INSTALLATION ACTION PLAN

For

TOOELE ARMY DEPOT



FISCAL YEAR 2001

PURPOSE

The purpose of the Installation Action Plan (IAP) is to outline the total multi-year restoration program for an installation. The plan will define Installation Restoration Program (IRP) requirements and propose a comprehensive approach and associated costs to conduct future investigations and remedial actions at each Solid Waste Management Unit (SWMU) at the installation and other areas of concern.

In an effort to coordinate planning information between the IRP manager, major army commands (MACOMs), installations, executing agencies, regulatory agencies, and the public, an IAP has been completed for the Tooele Army Depot (TEAD). The IAP is used to track requirements, schedules and tenative budgets for all major Army installation restoration programs.

All site specific funding and schedule information has been prepared according to projected overall Army funding levels and is therefore subject to change during the document's annual review. Under current project funding, all remedies will be in place at the TEAD by the end of 2007.

CONTRIBUTORS TO THIS YEAR'S IAP

NAME

ORGANIZATION

Larry McFarland TEAD, IRP Manager

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TOOELE ARMY DEPOT IAP FY 2001

PREPARED BY

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INFORMATION SHARING

s and installations believe that it should make openly. This Installation Action Plan was forw	
RAB Co-chair (document provided to all RAB members)	-
State Regulator	
EPA Regulator	
Installation RPM	

ACRONYMS & ABBREVIATIONS

AED Ammunition and Equipment Directorate

ALF Abandoned Landfill

ADRA Ammunition Demilitarization and Renovation Area

bgs below ground surface

BRAC Base Realignment and Closure Action
CAMU Corrective Action Management Unit

CERCLA Comprehensive Environmental Response Compensation and Liability Act

COC Contaminate of Concern
CM Corrective Measure

CMD Corrective Measure- Design

CMI Corrective Measure ImplementationCM(O) Corrective Measure-Operations

CMS Corrective Measure Study

DERA Defense Environmental Restoration AccountDRMO Defense Reutilization and Marketing Office

DSERTS Defense Site Environmental Restoration Tracking System **ER,A** Environmental Restoration, Army (formally called DERA)

FFSRA Federal Facility Site Remediation Agreement

FS Feasibility Study

FY Fiscal Year

IRA Interim Remedial Action

IRP Installation Restoration Program

IWL Industrial Waste Lagoon

MCL Maximum Contaminant Level

NE Not Evaluated

NFA No Further Action
NPL National Priorities List

OB/OD Open Burning/ Open Detanation

POL Petroleum, Oil & Lubricants

PP Proposed Plan

PRG

RA Remedial Action

RA(C) Remedial Action - ConstructionRA(O) Remedial Action - OperationRAB Restoration Advisory Board

RCRA Resource Conservation and Recovery Act

RD Remedial Design

REM Removal

RI Remedial Investigation

ACRONYMS & ABBREVIATIONS

RIP Remedy in Place ROD Record of Decision

RRSE Relative Risk Site Evaluation

SI Site Inspection

SVOC Semi-Volatile Organic Compounds

TCE Trichloroethylene

TPH Total Petroleum Hydrocarbons

UDEQ Utah Department of Environmental Quality

USACHPPM United States Army Center for Health Promotion and Preventive Medicine

USAEC United States Army Environmental Center

USAEHA United States Army Environmental Hygiene Agency (replaced by CHPPM)
USATHMA United States Army Toxic and Hazardous Material Agency (replaced by AEC)

UXO Unexploded Ordnance

VOC Volatile Organic Compounds

SUMMARY

STATUS

NPL (score = 53.95) with off-post groundwater contamination in October 1990. IRP being conducted in accordance with a FFA and RCRA Corrective Action Permit.

NUMBER OF DSERTS SITES:

64 DSERTS sites

27 Active ER,A Eligible Sites 6 Response Complete Sites

31 BRAC Sites

DIFFERENT DSERTS SITE TYPES:

Burn Area	1	Contaminated Buildings	1
Contaminated Soil Piles	2	Contaminated Groundwater	1
Surface Disposal Area	4	Chemical Disposal	1
Drainage Ditch	7	Disposal Pit/Dry Well	3
Firing Range	2	Industrial Discharge	1
Incinerator	4	Landfill	1
Pesticide Shop	1	Storage Area	12
Surface Impound./Lagoon	8	Soil Contam. after Tank Removal	1
Small Arms Range	1	Spill Site Area	3
Aboveground Storage Tank	2	Underground Storage Tank	1
Waste Lines	2	Waste Treatment Plant	2
EOD Area	1	Unexploded Munitions/Ordnance	2

CONTAMINANTS OF CONCERN:

VOC's, Explosives, Metals, PCBs and Petroleum Constituents

MEDIA OF CONCERN:

Groundwater and Soil

COMPLETED REM/IRA/RA:

REM-Soil Removal (1976) (Non-DERA Funds)
REM-Soil Removal (1980) (Non-DERA Funds)
IRA-Capping (1984) (Non-DERA Funds)
IRA-Capping (1989) \$4,200,000
REM-Tank Removal (1991) (Non-DERA Funds)
REM-Tire Removal (1993) \$160,000
REM-Fence Installation (1994) \$4,000
IRA-UXO Clearance (1994) \$1,298,000
REM-Fence Installation (1995) \$3,800
REM-Fence Installation (1995) \$3,200
IRA-Tank Removal TNT Washout Facility (1996) \$265,330

IRA- Building 679 Sump Removal (2000) BRAC funds \$12,000

IRA-Washdown Industrial Waste Lagoon (1996)

\$86,000

IRA-Sump Removal, Building 507 Battery Pit (1996) \$50,000

IRA-Compressor Condensate, Buildings 619 & 613 (1996) (BRAC Funds)

IRA-Battery Shop, Building 618 (1996) (BRAC Funds)

REM-Underground Storage Tanks, Building 629, 691,

and 637 (1997) \$1500K (BRAC)

IRA- Soil Removal, SWMU's 7 and 22 (1997-98)

\$200,000

CURRENT IRP PHASES:

RD at 3 Sites RA at 11 Sites RAO at 12 Sites LTM at 2 Sites

PROJECTED IRP PHASES:

RA at 2 Sites LTM/RA(O) at 25 Sites

FUNDING & DURATION:

 Prior Year through 2000:
 \$ 74,211,00K

 FY 2001:
 \$ 8,681,000 K

 Future Requirements
 \$ 45,503,000K

 Total:
 \$ 128,395,000 K

YEAR OF IRP INCEPTION: YEAR OF IRP COMPLETION (excluding LTM and 1979

RAO): 2007

INSTALLATION INFORMATION

LOCALE

TEAD is located approximately 35 miles southwest of Salt Lake City, in Tooele County, Utah. The installation covers an area of 23,015 acres and is located off of Utah Highway 36, just west of the City of Tooele. The working population is approximately 600 personnel. The City of Grantsville (population 6,000) is situated just beyond the northwest boundary and the City of Tooele (population 20,000) is located immediately northeast of TEAD.

COMMAND ORGANIZATION

MAJOR COMMAND: U.S. Army Materiel Command; Engineering, Housing, Environmental and Installation Logistics, Environmental Quality Division

SUBCOMMAND: U.S. Army Operations Support Command **INSTALLATION:** Tooele Army Depot, Environmental Office

INSTALLATION RESTORATION PROGRAM (IRP) EXECUTING AGENCY

- U.S. Army Corps of Engineers, Sacramento District, CA
- U.S. Army Industrial Operations Command; Industrial Base Management Center

REGULATOR PARTICIPATION

FEDERAL: U.S. Environmental Protection Agency, Region VIII, Federal Facilities Program, Office of Ecosystem

Protection and Remediation

STATE: State of Utah, Department of Environmental Quality (UDEQ), Division of Solid and Hazardous Waste

and Division of Environmental Response and Remediation

REGULATORY STATUS

- NPL Installation, Oct 90
- Technical Review Committee, Feb 88
- Corrective Action Permit, Jan 91
- Federal Facility Agreement, Sep 91
- Restoration Advisory Board formed in 1994

MAJOR CHANGES TO ACTION PLAN FROM PREVIOUS YEAR (FY 00)

- RCRA Corrective Action Permit is being re-issued in FY2001.
- ROD for OU 4 and 8 is being staffed for signature in 1st Qtr FY2001.
- CMS and DD for Group B sites has been approved by regulators. Public comment and DD staffing for signature planned for 1st Qtr FY2001.
- First Five Year Review under FFA to be completed in FY2001.

INSTALLATION DESCRIPTION

Tooele Army Depot (TEAD) is an active U.S. Army Operations Support Command facility. TEAD's mission is to provide for the receipt, storage, issue, maintenance, and demilitarization of conventional ammunition. TEAD is one of the major ammunition storage facilities in the United States and occupies 23,015 acres. TEAD's past maintenance missions have included the repair of tactical wheeled vehicles and power generation equipment. Along with these missions, secondary components of these items have been rebuilt, including engine and power trains. In 1993, TEAD's maintenance mission was placed on the base realignment and closure (BRAC) list and the realignment of the maintenance mission was completed in September 1995. The excess BRAC property (1717 acres and over 200 buildings) was transferred to the Tooele City Redevelopment Agency in December 1998 under the Section 334 Early Transfer Authority.

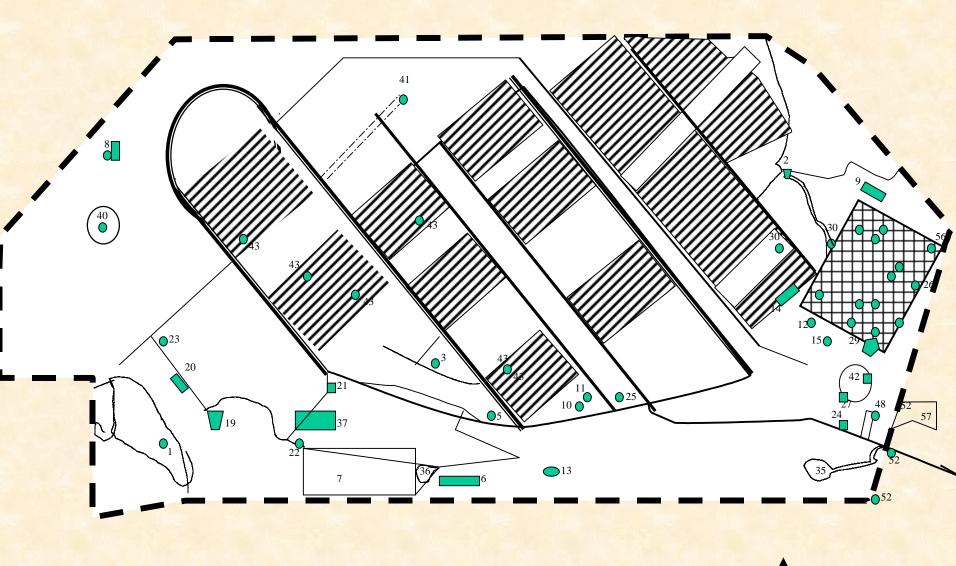
TEAD was established on 7 April 1942 as the Tooele Ordnance Depot. Construction of the facilities, including igloos, magazines, administration buildings, military and civilian housing, roads, hardstands for vehicle storage, and other allied appurtenances, was completed in January 1943. More than 1,625,000 tons of material were shipped and received by TEAD during World War II.

The installation was designated a sub-depot of the Ogden Arsenal in March 1947. In November 1949, TEAD was again redesignated as a full depot and the Ogden Arsenal was designated as a sub-depot under TEAD. In 1955, the Ogden facility was discontinued and its mission transferred to Tooele. On 30 March 1961, the guided missile rebuild, tires and tubes rebuild and calibration of test equipment missions from Benicia Arsenal and Mt. Ranier Ordnance Depot were transferred to TEAD. In June 1970, the maintenance mission responsibilities for topographic equipment, troop support items, construction equipment, power generators and serviceable assets were transferred from Granite City Army Depot. In the mid-1970's, the following four depot activities were assigned to TEAD for administration: Umatilla, Navajo, Fort Wingate and Pueblo.

In 1993, TEAD's maintenance and supply functions were identified for transfer to other installations by the Base Realignment and Closure (BRAC) Commission. With two of the remaining missions being ammunition logistics and the design/fabrication of ammunition equipment, TEAD was designated as a Tier 1 ammunition storage facility in 1995. This made it the primary depot for ammunition operations in the western United States.

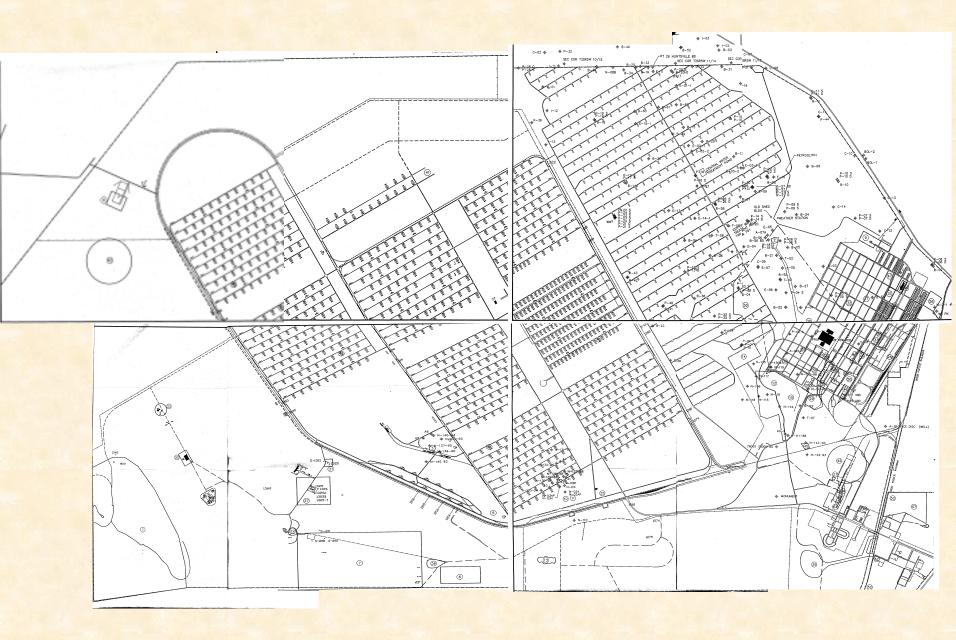
The Army is investigating areas of the installation potentially contaminated by these previous activities by implementing its environmental response authority under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), the Superfund Amendments and Reauthorization Act (SARA) and the Resource Conservation and Recovery Act (RCRA).

A Federal Facility Agreement (FFA) between the Utah Department of Environmental Quality (UDEQ), U.S. Environmental Protection Agency (EPA) Region VIII and the Army was signed in September 1991. Seventeen of the waste sites at TEAD were designated as CERCLA sites in this Agreement. In January 1991, TEAD was issued a RCRA Post Closure and Corrective Action Permit. This Permit basically serves the same purpose as the FFA. The Corrective Action portion of the Permit addresses 9 known releases Solid Waste Management Units (SWMU's) and 31 suspected releases SWMU's. Thus, 17 sites are being handled under CERCLA/SARA with the EPA as the lead regulatory agency and 40 are being addressed under RCRA with the State of Utah as the lead agency.



TOOELE ARMY DEPOT DSERTS SITES

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SWMU/DSERTS/OU CONVERSION

DSERTS#	SWMU#	Group	Regulation	Program	Title	RC
TEAD-01	1	Group A	RCRA	ER,A	OB/OD Area	
TEAD-05	6	OU 8	CERCLA	ER,A	Old Burn Area	
TEAD-06	13	OU 8	CERCLA	ER,A	Tire Disposal Site	
TEAD-09	12 & 15	Known Releases	RCRA	ER,A	North Area Sanitary Landfill	
TEAD-10	5	OU 7	CERCLA	ER,A	PCB Spill Site (Pole 184)	X
TEAD-11	3	Known Releases	RCRA	ER,A	X-Ray Lagoon (Bldg L-23)	
TEAD-12	23	OU 9	CERCLA	ER,A	Bomb & Shell Recond Bldg	
TEAD-13	2	Known Releases	RCRA	ER,A	IWL & Ditches	
TEAD-14	24	Known Releases	RCRA	ER,A	Battery Pit	
TEAD-15	7	OU 9	CERCLA	ER,A	Chemical Range	
TEAD-16	8	OU 8	CERCLA	ER,A	Firing Range	
TEAD-18	19	Group B	RCRA	ER,A	AED Demil Facility (Bldg 1370-80)	
TEAD-21	27	Group A	RCRA	ER,A	RCRA Container Storage	X
TEAD-24A	30	Known Releases	RCRA	ER,A	Old IWL (Active Parcel)	
TEAD-27	35	OU4	CERCLA	ER,A	Wastewater Spreading Area	
TEAD-28	36	OU 8	CERCLA	ER,A	Old Burn Staging Area	
TEAD-29	37	Group A	RCRA	ER,A	Cont Waste Proc (Bldg 1325)	
TEAD-31	11	Known Releases	RCRA	ER,A	Laundry Pond	
TEAD-33	16	None	None	ER,A	Septic Tanks	X
TEAD-34	22	OU 8	CERCLA	ER,A	Bldg 1303 Washout Pond	
TEAD-35	20	Group A	RCRA	ER,A	Deact Furnace (Bldg 1351)	
TEAD-36	40	OU 9	CERCLA	ER,A	AED Test Range	
TEAD-37	21	Group A	RCRA	ER,A	Deact Furnace (Bldg 1320)	
TEAD-38	41	UO 10	CERCLA	ER,A	Box Eder Wash Drum Site	X
TEAD-50	25	Known Releases	RCRA	ER,A	Battery Recharge Ops (Bldg 1252)	
TEAD-54	34	Group A	RCRA	ER,A	Pesticide Mixing (Bldg 532)	
TEAD-58	42	Group A	RCRA	ER,A	Bldg 539 Bomb Washout	
TEAD-67	43	None	RCRA	ER,A	Cont Storage Areas for P999	X
TEAD-70A	46	Group B	RCRA	ER,A	Used Oil Dumpsters	
TEAD-80	14	Group B	RCRA	ER,A	Sewage Lagoons	X
TEAD-81	10	Known Releases	RCRA	ER,A	TNT Washout Ponds	
TEAD-83	45	Group A	RCRA	ER,A	Stormwater Discharge	
TEAD-84	48	Group A	RCRA	ER,A	Old Dispensary	

SWMU/DSERTS/OU CONVERSION

DSERTS #	SWMU#	Group	Regulation	Program	Title	RC
TEAD-03	31	OU 4	CERCLA	BRAC	Transformer Storage Site	
TEAD-04	4	Group B	RCRA	BRAC	Sandblast Area	
TEAD-07	17	OU 5	CERCLA	BRAC	Transformer Storage	X
TEAD-08	18	OU 6	CERCLA	BRAC	RAD Storage (Bldg S-659)	X
TEAD-101	58	None	RCRA	BRAC	Indust Area Groundwater Sources	
TEAD-19	9	OU 6	CERCLA	BRAC	RAD Waste Storage	X
TEAD-20	26	Group B	RCRA	BRAC	DRMO Storage Yard	
TEAD-22	28	Group B	RCRA	BRAC	90 Day Storage Area	X
TEAD-23	29	Group B	RCRA	BRAC	Drum Storage Area	
TEAD-24	30	Known Releases	RCRA	BRAC	Old IWL (BRAC Parcel)	
TEAD-25	32	UO 4	CERCLA	BRAC	PCB Spill Site	
TEAD-26	33	OU 5	CERCLA	BRAC	PCB Storage (Bldg 659)	X
TEAD-30	38	Group B	RCRA	BRAC	IWTP	X
TEAD-32	39	None	RCRA	BRAC	Solvent Recov Facility	X
TEAD-69	47	Group B	RCRA	BRAC	Boiler Blowdown	X
TEAD-70	46	Group B	RCRA	BRAC	Used Oil Dumpsters	
TEAD-82	44	None	RCRA	BRAC	TCE Storage Tank	X
TEAD-85	49	Group C	RCRA	BRAC	Storm/ Indust Piping System	
TEAD-86	50	Group C	RCRA	BRAC	Compressor Condensate	
TEAD-87	51	Group C	RCRA	BRAC	Chromic Acid/ Alodine Beds	
TEAD-88	52	Group C	RCRA	BRAC	Drain Field/ Disp Trench	
TEAD-89	53	Group C	RCRA	BRAC	PCB Storage/ Spill Sites	X
TEAD-90	54	Group C	RCRA	BRAC	Sandblast Areas	
TEAD-91	55	Group C	RCRA	BRAC	Battery Shop, Bldg 618	X
TEAD-93	56	Group C	RCRA	BRAC	Gravel Pit	
TEAD-94	57	Group C	RCRA	BRAC	Skeet Range	
TEAD-95	NA	None	Compliance	BRAC	UST Sites	
TEAD-96	NA	None	Compliance	BRAC	Building 611 Firing Range	X
TEAD-97	NA	None	Compliance	BRAC	Building 659 Transformer Storage	X
TEAD-98	NA	None	CERCLA/RCRA	BRAC	State Services	
TEAD-99	None	None	RCRA	BRAC	Northeast Boundary TCE Plume	

CONTAMINATION ASSESSMENT

General

Past operations and related disposal practices at TEAD have resulted in the generation of various types of industrial wastes, some of which have resulted in contamination of the environment. Chlorinated solvents, heavy metals (primarily lead), polychlorinated biphynels, and explosives are the primary contaminants of concern. Significant plumes of solvent-contaminated ground water have been identified, both on and off the installation. Additionally, UXO are present in substantial quantities at some locations, which can complicate both study and cleanup efforts.

Investigations identified trichloroethylene (TCE) and other chlorinated solvents contamination from the Industrial Waste Lagoon in groundwater in the early 1980's, as well as explosive compounds from the TNT Washout Facility in soil and in groundwater. Following the discovery of solvent contamination at the lagoon, the Utah Department of Environmental Quality issued TEAD a formal consent order to investigate and clean up the site. A ground water pump and treat system has been operating at the site since 1993.

The U.S. Environmental Protection Agency placed the Depot on its National Priorities List in October of 1990. Subsequently, a Federal Facilities Agreement regulating general investigation and cleanup terms and conditions, under the Comprehensive Environmental Response, Compensation and Liabilities Act (CERCLA), was signed with federal and state regulatory agencies in September 1991. TEAD was issued a RCRA Corrective Actions permit, addressing similar issues, in January of that year.

The TEAD cleanup program underwent an outside technical review in June of 1998 (primarily focused at Base Realignment and Closure [BRAC] actions). The review team's recommendations included the development of risk-based Alternate Concentration Limits as objectives for the groundwater treatment system, along with a goal-oriented strategy for determining the appropriate point to discontinue use of the systems. Further recommendations dealt with the optimization of the operation of the treatment system, and the potential usefulness of an analysis of the details of the role of metals background concentrations in evaluating site risks.

The TEAD restoration program underwent an Independent Technical Review (ITR) in September 2000. Sites evaluated under this review included SWMU 10, TNT Washout Ponds, SWMUs 12/15, Sanitary Landfill, and Groundwater Investigation efforts associated with SWMUs 2 and 58. Although the report of findings from this review has not been published discussions concerning the appropriateness of proposed remedies at SWMUs 10, and 12/15 were questioned. In addition, concerns were raised concerning the on-going operations of the ground water remediation system, as well as the concepts presented for further delineation and remediation of source areas. Based on the recommendations coming out of the ITR, the focus may change concerning remedies at these sites.

The Depot was placed on the BRAC list in 1993. As a result, of the 67 DSERTS sites at TEAD, 36 are being addressed under the Army's Installation Restoration Program (IRP) for active facilities, and the others are under the BRAC environmental program. Likewise both IRP and BRAC sites are further split between regulation under CERCLA and RCRA, as shown in the Site List.

CONTAMINATION ASSESSMENT

Site Organization and Project Phase Status

The IRP at TEAD (a total of 57 Solid Waste Management Units or SWMUs) is divided into two programs, one operated under CERCLA and the other under RCRA corrective action. The 17 CERCLA SWMUs are listed in the Federal Facilities Agreement, and are divided into seven operable units, numbered 4-10 (numbers 1-3 are used by EPA to track TEADs RCRA Corrective Action sites). All required response actions have been completed at OUs 5,6,7 and 10. A ROD is being staffed for signature addressing OUs 4 and 8. The remaining operable unit, OU 9, contains 3 SWMUs which are currently in the Feasibility Study/Proposed Plan/Record of Decision phase.

There are 40 SWMUs addressed in the Corrective Action Permit. These SWMUs are further divided into two primary categories by the permit - known releases (nine SWMUs), and suspected releases (31 SWMUs).

The RFI for the Known Release SWMUs was approved by the regulators in 1997. Currently, eight of the nine SWMUs are in the CMS phase. The remaining SWMU (TEAD-14) is in the corrective measures implementation (CMI) phase.

Of the 31 suspected release SWMUs, four were approved as requiring no further action after the Phase I RFI. The 27 remaining SWMUs are categorized into four groupings (Groups A, B, C, and TEAD-101) for management and scheduling purposes. There are eight SWMUs in Group A, all in the CMS phase. There are nine in Group B, four of which have been approved for no further action after the Phase II RFI in 1997; the rest are in the CMS/DD phase. The CMS/DD have been approved by the State and will be made available in the first quarter of FY2001 for public review prior to signature. There are also nine SWMUs in Group C, one of which received no further action in 1997. The other eight SWMUs in this group are in the CMS phase. Lastly, TEAD-101, Industrial Area Groundwater Sources is in the Phase I RFI phase.

PREVIOUS STUDIES

Title	Author	Date
Environmental Assessment of Tooele Army Depot, Report No. 141	USATHAMA	Dec-79
Installation Environmental Assessment	Inland Pacific Engineering Co.	Jun-82
Investigation at the Open Burning/Open Detonation Areas	AEHA	1982-1985
Exploratory Environmental Contamination Assessment Report	ERTEC	1982
Environmental Photographic Interpretation Center Report	USEPA and EPIC	1982
Analysis of Existing Facilities/Environmental Assessment Report	TEAD Facilities Engineering	May-83
Monitoring Activity and Waste Disposal Review and Evaluation	CH2M Hill	Jan-85
A Study of Environmental Balance	Department of the Army	Mar-85
Performance of Remedial Response Activities at Uncontrolled Hazardous Waste Sites - Final Plan	CDM	Mar-85
Interim Groundwater Quality Assessment Report	Woodward-Clyde	1985
Analytical/Environmental Assessment Report	TEAD Facilities Engineering	Nov-85
Industrial Wastewater Lagoon and Ditches - Groundwater Quality Assessment Report, Corrective Action	James M. Montgomery (JMM)	Jan-86
Plan, and Record of Decision		
Engineering Report for Closure of the Industrial Wastewater Lagoon	JMM	Mar-86
Environmental Photographic Interpretation Center Report Addendum	USEPA and EPIC	Jul-86
Draft Interim RCRA Facility Assessment	NUS Corporation	Aug-87
Groundwater Quality Assessment Engineering Report	JMM	May-88
Preliminary Assessment/Site Investigation Report	EA Engineering, Science and Technology	Dec-88
Final Remedial Investigation Report	Roy F. Weston	Dec-90
Groundwater Quality Assessment for Tooele Army Depot Tooele, Utah	ESE	Feb-91
RCRA RFI Phase I Summary Report for Known Release Units	ASI	Nov-91
Final Preliminary Baseline Risk Assessment for Tooele Army Depot - North Area	SEC Donohue	Apr-92
Memorandum of Remedial Action Objectives	RUST Environment and Infrastructure (RUST E&I)	Jun-93
Assembled Alternatives Screening Memorandum	RUST E&I	Mar-93
Phase I RCRA Facility Investigation Report, Suspected Releases SWMUs	Montgomery Watson	Dec-93
Memorandum on Detailed Analysis of Alternatives	RUST E&I	Oct-93
Remedial Investigation Report for Operable Units 4-10	RUST E&I	Feb-94
Feasibility Study Report for Operable Units 5, 6, 7 and 10	RUST E&I	Mar-94
Record of Decision for Operable Units 5, 6, 7 and 10	RUST E&I	Sep-94
Phase II RFI Report for Known Releases SWMUs	RUST E&I	Apr-96
Phase II RFI Report for Group A SWMUs.	Montgomery Watson	Sep-96
Phase 2 RI Report for Operable Units 4, 8 and 9	RUST E&I	Nov-96
Phase II RFI Report for Group B SWMUs.	SAIC	1-Jun-96
Remedial Design for Two CERCLA Sites in TEAD-North, Volume 1 & 2	Jacobs Engineering, Kleinfelder	1-Nov-95

PREVIOUS STUDIES

Title	Author	Date
Remedial Action Workplan for CERCLA Sites	Davey	1-Oct-95
Groundwater Monitoring Report	Geomatrix Consultants, Inc.	Spring of 1996
Technical Evaluation of Groundwater Conditions Beneath Northeast Boundary	Kleinfelder	Mar-96
Groundwater Sampling & Analysis	Metcalf & Eddy	Dec-96
Remedial Design Support Field Activities Report for Box Elder Wash Drum Site in TEAD-North	Jacobs Engineering, Kleinfelder	Feb-96
Technical Memorandum, Target Soil Clean-up Goals, Box Elder Drum Wash Site (OU 10/SWMU 41), TEAD-North	Kleinfelder	Jan-96
Site Close Out Report, Box Elder Wash Site (OU 10/SWMU 41), TEAD-North	U.S. Army Corps of Engineers, Sacramento District	May-96
Known Releases CMS Work Plan	Dames and Moore	Jul-96
Group A Suspected Releases CMS Work Plan	Dames and Moore	Jun-96
Remedial Investigation Addendum Report for OUs 4, 8, and 9	RUST E&I	Feb-97
Feasibility Study Report for OUs 4,8, and 9	Dames and Moore	Jan-98
Proposed Plan for OUs 4, 8, and 9	Dames and Moore	Feb-98
Technical Report for Soil Composting Treatability Study, TNT Washout Facility (SWMU 10)	Dames and Moore	Feb-98
Group B Suspected Releases CMS Workplan	Dames and Moore	Apr-98
Group C Suspected Releases CMS Workplan	Dames and Moore	Jul-98
Additional Field Investigation for Known Releases SWMUs	Dames and Moore	Jul-98
Groundwater Treatment Plant Optimization Study	Kleinfelder	Aug-98
Groundwater Treatment System Optimization Study	EPA	Feb-99
Groundwater Flow and Solute Transport Model	USACE	Feb-99

OPERABLE UNIT 4 AND 8

TEAD-05, SWMU 6 OLD BURN AREA

SITE DESCRIPTION

Regulation: CERCLA

The Old Burn Area was used for testing of munitions and for burning boxes and wooden crates on the ground surface and in shallow trenches. These activities were discontinued in the 1970's. The trenches still contain metal debris and spent or destoyed munitions. The trenches have been filled, graded and revegetated.

Low levels of metals and explosives were detected in soil samples. Lead was located in a small area near one of the berms and hot spots were detected to 5 ft bgs. 2,4-DNT was located within a manmade drainage ditch that collects runoff from the site. Both were present at concentrations above the industrial worker PRGs. Elevated cancer risks and hazards were identified for the hypothetical future resident and the future construction worker. No significant ecological risks were identified. A ROD was staffed for signature in October 2000.

PROPOSED PLAN

Excavation of lead-contaminated soil (~2800cy) at levels above PRGs, and treatment of the contaminated soil onsite through solidification/ stabilization. Solidified/stabilized soil will be deposited in and managed in a CAMU located within the boundries of SWMU 12/15.

Institutional controls in the form of land use restrictions are included to prevent future residential use. Five-year site reviews will be conducted.

IRP STATUS

RRSE RATING: High Risk (1A)
CONTAMINANTS OF CONCERN:

Explosives, Metals

MEDIA OF CONCERN:

Soil

COMPLETED IRP PHASE:

PA/SI, RI

CURRENT IRP PHASE:

FS (ROD), RD

FUTURE IRPPHASE:

RA



CONSTRAINED COST TO COMPLETE										
PHASE	2001	2002	2003	2004	2005	2006	2007+			
RI/FS										
IRA										
RD										
RA(C)	650									
RA(O)				1			2			
LTM										
LTO										
PROJ	PROJECTED TOTAL: \$653,000									

TEAD-06, SWMU 13 TIRE DISPOSAL SITE

SITE DESCRIPTION

Regulation: CERCLA

The Tire Disposal Area is an 11-acre pit located in the southern portion of TEAD. It was used for the disposal of vehicle tires from 1965 to 1993. The tires were removed in 1993.

Chloromethane was the only chemical detected in the surface soil. However it was present at levels below the Depot worker PRG.

A ROD was staffed for signature in October 2000.

IRP STATUS

RRSE RATING: Low Risk (3A)
CONTAMINANTS OF CONCERN:

Chloromethane

MEDIA OF CONCERN:

Soil

COMPLETED IRP PHASE:

PA/SI, REM, RI

CURRENT IRP PHASE:

FS (ROD), RA(institutional controls)

FUTURE IRPPHASE:

RA(institutional controls)



PROPOSED PLAN

Institutional controls in the form of land use restrictions will be applied. Five-year site reviews will be required.

CONSTRAINED COST TO COMPLETE										
PHASE	2001	2002	2003	2004	2005	2006	2007+			
RI/FS										
IRA										
RD										
RA(C)										
RA(O)				1			2			
LTM										
LTO										
PROT	FCTEI	— В ТОТ	'A T •	¢3 0	00					

PROJECTED TOTAL: \$3.00(

TEAD-16, SWMU 8 FIRING RANGE

SITE DESCRIPTION

Regulation: CERCLA

The Small Arms Firing Range was used weapons training by the National Guard, Army Reserve, Navy and TEAD military personnel. The range contains 20 firing stations, with targets located at 25, 50, 100 and 300 meters. Bermed areas just in front and behind the targets were used to stop the fired rounds.

Several metals were identified in the soil collected from the berms, although lead was the only COC.

Elevated risks and hazards were identified for the hypothetical future resident. The ecological risk identified adverse effects on plants and animals from the lead in the soil. A ROD was staffed for signature in October 2000.

PROPOSED PLAN

Excavation of lead-contaminated soil (2,400cy) at levels above PRGs, and treatment of the contaminated soil onsite through solidification/stabilization. Solidified/stabilized soil will be deposited in and managed in a CAMU located within the boundries of SWMU 12/15.

Institutional controls in the form of land use restrictions are included to prevent future residential use. Five-year site reviews will be conducted.

IRP STATUS

RRSE RATING: High Risk (1A)
CONTAMINANTS OF CONCERN:

Lead

MEDIA OF CONCERN:

Soil

COMPLETED IRP PHASE:

PA/SI. RI

CURRENT IRPPHASE:

FS (ROD), RD

FUTURE IRPPHASE:

RA



CONSTRAINED COST TO COMPLETE										
PHASE	2001	2002	2003	2004	2005	2006	2007+			
RI/FS										
IRA										
RD										
RA(C)	550									
RA(O)				1			2			
LTM										
LTO	·									
PROJECTED TOTAL: \$553,000										

TEAD-27, SWMU 35 WASTEWATER SPREADING AREA

SITE DESCRIPTION

Regulation: CERCLA

At the Wastewater Spreading Area, runoff and wastewater from a former housing area, now part of the TEAD horse stable complex, was discharged through two culverts into two unlined ditches. The ditches discharged to a relatively flat spreading area.

Levels of pesticides above industrial worker PRGs were identified as COCs in the soil. These pesticides do not appear to have adversely affected groundwater. The human health Risk Assessment identified no elevated cancer risk or hazards for the Depot worker. Eelevated risk has been identified for the possible future resident. There is a potential ecological risk to songbirds due to the consumption of food from this area. A ROD was staffed for signature in October 2000.

PROPOSED PLAN

Excavation of some of the pesticide-contaminated soil and off-post treatment/disposal.

Institutional controls in the form of land use restrictions are included to prevent future residential use. Five-year site reviews will be conducted.

IRP STATUS

RRSE RATING: Medium Risk (2A) CONTAMINANTS OF CONCERN:

Pesticides

MEDIA OF CONCERN:

Soil

COMPLETED IRPPHASE:

PA/SI, RI

CURRENT IRP PHASE:

FS (ROD), RD

FUTURE IRPPHASE:

RA



CONSTRAINED COST TO COMPLETE									
PHASE	2001	2002	2003	2004	2005	2006	2007+		
RI/FS									
IR A									
RD									
RA(C)									
RA(O)				1			2		
LTM									
LTO									
DD O II	e CTEI	о тот	'A T •	62 0	00				

TEAD-28, SWMU 36 OLD BURN STAGING AREA

SITE DESCRIPTION

Regulation: CERCLA

The Old Burn Staging Area is a small pit located immediately north of the Old Burn Area (SWMU 6). The area was used to temporarily store material on its way the the Old Burn Area.

Elevated concentrations of metals were detected in the surface soil. Slightly elevated hazards were identified for the hypothetical future resident. A ROD was staffeed for signature in October 2000.

IRP STATUS

RRSE RATING: High Risk (1A)
CONTAMINANTS OF CONCERN:

Metals

MEDIA OF CONCERN:

Soil

COMPLETED IRP PHASE:

PA/SI. RI

CURRENT IRP PHASE:

FS (ROD), RA (institutional controls)

FUTURE IRPPHASE:

RA (institutional controls)



PHASE 2003 2006 2007+ 2001 2002 2004 2005 RI/FS IRA RD RA(C) RA(O) 1 2 LTM LTO PROJECTED TOTAL: \$3,000

PROPOSED PLAN

Institutional controls in the form of land use restrictions will be applied. Five-year reviews will be required.

TEAD-34, SWMU 22 BUILDING 1303 WASHOUT POND

SITE DESCRIPTION

Regulation: CERCLA

The Building 1303 Washout Pond is a shallow depression located in the southwestern portion on TEAD. This site received washwater from Bldg 1303, where high-explosive bombs and projectiles were dismantled and shell casings were washed for reuse or disposal. The washwater drained from the building into an unlined ditch and flowed to the ponding area.

Metals and explosives were detected in the soil of the ditch and pond. The explosives 2,4,6-TNT and RDX were located in one hot spot.

Explosive-stained soil from the washout pond was removed in Feb 1998.

A risk assessment conducted after the removal showed a slightly elevated cancer risks and hazards were detected for the hypothetical future resident. A ROD was staffed for signature in October 2000

PROPOSED PLAN

Institutional controls in the form of land use restrictions will be applied. Five-year site reviews will be required.

IRP STATUS

RRSE RATING: Medium Risk (2A) CONTAMINANTS OF CONCERN:

Explosives, Metals

MEDIA OF CONCERN:

Soil

COMPLETED IRP PHASE:

PA/SI, RI, IRA

CURRENT IRP PHASE:

FS (ROD), RA (institutional controls)

FUTURE IRPPHASE:

RA (institutional controls)



CO	CONSTRAINED COST TO COMPLETE										
PHASE	2001	2002	2003	2004	2005	2006	2007+				
RI/FS											
IRA											
RD											
RA(C)											
RA(O)				1			2				
LTM											
LTO											
PROJ	PROJECTED TOTAL: \$3,000										

OPERABLE UNIT 9

TEAD-12, SWMU 23 BOMB AND SHELL RECOND BLDG

SITE DESCRIPTION

Regulation: CERCLA

Operations in Building 1345 began in the late 1950's and have consisted of external work on large munitions, primarily sandblasting and painting. Wastewater, which currently is comprised of boiler blowdown water, has flowed from the facility into two ditches.

The Remedial Investigation identified elevated levels of SVOCs and PCBs that pose a risk to furture residents as well as on-site workers.

PROPOSED PLAN

A draft Feasibility Study proposing the excavation of contaminated soil for off post treatment or disposal and the application land use restirctions will be submitted for regulatory review. Five-year reviews will be required..

IRP STATUS

RRSE RATING: High Risk (1A)
CONTAMINANTS OF CONCERN:

SVOC's, Metals

MEDIA OF CONCERN:

Soil, Surface Water

COMPLETED IRP PHASE:

PA/SI/RI

CURRENT IRP PHASE:

FS (ROD)

FUTURE IRPPHASE:

RD, RA



CONSTRAINED COST TO COMPLETE										
PHASE	2001	2002	2003	2004	2005	2006	2007+			
RI/FS										
IRA										
RD	15									
RA(C)		130								
RA(O)				1			2			
LTM										
LTO										
PROJECTED TOTAL: \$148,000										

TEAD-15, SWMU 7 CHEMICAL RANGE

SITE DESCRIPTION

Regulation: CERCLA

The Chemical Range which covers 550 acres, runs east and west along the southern installation boundry. At the eastern point of the firing range is the firing point, with the bullet stop located about 4,860 feet to the west. A building foundation and several debris disposal trenches are all that remain. Chemical and pyrotechnic type munitions, excluding chemical agent fill munitions, were tested and disposed of at this site. Munition testing and disposal included such items as flares, smoke grenades, smoke pots, incebdiary devices and riot control gases.

In 1998, debris and explosive residue was removed from one of the trenches which was exposed and had not been covered in the past.

The Remedial Investigation at this site identified elevated metals concentrations in surface soils that pose a risk to future resident nd construction workers. A draft Feasibility Study proposing land use controls will be submitted for regulatory review in October 2000.

IRP STATUS

RRSE RATING: Medium Risk (2A) CONTAMINANTS OF CONCERN:

Metals, UXO

MEDIA OF CONCERN:

Soil

COMPLETED IRP PHASE:

PA/SI, RI, IRA

CURRENT IRP PHASE:

FS (ROD)

FUTURE IRPPHASE:

RD, RA



PROPOSED PLAN

Issues have been raised by the regulators concerning the survey and clearance of UXO which must be resolved before finalizing the proposed remedy. Five-year reviews will be required at this site.

CONSTRAINED COST TO COMPLETE								
PHASE	2001	2002	2003	2004	2005	2006	2007+	
RI/FS								
IRA								
RD	1							
RA(C)	4							
RA(O)				1			2	
LTM								
LTO								
PROJ	ECTE	о тот	AL:	\$8,0	00			

TEAD-36, SWMU 40 AED TEST RANGE

SITE DESCRIPTION

Regulation: CERCLA

The AED Test Range is located in the north-western portion of TEAD, and has been used for the testing of minutions, bombs and rocket motors. This site consist of several berned revetments, a drop tower and a deactivation furnace (only the foundation remains). The deactivation furnance was used to test conveyor spacing in relationship to the design of such systems. Fragments of propellant, UXO and spent munitions can be found on the surface throught the site.

Contaminants of concern that were identified during the Remedial Investigation consist of metals, RDX and 2,4-dinitrotoluene. These contaminants trigger a risk to the future resident.

PROPOSED PLAN

A draft Feasibility Study proposing the excavation of the metal and explosive contaminated soil and the UXO that are contained within will be submitted for regulatory review. Soil will be disposed of off post and land use restrictions to prevent residential use will be applied. Issues have been raised by the regulators concerning the survey and clearance of UXO which must be resolved before finalizing the proposed remedy. Five-year reviews will be required.

IRP STATUS

RRSE RATING: High Risk (1A) CONTAMINANTS OF CONCERN:

Explosives, Metals, UXO MEDIA OF CONCERN:

Soil

COMPLETED IRP PHASE:

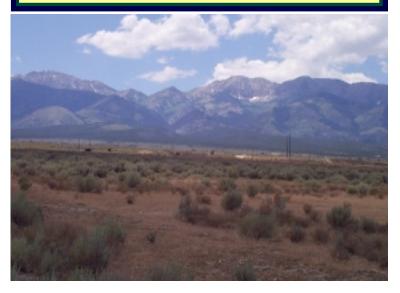
PA/SI, RI

CURRENT IRP PHASE:

FS (ROD)

FUTURE IRPPHASE:

RD, RA



CONSTRAINED COST TO COMPLETE									
PHASE	2001	2002	2003	2004	2005	2006	2007+		
RI/FS									
IRA									
RD	50								
RA(C)		420							
RA(O)				1			2		
LTM	·								
LTO	·								
PROJ	PROJECTED TOTAL: \$473,000								

GROUP A

TEAD-01, SWMU 1 OB/OD AREA

SITE DESCRIPTION

Regulation: RCRA

This site is composed of four subsites:

Open Detonation/Cluster Bomb Area (Sub-Area 1),

Propellant Burn Pad (Sub-Area 1b),

Trash Burn Pits (Sub-Area 1c), and

Propellant Burn Pans (Sub-Area 1d).

Sub-Areas 1 and 1d are RCRA permitted facilities and are still active. Due to their RCRA status, Sub-Areas 1 and 1d will not be ER,A-eligible for remediation.

Sub-Area 1b and 1c are located next to the active OB/OD area (1 & 1d), approximately 2,000 ft east of the Main Demo Area. The Burn Pad consisted of a 300 by 100 ft cleared area where propellants were burned in open trenches and projectiles were flashed. The Trash Burn Pits consists of 45-acres (approximately 20 pits) that was used to burn range and ammo waste. These sub-areas were used from 1959 to 1977.

Widespread, but low level, explosive, metal and UXO contamination was detected during the RFI. Sub-area 1b and 1c pose an unacceptable risk to the future resident. Sub-area 1b pose a low ecological risk.

IRP STATUS

RRSE RATING: Medium Risk (2A)

CONTAMINANTS OF CONCERN:

Explosives, UXO's, Metals

MEDIA OF CONCERN:

Soil

COMPLETED IRPPHASE:

Phase I & II RFI, REM-Off Post OEW

CURRENT IRPPHASE:

CMS, CMD

FUTURE IRPPHASE:

CMI, CM(O)



PROPOSED PLAN

The proposed plan for Sub-area 1b and 1c is to use institutional controls to prevent future land development and to limit access to the area.

Sub-area 1 and 1d will continue to be used by the installation.

CONSTRAINED COST TO COMPLETE									
PHASE	2001	2002	2003	2004	2005	2006	2007+		
RI/FS									
IR A									
CMD									
CMI									
CM(O)				1			2		
LTM									
LTO						·			
PROJ	PROJECTED TOTAL: \$3,000								

TEAD-29, SWMU 37 CONTAMINATED WASTE PROCESSOR BLDG 1325

SITE DESCRIPTION

Regulation: RCRA

This site was used for flashing scrap metal and incinerating pentachlorophenol-treated wooden crates, dunnage and fabric contaminated with trace explosives. Use of the site ended in 1985.

Low level contamination was detected during the RFI that posed an unacceptable risk for future residents.

IRP STATUS

RRSE RATING: Low Risk (3A) CONTAMINANTS OF CONCERN:

SVOCs, Dioxins, Furans MEDIA OF CONCERN:

Soil

COMPLETED IRPPHASE:

Phase I & II RFI

CURRENT IRP PHASE:

CMS, CMD

FUTURE IRPPHASE:

CMI



PROPOSED PLAN

Land use restictions will be put in place.

CONSTRAINED COST TO COMPLETE									
PHASE	2001	2002	2003	2004	2005	2006	2007+		
RI/FS									
IR A									
CMD									
CMI									
CM(O)				1			2		
LTM									
LTO									
PROJ	PROJECTED TOTAL: \$3,000								

TEAD-35, SWMU 20 AED DEACTIVATION FURNACE (BLDG 1351)

SITE DESCRIPTION

Regulation: RCRA

This site is located on an approximately 200 by 225 ft asphalt pad, along the road between the AED Demil Facility and the Bomb Shell Recon Bldg. A small area of the western corner of the pad, which was reportedly once used to store drummed residue, is referred to as the former hazardous waste holding area. Building 1351 has been active since approximately 1970; it includes a deactivation furnance, a flash furnance (installed in 1976) and a large air pollution control system (installed in 1976). Building 1352 is a small storage building.

The contamination resulting from the approximately 6 years of use without the air pollution controls is eligible for ER,A funds. Low levels of several metals were detected in the soils that pose a risk to future resident.

Ash from current use is drummed and disposed of off-site due to the presence of Cd, Cr and Pb.

IRP STATUS

RRSE RATING: High Risk (1A) CONTAMINANTS OF CONCERN:

MEDIA OF CONCERN:

Soil

COMPLETED IRPPHASE:

Phase I & II RFI

CURRENT IRP PHASE:

CMS, CMD

FUTURE IRPPHASE:

CMI, CM(O)



PROPOSED PLAN

The asphalt will be extended to cover the contaminated soil and land use controls will be put in place.

CONSTRAINED COST TO COMPLETE									
PHASE	2001	2002	2003	2004	2005	2006	2007+		
RI/FS									
IRA									
CMD									
CMI	12								
CM(O)	1		1	1	1		7		
LTM									
LTO									
PROJECTED TOTAL: \$23,000									

TEAD-37, SWMU 21 DEACTAVATED FURNACE (BLDG 1320)

SITE DESCRIPTION

Regulation: RCRA

This site occupies 0.7-acres in the southwestern portion of TEAD. The site is an ammo demil production facility (Bldg 1320) that was constructed about 1955 and is currently under a RCRA Part B permit.

Bldg 1320 contains a rotary-kiln deactivation furnace that is used to deactivate small arms ammo, primers and fuses. Air pollution control equipment was installed around 1975 to treat emissions from the furnace.

The contamination resulting from the approximately 20 years of use without the air pollution controls is eligible for ER,A funds. The RFI detected metals, explosives, dioxins and furans that pose an unacceptable risk to the future resident, worker and ecoligical risk. A small amount of TNT-contaminated soil was removed from the Former Drum Staging Area.

Incinerator residue (ash and metal debris) is collected at the south end of the furnace and loaded into 55-gallon drums for temporary storage. Open staging areas for support equipment and drums are located around the outside of the building. These areas are paved with asphalt or covered with gravelly soil.

PROPOSED PLAN

The asphalt will be extended to cover the contaminated soil and land use controls will be put in place.

IRP STATUS

RRSE RATING: High Risk (1A)
CONTAMINANTS OF CONCERN:
Explosives, Metals, Dioxins, Furans

MEDIA OF CONCERN:

Soil

COMPLETED IRPPHASE:

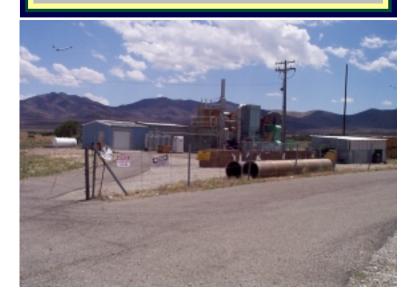
Phase I & II RFI, REM

CURRENT IRP PHASE:

CMS, CMD

FUTURE IRPPHASE:

CMI, CM(O)



CONSTRAINED COST TO COMPLETE									
PHASE	2001	2002	2003	2004	2005	2006	2007+		
RI/FS									
IRA									
CMD									
CMI	25								
CM(O)	1		1	1	1		7		
LTM									
LTO									
PROJECTED TOTAL: \$36,000									

TEAD-54, SWMU 34 PESTICIDE HANDLING & STORAGE BLD 518

SITE DESCRIPTION

Regulation: RCRA

Building 518 and the bermed concrete pad are located in the southeastern portion of TEAD and has been used since 1942 to store and prepare herbicides and pesticides. Previously, spills from within the building were directed to the floor drain, which connected to the storm drain and ultimately dumped into Stormwater Discharge (TEAD-82, SWMU 45). However, all liquid wastes are now containerized.

Localized areas of elevated metals and pesticides were detected during the RFI. Risk levels were acceptable for all but the future residential scenario.

PROPOSED PLAN

Planned remedies include placement of a soil cover, construction of a fence, and the application of land use restrictions.

IRP STATUS

RRSE RATING: Medium Risk (2A) CONTAMINANTS OF CONCERN:

Metals, Pesticides

MEDIA OF CONCERN:

Soil

COMPLETED IRPPHASE:

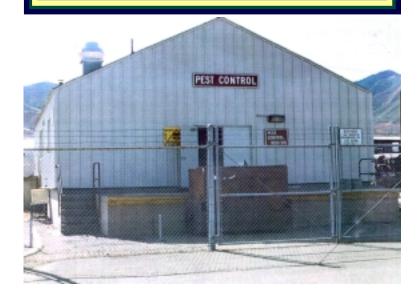
Phase I & II RFI

CURRENT IRP PHASE:

CMS, CMD

FUTURE IRPPHASE:

CMI, CM(O)



CONSTRAINED COST TO COMPLETE										
PHASE	2001	2002	2003	2004	2005	2006	2007+			
RI/FS										
IRA										
CMD										
CMI										
CM(O)				1			2			
LTM										
LTO										
PROJ	PROJECTED TOTAL: \$3,000									

TEAD-58, SWMU 42 BOMB WASHOUT BUILDING

SITE DESCRIPTION

Regulation: RCRA

Building 539 was used from 1942 to the early 1960s to burn small arms projectiles and recover lead. The floors were washed down and the water allowed to discharge through a concrete flume to a culvert, eventually emptying into a ditch (extending approximately 600 ft) on the northwest side of the building, then to an unlined holding pond (50 ft in diameter and 2 ft deep). There were three other furnaces in the area; two in Bldg 520 and one 255 ft to north of the site that were operated at about the same time that may have contributed to the area's contamination.

Very high levels of Pb were found in surficial soils around the building, and in the drainage ditch and pond. The contamination poses an unacceptable risk to the futue resident, worker and ecological receptors. TEAD has fenced off the most highly contaminated area to keep current workers from being exposed.

IRP STATUS

RRSE RATING: High Risk (1A)
CONTAMINANTS OF CONCERN:

Explosives, Metals

MEDIA OF CONCERN:

Soil

COMPLETED IRPPHASE:

Phase I & II RFI, IRA

CURRENT IRP PHASE:

CMS, CMD

FUTURE IRPPHASE:

CMI



PROPOSED PLAN

Contaminated soil (~2,700 cy) from the ditch, pond, and waste pile areas will be excavated and stabilized. Land use restrictions will be put in place.

CONSTRAINED COST TO COMPLETE										
PHASE	2001	2002	2003	2004	2005	2006	2007+			
RI/FS										
IRA										
CMD										
CMI	580									
CM(O)				1			2			
LTM										
LTO										
PROJ	PROJECTED TOTAL: \$583,000									

TEAD-83, SWMU 45 STORM DISCHARGE AREA

SITE DESCRIPTION

Regulation: RCRA

This site consists of a ponded area at the outfall of the TEAD Administration Area. The site covers 2-acres and includes an unlined ponding area, stormwater-discharge pipe, and undefined portions of the wash floodplain between the outfall and the road to the landfill (SWMU 12/15).

Sampling showed volatile and semi-volatile organic contamination. Very low levels of several metals were detected in the sediment during the RFI. This site poses a unacceptable risk to the future resident.

IRP STATUS

RRSE RATING: Low Risk (3A)
CONTAMINANTS OF CONCERN:

Metals, VOCs, SVOCs

MEDIA OF CONCERN:

Sediment, Soil, Surface water

COMPLETED IRPPHASE:

Phase I & II RFI

CURRENT IRP PHASE:

CMS, CMD

FUTURE IRPPHASE:

CMI



PROPOSED PLAN

Land use restrictions will be applied to this site.

CO	CONSTRAINED COST TO COMPLETE										
PHASE	2001	2002	2003	2004	2005	2006	2007+				
RI/FS											
IR A											
CMD											
CMI											
CM(O)				1			2				
LTM											
LTO											
PROJ	ECTE	тот	AL:	\$3.0	00						

TEAD-84, SWMU 48 OLD DISPENSARY DISCHARGE, BLD 400

SITE DESCRIPTION

Regulation: RCRA

Bldg 400 is located approximately 300 ft northwest of the present TEAD clinic, in the Administration Area. It is a flat, grass-covered area approximately 8.2 acres. This site consists of the former TEAD dispensary (Bldg 400) and nine smaller buildings. The dispensary was constructed in 1945 and orginially served as an administration building; it was later used as a hospital. Bldg 400 included operating rooms, sterilization room, X-ray rooms, and a dental office; the development of the X-rays may have generated contaminated waste.

Although plans for Bldg 400 indicate that waste streams from X-ray operations were discharged to the sanitary sewer system, there is a possibility that these and other waste were disposed of into the adjacent stormwater lines. In the mid-1980s these buildings were demolished and the new clinic was built on the same location.

The RFI found low levels of metals, pesticides and SVOCs that pose an unacceptable risk to the future resident.

IRP STATUS

RRSE RATING: Low Risk (3A) CONTAMINANTS OF CONCERN:

Pesticides, SVOC's, Metals **MEDIA OF CONCERN:**

Soil

COMPLETED IRPPHASE:

Phase I & II RFI

CURRENT IRP PHASE:

CMS, CMD

FUTURE IRPPHASE:

CMI



PROPOSED PLAN

Land use controls will be applied to this site.

CONSTRAINED COST TO COMPLETE										
PHASE	2001	2002	2003	2004	2005	2006	2007+			
RI/FS										
IRA										
CMD										
CMI										
CM(O)				1			2			
LTM										
LTO										
PROJ	ECTE	тот	'AL:	\$3.0	00					

GROUP B

TEAD-18, SWMU 19

AED DEMILITARIZATION TEST FACILITY (BLDG 1370-1380)

SITE DESCRIPTION

Regulation: RCRA

The AED Demilitarization Test Facility is located southwest of the ammunition storage area in a remote, undeveloped portion of TEAD. The facility was constructed in 1973 and is composed of several sdmall buildings, sheds and a series of protective revetments behind which tests are conducted. Operations conducted at this site include experimental or function testing of new design demilitarization equipment. Live ammunition and propellants are commonly used as part of these test operations.

Contaminants identified during the Phase II RCRA facility ivestigation that trigger a risk are RDX and bis(2-ethylhexyl)phtalate. Risk triggered bt these compunds may adversely affect future residents.

IRP STATUS

RRSE RATING: Low Risk (3A)
CONTAMINANTS OF CONCERN:

Metals

MEDIA OF CONCERN:

Soil

COMPLETED IRPPHASE:

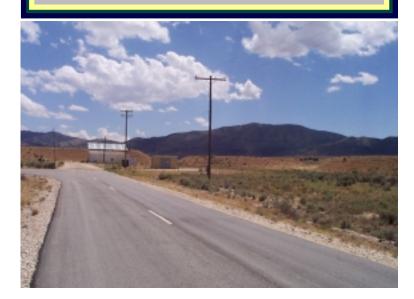
Phase I RFI/Phase II RFI, CMS

CURRENT IRP PHASE:

CMI

FUTURE IRPPHASE:

RC



PROPOSED PLAN

Land use restrictions will be implemented at this site to prevent future residential development. The CMS and DD for the proposed action have been approved by the regulators. Public comment on the proposed remedy and staffing of the DD for signature is planned.

CONSTRAINED COST TO COMPLETE										
PHASE	2001	2002	2003	2004	2005	2006	2007+			
RI/FS										
IR A										
CMD										
CMI										
CM(O)				1			2			
LTM										
LTO										
PROJ	ECTE	 тот	AL:	\$3.0	0.0					

PROJECTED TOTAL: \$3,00

TEAD-70A, SWMU 46 USED OIL DUMPSTERS

SITE DESCRIPTION

Regulation: RCRA

Waste oil, generated from the overhaul of engines and various equipment, was stored in dumpsters outside of 14 buildings, and 2 USTs located north of Building 637. Some of the locations are located within the BRAC parcel. Spillage of the waste oil has occurred. The USTs and dumpsters have been removed.

The RFI results recommend NFA at 12 of the 16 locations. Three of the remaining site are BRAC. The remaining location will have soil (~33cy) removed due to metal and hydrocarbon contamination.

PROPOSED PLAN

Excavation and disposal of contaminated soil is planned. The CMS and DD for the proposed action have been approved by the regulators. Public comment on the proposed remedy and staffing of the DD for signature is planned.

IRP STATUS

RRSE RATING: High Risk (1A)
CONTAMINANTS OF CONCERN:

Hydrocarbons, Metals **MEDIA OF CONCERN:**

Soil

COMPLETED IRPPHASE:

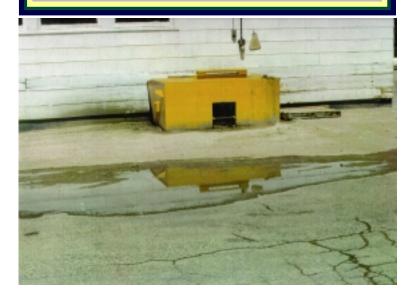
Phase I & II RFI, CMS

CURRENTIRPPHASE:

CMD

FUTURE IRPPHASE:

CMI



CONSTRAINED COST TO COMPLETE										
PHASE	2001	2002	2003	2004	2005	2006	2007+			
RI/FS										
IRA										
CMD										
CMI										
CM(O)										
LTM										
LTO										
PROJECTED TOTAL: \$0										

KNOWN RELEASES

TEAD-09, SWMU 12/15 NORTH AREA SANITARY LANDFILL

SITE DESCRIPTION

Regulation: RCRA

TEAD's 140-acre, abandoned landfill is located in and around an arroyo and was used from 1942. Until the mid-1980's, access to the landfill was uncontrolled. A wide variety of wastes, including hazardous waste and liquids, have been disposed of here. Groundwater beneath the site is contaminated with volatile organics.

The RFI identified an unaccaptable risk for the future resident, construction worker and ecological receptors caused by contamination of metals, SVOCs, VOCs, and pesticides in soil and VOCs in the groundwater.

Groundwater monitoring began in the early 1990s. The boundry fence line was extented in FY00.

PROPOSED PLAN

The proposed plan is to cover the landfill with a soil cover and apply land use controls. Groundwater monitoring will continue.

Additional investigations may be warranted to further characterize the groundwater contaminant source areas within the landfill and to further evaluate the need or design of the cover system.

IRP STATUS

RRSE RATING: High Risk (1A)
CONTAMINANTS OF CONCERN:

Volatiles, Metals, Pesticides **MEDIA OF CONCERN:**

Groundwater, Soil

COMPLETED IRPPHASE:

Phase I & II RFI, IRA

CURRENT IRP PHASE:

CMS, CMD

FUTURE IRPPHASE:

CMI, CMO, and LTM



CO	CONSTRAINED COST TO COMPLETE										
PHASE	2001	2002	2003	2004	2005	2006	2007+				
RI/FS											
IR A											
CMD											
CMI	810	4020	5634	6307	3762	1967					
CM(O)	140	140	140	140	70	70	630				
LTM											
LTO											
PROJ	ECTE	тот	AL:	\$23,	830,0	000					

TEAD-11, SWMU 3 X-RAY LAGOON (BLDG 1223)

SITE DESCRIPTION

Regulation: RCRA

Spent photographic developer and fixer solutions from Building 1223 were released to this 75 by 35 foot lined lagoon between 1974 and 1990. A separate septic tank and associated piping from Bldg 1225 are located next to the west of the pond.

Localized levels of heavy metals were detected in the pond's soils.

IRP STATUS

RRSE RATING: Low Risk (3A)
CONTAMINANTS OF CONCERN:

Metals

MEDIA OF CONCERN:

Soil, Groundwater

COMPLETED IRPPHASE:

Phase I & II RFI

CURRENT IRPPHASE:

CMS, CMD

FUTURE IRPPHASE:

CMI



PROPOSED PLAN

A CMS is being conducted to evaluate the use of institutional controls to limit future development. Wells may be abandoned as part of the CMI.

CONSTRAINED COST TO COMPLETE										
PHASE	2001	2002	2003	2004	2005	2006	2007+			
RI/FS										
IR A										
CMD										
CMI										
CM(O)				1			2			
LTM										
LTO										
PROJ	ECTE	тот о	AL:	\$3,0	00					

TEAD-13, SWMU 2 IWL & DITCHES

SITE DESCRIPTION

Regulation: RCRA

Between 1965 and 1988, the IWL received wastewater containing high levels of solvents and heavy metals from the Maintenance Area. The IWL consisted of a lagoon (200 ft. by 400 ft.) and four unlined ditches which connected to one ditch which extended approximately 1.5 miles to the lagoon.

A Consent Order was issued in 1985 and the Corrective Action Permit was issued in 1991.

TCE is the major contaminant and groundwater contamination has migrated beyond the installation's northern boundary. The contaminated soils (volatiles, metals) from the IWL and the ditches were remediated in 1989. A groundwater pump and treat system started operating in late 1993 to address the TCE contaminated water. The treatment system has stopped the migration of the plume (IWL Plume) and the area of contamination no longer extends beyond the boundry.

IRP STATUS

RRSE RATING: Medium Risk (2A) CONTAMINANTS OF CONCERN:

Heavy Metals, Solvents **MEDIA OF CONCERN:**

Soil, Groundwater

COMPLETED IRP PHASE:

Phase I & II RFI, IRA (\$4,200K), IRA (\$20,000K)

CURRENT IRP PHASE:

RA(O)

FUTURE IRPPHASE:

RA(O)



PROPOSED PLAN

The pump and treat, and air stripping systems will continue to be run.

CONSTRAINED COST TO COMPLETE										
PHASE	2001	2002	2003	2004	2005	2006	2007+			
RI/FS										
IRA										
RD										
RA(C)										
RA(O)	1600	1600	1600	1600	1600	1600	12800			
LTM										
LTO										
PROJECTED TOTAL: \$22,400,000										

TEAD-14, SWMU 24 BATTERY PIT

SITE DESCRIPTION

Regulation: RCRA

From 1965 to 1980, electrolyte from lead-acid batteries was released from Building 507 to a small pit adjacent to the building. Lime was routinely placed in the pit. The site has been covered with asphalt.

During the RFI, the old pit area was excavated and a sump was encountered. Low levels of metals were detected. In 1997, an IRA was conducted to remove the sump, over excavate contaminated soils and take analytical samples. Remaining contamination is at a level that poses an unacceptable future residential risk.

PROPOSED PLAN

Land use restrictions will be applied to this site.

IRP STATUS

RRSE RATING: High Risk (1A) CONTAMINANTS OF CONCERN:

Metals

MEDIA OF CONCERN:

Soil

COMPLETED IRPPHASE:

Phase I & II RFI, REM

CURRENT IRP PHASE:

CMS, CMD

FUTURE IRPPHASE:

CMI



CONSTRAINED COST TO COMPLETE											
PHASE	2001	2002	2003	2004	2005	2006	2007+				
R I/FS											
IR A											
CMD											
CMI											
CM(O)				1			2				
LTM											
LTO											
PROJ	ECTE	о тот	'AL:	\$3.0	0.0						

TEAD-24A, SWMU 30 OLD IWL

SITE DESCRIPTION

Regulation: RCRA

This site is half on the BRAC parcel and half on the Active portion of the installation.

The 42-acre site, located northwest of the Maintenance Area, consists of a gravel pit, seven former standing liquid areas (referred to as lagoons), and nine ditches. This site was operated for the purpose of disposal of wastewater that contained solvents and heavy metals from 1945 to 1965 at an estimated daily discharge rate of 125,000 gallons.

A groundwater plume contaminated with TCE is fully defined and is being remediated as part of the IWL's (TEAD-13) pump and treat system.

The RFI detected heavy metals, VOCs and SVOCs resulting in a risk to the future resident and a moderate ecological risk.

PROPOSED PLAN

Land use restrictions will be needed at this site.

IRP STATUS

RRSE RATING: High Risk (1A)
CONTAMINANTS OF CONCERN:

Metals, VOCs, SVOCs

MEDIA OF CONCERN:

Soil

COMPLETED IRPPHASE:

Phase I&II RFI

CURRENT IRP PHASE:

CMS, CMD

FUTURE IRPPHASE:

CMI



CONSTRAINED COST TO COMPLETE										
PHASE	2001	2002	2003	2004	2005	2006	2007+			
R I/FS										
IR A										
CMD										
CMI										
CM(O)				1			2			
LTM										
LTO										
PROJ	ECTE	— Тот	'AL:	\$3.0	0.0					

TEAD-31, SWMU 11 LAUNDRY EFFLUENT PONDS

SITE DESCRIPTION

Regulation: RCRA

Both the Laundry Effluent Pond and the Sewage Pond are located next to the TNT Washout Facility (TEAD-81). The laundry pond accepted laundry wastewater from approximately 1950 until 1990 and boiler blowdown water until 1995. The sewage pond is a mostly dry pond that appears to receive liquids from a septic tank and leach field. Several debris piles of waste metal cuttings and miscellaneous materials exist to the east of these ponds.

During the RFI, the majority of the cuttings and larger wastes were removed. The RFI found that the sediment contained metals and VOCs; the sludge contained metals, VOCs, and SVOCs; and the soil contained metals and TPH. The risk assessment found unacceptable risks for the future resident, worker and ecological receptors.

IRP STATUS

RRSE RATING: High Risk (1A)
CONTAMINANTS OF CONCERN:

Metals, SVOC's, VOCs

MEDIA OF CONCERN:

Soil, Sediment, Surface Water **COMPLETED IRPPHASE:**

Phase I & II RFI

CURRENT IRP PHASE:

CMS, CMD

FUTURE IRPPHASE:

CMI



PROPOSED PLAN

The proposed plan is to excavate soil (~400cy from the ponds and the debris pile area), dispose of the soil off site, fill with clean soil and land use restrictions.

CO	CONSTRAINED COST TO COMPLETE									
PHASE	2001	2002	2003	2004	2005	2006	2007+			
RI/FS										
IR A										
CMD										
CMI	77									
CM(O)				1			2			
LTM										
LTO										
PROL	retri	ТОТ	'A T •	¢ 2 0	000					

PROJECTED TOTAL: \$80,00

TEAD-50, SWMU 25 BATTERY SHOP

SITE DESCRIPTION

Regulation: RCRA

Building 1252 was the Battery Shop and it was used for the maintenance and repair of vehicle and forklift batteries. Past activities discharged spent battery acid and washdown water to a shallow ditch.

High, localized levels of metals were detected in the ditch during the RFI. The RFI found unacceptable risk to the future resident and on site workers.

TEAD has taken action to install a fence (1995) around the area with the highest levels of metal contamination.

IRP STATUS

RRSE RATING: High Risk(1A)
CONTAMINANTS OF CONCERN:

Metals

MEDIA OF CONCERN:

Soil

COMPLETED IRPPHASE:

Phase I&II RFI, REM (\$3,200)

CURRENT IRP PHASE:

CMS, CMD

FUTURE IRPPHASE:

CMI



PROPOSED PLAN

The proposed plan is to excavate and dispose of contaminated soil off site. Land use restrictions will be applied to prevent future residential development.

CONSTRAINED COST TO COMPLETE													
PHASE	2001	2002	2003	2004	2005	2006	2007+						
RI/FS													
IRA													
CMD													
CMI	175												
CM(O)				1			2						
LTM													
LTO													
PROJECTED TOTAL: \$178.000													

TEAD-81, SWMU 10 TNT WASHOUT FACILITY

SITE DESCRIPTION

Regulation: RCRA

This SWMU includes Building 1245 and a series of eight ponds that were used from 1948 to 1986 as a bomb decommissioning facility. Rinse water containing explosives was released to the ponds and allowed to infiltrate and evaporate. A small plume of explosives exists in the groundwater beneath the site and explosive concentrations up to 4% have been found in the ponds' soils.

In 1984, a removal action was conducted which consisted of a liner being placed over four of the old ponds and clean soil being placed on top to help reduce infiltration of precipitation. The settling tanks located immediately to the north of Building 1245 were removed in 1997.

Explosive contamination leads to unaccaptable residential, worker, and ecological risk.

PROPOSED PLAN

Explosive comtaminated soil (~10,000cy) will be composted onsite. The site will have institutional control and long term monitoring of the groundwater.

CONSTRAINED COST TO COMPLETE

PHASE	2001	2002	2003	2004	2005	2006	2007+
RI/FS							
IRA							
CMD							
CMI	3850						
CM(O)							
LTM	140	140	140	140	70	70	630
LTO							

PROJECTED TOTAL: \$5,180,000

IRP STATUS

RRSE RATING: High Risk (1A)
CONTAMINANTS OF CONCERN:

Explosives, Volatiles

MEDIA OF CONCERN:

Soil, Groundwater

COMPLETED IRPPHASE:

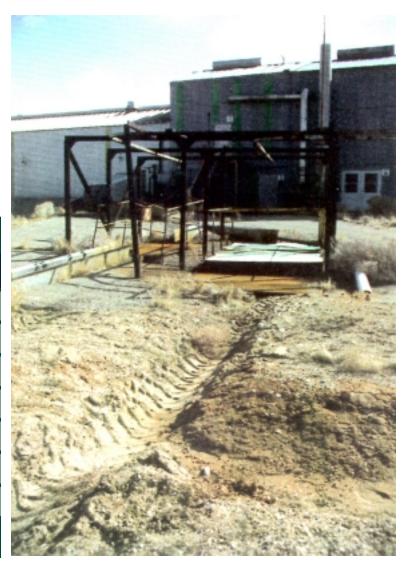
Phase I&II RFI, IRA, REM, Pilot Study

CURRENT IRPPHASE:

CMS, CMD

FUTURE IRPPHASE:

CMI, CM(O)



RESPONSE COMPLETE

TEAD-10, SWMU 5 PCB POLE SPILL (POLE 184)

SITE DESCRIPTION

Regulation: CERCLA, OU 7

As a result of a utility pole fire in 1976, PCB-containing oil leaked from a transformer that fell from the utility pole. Following the spill, eleven 55-gallon drums of PCB-1260 contaminated soil were removed. No confirmation sampling was conducted at the time of the cleanup. RI sampling results indicated that low levels of PCBs and dioxins were present in surficial soils. A ROD for placement of a soil cap was signed in FY94. The cap was put in place in 1996.

PROPOSED PLAN

Five-year reviews under the FFA are required.

IRP STATUS

RRSE RATING: Medium Risk (2A)
CONTAMINANTS OF CONCERN:

PCB's, dioxins

MEDIA OF CONCERN:

Soil

COMPLETED IRPPHASE:

PA/SI, REM, RI/FS, RD, RA

CURRENT IRP PHASE:

RC

FUTURE IRPPHASE:

RC

TEAD-80, SWMU 14 SEWAGE LAGOONS

SITE DESCRIPTION

Regulation: RCRA, Group B

This site has been used to receive domestic sewage from housing, warehouses, maintenance, and administrative areas since 1974. Industrial wastes may also have been directed to these lagoons. A groundwater mound exists under this site and the water is contaminated with TCE from the IWL & Ditches (TEAD-13) and the North Sanitary Landfill (TEAD-09), both up and down gradient.

PROPOSED PLAN

Since there are no current health risks from this SWMU and the facility remains operational and in use, no further action is recommended. The NFA was approved by UDEQ and EPA in 1997.

IRP STATUS

RRSE RATING: High Risk (1A)
CONTAMINANTS OF CONCERN:

Volitiless, Metals

MEDIA OF CONCERN:

Surface Water, Sediment, Soil, Groundwater

COMPLETED IRPPHASE:

Phase I & II RFI

CURRENT IRP PHASE:

RC

FUTURE IRPPHASE:

RC

TEAD-33, SWMU 16 SEPTIC TANKS

SITE DESCRIPTION

Regulation: RCRA

This site was origially used for all of the septic tanks at TEAD. When the installation negotiated the Corrective Action Permit each tank was listed by itself. Therefore, this site is closed.

PROPOSED PLAN

This site requires no future action.

IRP STATUS

RRSE RATING: Not Evaluated CONTAMINANTS OF CONCERN:

None

MEDIA OF CONCERN:

None

COMPLETED IRPPHASE:

None

CURRENT IRP PHASE:

RC

FUTURE IRPPHASE:

RC

TEAD-21, SWMU 27 RCRA CONTAINER STORAGE

SITE DESCRIPTION

Regulation: RCRA

Building 528 is TEAD's current RCRA-permitted facility for the long-term storage of hazardous waste. Wastes are stored inside the building in segregated areas to minimize spills. This site will require a closure plan under TEAD's Part B permit. The closure activities will not be ER,A eligible. This SWMU was recommended for no further action in the Phase I RFI Report.

PROPOSED PLAN

No response is required under the Corrective Action Permit. RCRA closure activities will be required, but will not be ER,A eligible.

IRP STATUS

RRSE RATING: High Risk (1A) CONTAMINANTS OF CONCERN:

Metals

MEDIA OF CONCERN:

Soil

COMPLETED IRPPHASE:

Phase I RFI

CURRENT IRPPHASE:

RC

FUTURE IRPPHASE:

RC

TEAD-38, SWMU 41 BOX ELDER WASH DRUM SITE

SITE DESCRIPTION

Regulation: CERCLA

This SWMU consisted of seventy-three 55-gallon drums containing a tar-like substance and one 55-gallon drum of solvent-like substance which were dumped into the wash. Sampling of the drums detected low levels of metals and organics and the drums' contents failed the TCLP test. A ROD recommending drum and stained soil removal was signed in FY94. In 1996, the drums and contaminated soil were removed.

PROPOSED PLAN

Approval for NFA from UDEQ and EPA was received in 1997. Five-year reviews are required under the FFA.

IRP STATUS

RRSE RATING: Low Risk (3A)
CONTAMINANTS OF CONCERN:

Metals, Volitiles, & Petroleum

MEDIA OF CONCERN:

Soil

COMPLETED IRP PHASE:

PA/SI, RI/FS, RD, RA

CURRENT IRP PHASE:

RC

FUTURE IRPPHASE:

RC

TEAD-67, SWMU 43 CONTAINER STORAGE FOR P999

SITE DESCRIPTION

Regulation: RCRA

This SWMU consists of Igloos B1002, C117, G308, G1005, and K202. A number of M-55 rocket motor parts were stored in these igloos for an unknown period of time. The parts were moved to Deseret Chemical Depot in the early 1980s. There are no chemicals of concern and corrective action is not planned. This SWMU was recommended for no further action in the Phase I RFI.

PROPOSED PLAN

Approval for NFA was received from UDEQ and EPA.

IRP STATUS

RRSE RATING: NE

CONTAMINANTS OF CONCERN:

None

MEDIA OF CONCERN:

None

COMPLETED IRPPHASE:

Phase I RFI

CURRENT IRPPHASE:

RC

FUTURE IRPPHASE:

RC

SCHEDULE

Because the SWMU's are divided into 3 major groups and 5 sub-groups, there are 5 separate schedules for TEAD. For a schedule of the IRP work completed to date and planned for the next few years at TEAD, see below.

PAST MILESTONES

Site-Wide Initial Installation Assessment Exploratory Survey PA/SI RI	Dec 79 Oct 82 Dec 88 Dec 90
FFA SWMUs Preliminary Baseline Risk Assessment Memorandum on Remedial Action Objectives Assembled Alternatives Screening Memorandum Memorandum on Detailed Analysis of Alternatives RI (OUs 5,6,7 & 10) FS (OUs 5,6,7 & 10) ROD (OUs 5,6,7, & 10) RD (OUs 7 & 10) RI (OUs 4, 8, & 9) RA (OUs 5, 6, 7, & 10)	Feb 93 Feb 93 Feb 93 Jan 94 Mar 94 Apr 94 Sep 94 Dec 95 Jun 97 Sep 96
Known Releases SWMUs Phase I RFI Phase II RFI Suspected Releases SWMUs	Mar 92 May 96
Phase I RFI Group A, Phase II RFI Group B, Phase II RFI	Oct 93 Aug 98 Dec 97

PROJECTED MILESTONES

Completion of all Remedial Action 2007

SCHEDULE

NO FURTHER ACTION SITES

The following sites currently require no further action under the Tooele Army Depot IRP Program:

TEAD-03	BRAC
TEAD-04	BRAC
TEAD-07	BRAC
TEAD-08	BRAC
TEAD-10	RC
TEAD-101	BRAC
TEAD-19	BRAC
TEAD-20	BRAC
TEAD-21	NOT IRP ELIGIBLE
TEAD-22	BRAC
TEAD-23	BRAC
TEAD-24	BRAC
TEAD-25	BRAC
TEAD-26	BRAC
TEAD-30	BRAC
TEAD-32	BRAC
TEAD-33	RC
TEAD-38	RC
TEAD-67	RC
TEAD-69	BRAC
TEAD-70	BRAC
TEAD-80	RC
TEAD-82	BRAC
TEAD-85	BRAC
TEAD-86	BRAC
TEAD-87	BRAC
TEAD-88	BRAC
TEAD-89	BRAC
TEAD-90	BRAC
TEAD-91	BRAC
TEAD-93	BRAC
TEAD-94	BRAC
TEAD-95	BRAC
TEAD-96	BRAC
TEAD-97	BRAC
TEAD-98	BRAC
TEAD-99	BRAC

Tooele Army Depot IRP Schedule

(Based on Cost to Complete current funding constraints)

CURRENT PHASE

FUTURE PHASE

DSERTS #	SITE NAME	PHASE	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007
TEAD-01	Ionion A (OMMILLA)	CMD							
TEAD-01	OB/OD Area (SWMU 1)	CMI							-
		CM(O)							
		GIVI(G)							
TEAD-05	Old Burn Area (SWMU 6, OU 8)	RD							
	old Bulli 7 tiod (GVVIVIO 6, GG 6)	RA							
		RA(O)							
TEAD-06	Tire Disposal Area (SWMU 13)	RD							
		RA RA							
		RA(O)							
TEAD-09	North Area Coniton I and till (CMMI 142/45)	CMD							
ILAD-09	North Area Sanitary Landfill (SWMU 12/15)	IRA							
		CMI							
		LTM							
TEAD-11	X-Ray Lagoon (Bldg L-23) (SWMU 3)	CMD							
		CMI							
		CM(O)							
TEAD-12	Bomb & Shell Recond Bldg (SWMU 23)	RD							
		RA							
		RA(O)							
TEAD-13	IWL & Ditches (SWMU 2)	RA(O)							
TEAD-13	IVVE & Ditches (SVVIVIO 2)	IXA(O)							
TEAD-14	Battery Pit (SWMU 24)	CMD							
1.27.2	Battery Fit (GVVIVIO 24)	CMI							
		CM(O)							
TEAD-15	Chemical Range (SWMU 7)	RD							
		RA							
		RA(O)							
TEAD 40		DD							
TEAD-16	Firing Range (SWMU 8)	RD RA							
		RA(O)			-				
		IXA(O)							
TEAD-18	AED Demilitarization Test Facility (Bldg	CMD							
	1370-1380)	CMI							
		CM(O)							
TEAD-24A	Old IWL (SWMU 30)	CMD							
		CMI							
		CM(O)							
TEAD-27	lw 0	DD							
IEAD-21	Wastewater Spreading Area (SWMU 35,	RD RA							
	OU 4)	RA(O)	1	 	 				
		(0)							
TEAD-28	Old Burn Staging Area	RD							
]	J. Sam Jaging / Hou	RA							
		RA(O)		<u> </u>	<u> </u>				
TEAD-29	Contaminated Waste Processor Bldg 1325	CMD							
	(SWMU 37)	CMI							
		CM(O)							

Tooele Army Depot IRP Schedule

(Based on Cost to Complete current funding constraints)

CURRENT PHASE

FUTURE PHASE

DSERTS #	SITE NAME	PHASE	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007
TEAD-31	Laundry & Sewage Ponds (SWMU 11)	CMD							
		CMI							
		CM(O)							
TEAD-34	Building 1303 Washout Pond (SWMU 22)	RD							
		RA							
		RA(O)							
TEAD-35	AED D	CMD							
TEAD-35	AED Deactivation Furnace (Bldg 1531 &	CMI							
	1352)	CM(O)							
		CIVI(O)							
TEAD-36	AED Test Range (SWMU 40)	RD							
12/12/00	ALD Test Range (SWINO 40)	RA							
		RA(O)							
		(5)							
TEAD-37	Deactivation Furnance (Bldg 1320)	CMD							
	(SWMU 21)	CMI							
	(6116 = 1)	CM(O)							
TEAD-50	Battery Shop (SWMU 25)	CMD							
		CMI							
		CM(O)							
TEAD-54	Pesticide Handling & Storage Bldg 532	CMD							
	(SWMU 34)	CMI							
		CM(O)							
TEAD-58	D 1 14/ 1 1 D 11 F (OMMALL 40)	CMD							
TEAD-56	Bomb Washout Building (SWMU 42)	CMI							
		CM(O)							
		CIVI(O)							
TEAD-70A	Used Oil Dumpsters (SWMU 46)	CMD							
TEND TON	Osed Oil Dumpsters (SWINO 40)	CMI	+						
TEAD-81	TNT Washout Facility (SWMU 10)	CMD							
	Title tradition is a district to the second	CMI							
		LTM							
TEAD-83	Storm Discharge Area (SWMU 45)	CMD							
		CMI							
		CM(O)							
TEAD-84	Old Dispensary Discharge, Bldg 400	CMD							
	(SWMU 48)	CMI	1						
		CM(O)							

DEFENSE SITE ENVIRONMENTAL RESTORATION TRACKING SYSTEM

Site, 4. Installation Phase Summary Report

Installation: TOOELE ARMY DEPOT

RIP Total:

RC Total:

Programs: BRAC I, BRAC II, BRAC III, BRAC IV, IRP

Subprograms: Compliance, Restoration, UXO

Installation count for Programs:

NPL Options: Delisted, No, Proposed, Yes

Installations count for Programs and NPL: 1
Site count for Programs and NPL: 64

31

Phase / Status / Sites

	PA						SI	
c	\mathbf{U}	F	RC		c	U	F	RC
64	0 RI/FS	0	0		63	0	0 RD	1
C	U	F	RC		c	U	F	
42	21 RA(C)	0	26		6	10	10 RA(O)	
C	${f U}$	F	RC		C	U	\mathbf{F}	RC
6	0	23	4	LTM	0	2	3	0
			C	U	\mathbf{F}	N		
			0 Remed	5 ly / Status / Sites (A	9 Actions)	50		
				IRA				
	\mathbf{c}			U			F	
	11 (14)		0	(0)			0	(0)
				FRA				
c				U			F	
	6 (7)		0	(0)			23	(25)
	2							

Reporting Period End Date:

03/31/2001

DEFENSE SITE ENVIRONMENTAL RESTORATION TRACKING SYSTEM

Site, 9. RISK INSTALLATION ACTION PLAN REPORT 01/19/2001

Installation: TOOELE ARMY DEPOT

Major Command: AMC

SubCommand: OSC

Program Options: IRP, BRAC I, BRAC II, BRAC III, BRAC IV

Subprogram Options: Compliance, Restoration, UXO

Subprogram Options.	Compilance, Res	ince, restoration, UAO									
Site	RRSE	Media Evaluated	Phase (s) Completed	Phase (s) Underway	Phase (s) Future	#IRA Completed	#IRA Underway	#IRA Future	LTM Status	RIP Date	RC Date
5440	111,52	2,4144164	Completed	chack way	1 414110	Completed	Chack way	1	Status	Duite	Dute
TEAD-01	2A	GW	PA	RI	RAC				N		200107
		SL	SI								
TEAD-03	3A	SL	PA						U		200002
			RI								
			SI								
TEAD-04	1 A	SL	PA						N		200007
			RI								
			SI								
TEAD-05	1 A	SL	PA	RD	RAC				F		200212
			RI								
			SI								
TEAD-06	3A	SL	PA			1			U		200002
			RI								
			SI								
TEAD-07	3A	SL	PA						N		199409
			RI								
			SI								
TEAD-08	NE		PA						N		199409
			RI								
			SI								
TEAD-09	1 A	GW	PA	RI	RAC	1			F	200707	203207
		SL	SI		RAO						
					RD						
TEAD-10	2A	SL	PA						N		199608
			RAC								
			RD								
			RI								
			SI								

Site	RRSE	Media Evaluated	Phase (s) Completed	Phase (s) Underway	Phase (s) Future	#IRA Completed	#IRA Underway	#IRA Future	LTM Status	RIP Date	RC Date
TEAD-101	1A	GW	PA	RI	RAC				F	200509	201312
					RAO						
					RD						
TEAD-11	3A	GW	PA	RI					N		200106
		SL	SI								
TEAD-12	2A	GW	PA	RI	RAC				F		200308
TT 1 D 10		aw.	SI	P. 1.0	RD				-	400040	202500
TEAD-13	2A	GW SL	PA	RAO		2			F	199312	202509
		SL	RAC RD								
			RI								
			SI								
TEAD-14	1 A	GW	PA	RI		1			N		200110
		SL	SI								
TEAD-15	2A	SL	PA	RI	RAC	1			F		200308
			SI								
TEAD-16	1A	SL	PA	RD	RAC				F		200212
			RI								
			SI								
TEAD-18	3A	SL	PA						N		200007
			RI								
			SI								
TEAD-19	NE		PA						N		199409
			RI								
TEAD-20	2A	SL	SI PA						N		200007
TEAD-20	2A	SL	RI						IN		200007
			SI								
TEAD-21	3A	SL	PA						N		199604
			RI								
			SI								
TEAD-22	2A	SL	PA						N		199710
			RI								
			SI								
TEAD-23	3A	SL	PA						N		200007
			RI								
			SI								
TEAD-24	1 A	GW	PA						N		200006
		SL	RI								
TEAD 244	4.4	CW	SI	D.					3.7		200110
TEAD-24A	1 A	GW SL	PA SI	RI					N		200110
		SL	31								

Site	RRSE	Media Evaluated	Phase (s) Completed	Phase (s) Underway	Phase (s) Future	#IRA Completed	#IRA Underway	#IRA Future	LTM Status	RIP Date	RC Date
TEAD-25	3A	SL	PA RI						U		200002
TEAD-26	3A	SL	SI PA RI						N		199409
TEAD-27	2A	SL	SI PA	RD	RAC				N		200212
TEAD-28	1 A	SL	RI SI						N		200002
TEAD-28	IA	SL	PA RI SI						N		200002
TEAD-29	3A	SL	PA SI	RI					N		200104
TEAD-30	3A	SL	PA RI						N		199710
TEAD-31	1A	GW SL	SI PA SI	RI	RAC RD	1			N		200302
TEAD-32	3A	SL	PA RI						N		199310
TEAD-33	NE		SI PA SI						N		198812
TEAD-34	2A	SL	PA RI			1			U		200002
TEAD-35	1A	SL	SI PA RI	RD	RAC				N		200304
TEAD-36	1A	SL	SI PA	RI	RAC				F		200302
TEAD-37	1A	SL	SI PA SI	RI	RD RAC RD				N		200304
TEAD-38	3A	SH	PA RAC		KD				N		199610
			RD RI								
TEAD-50	1A	GW SL	SI PA RI	RD	RAC	1			N		200306
		~	SI								

Site	RRSE	Media Evaluated	Phase (s) Completed	Phase (s) Underway	Phase (s) Future	#IRA Completed	#IRA Underway	#IRA Future	LTM Status	RIP Date	RC Date
TEAD-54	2A	SL	PA	RD	RAC	Completed	Chack way	1 44410	N	Dute	200304
TEME 34	211	52	RI	TLD	Kite				11		200304
			SI								
TEAD-58	1A	SL	PA	RD	RAC	1			N		200304
			RI								
			SI								
TEAD-67	NE		PA						N		199310
			RI								
			SI								
TEAD-69	3A	SH	PA						N		199710
			RI								
			SI								
TEAD-70	3A	SL	PA	RD	RAC				N		200207
			RI								
			SI								
TEAD-70A	3A	SL	PA	RD	RAC				N		200207
			RI								
			SI								
TEAD-80	1 A	GW	PA						N		199710
		WEF	RI								
			SI								
TEAD-81	1A	GW	PA	RI	RAC	3			F	200306	200506
		SL	SI		RAO						
					RD						
TEAD-82	3A	SL	PA						N		199310
			RI								
			SI								
TEAD-83	3A	SL	PA	RI					N		200104
		WH	SI								
TEAD-84	3A	SL	PA	RI					N		200104
			SI								
TEAD-85	3A	SL	PA	RI	RAC				N		200102
			SI								
TEAD-86	NE		PA	RI					N		200012
			SI								
TEAD-87	2A	SL	PA	RI					N		200012
TT . D . 0.0			SI	n-	.						20
TEAD-88	3A	SL	PA	RD	RAC				N		200312
			RI								
			SI								

		Media	Phase (s)	Phase (s)	Phase (s)	#IRA	#IRA	#IRA	LTM	RIP	RC
Site	RRSE	Evaluated	Completed	Underway	Future	Completed	Underway	Future	Status	Date	Date
TEAD-89	3A	SL	PA						N		199710
			RI								
			SI								
TEAD-90	2A	SL	PA	RI	RAC	1			N		200212
			SI		RD						
TEAD-91	3A	SL	PA						N		199810
			RI								
			SI								
TEAD-93	2A	SL	PA	RI	RAC				N		200212
			SI		RD						
TEAD-94	1A	SL	PA	RI	RAC				N		200306
			SI		RD						
TEAD-95	NE		PA	RAO					N	199906	200106
			RAC								
			RD								
			RI								
TEAD OF	NE		SI						27		100000
TEAD-96	NE		PA						N		199808
			RAC								
			RD								
			RI SI								
TEAD-97	NE		PA						N		199902
TEAD-97	NE		RAC						11		199902
			RD								
			RI								
			SI								
TEAD-98	NE		PA						U		199906
TEND 70	IVE.		RI						C		1,,,,,,,
			SI								
TEAD-99	1A	GW	PA						N		200002
//	•••	3	RI								200002
			SI								
DDSE Polotivo Biok Sito Evoluctio	n. Diek Catagor	v 1_High 2_Mad									

RRSE - Relative Risk Site Evaluation; Risk Category - 1=High, 2=Medium, 3=Low;

 $Legal\ Agreement \ -\ A=with\ agreement,\ B=without\ agreement;\ C=Complete,\ U=Underway,\ F=Future,\ N=Not\ Applicable$

Reporting Period End Date: 03/31/2001

REM/IRA/RA ASSESSMENT

PAST REM/IRA/RA

- * TEAD-13, At the IWL (SWMU 2), a soil remediation project has been successfully completed. This action involved the removal of the contaminated soils from the 4 ditches and placing it in the lagoon. The soils and sludges in the lagoon were then bound with native soil and capped with a RCRA-type cap. FY88, \$4,200K.
- * TEAD-13, Another project which has been implemented at the IWL (SWMU 2) is the TCE contaminated ground-water pump, treat and reinjection interim remedial action. Air stripping is the technique being used. FY90, \$272.1K; FY91, \$7,977.7K; FY92, \$7,348.9K; FY93, \$5,557.4K; FY94, \$2,128.0K; FY95, \$2,298.0K; FY96, \$2,115.0K.
- * TEAD-81, A removal at the TNT Washout Facility (SWMU 10) was conducted in 1984. Contaminated soils were left in the 4 ponds. The depressions were covered with a plastic sheeting and then filled in with clean soil. This action was done without regulatory approval. Contaminated groundwater at the SWMU has not yet been cleaned up. FY84, dollar amount unknown.
- * TEAD-25, In 1980, 400 gallons of PCB oil and a large quantity of associated soil were removed from Open Storage Lot 665D (SWMU 32) and properly disposed. Clean soil was brought in to fill the depression. No confirmatory sampling results are available to ensure that the clean-up was complete. FY80, dollar amount unknown.
- * TEAD-10, Eleven, 55-gallon drums of PCB contaminated soils were removed from the base of telephone pole No. 184 (SWMU 5) in the Ammunition Area in 1976. FY76, dollar amount unknown.
- * TEAD-82, In 1991, at SWMU 44, a large TCE degreaser unit located in Building 620 was cleaned of its residue sludge and transferred to DRMO for final disposal or transfer. No contamination remains at this location and no further action is required, FY91, dollar amount unknown.
- * TEAD-06, Over 125,000 used tires were removed from SWMU 13 to the Fallon Naval Air Station where they will be recycled as bombing targets. No contamination is expected to remain at this site once this effort is complete, however, confirmatory sampling is being required by the regulators. FY93, \$160.0K.
- * TEAD-01, OB/OD Area (SWMU 1), Off-post UXO survey & removal and/or detonation-in-place of munitions was completed. FY93, \$776K; FY94, \$463K; FY95, \$59K.
- * TEAD-58, Building 539 Bomb Washout Facility (SWMU 42), a fence was installed to keep personnel away from the lead contaminated soils. FY94, \$4K.
- * TEAD-81, TNT Washout Facility (SWMU 10), a fence was installed to keep personnel away from the explosively contaminated soils. FY95, \$3.8K.
- * TEAD-50, Battery Shop (SWMU 25), a fence was installed to keep personnel away from the contaminated soils. FY95, \$3.2K.
- * TEAD-10, PCB Pole (SWMU 5), Clean soil placed in excavation left from PCB clean-up. FY95, \$26.3K. FY96, \$27K.

REM/IRA/RA ASSESSMENT

PAST REM/IRA/RA

- * TEAD-38, Box Elder Wash Drum Site (SWMU 41), 74 drums removed from bottom & sides of wash and taken for off-site incineration. FY95, \$224.6K. FY96, \$443.4K.
- * TEAD-86, Compressor Condensate Drains (SWMU 50), excavated & removed drain system and associated discharge piping. FY96, dollar amount unknown.
- * TEAD-91, Battery Shop, Building 618 (SWMU 55), moved debris and asbestos materials from sump. FY96, Dollar amount unknown.
- * TEAD-81, TNT Washout Facility (SWMU 10), Removal of metallic settling basins. FY95, \$105K. FY96, \$264.3K.
- * TEAD-13, IWL Decon Facility (SWMU 2), Removal of the decon facility and contaminated soils. FY95, \$93.2K. FY96, \$153K.
- * TEAD-31, Laundry and Sewage Ponds (SWMU 11), Debris removal at the Waste Piles area. FY96, \$40K.
- * TEAD-34, Building 1303 (SWMU 22), Removal of small area of highly contaminated soil (explosives). FY98.
- * TEAD-13, Chemical Range (SWMU 7), Removal of OEW from disposal trench. FY98.
- * TEAD-09, Landfill (SWMU 12/15), IRA Boundry Fence installed. FY00.

CURENT REM/IRA/RA

- * TEAD-13, IWL (SWMU 2), Long Term Monitoring, average \$160K/year.
- * TEAD-09, Landfill (SWMU 12/15), Long Term Monitoring, appx. \$115K/year.
- * TEAD-81, TNT Washout Pond (SWMU 10), Long Term Monitoring, Appx. 115K/year.

FUTURE REM/IRA/RA

- * TEAD-01, 06, 11, 14, 15, 18, 24A, 28, 29, 34, 54, Site Management Plan
- *TEAD-05, 16, 58, excavation and stabilization
- *TEAD-09, North Area Sanitary Landfill (SWMU12/15), soil cover and fence
- *TEAD-12, 27, 31, 36, 50, excavation
- *TEAD-35, 37, asphalt cap

FY79

Initial Assessment	\$25,000

FY82

Exploratory Survey \$422,500

FY85

Preliminary Assessment/Site Investigation \$5,000

FY87

PA/SI	\$30,000
Remedial Investigation/Feasibility Study	\$536,300
IWL Remedial Action	\$168,400

FY88

RI/FS	\$245,900
IWL Off Post RI/FS	\$2,224,100
IWL Remedial Action	\$4,200,000

FY89

RI/FS	\$1,525,700
IWL RI/FS	\$646,700
IWL S&A	\$231,300

FY90

RI/FS	\$155,600
IWL Remedial Design RD/RA	\$272,100

FY91

North Area RI/FS &RFI	\$3,773,600
IWL RD/RA	\$7,977,700
Installation Support: TEAD	\$8,000

RI/FS	\$813,000
RFI	\$3,326,700
State Reimbursement	\$57,400
IWL RD/RA/S & A	\$7,348,900
	1,

FY93

RI/FS	\$3,474,500
RFI	\$2,540,000
Off Post UCO's	\$775,500
State Reimbursement	\$31,400
IWL RD/RA/S\$A	\$5,804,400
SWMU 13 Tire Removal	\$160,000

FY94

TNT Washout Fac. REM	\$40,000
Off Post UXO's REM	\$519,000
Reimbursement of State Service	\$36,900
GW Treatment-IWL	\$1,600,000
GW Treatment-IWL S&A	\$528,000
GW Sampling & Analysis	\$225,000
Kn Rel RFI	\$1,400
FFA RI/FS	\$1,725,000
Group B RFI	\$26,700
Group A RFI	\$84,900
Decon Pad Removal	\$15,000
Box Elder RD/RA	\$15,000

Public Relations	\$39,000
TEAD-N Off-Post UXOs	\$35,400
Decon Pad RD/RA	\$236,000
TNT Washout Fac. RD/RA	\$344,400
Box Elder RD/RA	\$433,400
Reimbursement Of Ut Ser.	\$35,300
GW Treatment-IWL	\$1,850,000
GW Sampling & Analysis	\$324,500
GW Treatment-IWL, S&A	\$48,000
Installation Support	\$39,000
Known Rel CMS	\$40,000
RD S&A	\$96,000
Group B RFI/CMS	\$59,400
Sewer Box RD/RA	\$51,000
Battery Pit RD/RA	\$3,000

FY96

GW Monitoring Kn Rel	\$845,200
FFA RI/FS	\$1,092,000
FFA RD/RA	\$181,800
Group A RFI/CMS	\$1,261,000
Group B RFI/CMS	\$786,500
Kn Rel RFI/CMS	\$2,720,000
GW Treatment OPS	\$2,444,000
Installation Support	\$118,200
Decon Pad-IWL REM	\$10,000
Box Elder Drum Site RA	\$15,000
TNT Facility Tank REM	\$15,000
Battery Pit REM	\$60,000
Reimbursement of Utah SVCS	\$39,000

FY97

TNT Washout Facility REM/SA (TEAD93-025)	\$10,000
GW Monitoring Kn Rel (TN-SF-28)	\$272,000
FFA UT Reimb. (TN-91-019)	\$50,000
Kn Rel RD (TN-SF-28)	\$40,000
Kn Rel IRA (TN-SF-28)	\$40,000
Kn Rel PY/RA (TN-SF-28)	\$5,000
GW Treatment OPS (TN-SW-27)	\$999,000
GW Treatment PY/RI (TN-SW-27)	\$230,000
TRC(TEAD97-001)	\$24,000

FY98

TEAD-09, Landfill (LTM)	\$115,000
TEAD-81, TNT Washout Ponds (LTM)	\$115,000
TEAD-13, IWL and Ditches (RA)	\$160,000
TEAD-13, IWL and Ditches (LTO)	\$2,470,000
TEAD-05, State Reimbursement (PGMT)	\$100,000
Technical Review Committee (PGMT)	\$24,000

TEAD-81, TNT Washout Ponds (LTM)	\$115,000
TEAD-13, IWL and Ditches (LTM)	\$142,000
TEAD-13, IWL and Ditches (LTO)	\$2,014,000
TEAD-09, Landfill (LTM)	\$115,000

TEAD-13, IWL and Ditches (LTO)	\$1,900,000
TEAD-09, Sanitary Landfill (LTM)	\$150,000
TEAD-09, Sanitary Landfill (IRA)	\$19,000
TEAD-09, Sanitary Landfill (RD)	\$350,000
TEAD-81, TNT Washout Ponds (LTM)	\$150,000
TEAD-05, Old Burn Area (RD)	\$285,000
TEAD-27, Wastewater Spreading Area (RD)	\$75,000
TEAD-16, Firing Range (RD)	\$225,000
TEAD-06, Tire Disposal Site (RA)	\$5,000
TEAD-28, Old Burn Staging Area(CMI)	\$5,000
TEAD-34, Bldg 1303 Washout Ponds (RA)	\$5,000
TEAD-70, Used Oil Dumpsters (CMI)	\$10,000
TEAD-18, AED Demil Facility (CMI)	\$5,000
TEAD-84, Old Dispensary (CMI)	\$5,000
TEAD-81, TNT Washout Ponds (CMD)	\$346,000
TEAD-50, Battery Shop (CMD)	\$49,000
TEAD-31, Laundry Pond (CMD)	\$14,000
TEAD-14, Battery Pit (CMI)	\$5,000
TEAD-24A, Old Industrial Waste Lagoon (CMI)	\$5,000
TEAD-11, X-Ray Lagoon (CMD)	\$9,000
TEAD-35, Deactivation Furnace (CMD)	\$12,000
TEAD-37, Deactivation Furnace (CMD)	\$14,000
TEAD- 53, Pesticide Storage and Mixing Facility (CMD)	\$22,000
TEAD-01, OB/OD Area (CMI)	\$10,000
TEAD-29, Contaminated Waste Processor (CMI)	\$5,000
TEAD-83, Stormwater Discharge Area (CMI)	<u>\$5,000</u>
	\$6,043,000
TOTAL Prior Year Funding:	\$74,211,000
5	, , , , , ,
FY 01 Funding:	\$8,681,000
1 1 01 Funding.	\$6,061,000
Estimated Future Funding:	\$45,503,000
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TOTAL from inception to complettion:	\$128,395,000

Tooele Army Depot - FY01 - Constrained Cost to Complete

DSERTS	OUTE TITLE	DUAGE	EV/04	EVOC	E)/00	EV.04	EV.05	EVOC	EV07.	TOTAL	DESCRIPTION OF WORK
#	SITE TITLE OB/OD Area (SWMU 1)	PHASE	FY01	FY02	FY03	FY04	FY05	FY06	FY07+	TOTAL	DESCRIPTION OF WORK
TEAD-01	Ob/OD Alea (SWINO 1)	CMD									Site Management Plan
		CMI				4					Site Management Plan
TEAD OF	Old Burn Area (SWMU 6,	CM(O)				1			0		5-year reviews
TEAD-05	OU 8)	RA	650						0		excavation and stabilization of ~2800cy
	,	RA(O)	650			1			2		excavation and stabilization of ~2800cy 5-year reviews
TEAD OF	Tire Disposal Area (SWMU	RA(O)				1			0		,
TEAD-06	13)										Site Management Plan
		RA (C)				4			0		Site Management Plan
TEAD OO	North Area Sanitary Landfill	RA(O)				1			2		5-year reviews
TEAD-09	(SWMU 12/15)	CMD							0		Soil cover for 140-acre landfill
	(OTTIMO 12, 10)	IRA	212						0		fence
		CMI	810	4,020	5,634	6,307	3,762	1,967	0		Soil cover for 140-acre landfill
	V D - 1 - 1 - 1 - 1 (Did - 1 00)	LTM	140	140	140	140	70	70	630		start semi-annual, 7 wells, drop to annual
TEAD-11	X-Ray Lagoon (Bldg L-23) (SWMU 3)	CMD							0		Site Management Plan
	(3001010 3)	CMI							0		Site Management Plan, well abandonment
		CM(O)				1			2		5-year reviews
TEAD-12	Bomb & Shell Recond Bldg	RD	15						0	15	excavation, treatment
	(SWMU 23)	RA		130					0		excavation, treatment
		RA(O)				1			2		5-year reviews
TEAD-13	IWL & Ditches (SWMU 2)	RA(O)	1,600	1,600	1,600	1,600	1,600	1,600	12,800	22,400	operations of groundwater treatment system
TEAD-14	Battery Pit (SWMU 24)	CMD							0	0	Site Management Plan
		CMI							0	0	Site Management Plan
		CM(O)				1			2	3	5-year reviews
TEAD-15	Chemical Range (SWMU 7)	RD	1						0	1	Site Management Plan
		RA	4						0	4	Site Management Plan, well abandonment
		RA(O)				1			2	3	5-year reviews
TEAD-16	Firing Range (SWMU 8)	RD							0	0	excavation and stabilization of ~2400cy
		RA	550						0	550	excavation and stabilization of ~2400cy
		RA(O)				1			2	3	5-year reviews
TEAD-18	AED Demilitarization Test	CMD							0	0	Site Management Plan
		CMI							0	0	Site Management Plan
		CM(O)				1			2	3	5-year reviews
TEAD-24A	Old IWL (SWMU 30)	CMD							0		Site Management Plan
		CMI							0		Site Management Plan
		CM(O)				1			2		5-year reviews

Tooele Army Depot - FY01 - Constrained Cost to Complete

DSERTS						-			-		
#	SITE TITLE Wastewater Spreading Area	PHASE	FY01	FY02	FY03	FY04	FY05	FY06	FY07+	TOTAL	DESCRIPTION OF WORK
TEAD-27	(OVANALLOE OLLA)								0		excavation of pesticide-contaminated soil
	(6111116 66, 66 1)	RA							0		excavation of pesticide-contaminated soil
	2112	RA(O)				1			2		5-year reviews
TEAD-28	Old Burn Staging Area	RD							0		Site Management Plan
		RA							0		Site Management Plan
		RA(O)				1			2		5-year reviews
TEAD-29	Contaminated Waste	CMD							0		Site Management Plan
		CMI							0		Site Management Plan
		CM(O)				1			2		5-year reviews
TEAD-31	Laundry & Sewage Ponds (S	CMD							0		Excavation of ~400cy, clean fill
		CMI	77						0		Excavation of ~400cy, clean fill
		CM(O)				1			2	3	5-year reviews
TEAD-34		RD							0	C	Site Management Plan
	Pond (SWMU 22)	RA							0	0	Site Management Plan
		RA(O)				1			2	3	5-year reviews
TEAD-35	AED Deactivation Furnace	CMD							0	C	asphalt cap
	(Bldg 1531 & 1352)	CMI	12						0	12	asphalt cap
		CM(O)	1		1	1	1		7	11	cap maintenance, 5-year reviews
TEAD-36		RD	50						0	50	excavation of contaminated soil
		RA		420					0	420	excavation of contaminated soil
		RA(O)				1			2	3	5-year reviews
TEAD-37	Deactivation Furnance (Bldg	CMD							0	C	asphalt cap
	1320) (SWMU 21)	CMI	25						0	25	asphalt cap ~1,000 s. yds.
		CM(O)	1		1	1	1		7	11	cap maintenance, 5-year reviews
TEAD-50	Battery Shop (SWMU 25)	CMD							0	C	stabilization of ~500cy of soil
		CMI	175						0	175	stabilization of ~500cy of soil
		CM(O)				1			2		5-year review
TEAD-54	Pesticide Handling &	CMD							0		Site Management Plan
	Storage Bldg 532 (SWMU	CMI							0		Site Management Plan
	24)	CM(O)				1			2		5-year reviews
TEAD-58	Bomb Washout Building	CMD							0		excavation & stabilzation of 2,700cy
		CMI	580						0		excavation & stabilzation of 2,700cy
		CM(O)				1			2		5-year reviews
TEAD-70A	Used Oil Dumpsters	CMD							0		Soil excavation (~33cy)
/ / . / . /	(SWMU 46)	CMI							0		Soil excavation (~33cy)
	· ·	CIVII							U		Tooli choavalion (~550y)

Tooele Army Depot - FY01 - Constrained Cost to Complete

DSERTS											
#	SITE TITLE	PHASE	FY01	FY02	FY03	FY04	FY05	FY06	FY07+	TOTAL	DESCRIPTION OF WORK
TEAD-81	TNT Washout Facility	CMD							0	0	excavation of ~10,000 cy, composting
	(SWMU 10)	CMI	3,850						0	3,850	excavation of ~10,000 cy, composting
		LTM	140	140	140	140	70	70	630	1,330	starting w/ semi-annual, 7 wells, dropping to annua
TEAD-83	Storm Discharge Area	CMD							0	0	Site Management Plan
	(SWMU 45)	CMI							0	0	Site Management Plan
		CM(O)				1			2	3	5-year reviews
TEAD-84	Old Dispensary Discharge,	CMD							0	0	excavation & stabilzation of 2,700cy
	Bldg 400 (SWMU 48)	CMI							0	0	excavation & stabilzation of 2,700cy
		CM(O)				1			2	3	5-year reviews
SCAL YEAR TO	OTALS IN THOUSANDS OF D	OLLARS	\$ 8,681	\$ 6,450	\$ 7,516	\$ 8,210	\$ 5,504	\$ 3,707	\$ 14,116	\$ 54,184	
		POM	8,681	6,450	7,516	8,210	5,504	3,707			
		ifference	\$0	\$0	\$0	\$0	\$0	\$0		\$ 54,184	

COMMUNITY INVOLVEMENT

A. STATUS OF COMMUNITY INVOLVEMENT

The Tooele Army Depot maintains an active community involvement program through quarterly Technical Review Committee Meetings to address the on-going IRP Program. These meetings are public meetings and are advertised in the local newspaper as well as through the mailing of notices to those individuals on Tooele Army Depot's mailing list. Even though the public is invited, typically there is minimal participation by the public. Those that typically attend the meetings are from state, federal, and local agencies.

B. DETERMINING INTEREST IN ESTABLISHING A RAB

Tooele Army Depot formed a RAB to address issues relating to restoration efforts on excess property resulting from the BRAC 93 decision to realign Tooele Army Depot's maintenance mission. This RAB was formed separately from the TRC and Tooele Army Depot felt that it would be better to address BRAC and IRP issues separately. The BRAC RAB was formed in 1994 and included 18 members. These members represented local, state, and federal agencies, as well as the Army and the public. The RAB included 18 public members. In an effort to stimulate more interest in the on-going IRP program, the BRAC RAB was combined with the TRC in 1999.

DEFENSE SITE ENVIRONMENTAL RESTORATION TRACKING SYSTEM

Award Date

Completion Date

Installation, 7. RAB REPORT 01/19/2001 Command: **AMC SubCommand:** OSC **Installation:** TOOELE ARMY DEPOT **RAB Established Date:** 199404 Reason RAB Not Establish: 200509 Reason RAB Adjourned: **RAB Adjourned Date:** TRC Date: 198802 **RAB Community Members: Total RAB Community Members:** 14 **Business Community RAB Government Members: Total RAB Government Members:** 4 **Environmental Protection Agency RAB Activities:** Advice On Scope/Sch Studies/Cleanup **RAB Advice** Future Land Use **TAPP Application Approval Date: TAPP Project Title:** 03/31/2001 **TAPP Project Description:**

Purchase Order

Award Number