

B. STATEMENT OF PURPOSE

The corrective action objectives contained in this Part of the Permit are to perform a RCRA Facility Investigation (RFI) to determine fully the nature and extent of any release of hazardous waste (including hazardous constituents and perchlorates) at or from the facility and to perform any activities necessary to correct actual or potential threats to human health and /or the environment resulting from the past or current release or potential release of hazardous waste (including hazardous constituents and perchlorates) at the facility.

C. CORRECTIVE ACTION AT SWMUs 2, 5, 9 and 11

1. RCRA Facility Assessment At SWMUs 2, 5, 9 and 11

A RCRA Facility Assessment (RFA) was conducted, and a final report summarizing the findings and recommendations was prepared by Booz, Allen and Hamilton, Inc. for the U.S. Environmental Protection Agency (EPA) in July, 2002. An addendum to the RFA was prepared by ADEQ in September, 2003. Potential releases of hazardous materials or wastes to local soils were noted in the RFA. Four (4) SWMUs were identified in the RFA as requiring further investigation. These are described below:

(a) SWMU-2, Munitions Wash Area (MWA)

A munitions wash area was formerly located south of the closed open burn trenches in the northwest quadrant of the MTR. This self-contained unit was used infrequently from approximately 1988 until 1993 for the treatment of residue (pink/red water) from 2,4,6-trinitrotoluene (TNT) washing operations.

The Permittee addressed the release of hazardous waste(s) in a RCRA Facility Investigation (RFI) in accordance with Permit Condition IV.H.

(b) SWMU-5, Auxiliary Air Field 2 Debris Piles

SWMU-5 is approximately 1.5 acres in size and is located west of Auxiliary Air Field 2. This site is currently used to stockpile scrap metal from spent ordnance and jet assisted take off canisters. The site was also used as a temporary storage location for refuse items in the 1940s and 1950s. The debris pile reportedly contained lumber, tires, old vehicle parts, paint cans, and construction materials. Several areas of petroleum-stained soil were observed at the site during the Preliminary Assessment (PA). The PA recommended the site for further investigation.

The Permittee addressed this release of hazardous material (petroleum contaminated soil) in accordance Permit Condition IV.H.

(c) SWMU-9, Former Accumulation Area for Burn Residue

The area designated as SWMU-9 is located one mile north of the MTR on the Aux II access road. From 1988 until 1993, open burning of munitions was conducted at the MTR (the open burn trenches were clean-closed in 1998). During open burning operations, large pieces of scrap metal were removed from the trenches after open burn events and accumulated on the ground for disposal or recycling. These large pieces of scrap metal and solid residues that remained after an open burn usually included metal casings, soot, and residual ash from paper, wood, cardboard, etc. Due to the method of waste storage in this area (directly on the ground), the potential exists for a release of hazardous constituents and perchlorates to soil.

The Permittee addressed this release of hazardous waste in a RFI in accordance with Permit Condition IV.H.

(d) SWMU-11, Former EOD Range

The former EOD Range is approximately 6.5 miles south east of Yuma (see Figure 11). The site was used in the past for open burning, detonation and disposal of spent ordnance. The waste treated included Class A and B explosives, dud bombs, dummy units, artillery, ammunition, hand grenades, and rocket fuel. Features at SWMU-11 consist of a trench (approximately 2 feet deep, 14 feet wide, and 50 feet long) and a dighole (approximately 2 feet deep, and 21 feet in diameter).

The Permittee addressed this release of hazardous waste in a RFI in accordance with Permit Condition IV.H.

2. RCRA Facility Investigation at SWMUs -2, -5, -9, and 11

RCRA Facility investigations were performed at SWMUs -2, -5, -9, and -11. Concentrations of the Contaminants Of Concern (COCs) were compared to remediation goals. The remediation goals were based on the pre-determined remediation standards found in the Soil Remediation Standards rule (Title 18, Chapter 8, Article 2).

(a) SWMU-2, Munitions Wash Area (MWA)

During the 2004 RFI surface and subsurface soil samples were collected from SWMU-2. The samples were characterized for volatile organic compounds (VOCs). The concentrations of these COCs were below the remediation goals. No further action is required at SWMU-2, the MWA.

(b) SWMU-5, Auxiliary Air Field 2 Debris Piles

During the 2004 RFI, and a subsequent investigation in 2007, surface and subsurface soil samples were collected from SWMU-5. The samples were characterized for explosives, metals, perchlorate, and semi-volatile organic compounds (SVOCs). The concentrations of all COCs were below the remediation goals. No further action is required at SWMU-5, the Auxiliary Air Field 2 Debris Piles.

(c) SWMU-9, Former Accumulation Area for Burn Residue

During the 2004 RFI surface and subsurface soil samples were collected from SWMU-9. The samples were characterized for explosives, metals, perchlorate, VOCs, SVOCs and white phosphorus. The concentrations of all COCs were below the remediation goals. No further action is required at SWMU-9, the Former Accumulation Area for Burn Residue.

(d) SWMU-11, Former EOD Range

The RFI at SWMU-11 involved excavation to determine if open burning and burying of munitions occurred at the trench or dighole. The RFI provided evidence that open burning and burying of munitions had occurred at the dighole. The dighole contents included black ash and burned munitions. Based on these findings, the Permittee must perform further corrective measures at SWMU-11.

3. No Further Action Determination For SWMUs -2, -5 and -9

The SWMUs where corrective action has been completed are shown in Table IV-1

Table IV-1
SWMUs REQUIRING NO FURTHER ACTION BY PERMITTEE

SWMU ID	SWMU Name
SWMU 2	Former Munitions Wash Area
SWMU 5	Auxiliary Air Field 2 Debris Piles
SWMU 9	Former Accumulation Area for Burn Residue

4. **SCHEDULE OF COMPLIANCE FOR SWMU-11, FORMER EOD Range**

The Corrective Measures Study (CMS) and Corrective Measures Implementation (CMI) Plan were finalized in 2006. The selected remedy was excavation of the buried munitions and ash followed by confirmatory sampling of the bottom and sides of the dighole. The selected remedy was implemented in 2007 and the CMI Report was submitted in 2007.

- (a) By December 31, 2011, Permittee shall submit to the Director for review and approval a revised Corrective Measures Implementation (CMI) report. The report must list the concentrations of contaminants of concern (COCs) in the confirmatory soil samples from SWMU-11, compare the COC concentrations with the applicable groundwater protection levels (GPLs), as required pursuant to A.A.C. R18-7-203.B, and identify all COCs that exceed the GPLs.
- (b) If none of the COC concentrations exceed the GPLs the revised CMI report becomes the final CMI report.
- (c) If any COC concentrations exceed the GPLs, the Permittee must submit for approval a Work Plan to complete the remaining corrective measures at SWMU-11. A final CMI Report will be due within 90 days of completion of the corrective measures.

D. **PROJECT COORDINATOR**

Within fifteen (15) calendar days of the effective date of this Permit, the Permittee shall designate a Project Coordinator and shall notify the Department in writing of the Project Coordinator it has selected. The Permittee's Project Coordinator shall be responsible for