today. 11 12 And so the Forest Service, are you going to 13 report back to Belinda? 14 MS. HARTMAN: Oh, absolutely. Ours is a small 15 area, but we do have people that hike in there and we do have cattle grazing in there, so we are wondering if signs 16 17 are going to be enough. 18 MR. JAMES: Well, they haven't kept the people 19 out of the Chumash Wilderness Area from driving all 20 through it, so I don't think -- if they're going to be there, they're going to be there. 21 22 MS. HARTMAN: It's in the 05-North, so the odds 23 are pretty low. 24 MR. JAMES: Well, and the cows can't read it 25 anyway.

1 MS. HARTMAN: Cows can't read it, but the people 2 that hike in the hills can. 3 MR. JAMES: I don't worry about people some 4 days. 5 MS. HARTMAN: No. We're good. 6 MR. JAMES: Any questions? I'm also 7 MR. FEATHERSTONE: Tom Featherstone. with the Cal Poly Environmental Health and Safety Office. 8 9 And just by way of letting everyone know, Bruce and Mary 10 and I have spent a couple of times on conference call recently. We've had people wanting to do academic work in 11 12 a couple of those spaces and we helped process that. At 13 one time, we wound up discouraging them from using that 14 space until after this is over. 15 And so that was in the form of if they wished to dig pits to evaluate soil, which is what the soil 16 17 scientists do, right? And so, thank you for that, and 18 thank you for your commitment to be willing to work with 19 us and our people whose career work is creating these 20 natural environments for cattle grazing and for what have We appreciate that and respect for our roads and 21 22 erosion and stuff like that. So certainly for many of my 23 folks, the academics, the munitions are of concern and 24 kind of an abstract concept. Yeah, we may be able to put 25 a picture of one up, but even that's not what they are

- 1 worried about, to be honest. It's the road. It's the
- 2 soils. It's their livelihood.
- 3 MR. JAMES: Well, and that's like the chemistry
- 4 student in the dorm mixing chemicals together to make a
- 5 bomb, just to see if he can do it, then he blows off his
- 6 hand. Then it becomes nonacademic, unfortunately, and
- 7 that's what we are trying to prevent. We can lessen the
- 8 exposure, but we can't remove it completely. Or I should
- 9 say not the exposure, the risk. We can get you to
- 10 99 percent, but that's about as far as we are going to go.
- 11 MR. FEATHERSTONE: But I just wanted to express
- 12 gratitude for your willingness to talk with us, to help us
- 13 with education materials and what have you going forward.
- MR. JAMES: We're not here to -- as I say, I was
- 15 joking when I say "strip mine." That's not what we are
- 16 here for. We are here to take care of the hot spots, if
- 17 you will, and try to leave it as we left it -- or leave it
- 18 as we found it, I'm sorry. But with the right seed mix,
- 19 you know, not take out an endangered species, avoid taking
- 20 the birds, because we don't go out in the February to
- 21 August area because of migratory birds. And I have worked
- 22 extensively with that.
- I used to work for the Air Force, worked for the
- 24 Air Force, the Army and the Navy installations around the
- 25 Western United States. And we're out there to try and

- 1 make sure that the birds, if there is a nest, we don't go
- 2 bother it. If we can, unless there is an absolute
- 3 necessity -- and I have actually gotten permits that say,
- 4 "You can do this, but only two." One air base, we had a
- 5 bird problem, and we were out there taking out raptors
- 6 because they were flying across the base. We even had --
- 7 we were able to take what we call a take with an eagle.
- 8 That doesn't mean we kill them. It just means we scare
- 9 them off, but we had permits from agriculture folks that
- 10 said "You can do this, so many of this, so many of that,"
- 11 what we could and couldn't do. And the idea here is the
- 12 same thing, we will go out there and do what we can do and
- 13 then try to leave it the way we found it.
- 14 MR. FEATHERSTONE: And I am sure with the open
- 15 communication that we've enjoyed so far, we'll both get
- 16 what we want.
- 17 MR. JAMES: I hope so. And I may not be the
- 18 project manager when we do the next couple of phases, but
- 19 the same thing, they should be talking to you. If they
- 20 don't, then you need to speak up and let people know.
- 21 MR. FEATHERSTONE: You presented a slide that
- 22 had a schedule, kind of a Microsoft schedule looking
- 23 thing. Can I get that one? I think it was that one.
- MS. HARTMAN: The one you can't read.
- MR. JAMES: And it's what we call notional. We

- 1 aren't sure when the funding will come for the next phase.
- 2 MR. FEATHERSTONE: I recall you saying that.
- 3 MR. JAMES: And I'm not sure when we are
- 4 programmed for this, so I have got this project with a
- 5 couple of others that are driving me crazy right now, so I
- 6 am not paying attention to the out years on these things,
- 7 but you can have a copy of this. And I believe it's not
- 8 in the Proposed Plan, but I don't see why we couldn't
- 9 share these slides.
- 10 MS. FRANQUEMONT: Yeah. It doesn't specifically
- 11 -- it's a little misleading because that's just how long
- 12 each alternative would take. It's just showing the
- 13 comparison between the implementation of Alternative 2,
- 14 which is institutional controls, versus Alternative 4,
- 15 which is --
- 16 MR. JAMES: Surface and subsurface.
- 17 MR. FEATHERSTONE: So perhaps that wouldn't be
- 18 helpful as I am talking to my people.
- 19 MR. JAMES: Well, as Mary says, it will start
- 20 here and take X number of days or months, whatever. So
- 21 this is not how we figure when it will happen or anything
- 22 like that.
- 23 MR. FEATHERSTONE: We'll just look forward to
- 24 getting something like that as it's available. Again,
- 25 Kevin and I will have people we need to advise how it's

```
going to play out. Thank you.
1
 2
               MR. JAMES: And Tom, if you will send me an
 3
     e-mail, I will check the schedule and see what is
     programmed for the next year. And I can, maybe, let you
 4
 5
    know when we are going to do the remedial design portion
     of that, and then you can go back and say, "Well, in two
6
 7
     years, they are planning to come back out here, look at
     it, design it, and then start preparing the remedy next
8
9
     year," or something like that.
10
               And also, we're doing -- there's another MRS
11
     called 09 that we are going to be awarding the contract
12
     this year before the end of September, so we will come
13
     back out and be doing a little more work out there, so I
14
     will let you know about that one too.
15
               Any further questions? We are only a phone call
16
     away or an e-mail away.
17
               So in that case, that concludes my presentation.
18
     And I would encourage you to check out the administrative
19
     record, and that will give you much further information of
20
    what we have found in the past up to now and give you
    probably interesting history. I am sure that there is
21
22
     some of that in there too.
23
               (Hearing concluded at 6:20 p.m.)
24
25
```

1	
2	
3	
4	CERTIFICATE
5	OF
6	CERTIFIED SHORTHAND REPORTER
7	* * * *
8	I, THE UNDERSIGNED CERTIFIED SHORTHAND REPORTER
9	IN AND FOR THE STATE OF CALIFORNIA, DO HEREBY CERTIFY:
10	THAT, THE FOREGOING PROCEEDINGS WERE TAKEN
11	BEFORE ME AT THE TIME AND PLACE HEREIN SET FORTH; THAT A
12	RECORD OF THE PROCEEDINGS WAS MADE BY ME USING MACHINE
13	SHORTHAND, WHICH WAS THEREAFTER TRANSCRIBED UNDER MY
14	DIRECTION; THAT THE FOREGOING IS A TRUE AND ACCURATE
15	RECORD OF THE PROCEEDING.
16	
17	
18	IN WITNESS WHEREOF, I HAVE SUBSCRIBED MY NAME ON
19	THIS DATE:
20	Carolyn Espere
21	- under the contract
22	CSR NO. 10091
23	
24	
25	
1	

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