DCN 462

1995 Base Realignment and Closure

INSTALLATION ENVIRONMENTAL BASELINE SURVEY (IEBS) DATA CALL # 3

DACS-TAB

TABLE OF CONTENTS

MANEUVER INSTALLATIONS: TAB - A

REC. NO.	INSTALLATION
MA-1	FORT BRAGG
MA-2	FORT CAMPBELL
MA-3	FORT CARSON
MA-4	FORT DRUM
MA-5	FORT HOOD
MA-6	FORT LEWIS
MA-7	FORT RICHARDSON
MA-8	FORT RILEY
MA-9	FORT STEWART
MA-10	FORT WAINWRIGHT
MA-11	SCHOFIELD BARRACKS

MAJOR TRAINING AREAS: TAB - B

REC. NO.	INSTALLATION
MT-1	*FORT A.P. HILL*
MT-2	*FORT CHAFFEE*
MT-3	FORT DIX
MT-4	*FORT GREELY*
MT-5	FORT HUNTER- LIGGETT
MT-6	FORT INDIANTOWN GAP
MT-7	FORT IRWIN
MT-8	FORT McCOY
MT-9	*FORT PICKETT*
MT-10	FORT POLK

ADMIN SUPPORT INSTALLATIONS: TAB - C

REC. NO.	INSTALLATION
CA-1	*CHARLES E. KELLY SUPPORT CENTER*
CA-2	CHARLES MELVIN PRICE SUPPORT CENTER
CA-3	FORT BELVOIR
CA-4	FORT BUCHANAN
CA-5	FORT GILLEM
CA-6	*FORT HAMILTON*
CA-7	FORT McPHERSON
CA-8	FORT MEADE
CA-9	FORT MONROE
CA-10	FORT MYER
CA-11	FORT RITCHIE
CA-12	FORT SHAFTER
CA-13	FORT TOTTEN
CA-14	*PRESIDIO OF SAN FRANCISCO*
CA-15	*SELFRIDGE TACOM SUPPORT ACTIVITY*

TABLE OF CONTENTS

TRAINING SCHOOLS: TAB - D

REC. NO.	INSTALLATION
TS-1	FORT BENNING
TS-2	FORT BLISS
TS-3	FORT EUSTIS
TS-4	FORT GORDON
TS-5	FORT HUACHUCA
TS-6	FORT JACKSON
TS-7	FORT KNOX
TS-8	FORT LEE
TS-9	FORT LEONARD WOOD
TS-10	FORT McCLELLAN
TS-11	FORT RUCKER
TS-12	FORT SAM HOUSTON
TS-13	FORT SILL
TS-14	PRESIDIO OF MONTEREY

PROFESSIONAL SCHOOLS: TAB - E

REC. NO.	INSTALLATION
PS-1	CARLISLE BARRACKS
PS-2	FORT LEAVENWORTH
PS-3	FORT LESLEY J. McNAIR
PS-4	WEST POINT / STEWART MILITARY

AMMO PRODUCTION : TAB - F

REC. NO.	INSTALLATION
AP-1	*HOLSTON ARMY AMMO PLANT*
AP-2	*IOWA ARMY AMMO PLANT*
AP-3	*LAKE CITY ARMY AMMO PLANT*
AP-4	*LONE STAR ARMY AMMO PLANT*
AP-5	McALESTER ARMY AMMO PLANT
AP-6	*MILAN ARMY AMMO PLANT*
AP-7	PINE BLUFF ARSENAL
AP-8	*RADFORD ARMY AMMO PLANT*

AMMUNITION STORAGE: TAB - G

REC. NO.	INSTALLATION
AS-1	BLUE GRASS ARMY DEPOT
AS-2	*HAWTHORNE ARMY AMMO PLANT*
AS-3	*PUEBLO DEPOT*
AS-4	SAVANNA DEPOT
AS-5	SENECA DEPOT
AS-6	SIERRA DEPOT
AS-7	TOOELE DEPOT
AS-8	*UMATILLA DEPOT*

TABLE OF CONTENTS

COMMODITY INSTALLATIONS: TAB - H

REC. NO.	INSTALLATION
CO-1	ADELPHI LABORATORY CENTER
CO-2	*COLD REGION RESEARCH LABORATORY*
CO-3	DETROIT ARSENAL / DETROIT TANK PLANT
CO-4	FORT DETRICK
CO-5	FORT MONMOUTH
CO-6	NATICK RESEARCH, DEV ENGRG CTR
CO-7	PICATINNY ARSENAL
CO-8	REDSTONE ARSENAL
CO-9	ROCK ISLAND ARSENAL

PORTS / MILITARY OCEAN TERM: TAB - I

REC. NO.	INSTALLATION
PO-1	BAYONNE MILITARY OCEAN TERMINAL
PO-2	OAKLAND ARMY BASE
PO-3	*SUNNY POINT MILITARY OCEAN TERMINAL*

PROVING GROUNDS: TAB - J

REC. NO.	INSTALLATION
PG-1	ABERDEEN PROVING GROUNDS
PG-2	DUGWAY PROVING GROUNDS
PG-3	WHITE SANDS MISSLE RANGE
PG-4	YUMA PROVING GROUNDS

MEDICAL CENTERS: TAB - K

REC. NO.	INSTALLATION
MD-1	FITZSIMONS ARMY MEDICAL CENTER
MD-2	TRIPLER ARMY MEDICAL CENTER
MD-3	WALTER REED ARMY MEDICAL CENTER

INDUSTRIAL FACILITIES: TAB - L

REC. NO.	INSTALLATION
IF-1	*LIMA TANK PLANT*
IF-2	*STRATFORD ENG PLNT*
IF-3	WATERVLIET ARSENAL
	DETROIT TANK PLANT GOCO

DEPOTS: TAB - M

REC. NO.	INSTALLATION
DE-1	ANNISTON DEPOT
DE-2	LETTERKENNY DEPOT
DE-3	RED RIVER DEPOT
DE-4	TOBYHANNA DEPOT
	CORPUS CHRISTI

A

NONSTRUCTURAL ATTRIBUTES

Fort Bragg -- 37225

1. LAND USE.

a. Land Availability (estimated quantities in acres).

(1)	Installation total	142,125
(2)	Cantonment area	11,670
(3)	Maneuver area	87,266
(4)	Training lands designated as sensitive/marginal by ITAMS/LCTA monitoring	34,390
	Drop Zone - 4,156	
	Impact Areas - 30,234	
(5)	Firing Ranges	1,411
(6)	Non-Impact Firing Range	0
(7)	Wetlands Sec 404 area (non jurisdictional)	4,000
(8)	Other (Surface water areas; set aside unique areas; i.e., recreation habitat, forests; restricted use areas such as landfills, contaminated sites, safety zones.	7,521
	Pope AFB - 1,870	
	Green Belt - 5,518	
	Landfills - 133	

b. Air Space.

(1) Restricted Air Space.
Fort Bragg controls its own Airspace Restricted Area up to an altitude of 29,000 feet.

(2) Extent of Installation Compatible Use Zones (ICUZ) or Noise and Accident Potential Zone (NAPZ). Zone II & III 33,600

Artillery Tng -	7,200
Pope AFB -	12,800
Simmons AAF -	13,100
Camp MacKall -	500

2. THREATENED OR ENDANGERED SPECIES (PLANTS AND ANIMALS).

A threatened or endangered species (TES) survey has been conducted and a Biological Assessment has been completed. Federally listed species previously reported as occurring at

the installation include the endangered Red-cockaded Woodpecker, Rough-leaf Loosestrife and Michaux's Sumac. Restrictions imposed by the presence of TES include: allowing only foot traffic in TES sites; no digging within 100 feet of lakes, ponds, streams, and natural waterways; vehicle restricted on roads and firebreaks in Red-cockaded Woodpecker colonies; and no cutting of pine trees without approval. TES populations are reported as stabilized.

3. CULTURAL RESOURCES.

a. Fort Bragg has a Historic Preservation Plan that has been approved by the North Carolina State Historic Preservation Officer (SHPO) and the Advisory Council on Historic Preservation (ACHP).

b. A historic building survey has not yet been completed. However, one facility, Longstreet Church, is on the National Register of Historic Places. It is also reported that 500 structures are candidates for the National Register.

c. An archeological survey is partially complete. Of the approximately 20,000 acres surveyed, 95 sites have been identified as potentially eligible for the National register. Archeological artifacts and associated records are stored and/or curated in building 3-1633. Approximately 10 acres, 2 historic churches and 22 cemeteries are identified as unavailable for operations and development.

4. INFRASTRUCTURE ISSUES.

a. Potable Water.

The installation potable water source is 99% from surface water (cantonment area) and one percent from 18 wells (ranges & rec areas). The design capacity of the water treatment plant is 10.6 MGD with no daily average provided. An emergency supply of 3.0 MGD is available from the city of Fayetteville, North Carolina. The installation treatment plant was built in 1918 and has gone through major upgrades. Though the source and equipment are reliable, the installation reports the main building is due for renovation. In addition, the chemical handling facilities are in need of an upgrade. The total pumping capacity of the wells is 0.245 MGD, with an unknown daily usage volume.

b. Wastewater.

The National Pollutant Discharge Elimination System

(NPDES) permitted wastewater treatment plant has a design capacity of 8.0 MGD with a maximum hydraulic capacity of 13.0 MGD. The average usage is 4.68 MGD. The remaining life expectancy is 20 years.

c. Solid Wastes.

A 106 acre sanitary landfill exists with a remaining capacity of 140,000 tons and a estimated useful life of four years. There is also a 27 acre demolition debris landfill with a remaining capacity of 1,000,000 tons and a useful life of 20 years. The installation reports that there is no adequate space for expansion on post for future landfill operations.

Fort Bragg is currently pursuing a contract ($36 million for 20 years) to join the tri-county regional solid waste cooperative, BCH Energy Corporation. Average daily volume is reported as 150 tons/day at a cost of $40/ton. Regional disposal startup will be February 1997, coinciding with expiration of on-going refuse collection contracts.

5. AIR QUALITY.

a. The installation is in the Environmental Protection Agency (EPA) Region IV, Atlanta, Georgia and North Carolina State Fayetteville District.

b. The region is in attainment.

c. Air pollution sources are: two waste incinerators, boilers, four paint booths, controlled and wild forest fires (30-40,000 acres/year), and fog oil machines.

d. The installation has no air emission credits.

e. An air compliance project, Prepare Emissions Inventory and Permit Package is required to meet/maintain air compliance.

f. The installation is not within 100 km of a critical air quality region.

6. HAZARDOUS MATERIALS/SITES.

a. Use of hazardous materials.

The installation has a Resource Conservation and Recovery Act (RCRA) Part B permit for two 90- day sites (bldgs 2-2761 & 3-2039) and one storage facility (bldg J-1334).

b. Contaminated sites.

The installation has identified 31 inactive Defense Environmental Restoration Account (DERA) eligible sites.

c. PCB, Asbestos, Lead Paint, and RADON issues.

PCB survey has been completed and 200 of the 203 identified contaminated transformers have been removed.

d. Underground Storage Tanks (UST).

Fort Bragg has 325 regulated and 900 abandoned USTs. A total of 273 tanks have been tested, of which 36 failed. Seventy waste oil tanks have been replaced/repaired. POL consolidation will eliminate 105 regulated tanks and create three fuel points.

e. Radiological Materials and Sources.

The Army Medical Center holds all Nuclear Regulatory Commission (NRC) or DA licenses for radiological materials and sources, however no further detail was provided.

7. OTHER ISSUES, CONSTRAINTS.

No other significant issues or constraints exist.

8. REVENUE GENERATING PROGRAMS.

FY 92	$129,000
FY 93	$ 65,000
FY 94	$275,000
	$469,000

9. PROGRAMMED ENVIRONMENTAL COSTS.

a. Summary of environmental compliance costs:

	Funded	Unfunded
FY 94	$5,769,000	$6,834,000
FY 95	$ 0	$27,066,000
FY 96	$ 0	$21,596,000
FY 97	$ 0	$11,711,000
FY 98	$ 0	$11,283,000
FY 99	$ 0	$10,135,000
	$5,769,000	$88,625,000

b. Summary of restoration costs:

	Funded	Unfunded
FY 94	$2,690,000	$ 0
FY 95	$ 0	$1,785,000
FY 96	$ 0	$2,900,000
FY 97	$ 0	$2,070,000
FY 98	$ 0	$3,150,000
FY 99	$ 0	$2,750,000
	$2,690,000	$12,655,000

ACRONYMS

AICUZ	Air Installation Compatible Use Zone
ICUZ	Installation Compatible Use Zone
ITAMS	Integrated Training Area Management System
LCTA	Land Condition Trend Analysis
404 Wetlands	Regulated Wetlands

NONSTRUCTURAL ATTRIBUTES

Camp Mackall -- 37445

1. LAND USE.

a. Land Availability (estimated quantities in acres).

(1)	Installation total Includes 884 acres being purchased for maneuver area.		7,792
(2)	Cantonment area		0
(3)	Maneuver area		5,360
(4)	Training lands designated as sensitive/marginal by ITAMS/LCTA monitoring		1,734
	Training	1,494	
	Drop Zones	240	
(5)	Firing Ranges		0
(6)	Non-Impact Firing Range		0
(7)	Wetlands Sec 404 area		0
(8)	Other (Surface water areas; set aside unique areas; i.e., recreation habitat, forests; restricted use areas such as landfills, contaminated sites, safety zones. Airfield -		698

b. Air Space.

(1) Restricted Air Space.

Mackall AAF is the key node in the Simmons AAF-Mackall Restricted Area-Uwharrie National Forest Aviation Training Complex. Mackall controls six established day/light nap-of-the-earth (NOE) flight routes and is the primary training area for night "black out" flight operations. Upon completion of the DBRITE radar, Mackall will become the backup Range Control radar which controls all flights within the restricted area. Mackall AAF also serves as an alternate deployment site for Special Operations units and the 82d Airborne Division.

(2) Extent of Installation Compatible Use Zones (ICUZ) or Noise and Accident Potential Zone (NAPZ).

Zones II & III off post. 500

2. THREATENED OR ENDANGERED SPECIES (PLANTS AND ANIMALS).

A threatened or endangered species (TES) survey has been conducted. The only Federal or State listed endangered and threatened species (TES) mentioned is the Red Cockaded Woodpecker. Within the context of the current mission, a Biological Assessment status has been rendered as "Jeopardy." TES populations are reported as stable. Restrictions on development and operations have been imposed as a result of TES. Only transient foot travel is allowed in TES sites. No digging is allowed within 100 feet of lakes, ponds, streams and natural waterways. Vehicles are restricted to established roads and firebreaks in Red Cocked Woodpecker colonies. No cutting of pines is allowed without approval.

3. CULTURAL RESOURCES.

a. Camp Mackall has no Historic Preservation Plan.

b. A historic building survey has not yet been completed and no structures are reported as potentially eligible for listing on the National Register of Historic Places.

c. An archeological survey is partially complete. Of the approximately 6,000 acres surveyed, no archeological sites have been identified as eligible for the National Register. Archeological artifacts and associated records are stored and/or curated at Fort Bragg.

4. INFRASTRUCTURE ISSUES.

a. Potable Water.

All wells have been capped except for one on the west side of the installation by the fire station. The remaining potable water is provide by contract with the Town of Southern Pines at a rate of 0.046 MGD.

b. Wastewater.

Sewage disposal consists of pump out latrines, portable toilets and septic tanks.

c. Solid Wastes.

Fort Bragg is currently pursuing a contract ($36 million for 20 years) to join the tri-county regional solid waste cooperative, BCH Energy Corporation, which will support Camp Mackall. Average daily volume is

reported as 150 tons/day at a cost of $40/ton. Regional disposal start up will be February 1997, coinciding with expiration of on-going refuse collection contracts.

5. AIR QUALITY.

a. The installation is in the Environmental Protection Agency (EPA) Region IV, Atlanta, Georgia and North Carolina State Fayetteville District.

b. The region is in attainment.

c. Air pollution sources are: boilers, controlled and wild forest fires.

d. The installation has no air emission credits.

e. A Fort Bragg air compliance project, Prepare Emissions Inventory and Permit Package, has been identified in the A-106 Plan to meet/maintain air compliance.

f. The installation is not within 100 km of a critical air quality region.

6. HAZARDOUS MATERIALS/SITES.

a. Use of hazardous materials.

The installation is not a Resource Conservation and Recovery Act (RCRA) treatment, storage or disposal facility.

b. Contaminated sites.

An assessment has been conducted to determine contamination; no Defense Environmental Restoration Account (DERA) eligible sites were identified.

c. PCB, Asbestos, Lead Paint, and RADON issues.

PCB survey has been completed and all contaminated transformers have been replaced.

d. Underground Storage Tanks (UST).

There is one active UST on Camp Mackall which is scheduled to be tested in June 1994.

e. Radiological Materials and Sources.

The Army Medical Center holds all Nuclear Regulatory Commission (NRC) or DA licenses for radiological materials and sources, however no further details were provided.

7. OTHER ISSUES, CONSTRAINTS.

No other significant issues or constraints exist.

8. REVENUE GENERATING PROGRAMS.

Undisclosed revenue generating projects provided the following revenue:

FY 92	$ 15,000
FY 93	$ 5,000
FY 94	$ 20,000
	$ 40,000

9. PROGRAMMED ENVIRONMENTAL COSTS.

a. Summary of environmental compliance costs:

	Funded	Unfunded
FY 94	$ 0	$ 0
FY 95	$ 0	$ 250,000
FY 96	$ 0	$ 100,000
FY 97	$ 0	$ 100,000
FY 98	$ 0	$ 100,000
FY 99	$ 0	$ 100,000
	$ 0	$ 650,000

b. There are no restoration costs requirements reported at Camp Mackall.

ACRONYMS

AICUZ	Air Installation Compatible Use Zone
ICUZ	Installation Compatible Use Zone
ITAMS	Integrated Training Area Management System
LCTA	Land Condition Trend Analysis
404 Wetlands	Regulated Wetlands

NONSTRUCTURAL ATTRIBUTES

Fort Campbell -- 21145

1. LAND USE.

a. Land Availability (estimated quantities in acres).

(1)	Installation total	105,068
(2)	Cantonment area	11,204
(3)	Maneuver area	68,394
(4)	Training lands designated as sensitive/marginal by ITAMS/LCTA monitoring	10
(5)	Firing Ranges	22,691
(6)	Non-Impact Firing Range	0
(7)	Wetlands Sec 404 area	2,544
(8)	Other (Surface water areas; set aside unique areas; i.e., recreation habitat, forests; restricted use areas such as landfills, contaminated sites, safety zones.	225
	Surface water - 110	
	Landfills - 48	
	Recreation - 67	

b. Air Space.

(1)	Restricted Air Space.	0
(2)	Extent of Installation Compatible Use Zones (ICUZ) or Noise and Accident Potential Zone (NAPZ).	
	Zone I (on-post)	26,123
	Zone II (off-post)	14,083
	(no-post)	57,731
	Zone III (off-post)	8,059
	(on-post)	15,376

2. THREATENED OR ENDANGERED SPECIES (PLANTS AND ANIMALS).

A threatened or endangered species (TES) survey is in progress, however it was previously reported that no Federal or State listed TES nor critical habitats are known to occur on the installation.

3. CULTURAL RESOURCES.

a. Fort Campbell does not have a Historic Preservation Plan/ Cultural Resources Management Plan.

b. A historic building survey has been completed, however, no structures were identified as potentially eligible for the National Register of Historic Places.

c. An archeological survey is currently ongoing, however no further details are provided on archeological sites. A total of ten acres of cemeteries are currently not available for operations and development.

4. INFRASTRUCTURE ISSUES.

a. Potable Water.

Potable water is from Boiling Springs, which is considered a groundwater source (well) directly under the influence of surface water. Total pumping capacity from Boiling Springs is 15.1 MGD with an average daily usage of 4.48 MGD. During periods of extreme drought, water must be drawn from the Red River (surface water).

b. Wastewater.

A wastewater treatment plant exists with a design capacity of 4.0 MGD and an average use of 3.20 MGD. The wastewater plant is 52 years old and though a National Pollutant Discharge Elimination System (NPDES) permit exists, it does not meet all NPDES requirements. The plant is under a Tennessee Administration Order for violations of the NPDES permit (chlorine residue and fecal coliform).

c. Solid Wastes.

The installation has a one 12 acre sanitary landfill (Woodlawn Road) with a remaining capacity of 38,000 tons and an estimated remaining useful life of four months. There are also two construction/demolition debris landfills. One construction/demolition landfill (Woodlawn road) has a remaining capacity of 1,000 tons and an estimated useful life of with a 6-9 months. The other construction/demolition landfill (Woodland Road Cells 1 & 2) has a remaining capacity of 250,000 tons and an useful life of four years.

Effective March 1994, sanitary waste will be disposed of via a $1,245,300 contract with Mark Dunning Industries, Inc. The average daily volume is estimated to be 55 tons/day with a tipping fee of $28.00/ton. Contract collection quantities may be increased to 30,000 tons/year at no additional cost.

5. AIR QUALITY.

a. The installation is in Environmental Protection Agency (EPA) Region IV.

b. The region is in attainment.

c. The air pollution sources are: control burning, medical waste incinerator, paint booths, dry cleaners, underground storage tanks, above ground storage tanks, woodworking shops, boilers, and heaters.

d. The installation has no air emission credits.

e. Twelve projects have been identified in the A-106 Plan to meet/maintain air compliance.

f. The installation is not within 100 km of a critical air quality region.

6. HAZARDOUS MATERIALS/SITES.

a. Use of Hazardous Materials.

The installation has a Resource Conservation and Recovery Act (RCRA) Part B (90 day or longer) permit (non-operational) for storage of hazardous materials, which expires in September 1995. The installation is in the process of obtaining a modification of the permit to increase square footage of the facility. Expected issuance of the modified permit is July 1994.

b. Contaminated sites.

The installation has identified 149 Defense Environmental Restoration Account (DERA) eligible sites.

c. PCB, Asbestos, Lead Paint, and RADON issues.

PCB survey has been completed and all 25 contaminated transformers have been replaced.

It was previously reported that asbestos surveys and management plans had not been completed.

It was previously reported that the installation has elevated levels of lead paint and requires mitigation.

Radon testing is on-going.

d. Underground Storage Tanks (UST).

There are 530 USTs on Fort Campbell. The number of tanks tested, replaced and repaired vary from year to year. Thirty-six were tested in 1993; two failed. Twenty-eight tanks were replaced/repaired in 1993.

e. Radiological Materials and Sources.

Nuclear Regulatory Commission (NRC) licenses for radiological materials and sources are held through AMCCOM for various pieces of equipment (Howitzers, mortars, detectors, etc.). The amount of surveying and cleanup required for decommissioning is not known.

7. OTHER ISSUES, CONSTRAINTS.

No other significant issues or constraints are known.

8. REVENUE GENERATING PROGRAMS.

	Agriculture	Forestry	Hunting/Fishing
FY 92	$101,000	$257,000	$ 53,000
FY 93	$124,000	$334,000	$ 40,000
FY 94	$117,000	$300,000	$ 75,000
	$342,000	$891,000	$168,000

9. PROGRAMMED ENVIRONMENTAL COSTS.

a. Summary of environmental compliance costs:

	Funded	Unfunded
FY 94	$7,431,000	$4,738,000
FY 95	$7,000,000	$11,538,000
FY 96	$5,700,000	$8,478,000
FY 97	$15,530,000	$ 0
FY 98	$14,462,000	$ 0
FY 99	$13,514,000	$ 0
	$63,637,000	$24,754,000

b. For FY 94 - FY 99, total restoration costs are:

Funded - $ 932,000
Unfunded - $41,937,000.

ACRONYMS

AICUZ	Air Installation Compatible Use Zone
ICUZ	Installation Compatible Use Zone
ITAMS	Integrated Training Area Management System
LCTA	Land Condition Trend Analysis
404 Wetlands	Regulated Wetlands

NONSTRUCTURAL ATTRIBUTES

Fort Carson -- 08005

1. LAND USE.

a. Land Availability (estimated quantities in acres).

	Fort Carson	Pinion Canyon
(1) Installation total	136,193	235,896
(2) Cantonment area	7,500	1,670
(3) Maneuver area	97,201	232,376
(4) Training lands designated as sensitive/marginal by ITAMS/LCTA monitoring	97,201	232,376
(5) Firing Ranges	60	0
(6) Non-Impact Firing Range	7	0
(7) Wetlands Sec 404 area	290	782
(8) Other (Surface water areas; set aside unique areas; i.e., recreation habitat, forests; restricted use areas such as landfills, contaminated sites, safety zones. Turkey Creek Ranch Bird Farm Rec Area	2,117	0

b. Air Space.

(1) Restricted Air Space.		
(2) Extent of Installation Compatible Use Zones (ICUZ) or Noise and Accident Potential Zone (NAPZ).	200	0

2. THREATENED OR ENDANGERED SPECIES (PLANTS AND ANIMALS).

A threatened or endangered species (TES) survey is on-going. The only resident TES is the Greenback Cutthroat Trout, whose population is on the increase. It was also previously reported that the Bald Eagle and Peregrine Falcon occur on the installation. Approximately 10 acres are off limits in order to protect Greenback Cutthroat Trout habitat.

3. CULTURAL RESOURCES.

a. A Historic Preservation Plan (HPP) has been completed for Fort Carson and is in draft form for the Pinion Canyon Maneuver Site (PCMS). The State Historic Preservation Officer (SHPO) and the Advisory Council on Historic

Preservation (ACHP) have reviewed and accepted the Fort Carson HPP. The Pinion Canyon HHP was scheduled to be submitted to the SHPO and ACHP in August 1994.

b. A historic building survey has been conducted for buildings older than 50 years. A total of 123 structures (58 - Old Hospital Complex, 8 - Turkey Creek Ranch, & 57 - abandoned homestead and ranch buildings/structures) were found to be potentially eligible for the National Register of Historic Places. Forty-three of the buildings in the Old Hospital Complex have been identified for destruction and 15 for adaptive use and maintenance. In addition, four buildings in one complex, Samuel Taylor Brown Stage Coach Station require stabilization. A second complex, Mary Doyle homestead, requires extensive conservation measures.

c. An archeological surveys have been conducted for high to medium priority areas at Fort Carson (51%). Surveys have been conducted on approximately 55,616 acres on Fort Carson and 70,747 acres on PCMS. Three National Register districts on Fort Carson are listed or determined eligible. Nine National Register districts with 650 contributing sites have been identified on PCMS. All archeological artifacts and associated records for Fort Carson and PCMS are maintained at Fort Carson. A total of 99 acres is unavailable for development and operations and 2,518 acres are restricted to dismounted training on PCMS.

d. Fort Carson maintains an active program of consultations with seven Native American tribal groups. One site was identified as an important Native American traditional site (30 acres) on Pinion Canyon and is off limits to development and operations.

4. INFRASTRUCTURE ISSUES.

a. Potable Water.

All potable water is supplied under contract with the City of Colorado Springs. Maximum capacity is 5.345 MGD and the average daily usage is 2.6 MGD.

b. Wastewater.

The installation has a National Pollutant Discharge Elimination System (NPDES) permitted wastewater treatment plant with a design capacity of 2.9 MGD and an average use of 1.6 MGD. A plant upgrade is programmed for 1996 to meet discharge requirements.

The installation has an industrial wastewater treatment plant with a maximum design capacity of 0.5 MGD and an average daily usage of 0.1 MGD. The life expectancy of

the industrial waste water treatment plant is 50-75 years with a 10 year review for upgrade.

c. Solid Wastes.

The installation has a 240-acre landfill, but will increase to over 300 acres if a new permit application is accepted by the State and County. With the new permit, the estimated life will be 15 - 20 years. Total remaining capacity is 630 tons. Since Fort Carson plans to build on the existing landfill, only 20 acres will be used for garbage. The construction debris landfill is in a separate area within the landfill boundary.

5. AIR QUALITY.

a. Fort Carson and PCMS are located in Environmental Protection Agency (EPA) Region VIII. Fort Carson is located in three Colorado Air Quality Regions; Region 4, 7, and 13. PCMS is located in Colorado Air Region 7.

b. The region is in non-attainment for carbon monoxide (moderate).

c. Air pollution sources are as follows: two incinerators, controlled burning, underground storage tanks, above ground storage tanks, vehicles, dynometers, media blasting facility, paint booths, woodworking shops, mines, paving, wastewater treatment plant, swimming pool, sterilizer, obscurant use (fog oil, etc.), open burning/open detonation, landfills, generators, boilers, pesticides and herbicides, print shop, and fugitive dust from storage piles, unpaved roads, and military training.

d. The installation has no air emission credits.

e. The construction of a Munitions Incinerator (deferred to Spring 1994) has been identified in the A-106 Plan to meet/maintain air compliance.

f. Fort Carson and PCMS are within 100 km of a critical air quality regions (Pikes Peak Region, Denver Metro Area, Fremont County, & Prowers County).

g. The Colorado Air Quality Control Commission Regulation No. 1 identifies visible emissions limits. Headquarters, Fort Carson prohibited use of obscurant training in December 1994 as a result of this limitation. The State Air Quality Control Commission has instructed the State to use "regulatory discretion" until a final ruling has been reached. Therefore, Fort Carson and PCMS has resumed

obscurant use in training.

6. HAZARDOUS MATERIALS/SITES.

a. Use of hazardous materials.

The installation is in the process of obtaining a Resource Conservation and Recovery Act (RCRA) Part B permit. The expected date of issuance is December 1994.

b. Contaminated Sites.

Fort-eight Defense Environmental Restoration Account (DERA) eligible contaminated sites have been identified.

The installations are not currently on the National Priority List (NPL), however Fort Carson has been placed on the Federal Hazard Waste Compliance Docket and is currently going through the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) process.

c. PCB, Asbestos, Lead Paint, or RADON issues.

PCB survey is complete and 10 of the 36 contaminated transformers identified have been replaced.

It was previously reported that there were no asbestos surveys nor management plan.

It was previously reported that elevated levels of lead paint were found and require mitigation.

Radon testing is on-going.

d. Underground Storage Tanks (UST).

There are 100 active USTs. A total of 200 were tested and five failed. One hundred tanks have been replaced and 120 removed.

e. Radiological Materials and Sources.

No Nuclear Regulatory Commission (NRC) nor DA licenses are reported to be held by Fort Carson for Radiological Materials and Sources.

7. OTHER ISSUES, CONSTRAINTS.

No other significant constraints or issues are known.

8. REVENUE GENERATING PROGRAMS.

	Fishing/Hunting	Forestry
FY 92	$ 50,354	$ 1,507
FY 93	$ 40,738	$ 1,478
FY 94	$ 43,000	$ 2,000
	$134,092	$ 4,985

9. PROGRAMMED ENVIRONMENTAL COSTS.

a. Summary of environmental compliance costs:

	Funded	Unfunded
FY 94	$5,440,000	$13,601,000
FY 95	$8,000,000	$16,105,000
FY 96	$6,400,000	$12,989,000
FY 97	$ 0	$14,554,000
FY 98	$ 0	$13,771,000
FY 99	$ 0	$11,167,000
	$19,840,000	$82,187,000

b. Summary of restoration costs:

	Funded	Unfunded
FY 94	$ 0	$5,660,000
FY 95	$ 0	$5,620,000
FY 96	$ 0	$2,200,000
FY 97	$ 0	$1,395,000
FY 98	$ 0	$1,380,000
FY 99	$ 0	$ 180,000
	$ 0	$16,435,000

ACRONYMS

AICUZ	Air Installation Compatible Use Zone
ICUZ	Installation Compatible Use Zone
ITAMS	Integrated Training Area Management System
LCTA	Land Condition Trend Analysis
404 Wetlands	Regulated Wetlands

NONSTRUCTURAL ATTRIBUTES

Fort Drum -- 36205

1. LAND USE.

a. Land Availability (estimated quantities in acres).

(1)	Installation total	107,265
(2)	Cantonment area	10,042
(3)	Maneuver area	65,304
(4)	Training lands designated as sensitive/marginal by ITAMS/LCTA monitoring	0
(5)	Firing Ranges	24,007
(6)	Non-Impact Firing Range	5,530
(7)	Wetlands Sec 404 area (Includes 2,781 acres open waters)	15,402
(8)	Other (Surface water areas; set aside unique areas; i.e., recreation habitat, forests; restricted use areas such as landfills, contaminated sites, safety zones. (30 acres landfill, 20 acres cemeteries, & 180 acres historic & properties)	230

b. Air Space.

(1)	Restricted Air Space.	Normal
(2)	Extent of Installation Compatible Use Zones (ICUZ) or Noise and Accident Potential Zone (NAPZ). No installation AICUZ	

2. THREATENED OR ENDANGERED SPECIES (PLANTS AND ANIMALS).

A threatened or endangered species (TES) survey has been conducted. There are no known Federally listed TES reported found on the installation.

3. CULTURAL RESOURCES.

a. Fort Drum has a final draft installation historic preservation plan under review by the New York State Historic Preservation Officer (SHPO) and the Advisory Council on Historic Preservation.

b. The LeRay District is listed on the National Register of Historic Places. The LeRay Mansion is in substandard condition and renovation will cost approximately $87,000. Fort Drum has Legacy Funds for this work.

c. Approximately 19,000 acres have been surveyed for archeological resources. At least 30 of the sites discovered thus far are considered to be eligible for the National Register. Potentially eligible sites include the LeRay Mansion Complex, 12 farmsteads, five historic villages, two grist mill sites, two prehistoric Indian villages, and four prehistoric camp sites. Fort Drum has an interim artifact facility. Restrictions to development or operations resulting from agreements, consultations or management plans at Fort Drum are: (1) the section 106 requirement to inventory, identify, and evaluate the eligibility of significant sites, and (2) the need to avoid posted off-limits areas. Construction and timber harvest activities are normally reviewed far in advance and archeological clearances obtained with no impacts. Proposed military operations are reviewed within two week period and any limitations caused by Section 106 reviews are avoided by using alternate locations.

d. Coordination with Native Americans regarding the management of, or access to, traditional cultural properties has been initiated to comply with the Native American Graves Repatriation Act of 1990. Fort Drum has contacted the head chief of the Iroquois Confederacy and all the chiefs of the Iroquois Nations in New York (Seneca, Onondaga, Cayuga, Mohawk, and Oneida). Limitations to mission development and operations resulting from such consultations or subsequent agreements are minimal.

4. INFRASTRUCTURE ISSUES.

a. Potable Water.

Seventy-six percent of the potable water is provided by 11 wells and an Army owned treatment facility and the remaining 24% is supplied through contract. Ground water sources have a total pumping capacity 3 MGD and an average daily use of 0.5 MGD. Excess capacity is 2.5 MGD. The maximum surface water capacity is 5.6 MGD, however the contacted amount is 3 MGD from the City of Watertown. Average daily usage is 1.5 MGD. there are no known restrictions to expansion of capacity.

b. Wastewater.

National Pollutant Discharge Elimination System (NPDES) permitted sewage treatment plant exists on the installation but it is currently inoperative. Sewage disposal is accomplished by contract with the City of Watertown through the Development Authority of the North Country. Maximum design capacity is 13.4 MGD with a contracted capacity of 4.3 MGD. Average daily use at the treatment plant is 10 MGD and 1.8 MGD from Fort Drum. Life expectancy is 30 or more years as the plant was just expanded and upgraded. There are no known restrictions to expansion of capacity.

c. Solid Wastes.

Refuse from Fort Drum is disposed via a $455,000 commercial contract off-post. Average volume is 18 tons/day with a contracted rate of 6500/tons year. Three closed landfills exist on the installation. There are no known limitations to increasing the contract quantity.

5. AIR QUALITY.

a. The installation is in Environmental Protection Agency (EPA) Region II and New York State Region VI.

b. The area is in non-attainment for ozone (marginal).

c. Installation pollution sources include seven paint spray booths, a medical waste incinerator, a pesticide mixing facility, a packed column air stripper, a blue print reproduction machine and 300 MBTU/fr Cogeneration Plant. Permits for military rock crusher and asphalt plant are pending. Other potential sources include burning and detonations from range firing, military tank maneuvers, and the cumulative impact of boilers and furnaces.

d. The installation has no air emission credits.

e. Major projects identified in the A-106 plan are in compliance with air studies/permit requirements through 2001, CFC/Halon phaseout by 2000, and air monitoring though 2000.

f. There are no critical air quality regions within 100 km of the installation.

6. HAZARDOUS MATERIALS/SITES.

a. Use of hazardous materials.

Fort Drum is a Resource Conservation and Recovery Act (RCRA) treatment, storage and disposal facility, but does not have a RCRA permit. Fort Drum is currently in the process of obtaining RCRA Part B permits, which is expected to be issued in FY 95.

b. Contaminated Sites.

There are currently 19 Defense Environmental Restoration Account (DERA) eligible sites on Fort Drum.

c. PCB, Asbestos, Lead Paint, or RADON issues.

PCB survey has been completed and all contaminated transformers have been replaced.

The Radon testing program is being worked on.

d. Regulated underground storage tanks (UST).

Out 752 USTs, 576 have been tested. Thirty-five UST's failed and were replaced or repaired.

e. Radioactive Materials and Sources.

Fort Drum does not hold any Nuclear Regulatory Commission (NRC) or DA licenses for radiological materials, however several organizations do work with equipment containing radioactive materials. There are no known rooms or buildings requiring decommissioning for radioactive materials.

7. OTHER ISSUES, CONSTRAINTS.

Fort Drum currently has two MCA projects under construction which have a 404 Wetlands permit issued to fill wetlands. Fort Drum is required to mitigate this impact by constructing 21 acres of compensatory wetlands. The creation of these wetlands is currently under design and completion scheduled in increments of seven in 1994, 1995, and 1996.

8. REVENUE GENERATING PROGRAMS.

	Forestry	Hunting/Fishing
FY 92	$ 50,000	$ 18,000
FY 93	$ 40,000	$ 18,000
FY 94	$ 65,000	$ 18,000
	$155,000	$ 54,000

9. PROGRAMMED ENVIRONMENTAL COSTS.

a. Summary of environmental compliance cost:

	Funded	Unfunded
FY 94	$4,104,000	$ 0
FY 95	$4,314,000	$ 0
FY 96	$3,000,000	$2,926,000
FY 97	$ 0	$ 0
FY 98	$ 0	$ 0
FY 99	$ 0	$ 0
	$11,418,000	$2,926,000

b. Summary of restoration cost:

	Funded	Unfunded
FY 94	$13,064,000	$ 0
FY 95	$ 0	$5,006,000
FY 96	$ 0	$3,050,000
FY 97	$ 0	$6,295,000
FY 98	$ 0	$3,745,000
FY 99	$ 0	$1,825,000
	$13,064,000	$19,921,000

ACRONYMS

AICUZ	Air Installation Compatible Use Zone
ICUZ	Installation Compatible Use Zone
ITAMS	Integrated Training Area Management System
LCTA	Land Condition Trend Analysis
404 Wetlands	Regulated Wetlands

NONSTRUCTURAL ATTRIBUTES

Fort Hood -- 48255

1. LAND USE.

a. Land Availability (estimated quantities in acres).

(1)	Installation total 8,625 permitted from COE	217,337
(2)	Cantonment area	20,863
(3)	Maneuver area	122,124
(4)	Training lands designated as sensitive/marginal by ITAMS/LCTA monitoring	
(5)	Firing Ranges	65,000
(6)	Non-Impact Firing Range	0
(7)	Wetlands Sec 404 area	0
(8)	Other (Surface water areas; set aside unique areas; i.e., recreation habitat, forests; restricted use areas such as landfills, contaminated sites, safety zones. Wildlife habitat - 9,350 Landfill - 205	9,555

b. Air Space.

(1) Restricted Air Space. 180,000

(2) Extent of Installation Compatible Use Zones (ICUZ) or Noise and Accident Potential Zone (NAPZ). Only Zone II extends off the installation into two farming areas. 75

2. THREATENED OR ENDANGERED SPECIES (PLANTS AND ANIMALS).

A survey has been conducted by the US Army Construction Engineering Research Laboratory, and a report published dated September 1987 entitled "Black Capped Vireo on the Lands of Fort Hood". A survey has been conducted each year since 1987. A Biological Assessment of the Effects of Military Associated Activities on Endangered Species at Fort Hood, Texas, June 1991 was also made. The date of the opinion was September 23, 1993 with a no-jeopardy opinion. Two Federally listed endangered species are known to occur on the installation: Black-capped Vireo and Golden-cheeked Warbler. Training activities are constrained during the nesting season of these birds. Consultation is in progress

with the U.S. Fish and Wildlife Service which should result in the development of a management plan by which the habitat used by these two species can be protected while enabling the installation to accomplish its training programs. Installation has a list of ongoing measures and constraints (Fire Management Plans, overflight restrictions). TES population is stabilized.

3. CULTURAL RESOURCES.

a. Fort Hood has an installation Historic Preservation Plan that Texas State Historic Preservation Officer (SHPO) and the Advisory Council on Historic Preservation have been reviewed.

b. A historic building inventory has been completed. Four of these structures may be eligible for the National Register.

c. A total of 197,000 acres have been examined for archeological resources. At least 716 sites have been discovered by these surveys. Determinations of National Register eligibility are now being made for many of these sites.

d. Fifty-three acres in North Fort Hood is not available due to a cemetery and National Historic Landmark site of great spiritual significance to Native Americans. A Memorandum of Understanding (MOU) with interested Native American groups for access to Leon River Medicine Wheel is in effect.

4. INFRASTRUCTURE ISSUES.

a. Potable Water.

Potable water is supplied by surface water from Lake Belton. Fort Hood holds water rights to 12,000 acre-feet per year and contracts with the Bell County Water Control Improvement District number 1 and city of Gatesville for treatment and delivery. The contract is for 7.5 MGD and the installation has an average use of 6.5 MGD (North Fort Hood, 0.1 MGD & South Fort Hood, 6.4 MGD). The maximum capacity for North Fort Hood is 16.0 MGD and 3.3 MGD for South Fort Hood.

b. Wastewater.

Wastewater discharge is accomplished under contract with the Bell County Water Control Improvement District Number 1. The contract allows a 7.5 MGD discharge, but average use is 4.1 MGD. The annual cost is $470K.

Fort Hood operates two small systems. North Fort Hood system is a lagoon system with maximum capacity of 7.6 MG for each lagoon. Nominal capacity is 0.5 MGD. The second is a small package plant for the Lake Belton Recreation Area. Maximum design capacity is 0.04 MGD, with daily usage less than 0.02 MGD. Its life expectancy is 20 years. The installation has a National Pollutant Discharge Elimination System (NPDES) permit. Constraints on discharges by contact plant operator may require the establishment of an industrial treatment plant.

c. Solid Wastes.

There is a contractor operated landfill at a 154-acre site. Fifteen years of disposal capacity remain in the site. Remaining capacity is 1,050,000 tons. There is area available for additional sites. Refuse operations are contracted out to Inland Services. This includes household curbside pickup, dumpster pickup, large items and operation of the landfill. Annual cost is $1.9 M. Average daily volume is 200 tons, at a cost of $24.17/ ton.

5. AIR QUALITY.

a. The installation is in Air Quality Region 212, Texas Natural Resource Conservation Commission Air Quality Division.

b. The region is in attainment.

c. The air pollution sources on the installation are from normal training and operational activities, accidental and controlled fires, incinerator and spray booth.

d. The installation has no air emission credits.

e. No major air compliance projects were reported.

f. The installation is not within 100 km of a critical air quality region.

g. Local Air Quality Board has delayed or restricted activities in obtaining permit and/or standard exemption for paint booth operation and other volatile organic compounds.

6. HAZARDOUS MATERIALS/SITES.

a. Use of hazardous materials.

Installation has a Resource Conservation and Recovery

Act (RCRA) Part B permit (90 day or longer) for HW-50323 Class I Hazardous Storage and Processing, Off-Site, Non-commercial. Permit was issued in March 1994 and expires in March 2004. Contractor is currently preparing a request for RCRA Part B modification for Open burning/open detonation (OB/OD) on range with an expected date of issuance is November 1994.

b. Contaminated Sites.

The US Army Environmental Hygiene Agency did an assessment dated September 4, 1988. There is one Defense Environmental Restoration Account (DERA) eligible site identified.

c. PCB, Asbestos, Lead Paint, or RADON issues.

PCB survey is still continuing with identification approximately 50% complete. No other information provided.

d. Underground Storage Tanks (UST).

There are 99 USTs. All tanks have been tested and two have failed. Fort Hood has removed over 50 USTs in the last two years.

e. Radioactive Materials and Sources

There are no Nuclear Regulatory Commission (NRC) nor DA licenses reported for radioactive materials or sources.

7. OTHER ISSUES, CONSTRAINTS.

No other significant issues or constraints are known.

8. REVENUE GENERATING PROGRAMS.

Installation generates revenue from Hunting and Fishing:

FY 92	$54,000
FY 93	$49,700
FY 94	$46,800

9. PROGRAMMED ENVIRONMENTAL COSTS.

a. Summary of environmental compliance cost ($000):

	Funded	Unfunded
FY94	$ 4,117	$ 1,180
FY95	3,756	2,000
FY96	5,310	1,410
FY97	4,745	1,175
FY98	4,845	905
FY99	3,990	880
	$26,763	$ 7,550

b. Restoration Costs

Defense Environmental Restoration Account (DERA) eligible Restoration Costs from the 1993 report is $100K. Funded and unfunded totals for FY94 and FY95 are listed as $40,000 and $60,000, respectively.

ACRONYMS

AICUZ	Air Installation Compatible Use Zone
ICUZ	Installation Compatible Use Zone
ITAMS	Integrated Training Area Management System
LCTA	Land Condition Trend Analysis
404 Wetlands	Regulated Wetlands

NONSTRUCTURAL ATTRIBUTES

Fort Lewis -- 53465

1. LAND USE.

a. Land Availability (estimated quantities in acres).

(1)	Installation total	86,200
(2)	Cantonment area	10,600
(3)	Maneuver area	62,536
(4)	Training lands designated as sensitive/marginal by ITAMS/LCTA monitoring	0
(5)	Firing Ranges	12,500
(6)	Non-Impact Areas	0
(7)	Wetlands Sec 404 area	4,500
(8)	Other (Surface water areas; set aside unique areas; i.e., recreation habitat, forests; restricted use areas such as landfills, contaminated sites, safety zones.	600

b. Air Space.

(1) Restricted Air Space.

(2) Extent of Installation Compatible Use Zones (ICUZ) or Noise and Accident Potential Zone (NAPZ) N/A

Zone II (Off Post 73)	13,302
Zone III	3,282

2. THREATENED OR ENDANGERED SPECIES (PLANTS AND ANIMALS).

Threatened or endangered species surveys for Federally listed species have been conducted; however, the survey for State listed species is incomplete. The Federally listed threatened American Bald Eagle occurs on the installation and the population is reported as increasing. In addition, 58,000 acres are designated a critical habitat for the Northern Spotted Owl, though the owl does not occur on the installation. Operational limitations imposed by this designation affect actions that modify timber stands and require consultation with the U.S. Fish and Wildlife Service (USFWS). A Spotted-Owl management plan (due September 1994) is in preparation, which will alleviate the consultation requirements once USFWS has been consulted on the plan.

3. CULTURAL RESOURCES.

a. Fort Lewis does not have a Historic Preservation Plan or an implementing Memorandum of Agreement. However, the installation has entered into a Programmatic agreement with the Advisory Council on Historic Properties (ACHP) and the Washington State Office of Archaeology and Historic Preservation (OAHP) to complete such a plan in draft form no later than September 30, 1995.

b. A historic building inventory has been completed for Fort Lewis. The inventory found approximately 253 buildings of historical importance. One building (Bldg 4274) requires extensive renovations for repair of structural components and stabilization at an estimated cost of $500,000.

c. Approximately 53% of Fort Lewis has not been surveyed for archeological resources. A total of 102 archeological sites have been identified as potentially eligible for the National Register. Potentially eligible archeological sites are off limits to vehicle traffic or digging. The installation also provides storage/curation of archeological artifacts and associated records at the installation. Approximately 260 acres are reported as not available for development or operations due to cultural resources.

d. Consultations with the Nisqually Indian Tribe regarding Traditional Cultural Properties is ongoing.

4. INFRASTRUCTURE ISSUES.

a. Potable Water.

Potable water is supplied by eight wells and one spring with a total pumping capacity of 19.1 MGD and an average use of 7.2 MGD.

b. Wastewater.

The National Pollutant Discharge Elimination System (NPDES) permitted wastewater treatment plant has a design capacity of 9.0 MGD and an average use of 2.7 MGD. The headworks are to be upgraded within three years. Life expectancy is unknown.

c. Solid Wastes.

There are 180 acres of installation owned landfills. Cell 6 of Landfill 5 has a capacity of 145,000 tons and an estimated useful life of seven years. Cell 5 at Landfill 5 did not meet RCRA requirements, however, a variance was granted by Tacoma-Pierce Health Department to keep it open until full. Pierce County has been

designated as a Sole Source Aquifer and it is unclear what limitations that will place on future landfill development or use.

5. AIR QUALITY.

a. Air quality regions are not named, however Fort Lewis falls into two air quality districts: Puget Sound Air Pollution Control Agency and the Olympic Air Pollution Control Agency.

b. The region is in non-attainment for Carbon Monoxide (moderate) and Ozone (marginal).

c. The pollution sources are: combustion devices, fuel storage and distribution facilities, vehicle and aircraft emissions, incinerators, spray painting operations, degreasing/solvent operations, waste water treatment plant, woodworking facilities, prescribed burning, smoke generation (training), dirt roads, parking lots, and ordinance use.

d. The installation has no air emission credits.

e. Twenty programs are identified in the A-106 Plan to meet/maintain air compliance.

f. Fort Lewis is within 100 km of critical air quality regions (Class I Areas: Mt. Ranier National Park, Alpine Lakes Wilderness area, Goat Rocks Wilderness Area, Mt. Adams Wilderness Area, and Olympic National Park.

6. HAZARDOUS MATERIALS/SITES.

a. Use of hazardous materials.

The installation is operating and storing hazardous waste (Bldg 9673) on an interim Part B (Part A) permit and is in the process of obtaining a Resource Conservation and Recovery Act (RCRA) Part B permit.

b. Contaminated sites.

The installation has identified 20 Defense Environmental Restoration Account (DERA) eligible contaminated sites.

The installation is on the National Priority List (NPL) (Logistics Center NPL site & Landfill No. 5 NPL site).

c. PCB, Asbestos, Lead Paint, and RADON issues.

PCB survey has been completed and 25 contaminated

transformers have been identified and replaced.

It was previously reported that completion of asbestos survey and management plans are required.

It was also previously reported that there were elevated levels of lead paint and it require mitigation.

Radon level testing has been completed.

d. Underground Storage Tanks (UST).

All 110 (90 active & 20 abandoned) USTs have been tested; six failed, and 23 have been replaced/repaired.

e. Radioactive Materials and Sources.

The installation holds a Nuclear Regulatory Commission (NRC) and a DA license for radioactive materials and/or sources used for medical purposes at the Madigan Army Medical Center (MAMC). In addition, I Corps and Fort Lewis operate and perform missions from other license holders such as AMCCOM, CECOM, TACOM, etc.

Only MAMC has had problems with decommissioning of operations and storage ares on Fort Lewis. Due to hazards of tritium devices (H3) storage, handling and repair, DOL Bldg 9570 (fire control device repair), and radiation waste storage; ISO/RPO Bldg 9508 would have to decontaminated prior to decommissioning. The cleanup would be considered low level (3 rooms & 1 building for ISO).

7. OTHER ISSUES, CONSTRAINTS.

No other significant issues or constraints are known.

8. REVENUE GENERATING PROGRAMS.

Revenue generating programs consists of forestry with the following revenues:

FY 92	$1,281,000
FY 93	$2,068,000
FY 94	$1,000,000

9. PROGRAMMED ENVIRONMENTAL COSTS.

a. Summary of environmental compliance cost are:

	Funded	Unfunded
FY 94	$11,186,000	$ 4,892,000
FY 95	$18,453,000	$ 5,793,000
FY 96	$16,512,000	$ 6,000,000
FY 97	$12,300,000	$ 6,562,000
FY 98	$11,952,000	$ 5,459,000
FY 99	$10,195,000	$ 4,796,000
	$80,598,000	$33,502,000

b. Funded environmental restoration costs for FY 94 - FY 99 are $27,237,000. Unfunded restoration costs are not known.

ACRONYMS

AICUZ	Air Installation Compatible Use Zone
ICUZ	Installation Compatible Use Zone
ITAMS	Integrated Training Area Management System
LCTA	Land Condition Trend Analysis
404 Wetlands	Regulated Wetlands

NONSTRUCTURAL ATTRIBUTES

Yakima Firing Center -- 53995

1. LAND USE.

a. Land Availability (estimated quantities in acres).

(1)	Installation total (expansion of 62,200 acres planned)	261,451
(2)	Cantonment area	1,010
(3)	Maneuver area	222,371
(4)	Training lands designated as sensitive/marginal by ITAMS/LCTA monitoring	N/A
(5)	Firing Ranges	37,864
(6)	Non-Impact Areas	40,692
(7)	Wetlands Sec 404 area	0
(8)	Other (Surface water areas; set aside unique areas; i.e., recreation habitat, forests; restricted use areas such as landfills, contaminated sites, safety zones.	0

b. Air Space.

(1) Restricted Air Space. Up to 55,000 ft

(2) Extent of Installation Compatible Use Zones (ICUZ) or Noise and Accident Potential Zone (NAPZ)

Zone II	25,000
Zone III	11,900

2. THREATENED OR ENDANGERED SPECIES (PLANTS AND ANIMALS).

Threatened or endangered species (TES) surveys have been conducted for Federally listed and candidate species. Surveys for State listed and candidate species are incomplete. Fourteen different TES and candidate species have been identified: Endangered - Peregrine Falcon; Threatened - Bald Eagle; Candidate - Spotted bat, Townsends Big-eared bat, Pygmy Rabbit, Ferruginous Hawk, Sage grouse, Long-billed Crlew, Loggerhead Shrike, Pauper Milkvetch, Basalt Daisy, Hoover's Desert Parsley, and Hoover's Tauschia. Surveys on many of the identified TES are ongoing. A biological assessment has been completed. No Biological opinion was rendered because the U.S. Fish

and Wildlife Service (USFWS) concurred with a finding of no effect/no significant effect, or not likely to adversely affect for all TES in informal consultation.

3. CULTURAL RESOURCES.

a. Yakima Training Center does not have a historic preservation plan or a cultural resource memoranda of agreement in place. The installation has entered into a programmatic agreement with the Advisory Council for Historic Preservation (ACHP) and the State Historic Preservation Officer (SHPO) to complete said plan NLT September 1995.

b. A historic building inventory has been completed. No buildings were recommended as being eligible for the National Register.

c. Approximately 73% (70,885 acres) of Yakima have been surveyed for archeological resources. Approximately 384 archeological sites have been identified as potentially eligible for the National Register. All storage of artifacts and associated records is done at Fort Lewis.

d. Consultations are ongoing with the Yakima Indian Nation and Wanapum People with a plan expected by 1995. Approximately 320 acres of two traditional Yakima Nation cultural properties are fenced off and avoided.

4. INFRASTRUCTURE ISSUES.

a. Potable Water.

All potable water is supplied by 12 wells with a total capacity of 2.085 MGD and an average use of 0.17 MGD.

b. Wastewater.

A wastewater treatment plant exists with a design capacity of 0.72 MGD and an average use of 0.14 MGD. The life expectancy is 20 years. The system operates under a National Pollutant Discharge Elimination System (NPDES) permit.

c. Solid Wastes.

Solid waste removal is provided through contract, annual value of $100,000, at a cost of $34.00/ton.

5. AIR QUALITY.

a. The air quality region is Yakima County Clean Air Authority.

b. The region is in non-attainment for particulate matter (PM-10) (moderate).

c. The pollution sources are: PM-10=wind blown dust and wood stoves. Other sources are combustion devices, incinerator, degreasing/solvent operations, fuel storage and distribution, ordnance use, smoke generation, dirt roads and parking lots.

d. The installation has no air emission credits.

e. Major air compliance projects have been identified.

f. Class I areas within 100 km consist of Alpine Lakes Wilderness Area; Mt. Rainier National Park; Goat Rocks Wilderness Area, and Mt. Adams Wilderness Area.

g. Restriction on outdoor burning during air pollution episodes or impaired air quality periods. Construction permit for rock crusher delayed pending information on how dust emissions will be controlled.

6. HAZARDOUS MATERIALS/SITES.

a. Use of hazardous materials.

The installation has applied for a Resource Conservation and Recovery Act (RCRA) Part B, Subpart X permit.

b. Contaminated sites.

The installation has identified 16 Defense Environmental Restoration Account (DERA) eligible contaminated sites.

c. PCB, Asbestos, Lead Paint, and RADON issues.

PCB survey has been completed with 16 contaminated transformers having been identified and replaced.

d. Underground Storage Tanks (UST).

A total of two tanks are present, both have been tested and passed.

e. Radioactive Materials and Sources.

The installation holds no Nuclear Regulatory Commission (NRC) or DA licenses for radioactive materials and sources.

7. OTHER ISSUES, CONSTRAINTS.

This installation voluntarily entered into a Sage Grouse Conservation Agreement in 1991. This agreement stipulates seasonal training restrictions on approximately 35,000 acres.

8. REVENUE GENERATING PROGRAMS.

Livestock grazing is the only revenue generating program.

FY 92	$13,000
FY 93	$ 5,000
FY 94	$33,000 (est)
	$51,000

9. PROGRAMMED ENVIRONMENTAL COSTS.

a. Summary of environmental compliance costs:

	FUNDED	UNFUNDED
FY94	$2,910,000	$1,837,000
FY95	$8,930,000	$2,127,000
FY96	$5,141,000	$1,644,000
FY97	$4,909,000	$ 812,000
FY98	$4,684,000	$ 830,000
FY99	$4,866,000	$ 870,000
	$31,440,000	$8,120,000

b. Summary of environmental restoration costs are:

	FUNDED	UNFUNDED
FY94	$ 0	$ 215,000
FY95	0	$ 300,000
FY96	0	$ 200,000
FY97	0	$ 500,000
FY98	0	$4,600,000
FY99	0	$ 300,000
	$ 0	$6,115,000

ACRONYMS

AICUZ	Air Installation Compatible Use Zone
ICUZ	Installation Compatible Use Zone
ITAMS	Integrated Training Area Management System
LCTA	Land Condition Trend Analysis
404 Wetlands	Regulated Wetlands

NONSTRUCTURAL ATTRIBUTES

Fort Richardson -- 02781

1. LAND USE.

a. Land Availability (estimated quantities in acres).

(1)	Installation total	62,000
(2)	Cantonment area	5,000
(3)	Maneuver area	51,500
(4)	Training lands designated as sensitive/marginal by ITAMS/LCTA monitoring	2,000
(5)	Firing Ranges	2,500
(6)	Non-Impact Firing Range	1,000
(7)	Wetlands Sec 404 area (Wetlands are usable during Winter)	4,000
(8)	Other (Surface water areas; set aside unique areas; i.e., recreation habitat, forests; restricted use areas such as landfills, contaminated sites, safety zones.	N/A

b. Air Space.

(1)	Restricted Air Space.	20,000
(2)	Extent of Installation Compatible Use Zones (ICUZ) or Noise and Accident Potential Zone (NAPZ).	N/A

2. THREATENED OR ENDANGERED SPECIES (PLANTS AND ANIMALS).

No threatened or endangered species (TES) survey has been conducted, however no Federal or State listed endangered or threatened species or critical habitats are known to occur on the installation. It was previously reported that the Eagle River Flats Impact Area is seasonally restricted as a result of waterfowl deaths attributed to the ingestion of white phosphorus residue from mortar firings. This usage pattern for this range will continue until successful remediation of waterfowl habitats has been assured.

3. CULTURAL RESOURCES.

a. A Historic Preservation Plan has not been completed for this installation, however the State Historic Preservation

Officer (SHPO) and the Advisory Council for Historic Preservation (ACHP) are consulted on undertakings concerning historic properties.

b. A historic building survey has not been completed. There are no buildings recommended for listing on the National Register of Historic Buildings.

c. Extensive archeological surveys (61,989 acres) have been conducted for Fort Richardson and there are no known potentially eligible sites. There are no known limitations to development or operations due to cultural resources.

4. INFRASTRUCTURE ISSUES.

a. Potable Water.

Potable water is supplied by surface water sources and three ground wells on a standby basis. The State of Alaska provides 7.5 MGD from Ship Creek by contract to Fort Richardson. Fort Richardson uses 45% (3.38 MGD) and the remaining 55% (4.12 MGD) is sold to Elmendorf Air Force Base. The three standby wells are used when ice reduces the water plant to 0.3 - 0.5 MGD. The wells have been pumped for periods of up to one week without experiencing much draw down. Total pumping capacity is 3.15 MGD and used only on a standby basis. The State of Alaska has allotted a total of 3.6 MGD for well water.

Contracted potable water average daily use is 2.24 MGD and design capacity is 11.1 MGD. Most of the original pipeline has been replaced. Exfiltration may be a problem in some parts of the system and is partly responsible for the high per capita water consumption rates. During severe winters, system freezing can be a problem causing mains to require bleeding. Water can be routed through the central energy plant steam condensers, prior to distribution, which raises the water temperature 8-9 degrees F to approximately 41-43 degrees F.

b. Wastewater.

Sewage from the installation is discharged into the Anchorage City Collection System and treated at the municipality's treatment plant under contract. The current average use is 1.09 MGD and capacity is 4.1 MGD.

c. Solid Wastes.

Solid wastes is disposed of under contract with the City of Anchorage. The landfill is on 300 acres excessed by Fort Richardson and free landfill services are provided to Fort Richardson for the life of the landfill. Estimated life of the landfill is 45 years and average daily volume is 2 tons.

5. AIR QUALITY.

a. The installation is in the Cook Inlet Intrastate Air Quality Control Region 008.

b. The region is not in attainment for carbon monoxide (moderate).

c. The air pollution source is vehicle exhaust emissions.

d. The installation has no air emission credits.

e. No major air compliance projects/expenditures are indicated.

f. Critical air quality region within 100 km is the Municipality of Anchorage.

6. HAZARDOUS MATERIALS/SITES.

a. Use of hazardous materials.

Fort Richardson is in the process of obtaining a Part B Resource Conservation and Recovery Act (RCRA) permit for the deactivation of a furnace.

b. Contaminated sites.

There are 66 Defense Environmental Restoration Account (DERA) eligible sites identified.

Fort Richardson is listed on the National Priority List (NPL).

c. PCB, Asbestos, Lead Paint, and RADON issues.

Twenty four PCB contaminated transformers have been identified and all were replaced.

d. Underground Storage Tanks (UST).

Fort Richardson contains 150 USTs of which 50 are

abandoned. It is estimated that in FY 94, six (6) will be tested and 20 will be replaced.

e. Radioactive Materials and Sources.

A Nuclear Regulatory Commission (NRC) license is held for a Soil Density Meter, however no decommissioning is required.

7. OTHER ISSUES, CONSTRAINTS.

No other significant issues or constraints are known.

8. REVENUE GENERATING PROGRAMS.

Revenues for fire wood and Christmas tree sales average $8,000 per year.

9. PROGRAMMED ENVIRONMENTAL COSTS.

a. Summary of environmental compliance costs:

	Funded	Unfunded
FY 94	$3,366,000	$8,078,000
FY 95	$7,238,000	$7,999,000
FY 96	$4,878,000	$7,371,000
FY 97	$4,374,000	$5,607,000
FY 98	$4,343,000	$3,848,000
FY 99	$4,037,000	$ 620,000
	$28,236,000	$33,523,000

b. Summary of restoration costs are:

	Funded	Unfunded
FY 94	$13,715,000	$ 0
FY 95	$11,900,000	0
FY 96	$ 9,600,000	0
FY 97	$12,545,000	0
FY 98	$ 0	0
FY 99	$ 0	0
	$47,760,000	0

ACRONYMS

AICUZ	Air Installation Compatible Use Zone
ICUZ	Installation Compatible Use Zone
ITAMS	Integrated Training Area Management System
LCTA	Land Condition Trend Analysis
404 Wetlands	Regulated Wetlands

NONSTRUCTURAL ATTRIBUTES

Fort Riley -- 20605

1. LAND USE.

a. Land Availability (estimated quantities in acres).

(1)	Installation total	100,667
(2)	Cantonment area	7,181
(3)	Maneuver area	70,926
(4)	Training lands designated as sensitive/marginal by ITAMS/LCTA monitoring	0
(5)	Firing Ranges	16,170
(6)	Non-Impact Firing Range	19,316
(7)	Wetlands Sec 404 area	1,449
(8)	Other (Surface water areas; set aside unique areas; i.e., recreation habitat, forests; restricted use areas such as landfills, contaminated sites, safety zones. (Off limit area of Douthit MPRC Range)	6,890

b. Air Space.

(1)	Restricted Air Space. (Area surrounding Marshall Army Air Field)	8,553
(2)	Extent of Installation Compatible Use Zones (ICUZ) or Noise and Accident Potential Zone (NAPZ). ICUZ Zone II off post. 200 acres near Ogden, KS; 600 acres near Keats, KS; 300 acres near Riley, KS.	1,120

2. THREATENED OR ENDANGERED SPECIES (PLANTS AND ANIMALS).

A threatened or endangered species (TES) survey has been conducted by the U.S. Fish and Wildlife Service, dated February 1992. Two Federally listed TES are reported to occur at times at the installation: the threatened Bald Eagle and the endangered American Peregrine Falcon. No critical habitat are present. Neither of these species have constrained the installation's mission or development activities.

3. CULTURAL RESOURCES.

a. A Historic Preservation Plan is currently being programmed, budgeted and funded. Comments from the State Historic Preservation Officer (SHPO) and the Advisory Council for Historic Preservation (ACHP) have been obtained.

b. A historic buildings survey has been conducted for Fort Riley. Most of the original Main Post buildings (approximately 200) form a National Register district. Within this district, the boundaries of which are now being redefined, are 365 buildings or structures.

c. Archeological surveys have not been completed. It was previously reported that approximately 2,000 of the 100,687 acres that make up Fort Riley have been examined. Approximately 313 historic and 42 prehistoric archeological sites were found. Sites for eligibility include 19 buildings on Marshall AAF, 2 at Paker's Camp and 250 former homesteads through-out the installation. Additional archeological surveys will be required for Fort Riley.

4. INFRASTRUCTURE ISSUES.

a. Potable Water.

Potable water is supplied by 12 wells with a total pumping capacity of 14.0 MGD and average daily usage of 5.2 MGD. There are also two fire protection backup wells with a total pumping capacity of at least 1.44 MGD.

b. Wastewater.

Three wastewater treatment facilities exist, each of which have a 6-8 year life expectancy. The total design capacity of the systems is 5.0 MGD and the average use is 2.2 MGD. Feasibility study is underway for needed upgrade based on new National Pollutant Discharge Elimination System (NPDES) requirement for disinfectant and ammonia. The system operates under a National Pollutant Discharge Elimination System (NPDES) permit. Potable water system is used for all industrial and non-industrial uses. There is no separate industrial water or wastewater plant.

c. Solid Wastes.

Fort Riley has ceased operation of its sanitary landfill. The only active landfill located on the installation is an eight acre construction/demolition debris landfill, that is contractor operated. The

landfill has a seven year life expectancy. Adequate space exist to support future construction/demolition debris landfill needs. A solid waste contract with the Riley County Transfer Station is in place with an annual cost of $227,000. The average daily volume is 31 tons/day, at a cost of $28.31/ton.

5. AIR QUALITY.

a. The air quality region is Region 096 regulated by the Kansas Department of Health and Environment.

b. The region is in attainment.

c. The pollution sources are: three steam boiler plants, and one hospital incinerator.

d. The installation has no air emission credits.

e. Air compliance projects/expenditures are CAA inventory, permits, CFC phaseout and possible emission control equipment.

f. The installation is not within 100 km of a critical air quality region.

6. HAZARDOUS MATERIALS/SITES.

a. Use of hazardous materials.

There is one Resource Conservation and Recovery Act (RCRA) hazardous waste storage building. Installation currently has a RCRA Part B permit application approved by the State of Kansas, but is awaiting Environmental Protection Agency (EPA) approval/permit work on RCRA corrective actions. Subpart X permit for an Open burn/open detonation site has also been submitted.

b. Contaminated sites.

Assessments by USATHAMA have identified 48 Defense Environmental Restoration Account (DERA) eligible Installation Restoration Program (IRP) sites or site groupings.

The installation is on the National Priority List (NPL).

c. PCB, Asbestos, Lead Paint, and RADON issues.

PCB survey is 99% complete. So far, 93 contaminated transformers have been identified and 15 replaced.

Initial screening at all on-post buildings for Radon, as well as supported reserve centers is nearly complete. Required mitigations are being planned, budgeted and accomplished within allowable mitigation time frames.

Installation wide Asbestos survey is nearly complete, including all supported government-owned reserve centers. Asbestos removal continues to occur with renovation and demolition contracts as well as an indefinite quantities contract.

A comprehensive lead-based paint survey/testing contract for all OMA and AFH buildings as well as an option for supported reserve centers is being developed and will be initiated as funds become available.

d. Underground Storage Tanks (UST).

Installation reports 153 regulated tanks. 89 are earmarked for removal. 37 have failed testing, 26 scheduled to be replaced.

e. Radiological Materials and Sources.

The installation holds no Nuclear Regulatory Commission (NRC) and DA licenses for radiological materials and sources.

7. OTHER ISSUES, CONSTRAINTS.

No other significant issues or constraints are known.

8. REVENUE GENERATING PROGRAMS.

Three revenue generating programs are in place.

	Agri leases	Forestry	Hunt/Fish
FY 92	$ 62,000	$ 5,000	$ 45,000
FY 93	$ 62,000	$ 4,000	$ 41,000
FY 94	$ 60,000	$ 48,000	$ 47,000

9. PROGRAMMED ENVIRONMENTAL COSTS.

a. Summary of environmental compliance costs ($000):

	Funded	Unfunded
FY94	$ 6,926	$ 9,733
FY95	7,282	10,253
FY96	6,277	15,657
FY97		12,256
FY98		11,964
FY99		12,762
	$20,485	$72,625

b. Summary of environmental restoration costs ($000):

	Funded	Unfunded
FY 93	$12,775	$
FY 94	$ 4,479	12,201
FY 95		11,694
FY 96		7,500
FY 97		3,105
FY 98		1,860
FY 99		1,585
	$17,254	$37,945

ACRONYMS

AICUZ	Air Installation Compatible Use Zone
ICUZ	Installation Compatible Use Zone
ITAMS	Integrated Training Area Management System
LCTA	Land Condition Trend Analysis
404 Wetlands	Regulated Wetlands

NONSTRUCTURAL ATTRIBUTES

Fort Stewart -- 13305

1. LAND USE.

a. Land Availability (estimated quantities in acres).

(1)	Installation total		279,270
(2)	Cantonment area		5,725
(3)	Maneuver area		246,553
(4)	Training lands designated as sensitive/marginal by ITAMS/LCTA monitoring		N/A
(5)	Firing Ranges		5,898
	Gunnery -	3,778	
	Small arms -	2,120	
(6)	Non-Impact Firing Range		0
(7)	Wetlands Sec 404 area		90,605
(8)	Other (Surface water areas; set aside unique areas; i.e., recreation habitat, forests; restricted use areas such as landfills, contaminated sites, safety zones.		16,979
	Fish ponds -	1,423	
	Landfill -	87	
	Rec area -	147	
	Drop zones -	1,171	
	ASP -	70	
	Historical -	140	
	Art impact area -	13,184	
	EOD area -	757	

b. Air Space.

(1)	Restricted Air Space.	279,270
(2)	Extent of Installation Compatible Use Zones (ICUZ) or Noise and Accident Potential Zone (NAPZ).	N/A

2. THREATENED OR ENDANGERED SPECIES (PLANTS AND ANIMALS).

A threatened or endangered species (TES) survey is currently in progress. A Biological Assessment has been completed for TES on the installation. The Federally listed Red-cockaded Woodpecker, Bald Eagle, Shortnose Sturgeon and Indigo Snake are TES reported to occur on the installation. In July 1992 the U.S. Fish and Wildlife Service rendered a Biological Opinion of Jeopardy on the impact of the mission on the continued existence of all TES occurring on the

installation. Only limited activity is allowed within 200 feet of a Red-cocked Woodpecker cavity tree. Restrictions currently affect approximately 5,000 acres, scattered throughout the installation. TES populations are assured to be stable. An investigation is currently in progress to accurately define trends.

3. CULTURAL RESOURCES.

a. A draft Historic Preservation Plan is due in September 1994. The installation has obtained comments from the State Historic Preservation Officer or Advisory Council for Historic Preservation for undertakings that may effect historic property.

b. A historic building survey was completed in 1983. A more thorough survey is currently being conducted in association with the Historic Preservation Plan. One building, Remer Glisson Store, was found eligible for listing on the National Register of Historic Places. The building is in substandard condition and requires an estimated $5,000 in renovations.

c. A comprehensive archeological survey has not been conducted, however several small surveys have been conducted for approximately 17,223 acres. One site, Fort Argyle, is listed and 17 other sites have been recommended as potentially eligible for listing on the National Register. Efforts are made to avoid development or operations in areas known to contain cemeteries or archeological sites that are potentially eligible for the National Register. Areas that have not been previously surveyed are cleared by the Consulting Archaeologist/Cultural Resource Manager prior to the implementation of development or operations. Artifacts and associated records are stored at the 24th Infantry Division Museum.

4. INFRASTRUCTURE ISSUES.

a. Potable Water.

Potable water is supplied by 15 active wells and two inactive wells. The source is the Ocala Aquifer. Total pumping capacity is 11.2 MGD and average daily usage is 2.7 MGD.

b. Wastewater.

Wastewater is discharged to a regional plant owned and operated by the City of Hinesville. The contract capacity is 4.0 MGD, however the plant's actual capacity is 8.0 MGD. The average use is 2.3 MGD. The

plant was constructed in 1985 and is physically located on Ft. Stewart. The life expectancy is 40 years, however the government owned collection system requires major repairs.

Ft.Stewart has an industrial wastewater treatment facility with a capacity of 1.5 MGD and an average use of 0.23 MGD. The plant was constructed in 1982 and has a 40 year life expectancy.

A National Pollutant Discharge Elimination System (NPDES) permit exists with no unusual restrictions.

c. Solid Wastes.

The installation has a 87 acre landfill with a remaining capacity of 890,807 tons. The estimated life is 35 years with both cells being used.

5. AIR QUALITY.

a. The installation is in air quality region Environmental Protection Agency (EPA) Region IV, regulated by Georgia Environmental Protection Division.

b. The region is in attainment.

c. The sources of air pollution on the installation are: oil, wood, natural gas boilers, vehicular traffic, one paint booth, underbrush burnings and vehicle training.

d. The installation has no air emission credits.

e. The installation has identified five major projects to meet/maintain air compliance.

f. The installation is not within 100 km of a critical air quality region.

6. HAZARDOUS MATERIALS/SITES.

a. Use of hazardous materials.

The installation has a Resource Conservation and Recovery Act (RCRA) Part B permit (90 days or longer) for one hazardous waste storage site.

b. Contaminated Sites.

The installation has identified one Defense Environmental Restoration Account (DERA) eligible contaminated site.

c. PCB, Asbestos, Lead Paint, or RADON issues.

PCB survey has been completed and all 67 identified contaminated transformers have been replaced.

d. Underground storage tanks (UST).

Out of 153 UST's, 141 are active and 12 are inactive. Twelve of the 153 tested failed and none have been replaced.

e. Radioactive Materials and Sources.

FORSCOM holds a Nuclear Regulatory Commission (NRC) or DA license for Fort Stewart, however no further information was provided other than decommissioning requirements are minimal.

7. OTHER ISSUES, CONSTRAINTS.

No other significant issues or constraints are known.

8. REVENUE GENERATING PROGRAMS.

Revenue generating programs are:

	Hunting/ Fishing	Recycling	Forestry
FY 92	$155,700	$100,000	$1,275,000
FY 93	$183,000	$105,000	$1,018,000
FY 94	$225,000	$110,000	$1,500,000
	$563,900	$315,000	$3,793,000

9. PROGRAMMED ENVIRONMENTAL COSTS.

a. Summary of environmental compliance costs:

	Funded	Unfunded
FY 94	$11,572,000	$1,830,000
FY 95	$6,075,000	$1,577,000
FY 96	$6,604,000	$1,633,000
FY 97	$6,311,000	$1,681,000
FY 98	$6,344,000	$1,745,000
FY 99	$3,352,000	$1,061,000
	$40,258,000	$9,527,000

b. Summary of environmental restoration costs:

	Funded	Unfunded
FY 94	$ 0	$ 265,000
FY 95	$ 0	$ 450,000
FY 96	$ 0	$ 30,000
FY 97	$ 0	$ 0
FY 98	$ 0	$ 0
FY 99	$ 0	$ 0
	$ 0	$ 506,000

ACRONYMS

AICUZ	Air Installation Compatible Use Zone
ICUZ	Installation Compatible Use Zone
ITAMS	Integrated Training Area Management System
LCTA	Land Condition Trend Analysis
404 Wetlands	Regulated Wetlands

NONSTRUCTURAL ATTRIBUTES

Hunter Army Airfield -- 13070

1. LAND USE.

a. Land Availability (estimated quantities in acres).

(1)	Installation total	5,372
(2)	Cantonment area	1,215
(3)	Maneuver area	2,847
(4)	Training lands designated as sensitive/marginal by ITAMS/LCTA monitoring	N/A
(5)	Firing Ranges	7
	Small Arms Impact	26
(6)	Non-Impact Firing Range	N/A
(7)	Wetlands Sec 404 area (all in maneuver)	644
(8)	Other (Surface water areas; set aside unique areas; i.e., recreation habitat, forests; restricted use areas such as landfills, contaminated sites, safety zones.	212

Ammo storage area: 88
Recreation : 105
Ponds : 19

b. Air Space.

(1) Restricted Air Space.
Up to 1500 feet under control of the HAAF ATC Tower ATC Air Space.

(2) Extent of Installation Compatible Use Zones (ICUZ) or Noise and Accident Potential Zone (NAPZ).
431 acres total. 114 acres of this may actually be impacted based on current zoning and projected development.

2. THREATENED OR ENDANGERED SPECIES (PLANTS AND ANIMALS).

No Federal or State listed endangered or threatened species or critical habitats are known to occur on the installation, based upon a preliminary report from the Nature Conservancy. Final report is expected by 31 December 1994. The State does not provide for a biological assessment, however HAAF was included in the report done for Fort Stewart, GA. Consultation with U.S. Fish and Wildlife Service (USFWS), dated 15 July 1992 indicated a no-jeopardy concerning HAAF.

3. CULTURAL RESOURCES.

a. HAAF will be included in the September 1994 Fort Stewart Historic Preservation Plan.

b. A building survey at HAAF is currently being conducted in association with the Historic Preservation Plan.

c. Approximately 2,957 acres have been surveyed for archeological resources. One site was found to be eligible for the National Register of Historic Places (NRHP), and 6 sites have been recommended potentially eligible for the NRHP. Currently, artifacts are stored at the HAAF Annex of Ft. Stewart/24th ID Museum.

d. Consultations with Native Americans or others will begin soon as the newly hired Cultural Resource Manager works to bring the installation into compliance with NAGPRA.

4. INFRASTRUCTURE ISSUES.

a. Potable Water.

Potable water is supplied by two community wells with a total pumping capacity of 2.7 MGD and an average use of 0.9 MGD.

b. Wastewater.

A wastewater treatment plant exists with a design capacity of 1.4 MGD and an average use of 1.0 MGD. An National Pollutant Discharge Elimination System (NPDES) permit exists with no unusual restrictions. Plant was rebuilt and expanded in 1992. Life expectancy is 40 years with normal maintenance. Collection system needs major repairs.

c. Solid Wastes.

Solid wastes are disposed of under contract with the City of Savannah, with an annual contract amount of $117,000. Disposal quantity is approximately 8.7 ton/day, with a $37.50/ton charge.

5. AIR QUALITY.

a. The installation is in the Georgia Environmental Protection Division, Environmental Protection Agency (EPA) Region IV.

b. The region is in attainment.

c. Pollution sources on the installation are: Oil, natural gas boiler plants, vehicle training, and vehicle traffic.

d. The installation has no air emission credits.

e. No major projects to meet/maintain air compliance were reported.

6. HAZARDOUS MATERIALS/SITES.

a. Use of hazardous materials.

The installation is not a Resource Conservation and Recovery Act (RCRA) hazardous waste treatment, storage or disposal facility. Any necessary storage of hazardous material is done at Fort Stewart.

b. Contaminated Sites.

There are four Defense Environmental Restoration Account (DERA) eligible sites that have been identified by Geraghty & Miller, Inc. under contract with the U.S. Army Corps of Enginners, (1 Jun 92).

c. PCB, Asbestos, Lead Paint, or RADON issues.

PCB survey has been completed. All 68 contaminated transformers identified have been replaced.

d. Underground Storage Tanks (UST).

Thirty-one out of a total of 122 USTs have been tested, eleven failed, and none have been replaced/required.

e. Radioactive Materials and Sources

The installation holds no Nuclear Regulatory Commission (NRC) or DA licenses for radioactive materials or sources.

7. OTHER ISSUES, CONSTRAINTS.

There are no other significant issues or constraints are known.

8. REVENUE GENERATING PROGRAMS.

Forestry provides some revenue. Totals are included in the Ft. Stewart totals. Approximate value is $10,000 per year.

9. PROGRAMMED ENVIRONMENTAL COSTS.

a. Summary of environmental compliance costs:

	Funded	Unfunded
FY94	$3,355,000	$ 553,000
FY95	$ 875,000	$ 40,000
FY96	$ 940,000	$ 42,000
FY97	$ 769,000	$ 44,000
FY98	$ 740,000	$ 49,000
FY99	$ 630,000	$ 47,000
	$7,305,000	$ 771,000

b. Summary of environmental restoration costs:

	Funded	Unfunded
FY94	$ 0	$2,568,000
FY95	$ 0	$ 554,000
FY96	$ 0	$ 60,000
FY97	$ 0	$ 0
FY98	$ 0	$ 0
FY99	$ 0	$ 0
	$ 0	$3,182,000

ACRONYMS

AICUZ	Air Installation Compatible Use Zone
ICUZ	Installation Compatible Use Zone
ITAMS	Integrated Training Area Management System
LCTA	Land Condition Trend Analysis
404 Wetlands	Regulated Wetlands

NONSTRUCTURAL ATTRIBUTES

Fort Wainwright -- 02871

1. LAND USE.

a. Land Availability (estimated quantities in acres).

(1)	Installation total	918,000
(2)	Cantonment area	5,000
(3)	Maneuver area	823,000
(4)	Training lands designated as sensitive/marginal by ITAMS/LCTA monitoring	0
(5)	Firing Ranges	72,000
(6)	Non-Impact Firing Range	3,000
(7)	Wetlands Sec 404 area (Frozen wetlands are usable in Winter)	646,000
(8)	Other (Surface water areas; set aside unique areas; i.e., recreation habitat, forests; restricted use areas such as landfills, contaminated sites, safety zones. AFTAC site	14,000

b. Air Space.

(1)	Restricted Air Space.	300,000
(2)	Extent of Installation Compatible Use Zones (ICUZ) or Noise and Accident Potential Zone (NAPZ).	100,000

2. THREATENED OR ENDANGERED SPECIES (PLANTS AND ANIMALS).

A threatened or endangered species (TES) survey has been conducted and no Federal or State listed endangered or threatened species or critical habitats are known to occur on the installation.

3. CULTURAL RESOURCES.

a. Fort Wainwright has a Historic Preservation Plan and at least one cultural resource memorandum of agreement with the State Historical Preservation Officer (SHPO).

b. A historic building survey has been completed for this installation. There are 57 buildings eligible for or listed on the National Register of Historic Places. Ladd Field may be a National Historic Landmark.

c. Extensive archeological surveys (915,000 acres) have been conducted for Fort Wainwright. Thirteen potentially eligible sites have been identified. There are no limitations to operations and development due to cultural resources.

4. INFRASTRUCTURE ISSUES.

a. Potable Water.

Potable water is supplied, in part, by eight wells with a total pumping capacity of 10.3 MGD and an average use of 1.65 MGD. They have a low drawdown rate and excess capacity is 0.85 MGD. A portion of the installation is supplied water from the Fairbanks Municipal Utilities System. The average, per capital, water use is about 151 GPD. Two industrial wells provide water for the central power plant. The combined production is 1.34 MGD of non-potable water.

b. Wastewater.

Wastewater disposal is provided under contract with the City of Fairbanks. The maximum capacity is 4.6 MGD of which the military is allotted 48% (approximately 4.4 MGD). Average daily usage is 151 GPD. Fort Wainwright does not have any National Pollutant Discharge Elimination System (NPDES) permits at this time; however, the City of Fairbanks MUS sewage treatment plant does have a permit.

c. Solid Wastes.

The installation has a 20-acre landfill with an estimated life of 20+ years. Methane monitoring, the only requirement not yet met, has been programmed.

5. AIR QUALITY.

a. The installation is in the North Alaska Intrastate Air Quality Control Region 009.

b. The region is classified as non-attainment for carbon monoxide (moderate).

c. The air pollution sources are vehicle exhaust emissions and power plant. Use of oil fog generators and fuel flame expedient are on hold. Temperature inversions combined with 14 point sources are additional sources. Central Heating and Power Plant is coal fired and daily violates the opacity levels of the CAA.

d. The installation has no air emission credits.

e. No major projects identified to meet/maintain compliance with air quality standards.

f. Critical air quality areas within 100 km are the White Mountain National Recreation Area and the State National Conservation Area.

6. HAZARDOUS MATERIALS/SITES.

a. Use of hazardous materials.

There is one Indefinite Part B Resource Conservation and Recovery Act (RCRA) permit for a site located in the DRMO area, issued in 1986 with an indefinite expiration date.

b. Contaminated sites.

An assessment was performed by USAEHA in 1989. There are 92 Defense Environmental Restoration Account (DERA) eligible contaminated sites identified.
Fort Wainwright has been listed as a National Priority List (NPL) site as of 1 June 1994.

c. PCB, Asbestos, Lead Paint, and RADON issues.

Ninety-six contaminated transformers have been identified, 79 have been replaced. Removal of the 17 remaining transformers requires extensive structural demolition or modification to critical facilities in order to remove them from where they are installed. Six of the remaining transformers require shut-down of the utility plant to allow removal.

d. Underground Storage Tanks (UST).

Ten of 74 total tanks (68 active, 37 regulated and 6 inactive, awaiting removal) have been tested, all have passed.

e. Radioactive Materials and Sources

There are no Nuclear Regulatory Commission (NRC) nor DA licenses required for radioactive materials and sources.

7. OTHER ISSUES, CONSTRAINTS.

No other significant issues or constraints are known.

8. REVENUE GENERATING PROGRAMS.

No revenue generating programs were reported. Past revenue generating programs included recycling, wood cutting, and Christmas trees.

9. PROGRAMMED ENVIRONMENTAL COSTS.

a. Summary of environmental compliance costs:

	Funded	Unfunded
FY 94	$ 878,000	$6,242,000
FY 95	$4,466,000	$4,936,000
FY 96	$3,010,000	$4,548,000
FY 97	$2,699,000	$3,459,000
FY 98	$2,680,000	$2,374,000
FY 99	$2,491,000	$ 383,000
	$16,224,000	$21,942,000

b. Summary of restoration cost:

	Funded	Unfunded
FY 94	$26,431,000	$ 0
FY 95	$14,510,000	$ 0
FY 96	$12,810,000	$ 0
FY 97	$11,735,000	$ 0
FY 98	$ 0	$ 0
FY 99	$ 0	$ 0
	$65,486,000	$ 0

ACRONYMS

AICUZ	Air Installation Compatible Use Zone
ICUZ	Installation Compatible Use Zone
ITAMS	Integrated Training Area Management System
LCTA	Land Condition Trend Analysis
404 Wetlands	Regulated Wetlands

NONSTRUCTURAL ATTRIBUTES

Schofield Barracks -- 15815

1. LAND USE.

a. Land Availability (estimated quantities in acres).

(1)	Installation total	14,364
(2)	Cantonment area	3,956
(3)	Maneuver area	3,583
(4)	Training lands designated as sensitive/marginal by ITAMS/LCTA monitoring	0
(5)	Firing Ranges	2,780
(6)	Non-Impact Firing Range	1,506
(7)	Wetlands Sec 404 area	Unknown
(8)	Other (Surface water areas; set aside unique areas; i.e., recreation habitat, forests; restricted use areas such as landfills, contaminated sites, safety zones. Former landfill	40

b. Air Space.

(1)	Restricted Air Space.	0
(2)	Extent of Installation Compatible Use Zones (ICUZ) or Noise and Accident Potential Zone (NAPZ).	

2. THREATENED OR ENDANGERED SPECIES (PLANTS AND ANIMALS).

A threatened or endangered species (TES) survey has been conducted. Twenty-six floral/plant endangered and threatened species are reported to potentially occur on the installation. However, the U.S. Fish and Wildlife Service (USFWS) has not completed a Biological Assessment for TES known to occur on the installation.

3. CULTURAL RESOURCES.

a. No Historic Preservation Plan or Cultural Resources Management Plan has been completed; however, the installation has obtained comments from the State Historic Preservation Officer (SHPO) or the Advisory Council for Historic Preservation (ACHP) on undertakings concerning Historic properties.

b. A historic building survey has been conducted for the installation, and 217 structures were found to be potentially eligible for listing on the National Register of Historic Places.

c. Approximately 6,741 acres have been surveyed for archeological sites. No sites were identified as eligible for the National Register.

4. INFRASTRUCTURE ISSUES.

a. Potable Water.

Potable water is supplied entirely from four wells with a total pumping capacity of 10.0 MGD and an average use of 4.0 MGD. The drawdown rate is reported as 5.2 MGD.

b. Wastewater.

A wastewater treatment plant exists with a design capacity of 3.2 MGD and an average use of 2.8 MGD. The plant has a 20 year life expectancy. A potential restriction to increased discharge amounts is via an agricultural reuse by Wailua Sugar Company, at no cost to the Army. The sugar company is currently seeking reimbursement.

c. Solid Wastes.

Solid waste disposal is provided under a $18,000/year contract with The Refuse Company. The average disposal rate is 35 tons/day at a cost of $54/ton.

5. AIR QUALITY.

a. The air quality region is Region 60, State of Hawaii.

b. The region is in attainment.

c. Air pollution sources are: boilers, incinerators, vehicular traffic, training activities and water heaters.

d. The installation has no air emission credits.

e. No major air compliance projects/expenditures are indicated.

f. There are no critical air quality regions reported within 100 km of the installation.

6. HAZARDOUS MATERIALS/SITES.

a. Use of hazardous materials.

The installation is not a Resource Conservation and Recovery Act (RCRA) treatment, storage or disposal facility.

b. Contaminated sites.

The Federal Facilities Agreement was signed in 1991. Thirty-one Defense Environmental Restoration Account (DERA) eligible contaminated sites have been identified.

The installation is on the National Priority List (NPL) primarily due to ground contamination with TCE. Remedial investigation is currently in progress.

c. PCB, Asbestos, Lead Paint, and RADON issues.

The PCB survey is 95% complete, however the number of identified transformers has been identified.

d. Underground Storage Tanks (UST).

Out of 112 active and 59 inactive UST's, 102 have been tested, 17 failed, and none have been replaced/ repaired.

e. Radioactive Materials and Sources.

The installation does not hold a Nuclear Regulatory Commission (NRC) or DA license for radioactive materials and sources.

7. OTHER ISSUES, CONSTRAINTS.

No other significant issues or constraints are known.

8. REVENUE GENERATING PROGRAMS.

There are no revenue generating programs reported.

9. PROGRAMMED ENVIRONMENTAL COSTS.

a. Summary of environmental compliance costs:

	Funded	Unfunded
FY 94	$10,680,000	$ 8,535,000
FY 95	$ 7,470,000	$ 7,735,000
FY 96	$ 7,955,000	$ 7,220,000
FY 97	$ 7,955,000	$ 6,400,000
FY 98	$ 7,555,000	$ 5,250,000
FY 99	$ 7,165,000	$ 4,295,000
	$48,780,000	$39,435,000

b. Summary of environmental restoration costs:

	Funded	Unfunded
FY 94	$11,389,000	$3,700,000
FY 95	$ 150,000	$ 800,000
FY 96	$ 3,778,000	$3,000,000
FY 97	$ 7,388,000	$ 0
FY 98	$ 8,200,000	$ 0
FY 99	$ 2,300,000	$ 0
	$33,205,000	$7,500,000

ACRONYMS

AICUZ	Air Installation Compatible Use Zone
ICUZ	Installation Compatible Use Zone
ITAMS	Integrated Training Area Management System
LCTA	Land Condition Trend Analysis
404 Wetlands	Regulated Wetlands

NONSTRUCTURAL ATTRIBUTES

Fort A.P. Hill -- 51290

1. LAND USE.

a. Land Availability (estimated quantities in acres).

(1)	Installation total	75,944
(2)	Cantonment area	3,213
(3)	Maneuver area	54,451
(4)	Training lands designated as sensitive/marginal by ITAMS/LCTA monitoring	No ITAMS until FY 95
(5)	Firing Ranges	17,000
(6)	Non-Impact Firing Range Maneuver area - 1,431 Firing ranges - 1,292	10,000
(7)	Wetlands Sec 404 area Surface water - 639	2,726
(8)	Other (Surface water areas; set aside unique areas; i.e., recreation habitat, forests; restricted use areas such as landfills, contaminated sites, safety zones. Rec facilities - 1,040 Airfields - 240	1,040

b. Air Space.

(1)	Restricted Air Space When impact area is in use	27,000
(2)	Extent of Installation Compatible Use Zones (ICUZ) or Noise and Accident Potential Zone (NAPZ). Zone II is off post	5

2. THREATENED OR ENDANGERED SPECIES (PLANTS AND ANIMALS).

A threatened or endangered species (TES) survey has been conducted by the Nature Conservancy. Three listed animal and plant species are reported to occur on the installation: the endangered Bald Eagle and Small Whorled Pogonia and the threatened Swamp Pink. These species have had minimal impacts on the installation's mission and development activities. A 1500-foot buffer zone has been established around eagle nests which allowed training to continue undisrupted. The two plants predominately occur within wetland areas which are not subject to troop movements.

3. CULTURAL RESOURCES.

a. No memorandum of agreement concerning cultural resources has been signed. A Historic Action Plan is currently on going.

b. A Historic building report is due in July 1994. No buildings have yet been recommended as eligible for the National Register.

c. Approximately 8,300 acres have been surveyed for archeological resources. Five (5) of the sites located by these surveys may be eligible for the National Register. Fifty acres are not available for development or operations.

4. INFRASTRUCTURE ISSUES.

a. Potable Water.

Potable water is provided entirely by 30 wells with a total capacity of 4.2 MGD and an average use of 0.15 MGD. The drawdown rate is 191 feet and excess capacity is 4.05 MGD for output and 1.6 MGD for storage.

b. Wastewater

A wastewater treatment plant exists with a design capacity of 0.85 MGD and an average use of 0.15 MGD. The plant operates under a National Pollutant Discharge Elimination System (NPDES) permit and has a life expectancy of 20 years (2009).

c. Solid Wastes.

Disposal of solid waste is contract with the Caroline County Landfill. The average volume is 2.17 tons per day at a cost of $39.25 per ton. The last landfill on post closed in Spring 1994, however no waste was received after July 1992. There are no contract limitations to increasing solid waste disposal.

5. AIR QUALITY.

a. The installation is in Air Quality Region IV.

b. The region is in attainment.

c. The air pollution sources are: vehicle training, open burning/open detonation, fires, and heating oil fixed furnaces.

d. The installation has no air emission credits.

e. The installation has identified an air study/permit as a major air compliance project.

f. There are two critical air quality regions within 100 km (Washington, DC & Richmond, VA) of the installation.

6. HAZARDOUS MATERIALS/SITES.

a. Use of hazardous materials.

The installation is in the process of obtaining a Resource Conservation and Recovery Act (RCRA) part B subpart X permit for open burning/open detonation (OB/OD).

b. Contaminated sites

There is one Defense Environmental Restoration Account (DERA) eligible site.

c. PCB, Asbestos, Lead Paint, and RADON issues.

PCB survey is completed and there are no PCB contaminated transformers identified at AP Hill.

The installation has not conducted an asbestos survey.

A Radon assessment is complete.

d. Underground Storage Tanks (UST).

There are 86 active and no abandoned USTs on AP Hill. 83 have been tested, of which eight failed and were replaced. The three remaining will be tested during the Summer of 1994.

e. Radiological Materials and Sources

The installation does not hold any Nuclear Regulatory Commission (NRC) or DA licenses for radiological materials and sources.

7. OTHER ISSUES, CONSTRAINTS.

No other significant issues or constraints are known.

3. REVENUE GENERATING PROGRAMS.

Revenue generating programs are:

	Forestry	Agri	Hunting	Fishing	Firewood
FY 92	$254,800	$ 6,900	$ 47,100	$ 10,100	$ 2,500
FY 93	$197,000	$ 6,900	$ 50,600	$ 11,000	$ 3,100
FY 94	$300,000	$ 6,900	$ 52,000	$ 13,500	$ 4,000
	$751,800	$ 20,700	$149,700	$ 34,600	$ 9,600

9. PROGRAMMED ENVIRONMENTAL COSTS.

a. Summary of environmental compliance costs are:

	Funded	Unfunded
FY 94	$2,295,000	$ 525,000
FY 95	$2,585,000	$ 689,000
FY 96	$2,532,000	$ 300,000
FY 97	$2,509,000	$ 80,000
FY 98	$2,169,000	$ 280,000
FY 99	$2,142,000	$ 85,000
	$14,225,000	$1,959,000

b. Summary of environmental restoration costs:

	Funded	Unfunded
FY 94	$ 100,000	$ 30,000
FY 95	$ 0	$ 0
FY 96	$ 0	$ 0
FY 97	$ 0	$ 0
FY 98	$ 0	$ 0
FY 99	$ 0	$ 0
	$ 100,000	$ 30,000

ACRONYMS

AICUZ	Air Installation Compatible Use Zone
ICUZ	Installation Compatible Use Zone
ITAMS	Integrated Training Area Management System
LCTA	Land Condition Trend Analysis
404 Wetlands	Regulated Wetlands

NONSTRUCTURAL ATTRIBUTES

Fort Chaffee -- 05025

1. LAND USE.

a. Land Availability (estimated quantities in acres).

(1)	Installation total	71,358
(2)	Cantonment area	1,580
(3)	Maneuver area	63,046
(4)	Training lands designated as sensitive/marginal by ITAMS/LCTA monitoring	0
(5)	Firing Ranges	5,606
(6)	Non-Impact Firing Range	170
(7)	Wetlands Sec 404 area (Est. - survey being performed)	26
(8)	Other (Surface water areas; set aside unique areas., recreation habitat, forests; restricted use areas such as landfills, contaminated sites, safety zones. (sewage lagoon, landfill, & OB/OD unit)	917

b. Air Space.

(1) Restricted Air Space. 0 to 30,000 ft in area 2401A, 2401B, 2402, during air operations and artillery firing.

(2) Extent of Installation Compatible Use Zones (ICUZ) or Noise and Accident Potential Zone (NAPZ).
Zone II 141

2. THREATENED OR ENDANGERED SPECIES (PLANTS AND ANIMALS).

A threatened or endangered species survey has been conducted. The habitat of the Federally listed American Burying Beetle encompasses the entire installation. A Biological Assessment has been conducted and the determination was, "No-Jeopardy." Pesticide use is restricted in range areas and trapping and relocation is required before construction.

3. CULTURAL RESOURCES.

a. The installation has a Historic Preservation Plan.

b. A historic building survey has been conducted and one facility was found potentially eligible for listing on the National Register of Historic Places.

c. Approximately 49,639 of the total 71,772 acres that make up Fort Chaffee have been surveyed for archeological resources. An estimated total of 100 National Register eligible sites have been found by these investigations. The only cultural resource limitation to development is that no digging can occur until archeological surveys are complete.

4. INFRASTRUCTURE ISSUES.

a. Potable Water.

Potable water is supplied under contract with the City of Fort Smith. The contract amount and design capacity are 5.0 MGD with an average daily use rate of 0.35 MGD.

b. Wastewater.

A wastewater treatment plant exists with a design capacity of 4.35 MGD with an average use of 1.2 MGD and a 50-year life. The system operates under a National Pollutant Discharge Elimination System (NPDES) permit. Constraints to increasing discharge amounts are reduced discharge limitations for total suspended solids in current permit.

c. Solid Wastes.

A $817,799 commercial contract with Waste Management of Arkansas provides solid waste removal. Average daily volume is 6.85 tons at a cost of $65.42 a ton. Contract cost is offset by an agreement with the city for the use of a 400 acre post landfill. The contractor manages the landfill, and in return provides the installation free hauling and tipping for the 20 year life of the facility. The installation closed a 29.4 acre Class IV landfill in April 1994.

5. AIR QUALITY.

a. The installation is in the Ft. Smith Area Air Quality Region.

b. The region is in attainment.

c. Air pollution sources are: paint spray booths, controlled burning, open burning of excess powder increments during artillery training and accidental range fires.

d. The installation has no air emission credits.

e. No air compliance projects/expenditures are identified.

f. There are no critical air quality regions within 100 km of the installation.

6. HAZARDOUS MATERIALS/SITES.

a. Use of hazardous materials.

Building 339 is a Resource Conservation and Recovery Act (RCRA) Part B permitted facility. An additional RCRA Part B permit is in the process of being reviewed.

b. Contaminated sites.

There are 39 eligible Defense Environmental Restoration Account (DERA) sites of which 13 are active.

c. PCB, Asbestos, Lead Paint, and RADON issues.

A PCB survey has been completed and all 136 contaminated transformers have been replaced.

d. Underground Storage Tanks (UST).

All 25 tanks have been tested and one failed and was replaced.

e. Radioactive Materials and Sources

The installation holds no Nuclear Regulatory Commission (NRC) or DA licenses for radioactive materials and sources.

7. OTHER ISSUES, CONSTRAINTS.

No other significant issues or constraints are known.

8. REVENUE GENERATING PROGRAMS.

	FY 92	FY 93	FY 94
Agriculture	$ 7,000	$10,000	$16,000
Hunting/fishing	$46,000	$46,000	$47,000
Forestry	$ 1,000	$ 1,000	$ 1,000
Landfill agreement	(annual credits for life of landfill)		
Potable water (Credit)	$ 0	$ 0	$60,000
Tippage (Credit)	$ 0	$ 0	$16,000
Refuse Collect/Disp	$ 0	$ 0	$142,000
Recycling	$ 5,000	$28,000	$ 2,000
	$59,000	$90,000	$284,000

9. PROGRAMMED ENVIRONMENTAL COSTS.

a. Summary of environmental compliance costs:

	Funded	Unfunded
FY 94	$1,052,000	$3,717,000
FY 95		$5,552,000
FY 96		$7,414,000
FY 97		$4,979,000
FY 98		$3,457,000
FY 99		$3,006,000
	$ 1,052,000	$28,125,000

b. Summary of environmental restoration costs:

	Funded	Unfunded
FY 94	$1,330,000	
FY 95	$ 820,000	
FY 96	$1,200,000	
FY 97	$1,500,000	
FY 98	$ 500,000	
FY 99		$ 0
	$5,350,000	$ 0

ACRONYMS

AICUZ	Air Installation Compatible Use Zone
ICUZ	Installation Compatible Use Zone
ITAMS	Integrated Training Area Management System
LCTA	Land Condition Trend Analysis
404 Wetlands	Regulated Wetlands

NONSTRUCTURAL ATTRIBUTES

Fort Dix -- 34245

1. LAND USE.

a. Land Availability (estimated quantities in acres).

(1)	Installation total	31,065
(2)	Cantonment area	2,237
(3)	Maneuver area	14,000
(4)	Training lands designated as sensitive/marginal by ITAMS/LCTA monitoring	
	No ITAMS monitoring	
(5)	Firing Ranges	13,730
(6)	Non-Impact Firing Range	35
(7)	Wetlands Sec 404 area (Survey to be complete Sep/Oct 94)	est. 5,000
(8)	Other (Surface water areas; set aside unique areas; i.e., recreation habitat, forests; restricted use areas such as landfills, contaminated sites, safety zones.	1,417
	Off limits	126
	Recreation	680
	NPL landfill	126
	IRP sites (34)	485

b. Air Space.

(1)	Restricted Air Space.	31.86 sq. miles
(2)	Extent of Installation Compatible Use Zones (ICUZ) or Noise and Accident Potential Zone (NAPZ).	
	Zone II	445
	Zone III	135

2. THREATENED OR ENDANGERED SPECIES (PLANTS AND ANIMALS).

A complete natural resources inventory of the installation is underway and will be complete in calendar year 1995. The installation previously reported that there is a high potential for over 30 species of Federal and State concern to be present because of habitat suitability.

3. CULTURAL RESOURCES.

a. No Historic Preservation Plan/Cultural Resources Management Plan has been completed.

b. A historical building survey has been completed and there is one potentially eligible building for the National Register of Historic Places.

c. There are seven (7) potentially eligible archeological sites. Approximately 12 acres are limited to foot traffic only due to cultural resources.

4. INFRASTRUCTURE ISSUES.

a. Potable Water.

Potable water sources are 40% by wells and 60% from surface water. The water treatment plant is 50 years old with a design capacity of 4.0 MGD and an average daily usage of 1.2 MGD. An additional sediment basin will be constructed with FY 94 dollars to increase the ability to utilize surface water and minimize groundwater withdrawal. Additional upgrades to the distribution system are programmed for FY 95. Ground water is provided by five (5) wells with a design capacity of 1.2 MGD and a daily usage of 0.8 MGD. Excess capability is 1.0 MGD. Some capability must be retained for mobilization, down time, and population growth.

b. Wastewater.

A new wastewater treatment plant exists with a design capacity of 8.4 MGD and an average use of 1.8 MGD. Life expectancy for the plant is 35 - 50 years and is operating under a New Jersey National Pollutant Discharge Elimination System (NPDES) permit and an Environmental Protection Agency (EPA) consent order.

c. Solid Wastes.

Solid wastes are disposed in an on-post resource recovery incinerator. Design capacity is 80 tons/day, permitted capacity is 60 tons/day, and average utilization is 32 tons/day for both Fort Dix and neighboring McGuire AFB. Unburnables are disposed of at a landfill at the rate of 0.7 tons/day at a cost of $49.35/ton.

5. AIR QUALITY.

a. The installation is located in the Central Delaware Valley Air Quality Control Region.

b. The region is in non-attainment for ozone (severe).

c. Air pollution sources are: incinerators, controlled burning, tear gas, smoke munitions training, vehicular traffic, space heaters, and boiler plants.

d. The installation has no air emission credits.

e. The A-106 Plan identified retrofit RRF with state-of-the- art technology to ensure compliance with CAA goals set for the year 2000.

f. Fort Dix is within a critical air quality region (18 of 21 New Jersey counties are in non-attainment for ozone).

6. HAZARDOUS MATERIALS/SITES.

a. Use of hazardous materials.

The installation is currently operating under Resource Conservation and Recovery Act (RCRA) Part B permit for two (2) container storage and explosive ordinance storage facilities. The installation has applied for a RCRA permit Part B, Subpart X permit.

b. Contaminated sites

Survey of contaminated sites is on-going. Thirty-four Defense Environmental Restoration Account (DERA) sites are under investigation.

The installation is on the National Priority List (NPL). Landfill is in remediation (capping) with FY 94 funds. The installation is NPL.

c. PCB, Asbestos, Lead Paint, and RADON issues.

A total of 105 PCB contaminated transformers have been identified and replaced.

Asbestos survey was reported as 85% complete in FY 93.

d. Underground Storage Tanks (UST).

None of the 38 USTs failed testing. On going program for testing in place. Ten UST(s) have been removed

and two replaced.

e. Radioactive Materials and Sources.

There were no Nuclear Regulatory Commission (NRC) or DA licensed materials reported.

7. OTHER ISSUES, CONSTRAINTS.

Cleanup is required by the Air Force for a BOMARC missile site on Fort Dix. On June 7, 1960, a fire occurred in one of the shelters housing a missile. Weapons-grade plutonium from the nuclear warhead was dispersed to soils and structures in the immediate vicinity of the shelter. The Air Force's plan is excavation and off-site disposal of contaminated soils, sediments, and structural materials to a DOE low-level radioactive waste facility. Schedule to accomplish the task is not known.

8. REVENUE GENERATING PROGRAMS.

	Forestry	Fishing
FY 92	$ 6,000	$15,000
FY 93	$ 7,300	$18,000
FY 94	$ 6,000	$18,000
	$19,300	$51,000

9. PROGRAMMED ENVIRONMENTAL COSTS.

a. Summary of environmental compliance costs:

	Funded	Unfunded
FY 94	$10,620,000	$ 468,000
FY 95	$12,511,000	$4,573,000
FY 96	$10,654,000	$2,305,000
FY 97	$ 0	$ 0
FY 98	$ 0	$ 0
FY 99	$ 0	$ 0
	$33,785,000	$7,346,000

b. Summary of environmental restoration costs:

	Funded	Unfunded
FY 94	$20,360,000	$ 0
FY 95	$	$ 11,000
FY 96	$	$ 15,400
FY 97	$	$ 7,900
[illegible]	[illegible]	$ [illegible]00
FY 99	$	$ 800
	$20,360,000	$ 36,000

ACRONYMS

AICUZ	Air Installation Compatible Use Zone
ICUZ	Installation Compatible Use Zone
ITAMS	Integrated Training Area Management System
LCTA	Land Condition Trend Analysis
RCW Wetlands	Regulated Wetlands

NONSTRUCTURAL ATTRIBUTES

Fort Greely -- 02341

1. LAND USE.

a. Land Availability (estimated quantities in acres).

(1)	Installation total	638,742
(2)	Cantonment area	1,280
(3)	Maneuver area	568,737
(4)	Training lands designated as sensitive/marginal by ITAMS/LCTA monitoring	0
(5)	Firing Ranges	57,200
(6)	Non-Impact Firing Range	11,520
(7)	Wetlands Sec 404 area (100% usable during Winter months)	200,000
(8)	Other (Surface water areas; set aside unique areas; i.e., recreation habitat, forests; restricted use areas such as landfills, contaminated sites, safety zones. Landfills	5

b. Air Space.

(1)	Restricted Air Space.	570,000
(2)	Extent of Installation Compatible Use Zones (ICUZ) or Noise and Accident Potential Zone (NAPZ).	N/A

2. THREATENED OR ENDANGERED SPECIES (PLANTS AND ANIMALS).

A threatened or endangered species (TES) survey has been conducted. No threatened or endangered species occur on the installation.

3. CULTURAL RESOURCES.

a. A Historic Preservation Plan has been completed and reviewed by the State Historic Preservation Office and Advisory Council for Historic Preservation.

b. A historic building survey has not been completed.

c. Archeological surveys have been conducted for Fort Greely with three eligible or potentially eligible sites identified for the National Register.

4. INFRASTRUCTURE ISSUES.

a. Potable Water.

Potable water is supplied from 15 wells with a combined, average, daily pumping rate of 0.113 MGD, maximum capacity of 0.221 MGD, and an excess of 0.108 MGD. The drawdown rate is unknown, but serious depletion of the aquifer has resulted due to continuous pumping.

b. Wastewater.

Wastewater treatment daily usage is 0.16 MGD with a design capacity of 0.46 MGD. The life expectancy of the wastewater treatment facility is 40 years.

c. Solid Wastes.

A new five (5) acre landfill will require monitoring and statistical analysis of results. Two new monitoring wells must be dug. Estimated useful life is five (5) years with a remaining capacity of 10,950 tons. There is adequate space to support future landfill needs.

5. AIR QUALITY.

a. The installation is in the South Central Alaska Intrastate Air Quality Control Region 010.

b. The region is in attainment.

c. Air pollution sources are a power plant and garbage burn pit.

d. The installation has no air emission credits.

e. No major air compliance projects/expenditures are reported.

f. The installation is not within 100 km of a critical air quality region.

6. HAZARDOUS MATERIALS/SITES.

a. Use of hazardous materials.

The installation does not hold Resource Conservation and Recovery Act (RCRA) permits.

b. Contaminated sites.

Forty-two Defense Environmental Restoration Account (DERA) eligible sites have been identified.

c. PCB, Asbestos, Lead Paint, and RADON issues.

PCB survey has been completed with 16 contaminated transformers identified and none replaced.

d. Underground Storage Tanks (UST).

Fort Greely contains 46 active USTs with 21 tested. Of these, three (3) failed and 12 were removed.

7. OTHER ISSUES, CONSTRAINTS.

Fort Greely has a deactivated, sealed nuclear power plant that could be a problem for base closure.

8. REVENUE GENERATING PROGRAMS.

No revenue generating programs were reported.

9. PROGRAMMED ENVIRONMENTAL COSTS.

a. Summary of environmental compliance costs:

	Funded	Unfunded
FY 94	$1,757,000	$4,139,000
FY 95	$3,696,000	$4,085,000
FY 96	$2,491,000	$3,764,000
FY 97	$2,234,000	$2,863,000
FY 98	$2,218,000	$1,965,000
FY 99	$2,061,000	$ 317,000
	$14,457,000	$17,133,000

b. Summary of restoration cost:

	Funded	Unfunded
FY 94	$6,425,000	$ 0
FY 95	$2,600,000	$ 0
FY 96	$1,350,000	$ 0
FY 97	$2,250,000	$ 0
FY 98	$ 0	$ 0
FY 99	$ 0	$ 0
	$12,625,000	$ 0

ACRONYMS

AICUZ	Air Installation Compatible Use Zone
ICUZ	Installation Compatible Use Zone
ITAMS	Integrated Training Area Management System
LCTA	Land Condition Trend Analysis
404 Wetlands	Regulated Wetlands

NONSTRUCTURAL ATTRIBUTES

Fort Hunter Liggett -- 06205

1. LAND USE.

a. Land Availability (estimated quantities in acres).

(1)	Installation total	164,762
(2)	Cantonment area	6,470
(3)	Maneuver area	162,962
(4)	Training lands designated as sensitive/marginal by ITAMS/LCTA monitoring	0
(5)	Firing Ranges	162,962
(6)	Non-Impact Firing Range	25,000
(7)	Wetlands Sec 404 area (Survey not conducted)	Unknown
(8)	Other (Surface water areas; set aside unique areas; i.e., recreation habitat, forests; restricted use areas such as landfills, contaminated sites, safety zones.	0

b. Air Space.

(1)	Restricted Air Space. (Mission San Antonio 91 acre, cantonment, (built out 100 acre) (ASP-100 acre are self imposed)	164,762
(2)	Extent of Installation Compatible Use Zones (ICUZ) or Noise and Accident Potential Zone (NAPZ).	
	Zone II	0.6
	Zone III	4

2. THREATENED OR ENDANGERED SPECIES (PLANTS AND ANIMALS).

No threatened or endangered species (TES) survey has been conducted, however two Federally listed species, the endangered Kit Fox and the threatened Bald Eagle are known to occur on Fort Hunter Liggett. Biological Assessments have been done on the Kit Fox and Bald Eagle. The Kit Fox population is in decline and the Bald Eagle is believed to be stable. Seasonal (denning season) limits on training, incidental take limits, and pre-activity surveys are restrictions to operations and development due to the Kit Fox.

3. CULTURAL RESOURCES.

a. A Historical Preservation Plan is currently in draft form and under review by the Advisory Council for Historic Preservation (ACHP) and the California State Historic Preservation Offices (SHPO). Final signature for the agreement is expected in August 1994.

b. A historic building survey has been completed as part of Historic Preservation Plan. Two structures were identified as potentially eligible for listing on the National Register of Historic Places. One of these structures, The Gil Adobe, is in substandard condition and requires $300,000 in renovations.

c. An archeological survey is in progress with approximately 25,000 acres having been surveyed. There are 362 known potentially eligible archeological sites. Significant archeological sites mentioned are the Upper Stone Valley, 317 acres, San Antonio Mission, 1,343 acres, and the Jolon Townsite, 803 acres. Additional potentially eligible sites are likely to be found during future survey activities.

d. Approximately 2,500 acres are not available for development or operations due to cultural resources. Potentially eligible archeological sites are off-limits to vehicle traffic and digging. The Upper Stone Valley, San Antonio Mission, and Jolon Townsite archeological sites all have off-road vehicle restrictions.

4. INFRASTRUCTURE ISSUES.

a. Potable Water.

Potable water is supplied totally from six wells with a total pumping capacity of 2.8 MGD and average use of 0.2 MGD. Excess capability is 0.2 MGD. All water supplied to industrial activities is supplied by the potable water system.

b. Wastewater.

Wastewater is currently treated at the installation's non-National Pollutant Discharge Elimination System (NPDES) permitted treatment plant. The plant has a 1.0 MGD capacity. The average use is 0.06 MGD. There are no known constraints to expansion.

c. Solid Wastes.

The installation's landfill closed in 1985. A transfer station exists, operated under a $686,835 contract with

King City Disposal Company, and handles an average of 2 tons/day at a cost of $16.75/ton. There are no known limits to increasing the contract quantity.

5. AIR QUALITY.

a. The installation is in the Monterey Bay Unified Air Pollution Control District.

b. The region is in non-attainment for ozone (moderate).

c. The air pollution sources on the installation are: combustion sources, fuel storage and distribution, bulk loading plant, paint, wastewater treatment plant, photograph development, offset printing, munitions detonation, prescribed burning, and vehicles.

d. The installation has no air emission credits.

e. The installation identified an expenditure need of $30,000 for air quality compliance.

f. The installation is within 100 km of critical air quality regions including the San Joaqin Valley, Fresno, Pinnacles National Monument, and Ventana National Wilderness.

6. HAZARDOUS MATERIALS/SITES.

a. Use of hazardous materials.

The installation has a site which operates under a Resource Conservation and Recovery Act (RCRA) Part A permit. Anticipated closure of the site is 1999.

b. Contaminated Sites.

Thirteen Defense Environmental Restoration Account (DERA) sites have been identified. The number of DERA sites may increase to over 100 based on an EPA report that is currently being prepared.

c. PCB, Asbestos, Lead Paint, or RADON issues.

PCB survey is complete and all 33 contaminated transformers were replaced.

d. Underground Storage Tanks (UST).

All 31 USTs (30 active & 1 abandoned) passed a leak test. Three tanks were replaced or repaired.

e. Radioactive Materials and Sources.

The installation holds no Nuclear Regulatory Commission (NRC) or DA licenses for radiological materials.

7. OTHER ISSUES, CONSTRAINTS.

No other significant issues or constraints are known.

8. REVENUE GENERATING PROGRAMS.

The installation reported that cattle grazing leases, woodcutting, and fish and wildlife use permits generated revenues. Total revenues are:

FY 92	$100,000
FY 93	$ 80,000
FY 94	$100,000

9. PROGRAMMED ENVIRONMENTAL COSTS.

a. Summary of environmental compliance cost:

	Funded	Unfunded
FY 94	$11,401,000	$ 52,000
FY 95	$ 6,138,000	$ 27,000
FY 96	$ 3,551,000	$ 27,000
FY 97	$ 2,901,000	$ 29,000
FY 98	$ 1,626,000	$ 0
FY 99	$ 281,000	$ 0
	$25,898,000	$ 131,000

b. Total restoration costs for FY 94- FY 99 are $15,495,000.

ACRONYMS

AICUZ	Air Installation Compatible Use Zone
ICUZ	Installation Compatible Use Zone
ITAMS	Integrated Training Area Management System
LCTA	Land Condition Trend Analysis
404 Wetlands	Regulated Wetlands

NONSTRUCTURAL ATTRIBUTES

Fort Indiantown Gap -- 42305

1. LAND USE.

a. Land Availability (estimated quantities in acres).

(1)	Installation total	17,820
(2)	Cantonment area	2,286
(3)	Maneuver area	10,920
(4)	Training lands designated as sensitive/marginal by ITAMS/LCTA monitoring	2,525
(5)	Firing Ranges	2,000
(6)	Non-Impact Firing Range	0
(7)	Wetlands Sec 404 area Wetlands survey in progress)	Unknown
(8)	Other (Surface water areas; set aside unique areas; i.e., recreation habitat, forests; restricted use areas such as landfills, contaminated sites, safety zones.	89

b. Air Space.

(1)	Restricted Air Space.	0
(2)	Extent of Installation Compatible Use Zones (ICUZ) or Noise and Accident Potential Zone (NAPZ).	0

2. THREATENED OR ENDANGERED SPECIES (PLANTS AND ANIMALS).

There is a threatened species survey in progress by the Nature Conservancy. One candidate species may occur on the installation which could limit future operations.

3. CULTURAL RESOURCES.

a. Fort Indiantown Gap does not have a historic preservation plan.

b. A historic building survey is in progress of being conducted. No structures have yet been identified as eligible for the National Register of Historic Places.

c. An archeological survey is in progress. So far, no potentially eligible archeological sites have been identified.

4. INFRASTRUCTURE ISSUES.

a. Potable Water.

The potable water supply is contracted with the Lebanon City Bureau of Water. The water treatment facility has a design capacity of 2.80 MGD and an average use of 0.531 MGD. There are no known restrictions to expansion of capacity.

b. Wastewater.

A wastewater treatment plant exists with a permitted capacity of 2.0 MGD and an average use of 0.9 MGD. The total capacity is 3.5 MGD, and the plant operates under a National Pollutant Discharge Elimination System (NPDES) permit.

Life expectancy is 50 years with proper maintenance. There are no known restrictions to expansion of capacity.

c. Solid Wastes.

Solid waste is disposed of off post through a $113,672 contract with the Greater Lebanon Refuse Authority. The average volume is 10 tons/day at a cost of $53.64/day.

5. AIR QUALITY.

a. The installation is in the Lebanon County of the Pennsylvania Air Pollution Control Region III.

b. The region is in non-attainment for ozone (marginal).

c. The air pollution sources are: boilers/furnaces, degreasing operations, surface coating operations, inactive landfill, vehicle training, traffic, and accidental fires.

d. The installation has no air emission credits.

e. The A-106 plan identifies air studies/permit fees to meet air compliance.

f. The installation is in a critical Air Quality Region.

6. HAZARDOUS MATERIALS/SITES.

a. Use of hazardous materials.
The installation has applied for a Resource Conservation and Recovery Act (RCRA) Part B permit for open burning/open detonation.

b. Contaminated sites.

There are five Defense Environmental Restoration Account (DERA) sites (Area 5, PX USTs, Area 1 USTs, Area 2 USTs, Airfield USTs).

c. PCB, Asbestos, Lead Paint, and RADON issues.

PCB survey has been completed. All contaminated transformers were replaced in 1987.

No asbestos survey or management plan has been performed.

d. Underground Storage Tanks (UST).

There are 22 USTs at Fort Indiantown gap. None have been tested, however all USTs have been replaced with upgraded USTs that meet new RCRA requirements. At least 14 USTs have had leak monitoring equipment installed.

e. Radioactive Materials and Sources.

The installation does not hold any Nuclear Regulatory Commission (NRC) or DA licenses for radioactive materials.

7. OTHER ISSUES, CONSTRAINTS.

Soil erosion is a problem due to open area maneuvering.

8. REVENUE GENERATING PROGRAMS.

There are no revenue generating programs.

9. PROGRAMMED ENVIRONMENTAL COSTS.

a. Summary of environmental compliance costs:

	Funded	Unfunded
FY 94	$1,717,000	$ 212,000
FY 95	$ 0	$6,603,000
FY 96	$ 0	$4,039,000
FY 97	$ 0	$3,104,000
FY 98	$ 0	$2,787,000
FY 99	$ 0	$2,298,000
	$1,717,000	$19,043,000

b. Summary of environmental restoration costs:

	Funded	Unfunded
FY 94	$ 100,000	$ 225,000
FY 95	$ 0	$ 900,000
FY 96	$ 0	$ 450,000
FY 97	$ 0	$1,500,000
FY 98	$ 0	$ 500,000
FY 99	$ 0	$ 500,000
	$ 100,000	$4,075,000

ACRONYMS

AICUZ	Air Installation Compatible Use Zone
ICUZ	Installation Compatible Use Zone
ITAMS	Integrated Training Area Management System
LCTA	Land Condition Trend Analysis
404 Wetlands	Regulated Wetlands

NONSTRUCTURAL ATTRIBUTES

NTC and Fort Irwin CA -- 06225

1. LAND USE.

a. Land Availability (estimated quantities in acres).

(1)	Installation total	642,731
(2)	Cantonment area	15,314
(3)	Maneuver area (Dismounted only - 139,631)	464,693
(4)	Training lands designated as sensitive/marginal by ITAMS/LCTA monitoring (NASA Goldstone Deep Space Site - 33,241; Protected species - 21,500; Archeological - 3,250; & Recreational - 7,166)	65,157
(5)	Firing Ranges	92,625
(6)	Non-Impact Firing Range	4,942
(7)	Wetlands Sec 404 area	0
(8)	Other (Surface water areas; set aside unique areas; i.e., recreation habitat, forests; restricted use areas such as landfills, contaminated sites, safety zones.	0

b. Air Space.

(1)	Restricted Air Space.	642,731
(2)	Extent of Installation Compatible Use Zones (ICUZ) or Noise and Accident Potential Zone (NAPZ).	0

2. THREATENED OR ENDANGERED SPECIES (PLANTS AND ANIMALS).

Surveys for Federal and State listed and candidate threatened and endangered (TES) have been conducted. Four endangered species are reported to occur on the installation: Desert Tortoise, Lone Mountain Milkvetch, Mojave Ground Squirrel, and Bighorn Sheep. Approximately 20,000 acres of the installation are not available for maneuver due to classification as critical habitat . The Island population of Desert Tortoises appears to be declining. A number of mitigation measures are actively pursued by the installation to avoid impacts to this species. There is currently no impact to mission as a result of TES.

3. CULTURAL RESOURCES.

a. The installation Historic Preservation Plan is currently undergoing revision.

b. A historic building survey is said to have been completed for Fort Irwin and no buildings were recommended as being eligible for the National Register.

c. Approximately 160,000 acres of Fort Irwin have been surveyed for archeological resources. The number of archeological sites potentially eligible for the National Register identified in the on-going survey were not provided. Development and operations are reported to be restricted on a total of 2,750 acres due to cultural resources.

4. INFRASTRUCTURE ISSUES.

a. Potable Water.

Potable water is provided by 14 wells. The wells have a total pumping capacity of 2.5 MGD and average daily use of 2.5 MGD.

b. Waste Water.

A National Pollutant Discharge Elimination System (NPDES) permitted waste water treatment plant exists with a design capacity of 1.2 MGD and an average use of 1.2 MGD. The plant will undergo an upgrade in FY 95.

c. Solid Wastes.

Fort Irwin operates a 460 acre landfill which has a capacity of 3.0 million tons, however only 22 acres are active with a life expectancy of five years.

5. AIR QUALITY.

a. Fort Irwin reports it is under a State Air Resources Board (ARB) regulated by the Mojave Desert Air Quality Management District (MDAQMD).

b. The region is in non-attainment for ozone (extreme), PM-10 (moderate), and Carbon Monoxide (Serious).

c. The air pollution sources are: rotational training, sewer treatment plant, air conditioners, and fuel storage and dispensing.

d. The installation has no air emission credits.

e. The air quality compliance projects identified in the A-106 plan are: Title V Permitting and PM-10 sampling.

f. The installation is within 100 km of a critical air quality region (Death Valley, soon to be a National Park).

6. HAZARDOUS MATERIALS/SITES.

a. Use of hazardous materials.

The installation holds no Resource Conservation and Recovery Act (RCRA) permits.

b. Contaminated Sites.

The installation identified 50 Defense Environmental Restoration Account (DERA) eligible sites.

c. PCB, Asbestos, Lead Paint, or RADON issues.

PCB survey has been completed and no contaminated transformers were identified.

d. Underground storage tanks (UST).

There are 17 active USTs reported with testing scheduled for June 1994. A total of 29 USTs were removed in FY 92 and three removed in FY 93.

e. Radioactive Materials and Sources.

The installation does not actually hold any Nuclear Regulatory Commission (NRC) or DA licenses for radiological materials, however the Army Armament, Munitions and Chemical Command (AMCCOM) does hold NRC licenses. Licenses are held for approximately 28 various types of equipment (i.e. Chemical Agent Alarms, Thermal Imaging Systems, Compasses, etc.) containing low levels of radioactive materials. Level of radiological decommissioning not provided.

7. OTHER ISSUES, CONSTRAINTS.

No other significant issues or constraints are known.

8. REVENUE GENERATING PROGRAMS.

There are no revenue generating programs.

9. PROGRAMMED ENVIRONMENTAL COSTS.

a. Summary of environmental compliance costs:

	Funded	Unfunded
FY 94	$5,917,000	$5,095,000
FY 95	$ 0	$15,660,000
FY 96	$ 0	$9,785,000
FY 97	$ 0	$10,175,000
FY 98	$ 0	$10,340,000
FY 99	$ 0	$8,590,000
	$5,917,000	$59,645,000

b. Summary of environmental restoration costs:

	Funded	Unfunded
FY 94	$6,774,000	$ 0
FY 95	$ 0	$8,575,000
FY 96	$ 0	$12,060,000
FY 97	$ 0	$1,735,000
FY 98	$ 0	$1,150,000
FY 99	$ 0	$ 850,000
	$6,774,000	$24,370,000

ACRONYMS

AICUZ	Air Installation Compatible Use Zone
ICUZ	Installation Compatible Use Zone
ITAMS	Integrated Training Area Management System
LCTA	Land Condition Trend Analysis
404 Wetlands	Regulated Wetlands

NONSTRUCTURAL ATTRIBUTES

Fort McCoy -- 55425

1. LAND USE.

a. Land Availability (estimated quantities in acres).

		Inst.	Leased
(1)	Installation total	59,750	67,440
(2)	Cantonment area	2,500	
(3)	Maneuver area	46,553	
(4)	Training lands designated as sensitive/marginal by ITAMS/LCTA monitoring	0	67,440
(5)	Firing Ranges	7,656	
(6)	Non-Impact Firing Range	0	
(7)	Wetlands Sec 404 area (surface water - 192)	4,365	
(8)	Other (Surface water areas; set aside unique areas; i.e., recreation habitat, forests; restricted use areas such as landfills, contaminated sites, safety zones.	3,000	

b. Air Space.

(1)	Restricted Air Space.	200
(2)	Extent of Installation Compatible Use Zones (ICUZ) or Noise and Accident Potential Zone (NAPZ).	
	Zone II	22,000
	(Off Post -	8,144)
	Zone III	9,000
	(Off Post -	0

2. THREATENED OR ENDANGERED SPECIES (PLANTS AND ANIMALS).

Three threatened or endangered species (TES) surveys have been conducted by the Nature Conservancy. The February 1993 report, Biological Assessment of Land-use Activities on the Karner Blue Butterfly at Fort McCoy, Wisconsin has been assessed and on 24 March 1994 a NO-JEOPARDY opinion was given. No population data is available as baseline data is still being collected.

3. CULTURAL RESOURCES.

a. A draft historic preservation plan and implementing programmatic agreement have been prepared, but have not been reviewed by the State historic Preservation officer (SHPO) or the Advisory Council for Historic Properties (ACHP).

b. A historical building survey has been conducted and three structures were identified as eligible for the National Register. It was previously reported that, due to its excellent preservation, the Fort McCoy cantonment area is the prime study area for recording Army World War II temporary building types as required by a programmatic agreement signed by representatives of the Department of Defense, the National Conference of State Historic Preservation Officers, and the Advisory Council on Historic Preservation.

c. Archeological surveys are ongoing with a completion date of 1999. Approximately 4,674 acres of installation owned lands have been surveyed to date and at least five archeological sites were found to be potentially eligible for the National Register. The installation provides storage/curation of archeological artifacts and associated records.

d. There is a 20 acre Native American burial mound site which is likely to be nominated to the National Register of Historic Places. Consultation is underway with the Winnebago Tribe IAW the Native American Graves Protection and Repatriation Act.

4. INFRASTRUCTURE ISSUES.

a. Potable Water.

All potable water is supplied from 17 wells with a total pumping capacity 4.75 MGD and an average use of 0.30 MGD. The drawdown rate is 42 feet

b. Wastewater.

A National Pollutant Discharge Elimination System (NPDES) permitted wastewater treatment plant exists with a design capacity of 2.5 MGD and an average use of about 0.5 MGD. The plant has an estimated useful life of two years. The design for a FY 96 upgrade of the plant is in progress.

c. Solid Wastes.

A demolition debris landfill exists which is about 2.0 acres in size with a remaining capacity of 20,000 cubic yards and a life expectancy of four years.

Solid wastes is also disposed of off-post by a $180,000 contract with Waste Management, Inc. Average daily average volume is 5.0 tons/day at a cost of $43.79/ short ton.

5. AIR QUALITY.

a. The air quality region is the Wisconsin Department of Natural Resources.

b. The region is in attainment.

c. Air pollution sources are: Individual building heating systems (1000), vehicle training, brush fires, controlled and accidental.

d. The installation has no air emission credits.

e. Major air compliance projects are: Coal to gas conversion and Studies, fees, etc.

f. The installation is not within 100 km of a critical air quality region.

6. HAZARDOUS MATERIALS/SITES.

a. Use of hazardous materials.

One Resource Conservation and Recovery Act (RCRA) permitted hazardous waste storage facility is located at the DRMO. The RCRA Part B permit expires in 2001. The installation is in the process of obtaining a Subpart X permit, and anticipates issuance in FY 94.

b. Contaminated Sites

The US Army Corps of Engineers conducted a Remedial Feasibility Investigation in May 1994. Fourteen Defense Environmental Restoration Account (DERA) eligible sites were identified.

c. PCB, Asbestos, Lead Paint, and RADON issues.

A total of 4 PCB contaminated transformers have been identified and taken out of service.

An asbestos survey has been conducted. The asbestos abatement team removes and encapsulates friable asbestos as required.

All buildings have been tested for radon and meet federal standards.

d. Underground Storage Tanks (UST).

Four out of 33 tanks have been tested and no tanks failed. Three tanks have been repaired or replaced.

e. Radioactive Materials and Sources.

The installation holds no Nuclear Regulatory Commission (NRC) or DA licenses for radioactive materials or sources.

7. OTHER ISSUES, CONSTRAINTS.

No other significant issues or constraints are known.

8. REVENUE GENERATING PROGRAMS.

Three revenue generating programs are in place.

	Forestry	Hunting/Fish
FY 92	$63,000	$57,000
FY 93	$94,000	$48,000
FY 94	$75,000	$50,000
	$232,000	$155,000

9. PROGRAMMED ENVIRONMENTAL COSTS.

a. Summary of environmental compliance costs:

	Funded	Unfunded
FY94	$16,100,000	$3,300,000
FY95	$12,300,000	$4,200,000
FY96	$8,400,000	$2,200,000
FY97	$1,800,000	$1,700,000
FY98	$1,600,000	$1,800,000
FY99	$1,600,000	$1,900,000
	$41,800,000	$15,100,000

b. Summary of environmental restoration costs:

	Funded	Unfunded
FY94	$2,600,000	$ 0
FY95	$2,500,000	$ 0
FY96	$ 700,000	$ 0
FY97	$ 500,000	$ 0
FY98	$ 0	$ 0
FY99	$ 0	$ 0
	$6,300,000	$ 0

ACRONYMS

AICUZ	Air Installation Compatible Use Zone
ICUZ	Installation Compatible Use Zone
ITAMS	Integrated Training Area Management System
LCTA	Land Condition Trend Analysis
404 Wetlands	Regulated Wetlands

NONSTRUCTURAL ATTRIBUTES

Fort Pickett -- 51535

1. LAND USE.

a. Land Availability (estimated quantities in acres).

(1)	Installation total		45,160
(2)	Cantonment area		3,108
(3)	Maneuver area		30,014
(4)	Training lands designated as sensitive/marginal by ITAMS/LCTA monitoring		0
(5)	Firing Ranges		4,000
(6)	Non-Impact Firing Range		6,000
(7)	Wetlands Sec 404 area (w/o surface water)		3,200
(8)	Other (Surface water areas; set aside unique areas; i.e., recreation habitat, forests; restricted use areas such as landfills, contaminated sites, safety zones.		32,217
	Surface Water	550	
	Forests	24,554	
	Improved Grounds	930	
	Semi-improved Grounds	2,653	
	Landfills	30	
	Impact Area	4,000	

b. Air Space.

(1)	Restricted Air Space. (includes restricted airspace of 23,558 acres and Military Operations Area (MOA) of 139,238)	162,796
(2)	Extent of Installation Compatible Use Zones (ICUZ) or Noise and Accident Potential Zone (NAPZ). 6,000 acres of Zone II extend off-post, and 100 acres of Zone III from installation ICUZ)	

2. THREATENED OR ENDANGERED SPECIES (PLANTS AND ANIMALS).

A threatened or endangered species (TES) survey was conducted by the Virginia Division of Natural Heritage

and in a June 1994 report entitled "Natural Heritage Inventory of Fort Pickett" determined that there are no Federal or State listed endangered or threatened species or critical habitats known to occur on the installation.

3. CULTURAL RESOURCES.

a. A Historic Preservation Plan has not been completed for this installation, however comments have been obtained from the State Historic Preservation Officer (SHPO) and Advisory Council for Historic Preservation (ACHP).

b. A historic building survey has been completed for Fort Pickett and no buildings were recommended as being eligible for the National Register.

c. No archeological surveys have been conducted for this installation.

4. INFRASTRUCTURE ISSUES.

a. Potable Water.

Ninety-nine percent of the installations potable water is provided by surface water. The remaining water is supplied by two small wells for single family homes that have a pumping capacity of 0.005 MGD with an average use of .001 MGD.

The design capacity of the water treatment plant is 5.0 MGD, and the average use is approximately 0.9 MGD. The filtration Plant, reservoir and appurtenances are 51 years old and still in excellent condition.

b. Wastewater.

The installation's sewage treatment plant has a design capacity of 2.0 MGD and an average use of 1.2 MGD. Upgrade is under design and contract award is expected within 12 months. The sewage treatment plant and settling lagoon at the treatment plant operate under National Pollutant Discharge Elimination System (NPDES) permits.

c. Solid Wastes.

Solid waste disposal is provided under a $50,000 contract with the Nottoway County Landfill. Average daily volume is 10 tons at a cost of $15.00/ton.

5. AIR QUALITY.

a. The installation is regulated by the Virginia Department of Environmental Quality.

b. The region is in attainment.

c. Air pollution sources are: traffic on tank trails, control burning operations, and heat plants for individual buildings.

d. The installation has no air emission credits.

e. No major air compliance projects were reported.

f. There are no critical air quality regions within 100 km of the installation.

6. HAZARDOUS MATERIALS/SITES.

a. Use of hazardous materials.

The installation does not hold any Resource Conservation and Recovery Act (RCRA) permits.

b. Contaminated sites

An assessment has been conducted by Roy F. Weston, Inc. (report dated 1 July 1990); however, no Defense Environmental Restoration Account (DERA) eligible sites were found.

c. PCB, Asbestos, Lead Paint, and RADON issues.

PCB survey is approximately 30% complete. Forty-two transformers have been identified as contaminated and all 42 have been replaced.

d. Underground Storage Tanks (UST).

There are 212 active tanks. Fourteen tanks have been tested, one failed and has been replaced.

e. Radioactive Materials and Sources

The installation requires no Nuclear Regulatory Commission (NRC) nor DA licenses.

7. OTHER ISSUES, CONSTRAINTS.

No other significant issues or constraints are known.

E. REVENUE GENERATING PROGRAMS.

The installation has revenue generating programs, but did not indicate the source of this revenue.

FY 92	$360,000
FY 93	$410,000
FY 94	$390,000

F. PROGRAMMED ENVIRONMENTAL COSTS.

a. Summary of environmental compliance costs ($000):

	Funded	Unfunded
FY 94	$2,429	$ 600
FY 95	2,476	600
FY 96	2,369	600
FY 97	2,184	560
FY 98	2,093	538
FY 99	2,046	512
	$13,597	$ 3,410

b. Restoration Costs

There are no restoration costs requirements reported at Fort Pickett.

ACRONYMS

AICUZ	Air Installation Compatible Use Zone
ICUZ	Installation Compatible Use Zone
ITAMS	Integrated Training Area Management System
LCTA	Land Condition Trend Analysis
404 Wetlands	Regulated Wetlands

NONSTRUCTURAL ATTRIBUTES

Fort Polk -- 22725

1. LAND USE

a. Land Availability (estimated quantities in acres).

(1)	Installation total	198,134
(2)	Cantonment area	8,057
(3)	Maneuver area	182,523
(4)	Training lands designated as sensitive/marginal by ITAMS/LCTA monitoring development (CERL)	5,462
(5)	Firing Ranges	5,930
(6)	Non-Impact Firing Range	600
(7)	Wetlands Sec 404 area	8,000
(8)	Other (Surface water areas; set aside unique areas; i.e., recreation habitat, forests; restricted use areas such as landfills, contaminated sites, safety zones.	
	Surface Water	800

b. Air Space.

(1)	Restricted Air Space.	126,921
(2)	Extent of Installation Compatible Use Zones (ICUZ) or Noise and Accident Potential Zone (NAPZ). In effect throughout installation Army Environmental Hygiene Agency report, based on preliminary review indicates that Zone II or III has not been attained.	N/A

2. THREATENED OR ENDANGERED SPECIES (PLANTS AND ANIMALS).

The TES survey was conducted by the Louisiana Natural Heritage Program. Federally listed endangered Red-cockaded Woodpecker (RCW) occurs on the installation. A Biological assessment has been conducted. There are limitations on types of training within RCW clusters. Construction mitigation/avoidance is likely to adversely affect the RCW. Forestry program must produce RCW habitat, by limiting amount and type of timber cutting. The RCW population is reported as stabilized.

3. CULTURAL RESOURCES.

a. Fort Polk has a Historic Preservation Plan and an implementing Programmatic Agreement that have been approved by the Louisiana State Historic Preservation Officer (SHPO). These documents are still undergoing review by the Advisory Council on Historic Preservation.

b. An architectural inventory was conducted of World War II temporary buildings at Fort Polk; no additional work was recommended for these structures. All other installation buildings are of more recent construction and it is doubtful that any will be eligible for the National Register at this time.

c. Approximately 65% of Fort Polk (60,000 acres) has been surveyed for archeological resources. At least 319 sites may be eligible for the National Register. Additional archeological surveys will be required for those lands not yet examined. Eligible archeological sites (140 acres) are restricted by no digging and no vehicle traffic, but are still available for foot maneuver.

d. Contact has been made with the Clifton Choctaw Community about collection of Long Leaf pine straw.

4. INFRASTRUCTURE ISSUES.

a. Potable Water.

Potable water is supplied from 17 wells with a total pumping capacity of 6.93 MGD and an average use of 5.0 MGD.

b. Wastewater.

Wastewater treatment plants exist with a total design capacity of 5.2 MGD and an average use of 3.5 MGD and a life expectancy of 5-10 years. A National Pollutant Discharge Elimination System (NPDES) permit exists for all wastewater discharges.

c. Solid Wastes.

The installation landfill was closed on 30 Sep 93. A commercial contract ($750,000/year) is in place at a cost of $72/ short ton, and an average daily volume of 50 tons.

5. AIR QUALITY.

a. The installation is in National Air Quality Region 106.

b. The region is in attainment.

c. The pollution sources are: Medical sterilizer, training exercises, traffic, vehicle painting, degreasing, printing, medical waste incinerator, and sewage treatment plant.

d. The installation has no air emission credits.

e. No major air compliance projects were identified.

f. The installation is not within 100 km of a critical air quality region.

6. HAZARDOUS MATERIALS/SITES.

a. Use of hazardous materials.

The installation has no Resource Conservation and Recovery Act (RCRA) permitted hazardous waste storage areas, however the installation does have a RCRA permit pending for the Explosives Ordnance Disposal (EOD) site.

b. Contaminated sites.

A contamination assessment was made by Environmental Protection Agency (EPA) Region VI in August 1993, and identified 22 Defense Environmental Restoration Account (DERA) eligible sites.

c. PCB, Asbestos, Lead Paint, and RADON issues.

PCB survey is complete, 52 contaminated transformers have been identified, and none have been replaced.

No asbestos survey or management plan has been performed.

There were no elevated levels of lead paint.

Radon testing is complete.

d. Underground Storage Tanks (UST).

All 210 tanks have been tested. Ten are scheduled for repair, 20 repaired or replaced, and 47 removed.

e. Radiological Materials and Sources.

The installation holds no Nuclear Regulatory Commission (NRC) or DA licenses for radiological materials or sources.

7. OTHER ISSUES, CONSTRAINTS.

No other significant issues or constraints are known.

8. REVENUE GENERATING PROGRAMS.

The installation reported the following revenue generating programs:

	Forestry
FY 92	$736,000
FY 93	735,000
FY 94	$745,000

9. PROGRAMMED ENVIRONMENTAL COSTS.

a. Summary of environmental compliance costs($ MILLION):

	Funded	Unfunded
FY 94	$ 4.81	$ 4.1
FY 95	0	11.8
FY 96	0	8.9
FY 97	0	7.45
FY 98	0	8.1
FY 99	0	8.0
	$ 4.81	$ 48.35

b. Summary of restoration costs ($ million):

FY 94	2.02	0.99
FY 95	0	3.63
FY 96	0	7.08
FY 97	0	1.39
FY 98	0	1.36
FY 99	0	1.24
	$ 2.02	$15.69

ACRONYMS

AICUZ	Air Installation Compatible Use Zone
ICUZ	Installation Compatible Use Zone
ITAMS	Integrated Training Area Management System
LCTA	Land Condition Trend Analysis
404 Wetlands	Regulated Wetlands

NONSTRUCTURAL ATTRIBUTES

Charles E. Kelly Support Facility -- 42610

1. LAND USE.

a. Land Availability (estimated quantities in acres).

(1)	Installation total	125
(2)	Cantonment area	125
(3)	Maneuver area	0
(4)	Training lands designated as sensitive/marginal by ITAMS/LCTA monitoring	0
(5)	Firing Ranges	0
(6)	Non-Impact Firing Range	0
(7)	Wetlands Sec 404 area	0
(8)	Other (Surface water areas; set aside unique areas; i.e., recreation habitat, forests; restricted use areas such as landfills, contaminated sites, safety zones.	0

b. Air Space.

(1)	Restricted Air Space.	0
(2)	Extent of Installation Compatible Use Zones (ICUZ) or Noise and Accident Potential Zone (NAPZ).	0

2. THREATENED OR ENDANGERED SPECIES (PLANTS AND ANIMALS).

The installation reports that a threatened or endangered species survey is not required. No TES are known to occur on the installation.

3. CULTURAL RESOURCES.

a. There is not a Historic Preservation Plan/Cultural Resources Management Plan at the installation.

b. A historic building survey has not been conducted. There are no structures known to be potentially eligible for the Historic Register of Historic Places.

c. An archeological survey has not been conducted. There are no archeological sites known to be potentially eligible for the National Register.

4. INFRASTRUCTURE ISSUES.

a. Potable Water.

Potable water is supplied by contract with the Pennsylvania-American Water Company with a maximum capacity of 1.8 MGD.

b. Wastewater.

The non-National Pollutant Discharge Elimination System (NPDES) permitted waste water plant has a design capacity of 1.2 MGD. The municipal authority is scheduled to assume this function in January 1995 after the post sewage lines are tied into the municipal lines.

c. Solid Wastes.

Solid waste is disposed of through a $58,368.60 a year contract. Average daily volume is 23 tons/day at a cost of $30.50/ton.

5. AIR QUALITY.

a. The installation is located in the Code #197, Southwest Pennsylvania Air Quality Central Region.

b. The region is in non-attainment for ozone (moderate).

c. There are no air pollution sources reported on the installation.

d. The installation has no air emission credits.

e. No major projects identified in the A-106 Plan to meet/maintain air compliance.

f. The installation is within 100 km of an unspecified air quality region.

6. HAZARDOUS MATERIALS/SITES.

a. Use of hazardous materials.

The installation holds no Resource Conservation and Recovery Act (RCRA) permits.

b. Contaminated Sites

There has been no assessment to determine the presence and extent of contaminated sites on the installation.

c. PCB, Asbestos, Lead Paint, and RADON issues.

PCB survey has been completed. Total of 19 contaminated transformers were identified: seven were replaced, and 12 are out of service/eliminated.

d. Underground Storage Tanks (UST).

One abandoned UST has been identified with no further action reported.

e. Radiological Materials and Sources.

The installation does not hold a Nuclear Regulatory Commission (NRC) nor DA license for radiological materials and sources.

7. OTHER ISSUES, CONSTRAINTS.

No other significant issues or constraints are known.

8. REVENUE GENERATING PROGRAMS.

There are no revenue generating programs reported on the installation.

9. PROGRAMMED ENVIRONMENTAL COSTS.

a. Summary of environmental compliance costs:

	Funded	Unfunded
FY 94	$ 358,000	$ 0
FY 95	$ 180,000	$ 0
FY 96	$ 139,000	$ 0
FY 97	$ 1,000	$ 0
FY 98	$ 1,000	$ 0
FY 99	$ 0	$ 0
	$ 679,000	$ 0

b. Summary of environmental restoration costs:

	Funded	Unfunded
FY 94	$ 0	$ 0
FY 95	$ 150,000	$ 0
FY 96	$ 0	$ 0
FY 97	$ 0	$ 0
FY 98	$ 0	$ 0
FY 99	$ 0	$ 0
	$ 150,000	$ 0

ACRONYMS

AICUZ	Air Installation Compatible Use Zone
ICUZ	Installation Compatible Use Zone
ITAMS	Integrated Training Area Management System
LCTA	Land Condition Trend Analysis
404 Wetlands	Regulated Wetlands

NONSTRUCTURAL ATTRIBUTES

Charles Melvin Price Support Center

1. LAND USE.

a. Land Availability (estimated quantities in acres).

(1)	Installation total	686
(2)	Cantonment area	583
(3)	Maneuver area	35
(4)	Training lands designated as sensitive/marginal by ITAMS/LCTA monitoring	0
(5)	Firing Ranges	0
(6)	Non-Impact Firing Range	3
(7)	Wetlands Sec 404 area	3
(8)	Other (Surface water areas; set aside unique areas; i.e., recreation habitat, forests; restricted use areas such as landfills, contaminated sites, safety zones. Recreation	62

b. Air Space.

(1)	Restricted Air Space.	0
(2)	Extent of Installation Compatible Use Zones (ICUZ) or Noise and Accident Potential Zone (NAPZ).	0

2. THREATENED OR ENDANGERED SPECIES (PLANTS AND ANIMALS).

A TES has been conducted by the US Fish and Wildlife Service for the Coast Guard. No Federal or State listed endangered or threatened species or critical habitats are known to occur on the installation.

3. CULTURAL RESOURCES.

a. The installation does not have a Historic Preservation of Cultural Resources Management Plan. Comments have been obtained from the State Historic Preservation Officer (SHPO).

b. A Historic buildings survey has been completed. No buildings have been identified as eligible for the National Register.

c. An archeological survey has been conducted. No known sites have been identified, but the American Bottoms area is known to have a high density of prehistoric and archeological sites.

4. INFRASTRUCTURE ISSUES.

a. Potable Water.

All water is procured from Illinois American Water Co. The annual contract amount is 35 million gallons, with an average daily use of .095 MGD.

b. Wastewater.

Wastewater treatment is contracted with the City of Granite City Treatment Plant. The contracted amount is 36 million gallons. The average daily use is 0.098 MGD. The National Pollutant Discharge Elimination System (NPDES) permits is held by the operating agency.

c. Solid Wastes.

Solid waste collection is contracted with BFI with a total contract value of $38,307.

5. AIR QUALITY.

a. The air quality control area is Environmental Protection Agency (EPA) Region V, Illinois EPA Metropolitan St. Louis Interstate Air Quality Control Region 070.

b. The installation is in a non-attainment area, for moderate levels of ozone and particulates.

c. Sources of air pollution are; Individual building heating systems, boilers, generators, USTs, controlled burning.

d. The installation has no air emission credits.

e. There are no major air compliance projects reported.

f. There are several National Parks in the area. (Cahokia Mounds, Crab Orchard).

5. HAZARDOUS MATERIALS/SITES.

a. Use of hazardous materials.

The installation holds no Resource Conservation and Recovery Act (RCRA) permits.

b. Contaminated Sites.

An assessment for contamination has been made and there are no Defense Environmental Restoration Account (DERA) eligible sites identified.

c. PCB, Asbestos, Lead Paint, or RADON issues.

All 34 PCB contaminated transformers identified have been replaced.

d. Regulated underground storage tanks.

The installation has 10 active USTs; of which none have been tested.

e. Radioactive Materials and Sources.

Bulk radioactive ore (Uranium and other ores) was stored on this installation in the 1960's and 70's. Facilities where ore was stored should be surveyed for decommissioning purposes. This is potentially 686 acres and/or 2,253,000 sq ft of space.

7. OTHER ISSUES, CONSTRAINTS.

No other significant issues or constraints are known.

8. REVENUE GENERATING PROGRAMS.

No revenue generating programs currently exist.

F. PROGRAMMED ENVIRONMENTAL COSTS.

a. Summary of environmental compliance costs ($000).

	Funded	Unfunded
FY 94	$ 316	$ 403
FY 95	266	165
FY 96	280	97
FY 97	199	15
FY 98	248	15
FY 99	$ 309	$ 45
	$1,618	$ 740

b. There are no estimated costs for restoration.

ACRONYMS

AICUZ	Air Installation Compatible Use Zone
ICUZ	Installation Compatible Use Zone
ITAMS	Integrated Training Area Management System
LCTA	Land Condition Trend Analysis
404 Wetlands	Regulated Wetlands

NONSTRUCTURAL ATTRIBUTES

Fort Belvoir -- 51105

1. LAND USE.

a. Land Availability (estimated quantities in areas).

(1)	Installation total	8,650
(2)	Cantonment area	6,500
(3)	Maneuver area	0
(4)	Training lands designated as sensitive/marginal by ITAMS/LCTA monitoring	0
(5)	Firing Ranges	0
(6)	Non-Impact Firing Range	0
(7)	Wetlands Sec 404 area	600
(8)	Other (Surface water areas; set aside unique areas; i.e., recreation habitat, forests; restricted use areas such as landfills, contaminated sites, safety zones.	2,600

b. Air Space.

(1)	Restricted Air Space.	380
(2)	Extent of Installation Compatible Use Zones (ICUZ) or Noise and Accident Potential Zone (NAPZ).	465

2. THREATENED OR ENDANGERED SPECIES (PLANTS AND ANIMALS).

A threatened or endangered species (TES) survey, Bates Study, has been conducted. The Federally listed threatened species, Bald Eagle, occurs on the installation and a management plan directed at this species has been prepared. In addition, the Federal candidate Pygmy Wood Shrew and the State listed threatened Wood Turtle are reported to occur on the installation. The Bald eagle population is reported as stable. Restrictions to operations and development as a result of Bald Eagle nesting sites includes no development within the nesting site zone(s) and restricted air space over and around the nest.

3. CULTURAL RESOURCES.

a. Fort Belvoir does not have a Historic Preservation Plan/ Cultural Resources Management Plan. However, the State Historic Preservation Officer (SHPO) and Advisory Council on

Historic Preservation (ACHP) are solicited for comments on all projects which effect historic properties.

b. A historic buildings survey has been completed for Fort Belvoir and 150 buildings were recommended as being potentially eligible for the National Register of Historic Places.

c. An archeological survey has been completed for a majority of the lands suitable for examination (approximately 7,000 acres). Approximately 180 of the archeological sites recorded by these surveys are recommended as eligible or potentially eligible for the National Register.

4. INFRASTRUCTURE ISSUES.

a. Potable Water.

All potable water is from surface water sources and provided by contract with the Fairfax County water authority. The total capacity is 4.4 MGD with a daily average of 1.9 MGD.

b. Wastewater.

Wastewater discharge is provided under contract with Fairfax County. The total capacity is 3.0 MGD with a daily average of 1.5 MGD. Sewer capacity is limited in the County, therefore negotiations are necessary with the probability of the Federal government paying for any capital improvements. The installation has National Pollutant Discharge Elimination System (NPDES) permits for the Coal Storage Yard and the R & D Test Center.

c. Solid Wastes.

There are no active landfills on Fort Belvoir. The closure of one debris landfill and one sanitary landfill is on-going.

Solid waste disposal is provided by contract with RPMA Contractor with no limitation on volume increases. The average daily volume is 33 tons/day at a cost of $123/ton.

5. AIR QUALITY.

a. Fort Belvoir is in the National Capital Interstate Air Quality Region.

b. The region is not in compliance for Ozone (severe) and Sulfur Dioxide.

c. Pollution sources are: 105 boilers, 4 incinerators, 28 fuel burning generators, and 51 degreaser units.

d. The installation maintains no air emission credits.

e. To meet/maintain air compliance the A-106 plan has identified projects for FY 94 and FY 95.

f. The installation is within 100 km of a critical air quality region (Shanandoah National Park).

6. HAZARDOUS MATERIALS/SITES.

a. Use of hazardous materials.

The installation has a Resource Conservation and Recovery Act (RCRA) Part B permit for three storage areas (90 days or greater).

b. Contaminated Sites.

The U.S. Environmental Protection Agency (USEPA) has identified 27 Resource Conservation and Recovery Act (RCRA) solid waste management units (SWMU) at the Engineer Proving Grounds.

c. PCB, Asbestos, Lead Paint, or RADON issues.

A PCB survey has been completed and there are currently five contaminated transformers remaining on the installation. An unknown number has been identified throughout the years.

It was previously reported that all critical buildings have been surveyed for Radon and one building was above action level and it has been corrected.

It was previously reported that all buildings in the Family Housing areas were surveyed and 97% of the asbestos removed. In addition, 97% of administrative and other occupied buildings had been surveyed.

d. Underground Storage Tanks (UST).

All 142 tanks have been tested and passed testing. Twenty-seven USTs have been replaced/repaired.

e. Radiological Materials and Sources.

The installation holds Nuclear Regulatory Commission (NRC) license(s) for Atomic Number 1-95 (Limit 1 Curie) and Hydrogen 3 (Limit 500 Curies). One storage building surveying and if required, cleaning, for decommissioning.

7. OTHER ISSUES, CONSTRAINTS.

No other significant issues or constraints are known.

8. REVENUE GENERATING PROGRAMS.

The installation reported an estimated $5,000 per year in firewood sales.

9. PROGRAMMED ENVIRONMENTAL COSTS.

a. Summary of environmental compliance costs:

	Funded	Unfunded
FY 94	$9,080,000	$2,015,000
FY 95	$8,295,000	$3,140,000
FY 96	$6,825,000	$3,740,000
FY 97	$7,160,000	$1,645,000
FY 98	$6,274,000	$ 628,000
FY 99	$3,166,000	$ 628,000
	$40,800,000	$11,806,000

b. Summary of environmental restoration costs:

	Funded	Unfunded
FY 94	$ 300,000	$ 0
FY 95	$ 0	$1,100,000
FY 96	$ 0	$1,000,000
FY 97	$ 0	$ 0
FY 98	$ 0	$ 0
FY 99	$ 0	$ 0
	$ 300,000	$2,100,000

ACRONYMS

AICUZ	Air Installation Compatible Use Zone
ICUZ	Installation Compatible Use Zone
ITAMS	Integrated Training Area Management System
LCTA	Land Condition Trend Analysis
404 Wetlands	Regulated Wetlands

NONSTRUCTURAL ATTRIBUTES

Fort Buchanan -- RQ327

1. LAND USE.

a. Land Availability (estimated quantities in acres).

(1)	Installation total	746
(2)	Cantonment area	746
(3)	Maneuver area	0
(4)	Training lands designated as sensitive/marginal by ITAMS/LCTA monitoring	0
(5)	Firing Ranges	0
(6)	Non-Impact Firing Range	0
(7)	Wetlands Sec 404 area	11
(8)	Other (Surface water areas; set aside unique areas; i.e., recreation habitat, forests; restricted use areas such as landfills, contaminated sites, safety zones.	0

b. Air Space.

(1)	Restricted Air Space.	N/A
(2)	Extent of Installation Compatible Use Zones (ICUZ) or Noise and Accident Potential Zone (NAPZ).	N/A

2. THREATENED OR ENDANGERED SPECIES (PLANTS AND ANIMALS).

A threatened or endangered species (TES) survey has been conducted and four Federally listed TES (Puerto Rican Boa, Ruddy Duck, Coccoloba Rujusa, & Ottoschulzia Rhodoylon) are reported to occur on the installation. These species impact the installation's mission only if activities in the wooded area of the post are pursued.

3. CULTURAL RESOURCES.

a. There is no Historic Preservation Plan/Cultural Resources Management Plan concerning cultural resources.

b. A historic building survey has not been conducted for Fort Buchanan. No buildings were reported to be potentially eligible for the National Register.

c. No information was provided concerning archeological surveys, however previously it was reported that archeological investigations have been undertaken for the 746 acres that make up this facility. No archeological sites were found by these investigations.

4. INFRASTRUCTURE ISSUES.

a. Potable Water.

The installation obtains potable water from the Puerto Rico Aqueduct and Sewer Authority and has no contract amount or expansion restrictions. The design capacity is 2.16 MGD with a daily usage rate of 0.3 MGD.

b. Wastewater.

No wastewater treatment plants are on the post. Disposal of effluent is under contract with the Puerto Rico Aqueduct and Sewer Authority. Capacity is 1.2 MGD with usage rate of 0.24 MGD. There are no known restrictions to expansion.

c. Solid Wastes.

Solid waste disposal is under a $222,660 contract with the CP Garbage Disposal Co. and disposed of at a rate of 10.5 tons/day at cost of $58.00/ton. No landfills are located on the post.

5. AIR QUALITY.

a. The installation is in the Catano Bayamon Air Basin.

b. The region is in attainment.

c. No air pollution sources are identified on the installation.

d. The installation has no air emission credits.

e. No air compliance projects/expenditures have been identified.

f. The installation is within 100 km of two critical air quality regions (San Juan Metropolitan Area & Caribbean National Forest).

6. HAZARDOUS MATERIALS/SITES.

a. Use of hazardous materials.

No Resource Conservation and Recovery Act (RCRA) permitted hazardous waste storage areas were identified.

b. Contaminated sites.

No contaminated sites were reported, however previously one Defense Environmental Restoration Account (DERA) site (suspected pesticide burial site) was reported to be under investigation.

c. PCB, Asbestos, Lead Paint, and RADON issues.

PCB survey completed in 1982. No PCB contaminated transformers were identified.

It was previously reported that asbestos is in approximately 350 family housing units sprayed on ceilings and must be removed prior to rehabilitation work.

It was previously reported that all buildings were being tested for radon.

d. Underground Storage Tanks (UST).

Fort Buchanan has five active and three abandoned USTs. No tanks were recently tested. Five tanks were previously installed with leak detection devices in place.

e. Radioactive Materials and Sources.

There are no known radiological materials requiring Nuclear Regulatory Commission (NRC) or DA licenses.

7. OTHER ISSUES, CONSTRAINTS.

No other significant issues or constraints are known.

8. REVENUE GENERATING PROGRAMS.

There are no revenue generating programs.

9. PROGRAMMED ENVIRONMENTAL COSTS.

a. Summary of environmental compliance costs:

	Funded	Unfunded
FY 94	$1,350,000	$ 300,000
FY 95	$1,299,000	$ 385,000
FY 96	$ 305,000	$ 300,000
FY 97	$ 317,000	$ 300,000
FY 98	$ 323,000	$ 300,000
FY 99	$ 322,000	$ 300,000
	$3,916,000	$2,185,000

b. Estimates for environmental restoration costs are not available.

ACRONYMS

AICUZ	Air Installation Compatible Use Zone
ICUZ	Installation Compatible Use Zone
ITAMS	Integrated Training Area Management System
LCTA	Land Condition Trend Analysis
404 Wetlands	Regulated Wetlands

NONSTRUCTURAL ATTRIBUTES

Fort Gillem -- 13015

1. LAND USE.

a. Land Availability (estimated quantities in acres).

(1)	Installation total		1,426
(2)	Cantonment area		1,095
(3)	Maneuver area		0
(4)	Training lands designated as sensitive/marginal by ITAMS/LCTA monitoring		0
(5)	Firing Ranges		0
(6)	Non-Impact Firing Range		0
(7)	Wetlands Sec 404 area		0
(8)	Other (Surface water areas; set aside unique areas; i.e., recreation habitat, forests; restricted use areas such as landfills, contaminated sites, safety zones.		229
	Lakes	4	
	Forest, landfill	295	

b. Air Space.

(1)	Restricted Air Space.	N/A
(2)	Extent of Installation Compatible Use Zones (ICUZ) or Noise and Accident Potential Zone (NAPZ).	N/A

2. THREATENED OR ENDANGERED SPECIES (PLANTS AND ANIMALS).

A threatened or endangered species (TES) survey was planned for September 1994. The Pink Lady Slipper is a State Endangered Listed species suspected of occurring on the installation. The Peregrine Falcon, on the Federal Endangered List, was previously reported as occurring on the installation.

3. CULTURAL RESOURCES.

a. A draft Historic Preservation Plan has been submitted to the State Historic Preservation Officer and Advisory Council of Historic Preservation.

b. Thirty-one structures were identified as eligible for the National Register of Historic Places.

c. No archeological survey has been conducted and there are no known potentially eligible archeological sites on the installation.

4. INFRASTRUCTURE ISSUES.

a. Potable Water.

All potable water is purchased from Clayton County. Maximum capacity is 1.4 MGD with a usage rate of 0.13 MGD.

b. Wastewater.

Wastewater and sewage is treated by the City of Forest Park/Clayton County. Capacity is 1.1 MGD gravity flow and 3.3 MGD forced flow. The average daily rate is 0.1 MGD. There is no known restriction to maintaining or expanding wastewater treatment.

c. Solid Wastes.

Solid waste collection and disposal is provided through a $214,947 contract with waste management. The disposal quantity is about 7 tons/day at a cost of $85.50. There is no known limitation to increasing the contract amount.

5. AIR QUALITY.

a. The installation is in the Atlanta Air Quality Region, regulated by Georgia Environmental Protection Division.

b. The region is in non-attainment for ozone (serious).

c. The pollution source identified is vehicular traffic.

d. The installation has no air emission credits.

e. The installation has programmed major projects to meet/maintain compliance are $105,000.

f. The installation is within a critical air quality region.

6. HAZARDOUS MATERIALS/SITES.

a. Use of hazardous materials.

The installation is not a Resource Conservation and Recovery Act (RCRA) permitted hazardous waste treatment

storage or disposal facility.

b. Contaminated sites.

There are 14 Defense Environmental Restoration Account (DERA) eligible contaminated sites identified by the installation.

c. PCB, Asbestos, Lead Paint, and RADON issues

PCB survey has been completed. No contaminated transformers have been identified.

d. Underground Storage Tanks (UST).

Out of 14 active and seven abandoned USTs, nine were tested, one failed and is scheduled for removal.

e. Radioactive Materials and Sources.

No Nuclear Regulatory Commission (NRC) or DA licenses were reported as being required for radiological materials at the installation.

7. OTHER ISSUES, CONSTRAINTS.

No other significant issues or constraints are known.

8. REVENUE GENERATING PROGRAMS.

There are no revenue generating programs.

9. PROGRAMMED ENVIRONMENTAL COSTS.

a. Summary of environmental compliance costs:

	Funded	Unfunded
FY 94	$ 405,000	$ 0
FY 95	$ 690,000	$ 0
FY 96	$ 920,000	$ 0
FY 97	$1,145,000	$ 0
FY 98	$ 400,000	$ 0
FY 99	$ 345,000	$ 0
	$3,905,000	$ 0

b. Summary of environmental restoration costs:

	Funded	Unfunded
FY 94	$4,322,000	$ 0
FY 95	$ 20,000	$5,649,000
FY 96	$ 0	$1,560,000
FY 97	$ 0	$13,535,000
FY 98	$ 0	$2,485,000
FY 99	$ 0	$5,205,000
	$4,322,000	$28,434,000

ACRONYMS

AICUZ	Air Installation Compatible Use Zone
ICUZ	Installation Compatible Use Zone
ITAMS	Integrated Training Area Management System
LCTA	Land Condition Trend Analysis
404 Wetlands	Regulated Wetlands

NONSTRUCTURAL ATTRIBUTES

Fort Hamilton -- 36325

1. LAND USE.

a. Land Availability (estimated quantities in acres).

(1)	Installation total		166.07
(2)	Cantonment area		116.86
(3)	Maneuver area		0
(4)	Training lands designated as sensitive/marginal by ITAMS/LCTA monitoring		0
(5)	Firing Ranges		0
(6)	Non-Impact Firing Range		0
(7)	Wetlands Sec 404 area		0
(8)	Other (Surface water areas; set aside unique areas; i.e., recreation habitat, forests; restricted use areas such as landfills, contaminated sites, safety zones.		48.87
	Outgrant to NY City TBTA	25.26	
	Land Water Area	23.61	

b. Air Space.

(1)	Restricted Air Space.	None
(2)	Extent of Installation Compatible Use Zones (ICUZ) or National Air Space Zone (NAPZ).	None

2. THREATENED OR ENDANGERED SPECIES (PLANTS AND ANIMALS).

A threatened or endangered species (TES) survey has been conducted, and no Federal or State listed endangered or threatened species or critical habitats are known to occur on the installation. However, the installation adjoins a known habitat for the Shortnose Sturgeon which is a threatened or endangered species. The Biological Assessment stated that a natural recourse plan should be used when doing work on the installation that may effect the habitat of the fish.

3. CULTURAL RESOURCES.

a. There is a Cultural Resources Management Plan which has been coordinated with the State Historic Preservation Officer.

b. Three structures are eligible for the National Register of Historic Places. Part of one of the buildings, Bldg 207, is substandard condition per fire/life safety code and requires $500,000 in renovations.

c. An archeological survey has been conducted on over 91.35 acres. Two sites were found to be potentially eligible and seven areas to be of high resource preservation potential. There is storage, curation, and cataloging of archeological artifacts and records at the Fort Hamilton Museum. Restrictions to development are that further archeological inventories/studies are recommended in areas of medium to high resource preservation potential prior to major construction or excavation. It is undetermined at this time if any acreage is unavailable due to cultural resources.

4. INFRASTRUCTURE ISSUES.

a. Potable Water.

Potable water is acquired by contract with the City of New York. Capacity is 0.194 MGD and average usage is 0.04 MGD. There are no known limits to expansion of capacity.

b. Wastewater.

Wastewater treatment is through contract with the City of New York. Plant design capacity is 5.65 MGD and average usage is 0.041 MGD. There are no known limits to expansion of capacity.

c. Solid Wastes.

Solid waste disposal is by a $382,372 contract with Johnson Controls. Daily volume is 15 tons/day at a cost of $50/ton. There are no known limits to expansion of contract quantity.

5. AIR QUALITY.

a. The air quality region is in the New York City air quality region.

b. The region is in non-attainment for ozone (severe) and carbon monoxide (moderate).

c. Air pollution sources are traffic, heating plants, and minor amounts of VOCs.

d. The installation has no air emission credits.

e. Air compliance projects identified in the A-106 plan to meet/maintain compliance are air studies/permit fees and asbestos.

f. Fort Hamilton is within a critical air quality region (New York).

6. HAZARDOUS MATERIALS/SITES.

a. Use of hazardous materials.

The installation is not a Resource Conservation and Recovery Act (RCRA) permitted treatment storage or disposal facility.

b. Contaminated Sites.

There is one known Defense Environmental Restoration Account (DERA) eligible site and one suspected DERA eligible site.

c. PCB, Asbestos, Lead Paint, or RADON issues.

PCB survey has been completed. All 27 contaminated transformers have been replaced.

d. Underground Storage Tanks (UST).

The installation has 45 underground storage tanks, 18 have been tested, and the eight that failed were replaced.

e. Radioactive Materials and Sources

There are no radiological materials requiring Nuclear Regulatory Commission (NRC) or DA licenses at Fort Hamilton.

7. OTHER ISSUES, CONSTRAINTS.

No other significant issues or constraints are known.

8. REVENUE GENERATING PROGRAMS.

There are no revenue generating programs.

E. PROGRAMMED ENVIRONMENTAL COSTS.

a. Summary of environmental compliance cost are:

	Funded	Unfunded
FY 94	$ 936,000	$ 336,000
FY 95	$ 0	$1,172,000
FY 96	$ 0	$1,173,000
FY 97	$ 0	$1,010,000
FY 98	$ 0	$ 900,000
FY 99	$ 0	$ 248,000
	$ 936,000	$4,839,000

b. Summary of environmental restoration cost are:

	Funded	Unfunded
FY 94	$ 20,000	$ 10,000
FY 95	$ 0	$ 0
FY 96	$ 0	$ 0
FY 97	$ 0	$ 0
FY 98	$ 0	$ 0
FY 99	$ 0	$ 0
	$ 20,000	$ 10,000

ACRONYMS

AICUZ	Air Installation Compatible Use Zone
ICUZ	Installation Compatible Use Zone
ITAMS	Integrated Training Area Management System
LCTA	Land Condition Trend Analysis
404 Wetlands	Regulated Wetlands

NONSTRUCTURAL ATTRIBUTES

Fort McPherson -- 13115

1. LAND USE.

a. Land Availability (estimated quantities in acres).

(1)	Installation total	487
(2)	Cantonment area	487
(3)	Maneuver area	0
(4)	Training lands designated as sensitive/marginal by ITAMS/LCTA monitoring	0
(5)	Firing Ranges	1
(6)	Non-Impact Firing Range	0
(7)	Wetlands Sec 404 area	0
(8)	Other (Surface water areas; set aside unique areas; i.e., recreation habitat, forests; restricted use areas such as landfills, contaminated sites, safety zones. Surface water	4.5

b. Air Space.

(1)	Restricted Air Space.	N/A
(2)	Extent of Installation Compatible Use Zones (ICUZ) or Noise and Accident Potential Zone (NAPZ).	N/A

2. THREATENED OR ENDANGERED SPECIES (PLANTS AND ANIMALS).

No threatened or endangered species (TES) survey has been conducted. However, no Federal or State listed endangered or threatened species or critical habitats are known to occur on the installation.

3. CULTURAL RESOURCES.

a. A draft Historic Preservation Plan (HPP) has been completed and is under review by the State Historic Preservation Officer (SHPO) and the Advisory Council for Historic Preservation (ACHP). Comments on the HHP were due back from the SHPO and ACHP by June 1994.

b. A draft historic building survey is included as part of the draft HPP. A total of 40 structures are listed and 56 are potentially eligible for listing on the National Register of Historic Places.

c. An archeological survey has not been conducted for the installation.

4. INFRASTRUCTURE ISSUES.

a. Potable Water.

All potable water is purchased from the City of Atlanta. The maximum capacity is 3.1 MGD and the average use is 0.2 MGD.

b. Wastewater.

Wastewater and sewage is treated by the City of Atlanta. The maximum capacity is 2.87 MGD and average amount of effluent is 0.2 MGD. Contractor has a National Pollutant Discharge Elimination System (NPDES) permit.

c. Solid Wastes.

Solid waste collection and disposal is provided by a $178,544 contract with Waste Management. The disposal quantity is 6 tons/day at a cost of $82.77/ton.

5. AIR QUALITY.

a. The installation is in the Atlanta Air Quality Region.

b. The air quality region is in non-attainment for ozone (serious).

c. The air pollution source is boilers.

d. The installation has no air emission credits.

e. Projects exist to meet/maintain air compliance.

f. The installation is in a critical air quality region.

6. HAZARDOUS MATERIALS/SITES.

a. Use of hazardous materials.

Fort McPherson is not a Resource Conservation and Recovery Act (RCRA) treatment, storage or disposal facility.

b. Contaminated sites.

Two Defense Environmental Restoration Account (DERA) eligible contaminated sites were identified by the installation.

c. PCB, Asbestos, Lead Paint, and RADON issues.

PCB survey has been completed and no contaminated transformers were identified.

It was previously reported that an asbestos survey and management plan were required.

d. Underground Storage Tanks (UST)

There are nine active and one abandoned UST on the installation. Six active USTs did not require testing. Of the three active USTs tested, none failed.

e. Radioactive Materials and Sources.

The installation does not hold any Nuclear Regulatory Commission (NRC) or DA licenses for radioactive materials and sources.

7. OTHER ISSUES, CONSTRAINTS.

No other significant issues or constraints are known.

8. REVENUE GENERATING PROGRAMS.

There are no revenue generating programs reported.

9. PROGRAMMED ENVIRONMENTAL COSTS.

a. Summary of environmental compliance costs:

	Funded	Unfunded
FY 94	$4,570,000	$ 430,000
FY 95	$3,528,000	$ 821,000
FY 96	$2,527,000	$ 821,000
FY 97	$2,323,000	$ 590,000
FY 98	$2,173,000	$ 345,000
FY 99	$1,714,000	$ 345,000
	$16,835,000	$3,352,000

b. Summary of environmental restoration costs:

	Funded	Unfunded
FY 94	$ 50	$ 0
FY 95	$ 290	$ 0
FY 96	$ 80	$ 0
FY 97	$ 260	$ 0
FY 98	$ 20	$ 0
FY 99	$ 10	$ 0
	$ 710,000	$ 0

ACRONYMS

AICUZ	Air Installation Compatible Use Zone
ICUZ	Installation Compatible Use Zone
ITAMS	Integrated Training Area Management System
LCTA	Land Condition Trend Analysis
404 Wetlands	Regulated Wetlands

NONSTRUCTURAL ATTRIBUTES

Fort Meade -- 24355

1. LAND USE.

a. Land Availability (estimated quantities in acres).

(1)	Installation total	5,142
(2)	Cantonment area	5,142
(3)	Maneuver area	0
(4)	Training lands designated as sensitive/marginal by ITAMS/LCTA monitoring	0
(5)	Firing Ranges	0
(6)	Non-Impact Firing Range	0
(7)	Wetlands Sec 404 area	287
(8)	Other (Surface water areas; set aside unique areas; i.e., recreation habitat, forests; restricted use areas such as landfills, contaminated sites, safety zones.	0

b. Air Space.

(1) Restricted Air Space.

(2) Extent of Installation Compatible Use Zones (ICUZ) or Noise and Accident Potential Zone (NAPZ).

Class B	6,000
Class G	500 - 600

2. THREATENED OR ENDANGERED SPECIES (PLANTS AND ANIMALS).

A threatened or endangered species (TES) survey has been conducted and no Federal listed species are reported to occur on the installation.

3. CULTURAL RESOURCES.

a. A draft Historic Preservation Plan/Cultural Resources Management Plan is currently under review by the State Historic Preservation Officer (SHPO).

b. A total of 134 buildings are eligible to be listed on the National Register of Historic Places.

c. Archeological surveys have been conducted for the entire installation. There are four (4) potentially eligible

sites. The installation currently has storage or curation of archeological artifacts and associated records.

4. INFRASTRUCTURE ISSUES.

a. Potable Water.

Potable water is supplied by surface water and six wells, 78% and 22%, respectively. The water treatment plant has a design capacity of 8.2 MGD and an average use of 3.3 MGD. The treatment plant will require upgrading in the near future. The six wells have a total pumping capacity of 3.64 MGD and an average daily use of 0.73 MGD. The drawdown rate is 75 ft. Known and potential contamination sources are road salting, vehicle accidents on bridges, Little Patuxtent Waste Water Treatment Plant and upstream NPDES permit holders.

b. Wastewater.

A wastewater treatment plant exists and has a design capacity of 4.5 MGD and an average daily use of 2.5 MGD. The plant operates under a National Pollutant Discharge Elimination System (NPDES) permit. There are no known limitations to maintaining or expanding waste water treatment.

c. Solid Wastes.

A landfill exists that is approximately 120 acres in size with an estimated useful life of 20 years. Total remaining capacity is 45,000 tons/year. The landfill is currently being upgraded to meet the October 1993 RCRA requirements.

5. AIR QUALITY.

a. The installation is in Environmental Protection Agency (EPA) Air Quality Region III.

b. The region is not in attainment for ozone and carbon monoxide (severe).

c. Air pollution sources are: boilers, incinerator and vehicle maintenance shops, landfill, USTs, generator, and surface coating.

d. The installation has no air emission credits.

e. Projects to meet/maintain air compliance have been identified.

f. Fort Meade is within a severe non-attainment area.

6. HAZARDOUS MATERIALS/SITES.

a. Use of hazardous materials.

Fort Meade has Resource Conservation and Recovery Act (RCRA) permit for 32-90 day storage sites and one-90 day or longer storage site. The permit was submitted for renewal in September 1992. Expected issuance is in September 1994.

b. Contaminated sites.

There are six identified Defense Environmental Restoration Account (DERA) eligible sites.

c. PCB, Asbestos, Lead Paint, and RADON issues.

PCB survey has been completed, 102 contaminated transformers were identified and 58 were replaced.

An asbestos survey and management plan are required.

d. Underground Storage Tanks (UST).

There are 136 active USTs, of which 30 were tested and 25 failed in FY94. Fourteen were upgraded, seven replaced with AGST, three (3) replaced with USTs, and one (1) converted to gas. All others were tested prior to FY94.

e. Radioactive Materials and Sources.

There are no known radiological materials on Fort Meade requiring Nuclear Regulatory Commission (NRC) or DA licenses.

7. OTHER ISSUES, CONSTRAINTS.

No other significant issues or constraints are known.

8. REVENUE GENERATING PROGRAMS.

Revenue generating programs and revenues are as follows:

	Firewood
FY 92	$ 400
FY 93	$ 190
FY 94	$ 150
	$ 740

9. PROGRAMMED ENVIRONMENTAL COSTS.

a. Summary of environmental compliance costs:

	Funded & Unfunded
FY 94	$6,094,000
FY 95	$5,048,000
FY 96	$4,608,000
FY 97	$6,565,000
FY 98	$3,325,000
FY 99	$2,899,000
	$28,539,000

b. Summary of environmental restoration costs:

	Funded	Unfunded
FY 94	$5,030,000	$ 0
FY 95	$5,030,000	$ 0
FY 96	$ 30,000	$ 50,000
FY 97	$ 35,000	$ 50,000
FY 98	$ -	$ -
FY 99	$ -	$ -
	$10,125,000	$ 100,000

ACRONYMS

AICUZ	Air Installation Compatible Use Zone
ICUZ	Installation Compatible Use Zone
ITAMS	Integrated Training Area Management System
LCTA	Land Condition Trend Analysis
404 Wetlands	Regulated Wetlands

NONSTRUCTURAL ATTRIBUTES

Fort Monroe -- 51360

1. LAND USE.

a. Land Availability (estimated quantities in acres).

(1)	Installation total	1,068
(2)	Cantonment area	500
(3)	Maneuver area	0
(4)	Training lands designated as sensitive/marginal by ITAMS/LCTA monitoring	0
(5)	Firing Ranges	0
(6)	Non-Impact Firing Range	0
(7)	Wetlands Sec 404 area	67
(8)	Other (Surface water areas; set aside unique areas; i.e., recreation habitat, forests; restricted use areas such as landfills, contaminated sites, safety zones.	500
	Surface Water - 266	
	Watershed - 234	

b. Air Space.

(1) Restricted Air Space. Yes, in Air Force & commercial airport control area

(2) Extent of Installation Compatible Use Zones (ICUZ) or Noise and Accident Potential Zone (NAPZ). 0

2. THREATENED OR ENDANGERED SPECIES (PLANTS AND ANIMALS).

There are no known Federal of State endangered or threatened species present. An in-house survey was conducted in 1982. The U.S. Fish and Wildlife Service (USFWS) is proposing to update this survey. Negotiations are in progress on this.

3. CULTURAL RESOURCES.

a. Fort Monroe has a Historic Preservation Plan and an implementing memorandum of agreement, which is currently being reviewed.

b. A historic building survey has been completed for Fort Monroe and approximately 319 buildings are potentially eligible for the National Register.

c. An archeological survey of Fort Monroe has been completed. Total area surveyed was 1068 acres. One archeological site is listed and 50 eligible for listing on the National Register. Archeological artifacts and associated records are stored or curated at the Casemate Museum.

4. INFRASTRUCTURE ISSUES.

a. Potable Water.

Potable water is supplied entirely from a surface water source. No further data was provided, however previously maximum capacity was reported at 4.0 MGD and average daily usage was 1.5 MGD.

b. Wastewater.

Wastewater treatment is provided by contract with the Hampton Roads Sanitation District. The contracted capacity is 4.71 MGD and average daily usage is 0.3 MGD. A National Pollutant Discharge Elimination System (NPDES) permit exists for a water treatment plant.

c. Solid Wastes.

Trash is collected on a daily basis under contract with Reliable Trash with an annual value of $115,000/year. Daily usage is 8.85 tons at a cost of $30.00/ton.

5. AIR QUALITY.

a. The installation is located in the Virginia Region VI Air Quality Region, regulated by the Virginia Department of Environmental Quality.

b. The region is in non-attainment area for ozone (marginal).

c. Air pollution sources are traffic and accidental fires.

d. The installation has no air emission credits.

e. The installation has identified an Update/modify air permit project to meet/maintain air compliance.

f. The installation is not within 100 km of a critical air quality region.

6. HAZARDOUS MATERIALS/SITES.

a. Use of hazardous materials.

The installation is not a Resource Conservation and Recovery Act (RCRA) treatment, storage or disposal facility.

b. Contaminated Sites.

One Defense Environmental Restoration Account (DERA) eligible contaminated site has been identified with an unknown cost for restoration. The entire installation, with the exception of Big Bethel, may be contaminated with unexploded ordinance (UXO). DERA is funding an electromagnetic survey. The survey will include a risk assessment for various land usages.

c. PCB, Asbestos, Lead Paint, or RADON issues.

PCB survey has been completed and seventy-six out of eighty contaminated transformers have been replaced.

d. Regulated underground storage tanks (UST).

Out of 93 active tanks and 32 closed according to specified methods, 43 have been tested and 27 failed. Twenty-seven tanks have been replaced. Fourteen regulated tanks have been replaced and passed testing.

e. Radioactive Materials and Sources.

The installation holds no Nuclear Regulatory Commission (NRC) or DA licenses for radioactive materials and sources.

7. OTHER ISSUES, CONSTRAINTS.

Fort Monroe is a National Historic Landmark and the cantonment area is leased from Virginia.

8. REVENUE GENERATING PROGRAMS.

There are no revenue generating programs.

9. PROGRAMMED ENVIRONMENTAL COSTS.

a. Summary of environmental compliance costs:

	Funded	Unfunded
1994	$2,588,000	$ 340,000
1995	$ 0	$ 788,000
1996	$ 0	$ 383,000
1997	$ 0	$ 388,000
1998	$ 0	$ 143,000
1999	$ -	$ -
	$2,588,000	$2,042,000

b. Summary of environmental restoration costs:

	Funded	Unfunded
1994	$1,530,000	$ 0
1995	$ -	$ -
1996	$ -	$ -
1997	$ -	$ -
1998	$ -	$ -
1999	$ -	$ -
	$1,530,000	$ 0

ACRONYMS

AICUZ	Air Installation Compatible Use Zone
ICUZ	Installation Compatible Use Zone
ITAMS	Integrated Training Area Management System
LCTA	Land Condition Trend Analysis
404 Wetlands	Regulated Wetlands

NONSTRUCTURAL ATTRIBUTES

Fort Myer, VA

1. LAND USE.

a. Land Availability (estimated quantities in acres).

(1)	Installation total	256
(2)	Cantonment area	236.3
(3)	Maneuver area	16.3
(4)	Training lands designated as sensitive/marginal by ITAMS/LCTA monitoring	2.7
(5)	Firing Ranges	0
(6)	Non-Impact Firing Range	0
(7)	Wetlands Sec 404 area	1
(8)	Other (Surface water areas; set aside unique areas; i.e., recreation habitat, forests; restricted use areas such as landfills, contaminated sites, safety zones. Ammunition storage -	0.7

b. Air Space.

(1) Restricted Air Space. Unknown

(2) Extent of Installation Compatible Use Zones (ICUZ) or Noise and Accident Potential Zone (NAPZ). Unknown

2. THREATENED OR ENDANGERED SPECIES (PLANTS AND ANIMALS).

A threatened or endangered species survey has been conducted and no Federal or State listed endangered or threatened species or critical habitats are known to occur on the installation.

3. CULTURAL RESOURCES.

a. Fort Myer has a draft Historic Preservation Plan and it has been reviewed by the State Historic Preservation Officer (SHPO) and the Advisory Council for Historic Properties (ACHP).

b. A historic survey of the facility found that 27 buildings were on or eligible for the National Register of Historic Places. Two buildings (42 & 46) require $250,000

of extensive renovations.

c. A complete archeological survey was conducted of Fort Myer. There are 137 potential properties for the National Register. The Historic Landmark District 1972 Agreement may limit development and operations.

4. INFRASTRUCTURE ISSUES.

a. Potable Water.

Fort Myer receives its water from the Washington Aqueduct, Dalecarlia reservoir. Average daily consumption is 0.51 MGD. The potable water treatment plant is dated at the Dalecarlia reservoir. Limitations on expansion of potable water are not known.

b. Wastewater.

Waste water treatment is provided under contract with PTOW. The average daily discharge is 0.47 MGD. Limitations on expansion of wastewater contract are not known.

c. Solid Wastes.

Solid waste removal/disposal is provided by a $470,000 contract with Urban Service. Average daily volume is 13-15 tons/day at a cost of $70/ton, with no limitation on volume increases.

5. AIR QUALITY.

a. Fort Myer is in Air Quality Region VII.

b. The region is not in attainment for carbon monoxide (moderate) and ozone (severe).

c. Pollution sources are boilers, underground storage tanks, military and civilian vehicles.

d. The installation has no air emission credits.

e. No major air compliance projects/expenditures are indicated.

f. There are many critical air quality regions within 100 km of Fort Myer (i.e. Washington, DC; national parks; etc.)

6. HAZARDOUS MATERIALS/SITES.

a. Use of hazardous materials.

The installation has an interim Resource Conservation Recovery Act (RCRA) 90 day storage permit.

b. Contaminated Sites.

There is one reported Defense Environmental Restoration Account (DERA) eligible contaminated site.

c. PCB, Asbestos, Lead Paint, or RADON issues.

PCB survey has been completed and nine transformers were replaced and two retro-filled.

d. Underground Storage Tanks (UST).

There are 50 active and two abandoned USTs on Fort Myer. Forty-nine of the 50 tanks tested failed. Nine tanks were replaced and 20 removed.

e. Radioactive Materials and Sources

The installation holds Nuclear Regulatory Commission (NRC) or DA licenses for X-Ray equipment in the Radar Clinic and Veterinary clinics. No decommissioning is reportedly required for the two facilities.

7. OTHER ISSUES, CONSTRAINTS.

Several RI/RA projects associated with BRAC 90 and Master Plan future land use has revealed past contamination that requires environmental clean up.

Any new boilers will require State Air Division review to determine if an Air Emissions permit will be necessary.

8. REVENUE GENERATING PROGRAMS.

There are no revenue generating programs reported.

9. PROGRAMMED ENVIRONMENTAL COSTS.

a. Summary of environmental compliance costs:

	Funded	Unfunded
FY 94	$1,803,000	$ 200,000
FY 95	$2,031,000	$ 289,000
FY 96	$1,980,000	$ 0
FY 97	$1,495,000	$ 0
FY 98	$1,495,000	$ 0
FY 99	$1,495,000	$ 0
	$10,299,000	$ 489,000

b. Summary od environmental restoration costs:

	Funded	Unfunded
FY 94	$ 25,000	$ 425,000
FY 95	$ 25,000	$ 225,000
FY 96	$ 25,000	$ 125,000
FY 97	$ 25,000	$ 125,000
FY 98	$ 25,000	$ 25,000
FY 99	$ 25,000	$ 25,000
	$150,000	$ 950,000

ACRONYMS

AICUZ	Air Installation Compatible Use Zone
ICUZ	Installation Compatible Use Zone
ITAMS	Integrated Training Area Management System
LCTA	Land Condition Trend Analysis
404 Wetlands	Regulated Wetlands

NONSTRUCTURAL ATTRIBUTES

Ft Ritchie -- 24625

1. LAND USE.

a. Land Availability (estimated quantities in acres).

(1)	Installation total	638
(2)	Cantonment area	212
(3)	Maneuver area	0
(4)	Training lands designated as sensitive/marginal by ITAMS/LCTA monitoring	0
(5)	Firing Ranges	0
(6)	Non-Impact Firing Range	0
(7)	Wetlands Sec 404 area	16
(8)	Other (Surface water areas; set aside unique areas; i.e., recreation habitat, forests; restricted use areas such as landfills, contaminated sites, safety zones.	410
	Lakes 25	
	Recreation 99	
	Forest 286	

b. Air Space.

(1)	Restricted Air Space.	29.3
(2)	Extent of Installation Compatible Use Zones (ICUZ) or Noise and Accident Potential Zone (NAPZ).	0

2. THREATENED OR ENDANGERED SPECIES (PLANTS AND ANIMALS).

A TES survey has been conducted. The Center for the Ecological Management of Military Land conducted the Floristic survey, and Shippensburg University conducted the Animal survey. No Federal or State listed endangered or threatened species or critical habitats occur on the installation.

3. CULTURAL RESOURCES.

a. Fort Ritchie has a Historic Preservation Plan that has been reviewed by the State Historic Preservation Officer (SHPO).

b. A Historic buildings survey has been completed. Sixty-four stone buildings have been identified as eligible for the National Register.

c. Although no systematic archeological survey has been conducted for Fort Ritchie, one site has been identified as a potential site to the Maryland Historic Trust during a contract to dredge a lake in 1981.

4. INFRASTRUCTURE ISSUES.

a. Potable Water.

Eighty percent of the potable water comes from eight wells and 40% is from surface water. Two lakes and two reservoirs fed by springs provide surface water and have a total capacity of 0.3 MGD and an daily usage of 0.1 MGD. The eight wells have a total pumping capacity of 0.39 MGD and a daily usage of 0.149 MGD. The well drawdown rate is 31 gallons per minute. Fort Ritchie has applied for a permit to allow an average daily use of 0.25 MGD and peak of 0.35 MGD. This exceeds the current average daily usage by 0.101 MGD, and peak by 0.169 MGD. With completion of modifications in September 1994, the plant will have a life expectancy of 50 years.

b. Wastewater.

The National Pollutant Discharge Elimination System (NPDES) permitted sewage treatment plant is operated by the Washington County Sanitary District has a design capacity of 1.0 MGD, with 0.7 MGD contracted for Fort Ritchie. The average usage is 0.35 MGD. The plant, constructed in 1982, has a life expectancy of 50 years, with a partial upgrade in 2002. There are no known limitations to expansion.

c. Solid Wastes.

No landfills exist. Solid waste is disposed of under contract (annual amount - $239,733.72) with ColeJon Mechanical Corp. The average daily volume of waste is about 10.25 tons/day, at a cost of $65.00/ton.

5. AIR QUALITY.

a. The air quality control area is the Northeast Ozone, Transport Region.

b. The installation is in a non-attainment area for Ozone (moderate).

c. Sources of air pollution are; Individual building heating systems, vehicle traffic, accidental fires, degreasers, and wood working operations.

d. The installation has no air emission credits.

e. No major air compliance projects are reported.

f. The installation is with 100 km of critical air quality regions (Baltimore, MD & Washington, DC). Installation is also near Catoctin Park, Gettysburg National Battlefield and Antietam National Battlefield.

6. HAZARDOUS MATERIALS/SITES.

a. Use of hazardous materials.

The installation holds no Resource Conservation and Recovery Act (RCRA) permits.

b. Contaminated Sites.

A former artillery impact area is a Defense Environmental Restoration Account (DERA) eligible site.

c. PCB, Asbestos, Lead Paint, or RADON issues.

All 13 PCB contaminated transformers identified have been replaced.

Survey for asbestos containing materials has been completed.

Radon testing of all facilities was completed in 1990, no remediation needed.

d. Underground Storage Tanks (UST)

Seventy-one of 80 active USTs have been tested with no failures and 71 have been repaired or replaced.

e. Radioactive Materials and Sources.

Applications have been made for radiation authorization permits for XRF (Lead Detection Device) - 40 Microcurie Cobalt source (Half-life of 273 days). The device is self contained and all waste will be returned to the manufacturer.

7. OTHER ISSUES, CONSTRAINTS.

No other significant issues or constraints are known.

8. REVENUE GENERATING PROGRAMS.

No revenue generating programs currently exist, however a Forestry Management Program will be initiated in FY 95 and is expected to generate revenue.

9. PROGRAMMED ENVIRONMENTAL COSTS.

a. Summary of environmental compliance costs:

	Funded	Unfunded
FY 94	$2,235,000	$ 0
FY 95	$1,818,000	0
FY 96	$1,045,000	0
FY 97	$ 804,000	0
FY 98	$ 593,000	0
FY 99	$ 382,000	0
	$6,877,000	$ 0

b. There are no estimated costs for restoration reported.

ACRONYMS

AICUZ	Air Installation Compatible Use Zone
ICUZ	Installation Compatible Use Zone
ITAMS	Integrated Training Area Management System
LCTA	Land Condition Trend Analysis
404 Wetlands	Regulated Wetlands

NONSTRUCTURAL ATTRIBUTES

Presidio of San Francisco -- 06781

1. LAND USE.

a. Land Availability (estimated quantities in acres).

(1)	Installation total The size and composition of the future Army portion is currently under negotiation.	1,487
(2)	Cantonment area	0
(3)	Maneuver area	0
(4)	Training lands designated as sensitive/marginal by ITAMS/LCTA monitoring	0
(5)	Firing Ranges	0
(6)	Non-Impact Firing Range	0
(7)	Wetlands Sec 404 area	0
(8)	Other (Surface water areas; set aside unique areas; i.e., recreation habitat, forests; restricted use areas such as landfills, contaminated sites, safety zones.	0

b. Air Space.

(1)	Restricted Air Space.	0
(2)	Extent of Installation Compatible Use Zones (ICUZ) or Noise and Accident Potential Zone (NAPZ).	N/A

2. THREATENED OR ENDANGERED SPECIES (PLANTS AND ANIMALS).

A threatened or endangered species (TES) survey has been conducted and no TES or critical habitats are reported to occur on the installation.

3. CULTURAL RESOURCES.

a. A Historic Preservation Plan (HPP) has not been prepared, however funding has been requested to do so on the 6th Army footprint. A programmatic agreement for the entire installation has been signed between the Department of the Army, State Historic Preservation Officer (SHPO), Advisory Council for Historic Preservation (ACHP) and the National Park Service (NPS), and is in effect until 30 September 1995.

b. A historic building survey was conducted in 1993 as part of the National Historic Landmark District update. A total of 151 of the 277 footprint buildings contribute to the National Landmark District.

c. No archeological survey has been conducted. Much of the installation is paved and developed, making the likelihood of archeological sites remote. Undeveloped areas are surveyed on a project-by-project basis.

4. INFRASTRUCTURE ISSUES.

a. Potable Water.

Potable water is 90% from surface water and 10% from two wells. The two wells have a total pumping capacity of 0.004 MGD and an average daily usage of 0.004 MGD. The drawdown rate is nine gallons/minute.

Potable water from surface water has a maximum capacity of 2.0 MGD and an average daily usage of 1.0 MGD. The water treatment plant is 92 years old and is due to be replaced in 1996.

b. Wastewater.

No wastewater data is provided.

c. Solid Wastes.

Solid waste disposal is provided by contract with Bay Cities Refuse Service, Inc. Daily volume data is not provided.

5. AIR QUALITY.

a. The air quality region is the Bay Area Quality Management District San Francisco.

b. The region is not in attainment for ozone (moderate) and particulate matter (moderate) and carbon monoxide.

c. Air pollution sources are not reported.

d. The installation has no air emission credits.

e. No projects are indicated as necessary to meet/maintain air quality standards.

f. The installation is within a critical air quality region.

6. HAZARDOUS MATERIALS/SITES.

a. Use of hazardous materials.

The installation is not a Resource Conservation and Recovery Act (RCRA) treatment, storage or disposal facility.

b. Contaminated sites.

The installation has identified 12 Defense Environmental Restoration Account (DERA) eligible contaminated sites with estimated restoration costs of $26,900,000.

c. PCB, Asbestos, Lead Paint, and RADON issues.

A PCB survey has been conducted and 85 contaminated transformers have been identified. A contract to replace contaminated transformers is currently pending execution.

d. Underground Storage Tanks (UST).

Out of 173 USTs, 22 are active and 151 are inactive. Twenty-two tanks have been tested and none failed. Twenty-two tanks have been replaced/repaired.

e. Radioactive Materials and Sources.

The installation holds no Nuclear Regulatory Commission (NRC) or DA licenses for radioactive materials and sources.

7. OTHER ISSUES:

There are no other environmental issues or constraints on the installation.

8. REVENUE GENERATING PROGRAMS.

There are no revenue generating programs reported on the installation.

9. PROGRAMMED ENVIRONMENTAL COSTS.

a. Summary of environmental compliance costs :

	Funded	Unfunded
FY 94	$ 450,000	$ 0
FY 95	$1,315,000	$ 0
FY 96	$ 855,000	$ 0
FY 97	$ 500,000	$ 0
FY 98	$ 0	$ 0
FY 99	$ 0	$ 0
	$3,120,000	$ 0

b. Summary of environmental restoration costs:

	Funded	Unfunded
FY 94	$23,789,000	$ 0
FY 95	$34,992,000	$ 0
FY 96	$7,950,000	$ 0
FY 97	$4,600,000	$ 0
FY 98	$4,600,000	$ 0
FY 99	$4,600,000	$ 0
	$80,531,000	$ 0

ACRONYMS

AICUZ	Air Installation Compatible Use Zone
ICUZ	Installation Compatible Use Zone
ITAMS	Integrated Training Area Management System
LCTA	Land Condition Trend Analysis
404 Wetlands	Regulated Wetlands

NONSTRUCTURAL ATTRIBUTES

Fort Shafter -- 15835

1. LAND USE.

a. Land Availability (estimated quantities in acres).

(1)	Installation total	592
(2)	Cantonment area	592
(3)	Maneuver area	0
(4)	Training lands designated as sensitive/marginal by ITAMS/LCTA monitoring	0
(5)	Firing Ranges	0
(6)	Non-Impact Firing Range	0
(7)	Wetlands Sec 404 area	0
(8)	Other (Surface water areas; set aside unique areas; i.e., recreation habitat, forests; restricted use areas such as landfills, contaminated sites, safety zones.	Unknown

b. Air Space.

(1)	Restricted Air Space.	0
(2)	Extent of Installation Compatible Use Zones (ICUZ) or Noise and Accident Potential Zone (NAPZ).	0

2. THREATENED OR ENDANGERED SPECIES (PLANTS AND ANIMALS).

A threatened or endangered species (TES) survey has been conducted, however no Federal or State listed endangered or threatened species or critical habitats are known to occur on the installation.

3. CULTURAL RESOURCES.

a. Fort Shafter does not have a Historic Preservation Plan or an implementing memorandum of agreement. Comments have been obtained from the State Historic Preservation Officer (SHPO) or Advisory Council for Historic Preservation (ACHP) for undertakings that effect historic properties.

b. A historic building survey has been completed. Thirty-two buildings in the Palm National Historic Landmark District are eligible for listing in the National Register of Historic Places.

c. An archeological survey has been conducted for 212.42 acres; however, no sites are eligible.

4. INFRASTRUCTURE ISSUES.

a. Potable Water.

Potable water is supplied by two wells. The wells have a total pumping capacity of 3.2 MGD and an average daily usage of 0.8 MGD.

b. Wastewater.

Wastewater is disposed of under contract with the City and County of Honolulu. The maximum capacity is 5.0 MGD and average disposal quantity is 1.5 MGD.

c. Solid Wastes.

Solid waste is disposed of under a $352,000 contract with the Honolulu Disposal Company. Average daily volume is 24 tons/day at a cost of $54/ton.

5. AIR QUALITY.

a. The air quality region is Region #60, State of Hawaii.

b. The region is in attainment.

c. Air pollution sources are: emergency generators, water heaters and vehicular traffic.

d. The installation has no air emission credits.

e. No major projects have been identified as necessary to meet/maintain air quality standards.

f. The installation is not within 100 km of a critical air quality region.

6. HAZARDOUS MATERIALS/SITES.

a. Use of hazardous materials.

The installation is not a Resource Conservation and Recovery Act (RCRA) treatment, storage or disposal facility.

b. Contaminated sites.

The installation has identified 20 Defense Environmental Restoration Account (DERA) eligible contaminated sites.

c. PCB, Asbestos, Lead Paint, and RADON issues.

PCB survey is 95% complete.

d. Underground Storage Tanks (UST).

There are 14 active and 16 inactive USTs. Ten have been tested, one failed, and two were replaced/repaired.

e. Radioactive Materials and Sources.

The installation holds no Nuclear Regulatory Commission (NRC) or DA licenses for radioactive materials and sources.

7. OTHER ISSUES, CONSTRAINTS.

No other significant issues or constraints are known.

8. REVENUE GENERATING PROGRAMS.

There are no revenue generating programs.

9. PROGRAMMED ENVIRONMENTAL COSTS.

a. Summary of environmental compliance costs:

	Funded	Unfunded
FY 94	$ 800,000	$ 2,170,000
FY 95	$ 950,000	$ 2,701,000
FY 96	$1,250,000	$ 1,950,000
FY 97	$1,500,000	$ 1,150,000
FY 98	$1,750,000	$ 1,150,000
FY 99	$2,000,000	$ 1,650,000
	$8,250,000	$10,771,000

b. Summary of environmental restoration costs:

	Funded	Unfunded
FY 94	$ 1,086,000	$ 700,000
FY 95	$ 0	$2,635,000
FY 96	$ 0	$ 698,000
FY 97	$ 0	$ 0
FY 98	$ 0	$ 0
FY 99	$ 0	$ 0
	$ 1,086,000	$4,033,000

ACRONYMS

AICUZ	Air Installation Compatible Use Zone
ICUZ	Installation Compatible Use Zone
ITAMS	Integrated Training Area Management System
LCTA	Land Condition Trend Analysis
404 Wetlands	Regulated Wetlands

NONSTRUCTURAL ATTRIBUTES

Dillingham Military Reservation-15032

1. LAND USE.

a. Land Availability (estimated quantities in acres).

(1)	Installation total	664
(2)	Cantonment area	107
(3)	Maneuver area	550
(4)	Training lands designated as sensitive/marginal by ITAMS/LCTA monitoring	0
(5)	Firing Ranges	0
(6)	Non-Impact Firing Range	0
(7)	Wetlands Sec 404 area	0
(8)	Other (Surface water areas; set aside unique areas; i.e., recreation habitat, forests; restricted use areas such as landfills, contaminated sites, safety zones.	
	Landfill	7

b. Air Space.

(1)	Restricted Air Space.	0
(2)	Extent of Installation Compatible Use Zones (ICUZ) or National Air Space Zone (NAPZ).	N/A

2. THREATENED OR ENDANGERED SPECIES (PLANTS AND ANIMALS).

Threatened or endangered species surveys have been conducted by the Environmental Impact Study Corporation and no Federal or State listed endangered or threatened species or critical habitats have been found on the installation.

3. CULTURAL RESOURCES.

a. A Cultural Resources Management Plan/Historic Preservation Plan do not exist for the installation. Comments have been obtained from the State Historic Preservation Officer/Advisory Council for Historic Preservation for undertakings concerning historic properties.

b. A Historic Building Survey has been conducted. No building were recommended for listing on the National Register of Historic Places.

c. Archeological surveys have been conducted on 64.22 acres. No potentially eligible sites were identified.

4. INFRASTRUCTURE ISSUES.

a. Potable Water.

There are no water sources available.

b. Wastewater.

A septic tank is in place, with a maximum capacity of 2,000 gal. Life expectancy is 20 years. Hawaii-on-Call Services provide additional wastewater service for $15,000/year.

c. Solid Wastes.

Solid waste disposal is by an as required contract.

5. AIR QUALITY.

a. The air quality region is Region #60, State of Hawaii.

b. The region is in attainment.

c. Air pollution sources are vehicle and aircraft traffic.

d. The installation maintains is air emissions credits.

e. No air compliance projects are identified.

f. The installation is not within 100 km of a critical air quality region.

6. HAZARDOUS MATERIALS/SITES.

a. Use of hazardous materials.

This installation is not a Resource Conservation and Recovery Act (RCRA) permitted treatment, storage or disposal facility.

b. Contaminated Sites.

An assessment has been made by the Army Environmental Hygiene Agency (AEHA). There is one questionable Defense Environmental Restoration Account (DERA) eligible site (further testing required).

c. PCB, Asbestos, Lead Paint, or RADON Issues.

Installation PCB survey is 95% complete.

d. Underground Storage Tanks (UST).

The installation has 11 inactive underground storage tanks, none of which have been tested.

e. Radiological Materials and Sources

There are no Nuclear Regulatory Commission (NRC) nor DA licenses reported for radiological materials.

7. OTHER ISSUES, CONSTRAINTS.

No other significant issues or constraints are known.

8. REVENUE GENERATING PROGRAMS.

There are no revenue generating programs.

9. PROGRAMMED ENVIRONMENTAL COSTS.

a. Summary of environmental compliance costs ($000):

	FUNDED	UNFUNDED
FY 94	$ 0	$ 50
FY 95	0	0
FY 96	0	0
FY 97	0	0
FY 98	0	0
FY 99	0	0
	$ 0	$ 50

b. Summary of environmental restoration costs ($000):

	FUNDED	UNFUNDED
FY 94	$ 52	$ 185
FY 95	0	25
FY 96	0	0
FY 97	0	0
FY 98	0	0
FY 99	0	0
	$ 52	$ 210

ACRONYMS

AICUZ	Air Installation Compatible Use Zone
ICUZ	Installation Compatible Use Zone
ITAMS	Integrated Training Area Management System
LCTA	Land Condition Trend Analysis
404 Wetlands	Regulated Wetlands

NONSTRUCTURAL ATTRIBUTES

Helemano Military Reservation-15115

1. LAND USE.

a. Land Availability (estimated quantities in acres).

(1)	Installation total	285
(2)	Cantonment area	285
(3)	Maneuver area	0
(4)	Training lands designated as sensitive/marginal by ITAMS/LCTA monitoring	0
(5)	Firing Ranges	0
(6)	Non-Impact Firing Range	0
(7)	Wetlands Sec 404 area	0
(8)	Other (Surface water areas; set aside unique areas; i.e., recreation habitat, forests; restricted use areas such as landfills, contaminated sites, safety zones.	

b. Air Space.

(1)	Restricted Air Space.	0
(2)	Extent of Installation Compatible Use Zones (ICUZ) or National Air Space Zone (NAPZ).	N/A

2. THREATENED OR ENDANGERED SPECIES (PLANTS AND ANIMALS).

Threatened or endangered species surveys have been conducted and no Federal or State listed endangered or threatened species or critical habitats occur on the installation.

3. CULTURAL RESOURCES.

a. A Cultural Resources Management Plan and Historic Preservation Plan does not exist for the installation. Comments have been received from the State Historic Preservation Officer/Advisory Council for Historic Preservation.

b. A Historic Building Survey has been conducted and no buildings were found to be eligible for the National Register.

c. Archeological surveys have been conducted on 282.01 acres. No potentially eligible archeological sites were identified.

4. INFRASTRUCTURE ISSUES.

a. Potable Water.

Potable water is supplied by the Schofield Barracks Water System.

b. Wastewater.

Wastewater service is supplied by the Schofield Barracks Wastewater Treatment Plant.

c. Solid Wastes.

Solid waste disposal is by contract with The Refuse with a daily volume of 6 tons/day, at a cost of $54.00/ton.

5. AIR QUALITY.

a. The air quality region is Region #60, State of Hawaii.

b. The region is in attainment.

c. Air pollution sources are vehicle and aircraft traffic.

d. The installation has no air emission credits.

e. No major air compliance projects were reported.

f. These are no critical air quality regions within 100 km of the installation.

6. HAZARDOUS MATERIALS/SITES.

a. Use of hazardous materials.

Helemano does not hold any Resource Conservation and Recovery Act (RCRA) permits.

b. Contaminated Sites.

There are four Defense Environmental Restoration Account (DERA) eligible sites identified.

c. PCB, Asbestos, Lead Paint, or RADON Issues.

PCB survey is 95% complete.

d. Underground Storage Tanks (UST).

The installation has three active and four inactive underground storage tanks. Four tanks have been tested, one failed and one was replaced.

e. Radiological Materials and Sources

There are no Nuclear Regulatory Commission (NRC) nor DA licenses reported for radiological materials and sources.

7. OTHER ISSUES, CONSTRAINTS.

No other significant issues or constraints are known.

8. REVENUE GENERATING PROGRAMS.

There are no revenue generating programs.

9. PROGRAMMED ENVIRONMENTAL COSTS.

a. No environmental compliance costs were reported.

b. Total Environmental restoration costs are $1,000,000.

ACRONYMS

AICUZ	Air Installation Compatible Use Zone
ICUZ	Installation Compatible Use Zone
ITAMS	Integrated Training Area Management System
LCTA	Land Condition Trend Analysis
404 Wetlands	Regulated Wetlands

NONSTRUCTURAL ATTRIBUTES

Kahuku Training Area-15225

1. LAND USE.

a. Land Availability (estimated quantities in acres).

(1)	Installation total	9,380
(2)	Cantonment area	0
(3)	Maneuver area	6,152
(4)	Training lands designated as sensitive/marginal by ITAMS/LCTA monitoring	0
(5)	Firing Ranges	0
(6)	Non-Impact Firing Range	0
(7)	Wetlands Sec 404 area	0
(8)	Other (Surface water areas; set aside unique areas; i.e., recreation habitat, forests; restricted use areas such as landfills, contaminated sites, safety zones.	
	Forest Area	3,228

b. Air Space.

(1)	Restricted Air Space.	0
(2)	Extent of Installation Compatible Use Zones (ICUZ) or National Air Space Zone (NAPZ).	N/A

2. THREATENED OR ENDANGERED SPECIES (PLANTS AND ANIMALS).

A Threatened or endangered species survey is currently in progress by the Nature Conservancy.

3. CULTURAL RESOURCES.

a. A Cultural Resources Management Plan and Historic Preservation Plan do not exist for the installation. Comments are received as appropriate from the State Historic Preservation Officer and Advisory Council for Historic Preservation.

b. A Historic Building Survey has been conducted. No buildings were found to be eligible.

c. Archeological surveys have been conducted on 1,044.81 acres. One site has been identified as potentially eligible for the Natural Register.

4. INFRASTRUCTURE ISSUES.

a. Potable Water.

Potable water is supplied by one well. Total pumping capacity is 0.2 MGD, with an average daily use of 3.3 gallons a day.

b. Wastewater.

Wastewater service is provided entirely by portable latrines. A collection contract is in place with Hawaii On-Call Service for approximately $36,000.

c. Solid Wastes.

Solid waste disposal is by contract with KPM Equipment, with an annual cost of $10,000. Daily volume is 0.4 tons/day at a cost of $54/ton.

5. AIR QUALITY.

a. The air quality region is Region #60, State of Hawaii.

b. The region is in attainment.

c. Air pollution sources are vehicle traffic.

d. The installation has no air emission credits.

e. No major air compliance projects were identified.

f. The installation is not within 100 km of a critical air quality region.

6. HAZARDOUS MATERIALS/SITES.

a. Use of hazardous materials.

The installation is not a Resource Conservation and Recovery Act (RCRA) permitted treatment, storage or disposal facility.

b. Contaminated Sites.

The installation has identified one Defense

Environmental Restoration Account (DERA) eligible site.

c. PCB, Asbestos, Lead Paint, or RADON Issues.

PCB survey is 95% complete. No further data provided.

d. Underground Storage Tanks (UST).

The installation has one inactive underground storage tank that has not been tested.

e. Radiological Materials and Sources

There are no Nuclear Regulatory Commission (NRC) or DA licenses reported for radiological materials and sources

7. OTHER ISSUES, CONSTRAINTS.

No other significant issues or constraints are known.

8. REVENUE GENERATING PROGRAMS.

There are no revenue generating programs.

9. PROGRAMMED ENVIRONMENTAL COSTS.

a. No environmental compliance costs were reported.

b. Summary of environmental restoration costs:

	Funded	Unfunded
FY94	$ 0	$280,000
FY96	$ 0	$ 25,000
FY97	$ 0	$ 0
FY98	$ 0	$807,000
FY99	$ 0	$ 0
	$ 0	$1,112,000

ACRONYMS

AICUZ	Air Installation Compatible Use Zone
ICUZ	Installation Compatible Use Zone
ITAMS	Integrated Training Area Management System
LCTA	Land Condition Trend Analysis
404 Wetlands	Regulated Wetlands

NONSTRUCTURAL ATTRIBUTES

Kawaihae Military Reservation-15295

1. LAND USE.

a. Land Availability (estimated quantities in acres).

(1)	Installation total	11
(2)	Cantonment area	11
(3)	Maneuver area	0
(4)	Training lands designated as sensitive/marginal by ITAMS/LCTA monitoring	0
(5)	Firing Ranges	0
(6)	Non-Impact Firing Range	0
(7)	Wetlands Sec 404 area	0
(8)	Other (Surface water areas; set aside unique areas; i.e., recreation habitat, forests; restricted use areas such as landfills, contaminated sites, safety zones.	

b. Air Space.

(1)	Restricted Air Space.	0
(2)	Extent of Installation Compatible Use Zones (ICUZ) or National Air Space Zone (NAPZ).	N/A

2. THREATENED OR ENDANGERED SPECIES (PLANTS AND ANIMALS).

Threatened or endangered species surveys have been conducted and no Federal or State listed endangered or threatened species or critical habitats have been found on the installation.

3. CULTURAL RESOURCES.

a. A Cultural Resources Management Plan/Historic Preservation Plan does not exist for the installation. Comments are obtained as applicable from the State Historic Preservation Officer/Advisory Council for Historic Preservation.

b. A Historic Building Survey has not been conducted.

c. Archeological surveys have been conducted on 6.53 acres. No sites were found eligible for the National Register for Historic Places.

4. INFRASTRUCTURE ISSUES.

a. Potable Water.

There are no potable water sources on the installation.

b. Wastewater.

Portable latrines are used on the installation.

c. Solid Wastes.

Solid waste disposal is by contract with Wall's Rubbish Service for $3,600 a year. Daily volume is 1 ton/day.

5. AIR QUALITY.

a. The air quality region is Region #60, State of Hawaii.

b. The region is in attainment.

c. Air pollution sources are vehicles and ships.

d. The installation has no air emission credits.

e. No major air compliance projects were reported.

f. Volcano National Park; Haleakala National Park are within 100 km.

6. HAZARDOUS MATERIALS/SITES.

a. Use of hazardous materials.

The installation does not hold any Resource Conservation and Recovery Act (RCRA) permits.

b. Contaminated Sites.

An assessment to determine contamination has been conducted and there are no Defense Environmental Restoration Account (DERA) eligible sites.

c. PCB, Asbestos, Lead Paint, or RADON Issues.

PCB survey is 95% complete. No further information provided

d. Underground Storage Tanks (UST).

The installation has no underground storage tanks.

e. Radiological Materials and Sources

There are no Nuclear Regulatory Commission (NRC) nor DA licenses reported for radiological materials.

7. OTHER ISSUES, CONSTRAINTS.

No other significant issues or constraints are known.

8. REVENUE GENERATING PROGRAMS.

There are no revenue generating programs.

9. PROGRAMMED ENVIRONMENTAL COSTS.

a. No environmental compliance costs are reported.

b. Summary of environmental restoration costs:

	Funded	Unfunded
FY94	$ 0	$ 30,000
FY96	$ 0	$ 0
FY97	$ 0	$ 0
FY98	$ 0	$ 0
FY99	$ 0	$ 0
	$ 0	$ 30,000

ACRONYMS

AICUZ	Air Installation Compatible Use Zone
ICUZ	Installation Compatible Use Zone
ITAMS	Integrated Training Area Management System
LCTA	Land Condition Trend Analysis
404 Wetlands	Regulated Wetlands

NONSTRUCTURAL ATTRIBUTES

Kawailoa Training Area-15325

1. LAND USE.

a. Land Availability (estimated quantities in acres).

(1)	Installation total	23,348
(2)	Cantonment area	0
(3)	Maneuver area	2,049
(4)	Training lands designated as sensitive/marginal by ITAMS/LCTA monitoring	0
(5)	Firing Ranges	0
(6)	Non-Impact Firing Range	0
(7)	Wetlands Sec 404 area	Unknown
(8)	Other (Surface water areas; set aside unique areas; i.e., recreation habitat, forests; restricted use areas such as landfills, contaminated sites, safety zones. Forest Area	21,299

b. Air Space.

(1)	Restricted Air Space.	0
(2)	Extent of Installation Compatible Use Zones (ICUZ) or National Air Space Zone (NAPZ).	N/A

2. THREATENED OR ENDANGERED SPECIES (PLANTS AND ANIMALS).

Threatened or endangered species surveys have been conducted and no Federal or State listed endangered or threatened species or critical habitats have been found on the installation.

3. CULTURAL RESOURCES.

a. A Cultural Resources Management Plan/Historic Preservation Plan does not exist for the installation.

b. A Historic Building Survey has not been conducted.

c. Archeological surveys have been conducted on 523.64 acres. No potentially eligible sites for the Natural Register were identified.

4. INFRASTRUCTURE ISSUES.

a. Potable Water.

Potable water is not available.

b. Wastewater.

Portable latrines are used on the installation.

c. Solid Wastes.

No information provided.

5. AIR QUALITY.

a. The air quality region is in Region #60, State of Hawaii.

b. The region is in attainment.

c. Air pollution source is vehicle traffic.

d. The installation has no air emission credits.

e. No major air compliance projects were reported.

f. The installation is not within 100 km of a critical air quality region.

6. HAZARDOUS MATERIALS/SITES.

a. Use of hazardous materials.

The installation holds no Resource Conservation and Recovery Act (RCRA) permits.

b. Contaminated Sites.

An assessment to determine contamination has not been conducted.

c. PCB, Asbestos, Lead Paint, or RADON Issues.

PCB Survey is 95% complete. No further information provided.

d. Underground Storage Tanks (UST).

The installation has no underground storage tanks.

e. Radiological Materials and Sources

There are no Nuclear Regulatory Commission (NRC) nor DA licenses reported for radiological materials.

7. OTHER ISSUES, CONSTRAINTS.

No other significant issues or constraints are known.

8. REVENUE GENERATING PROGRAMS.

There are no revenue generating programs.

9. PROGRAMMED ENVIRONMENTAL COSTS.

a. No environmental compliance costs were reported.

b. No environmental restoration costs were reported.

ACRONYMS

AICUZ	Air Installation Compatible Use Zone
ICUZ	Installation Compatible Use Zone
ITAMS	Integrated Training Area Management System
LCTA	Land Condition Trend Analysis
404 Wetlands	Regulated Wetlands

NONSTRUCTURAL ATTRIBUTES

Makua Military Reservation-15545

1. LAND USE.

a. Land Availability (estimated quantities in acres).

(1)	Installation total	4,191
(2)	Cantonment area	0
(3)	Maneuver area	1,034
(4)	Training lands designated as sensitive/marginal by ITAMS/LCTA monitoring	0
(5)	Firing Ranges	1,944
(6)	Non-Impact Firing Range	1,212
(7)	Wetlands Sec 404 area	0
(8)	Other (Surface water areas; set aside unique areas; i.e., recreation habitat, forests; restricted use areas such as landfills, contaminated sites, safety zones.	

b. Air Space.

(1)	Restricted Air Space.	0
(2)	Extent of Installation Compatible Use Zones (ICUZ) or National Air Space Zone (NAPZ).	N/A

2. THREATENED OR ENDANGERED SPECIES (PLANTS AND ANIMALS).

Threatened or endangered species surveys have been conducted and no Federal or State listed endangered or threatened species or critical habitats have been found to occur on the installation.

3. CULTURAL RESOURCES.

a. A Cultural Resources Management Plan/Historic Preservation Plan does not exist for the installation. Comments are obtained as appropriate from the State Historic Preservation Officer (SHPO) or Advisory Council for Historic Preservation (ACHP).

b. A Historic Building Survey has been conducted. No buildings were found to be eligible for listing on the National Register.

c. Archeological surveys have been conducted on 1,316.51 acres. One potentially eligible site was identified for listing on the National Register.

4. INFRASTRUCTURE ISSUES.

a. Potable Water.

Potable water is supplied under contract by the City of Honolulu Board of Water Supply. The average daily use is .008 MGD.

b. Wastewater.

Wastewater facility has a maximum design capacity of 40,000 gallons /month. Life expectancy is 20 years; however, the facility will require larger holding tanks.

c. Solid Wastes.

Solid waste disposal is by a $10,000 contract with KPM Equipment, at a cost of $54/ton. Daily volume is 0.4 tons/day.

5. AIR QUALITY.

a. The air quality region is Region #60, State of Hawaii.

b. The region is in attainment.

c. Air pollution sources are accidental and controlled range fires.

d. The installation has no air emission credits.

e. No major air compliance projects are reported.

f. The installation is not within 100 km of a critical air quality region.

6. HAZARDOUS MATERIALS/SITES.

a. Use of hazardous materials.

The installation is in the process of obtaining a (RCRA) subpart X permit for open burning/open detonation (OB/OD).

b. Contaminated Sites.

An assessment to determine contamination has been conducted and no Defense Environmental Restoration Account (DERA) eligible sites have been identified.

c. PCB, Asbestos, Lead Paint, or RADON Issues.

PCB Survey is 95% complete. No further information provided.

d. Underground Storage Tanks (UST).

The installation has no underground storage tanks.

e. Radiological Materials and Sources.

There are no Nuclear Regulatory Commission (NRC) nor DA licenses reported for radiological materials and sources.

7. OTHER ISSUES, CONSTRAINTS.

No other significant issues or constraints are known.

8. REVENUE GENERATING PROGRAMS.

There are no revenue generating programs.

9. PROGRAMMED ENVIRONMENTAL COSTS.

a. Summary of environmental compliance costs:

	Funded	Unfunded
FY 94	$ 300,000	$ 0
FY 95	$ 500,000	$ 125,000
FY 96	$ 150,000	$ 50,000
FY 97	$ 250,000	$ 50,000
FY 98	$ 150,000	$ 50,000
FY 99	$ 250,000	$ 50,000
	$1,600,000	$ 325,000

a. Summary of environmental restoration costs:

	Funded	Unfunded
FY 94	$ 0	$ 150,000
FY 95	$ 0	$ 0
FY 96	$ 0	$ 0
FY 97	$ 0	$ 0
FY 98	$ 0	$ 0
FY 99	$ 0	$ 0
	$ 0	$ 150,000

ACRONYMS

AICUZ	Air Installation Compatible Use Zone
ICUZ	Installation Compatible Use Zone
ITAMS	Integrated Training Area Management System
LCTA	Land Condition Trend Analysis
404 Wetlands	Regulated Wetlands

NONSTRUCTURAL ATTRIBUTES

Pohakuloa Training Area-15705

1. LAND USE.

a. Land Availability (estimated quantities in acres).

(1)	Installation total	108,792
(2)	Cantonment area	566
(3)	Maneuver area	29,115
(4)	Training lands designated as sensitive/marginal by ITAMS/LCTA monitoring	27,752
(5)	Firing Ranges	51,000
(6)	Non-Impact Firing Range	0
(7)	Wetlands Sec 404 area	0
(8)	Other (Surface water areas; set aside unique areas; i.e., recreation habitat, forests; restricted use areas such as landfills, contaminated sites, safety zones.	0

b. Air Space.

(1)	Restricted Air Space.	0
(2)	Extent of Installation Compatible Use Zones (ICUZ) or National Air Space Zone (NAPZ).	N/A

2. THREATENED OR ENDANGERED SPECIES (PLANTS AND ANIMALS).

A threatened or endangered species survey has been conducted by the Colorado State University. There are unspecified Federal or State listed endangered or threatened species (TES) or critical habitats found to occur on the installation. Biological assessment for the Multi-purpose Range Complex is currently being reviewed at DA. Some restrictions have been placed on one range pending U.S. Fish and Wildlife Service (USFWS) Biological Opinion. The unspecified plant TES population is increasing.

3. CULTURAL RESOURCES.

a. A Cultural Resources Management Plan and Historic Preservation Plan does not exist for the installation. Comments, as appropriate, are obtained from the State Historic preservation Officer (SHPO) and the Advisory Council for Historic Preservation (ACHP).

b. A historic building survey has been conducted. No buildings are eligible for the National Register.

c. Archeological surveys have been conducted on 2,993.64 acres. One potentially eligible site for the National Register was identified.

4. INFRASTRUCTURE ISSUES.

a. Potable Water.

Potable water is supplied under contract with Hawaii County, at an annual cost of $16,000, and an average daily usage of 0.018 MGD.

b. Wastewater.

Wastewater is contracted through Fair Contracting for 60-80 chemical latrines.

c. Solid Wastes.

Solid waste disposal is by contract with Wally's Rubbish at a cost of $25,000 for four months. Average daily volume is 5 tons.

5. AIR QUALITY.

a. The air quality region is Region #60, State of Hawaii.

b. The region is in attainment.

c. Air pollution sources are range fires, airfield operations, traffic on dirt roads.

d. No major air compliance projects are reported.

e. The installation has no air emission credits.

f. Hawaii Volcanoes National Park and Haleakala National Park are critical air quality regions within 100 kilometers.

6. HAZARDOUS MATERIALS/SITES.

a. Use of hazardous materials.

The installation is not a Resource Conservation and Recovery Act (RCRA) storage or disposal facility.

b. Contaminated Sites.

The installation has identified four Defense Environmental Restoration Account (DERA) eligible sites.

c. PCB, Asbestos, Lead Paint, or RADON Issues.

All three PCB contaminated transformers have been replaced.

d. Underground Storage Tanks (UST).

The installation has 13 active and 1 inactive underground storage tanks, 12 have been tested, none failed, and none were replaced.

e. Radiological Materials and Sources

There are no Nuclear Regulatory Commission (NRC) nor DA licenses reported for radiological materials and/or sources.

7. OTHER ISSUES, CONSTRAINTS.

No other significant issues or constraints are known.

8. REVENUE GENERATING PROGRAMS.

There are no revenue generating programs.

9. PROGRAMMED ENVIRONMENTAL COSTS.

a. Summary of environmental compliance costs ($000):

	Funded	Unfunded
FY 94	$ 0	$ 2,116
FY 95	250	2,151
FY 96	100	1,746
FY 97	0	1,560
FY 98	0	1,260
FY 99	0	1,260
	$ 250	$ 10,093

b. Summary of environmental restoration costs ($000):

	Funded	Unfunded
FY 94	$ 38	$ 220
FY 95	0	660
FY 96	0	0
FY 97	0	0
FY 98	0	0
FY 99	0	0
	$ 38	$ 880

ACRONYMS

AICUZ	Air Installation Compatible Use Zone
ICUZ	Installation Compatible Use Zone
ITAMS	Integrated Training Area Management System
LCTA	Land Condition Trend Analysis
404 Wetlands	Regulated Wetlands

NONSTRUCTURAL ATTRIBUTES

Wheeler Army Airfield

1. LAND USE.

a. Land Availability (estimated quantities in acres).

(1)	Installation total	1,390
(2)	Cantonment area	0
(3)	Maneuver area	0
(4)	Training lands designated as sensitive/marginal by ITAMS/LCTA monitoring	0
(5)	Firing Ranges	22
(6)	Non-Impact Firing Range	0
(7)	Wetlands Sec 404 area	0
(8)	Other (Surface water areas; set aside unique areas; i.e., recreation habitat, forests; restricted use areas such as landfills, contaminated sites, safety zones.	

b. Air Space.

(1)	Restricted Air Space.	0
(2)	Extent of Installation Compatible Use Zones (ICUZ) or National Air Space Zone (NAPZ).	N/A

2. THREATENED OR ENDANGERED SPECIES (PLANTS AND ANIMALS).

Threatened or endangered species survey is in progress. No Federal or State listed endangered or threatened species or critical habitats are expected to be found on the installation.

3. CULTURAL RESOURCES.

a. A Cultural Resources Management Plan or Historic Preservation Plan has not been prepared for the installation.

b. A Historic Building Survey has been conducted. Fifteen structures were determined to be eligible for or listed on the National Register of Historic Places.

c. Archeological surveys have been conducted on all 1,390 acres. No potentially eligible sites were identified.

4. INFRASTRUCTURE ISSUES.

a. Potable Water.

Potable water is supplied entirely by groundwater from the Schofield Barracks Water System.

b. Wastewater.

Wastewater service is supplied through the Schofield Barracks Wastewater Treatment Plant.

c. Solid Wastes.

Solid waste disposal is by contract with The Refuse, with a total contract amount of $453,000. Daily volume of 19 tons/day at a cost of $54/ton.

5. AIR QUALITY.

a. The air quality region is Region #60, State of Hawaii.

b. The region is in attainment.

c. Air pollution sources are traffic, water heaters, and airfield operations.

d. The installation maintains no air emission credits.

e. There are no major projects reported to meet/maintain air compliance.

f. The installation is not within 100 km of a critical air quality region.

6. HAZARDOUS MATERIALS/SITES.

a. Use of hazardous materials.

The installation is not a Resource Conservation and Recovery Act (RCRA) permitted treatment, storage or disposal facility.

b. Contaminated Sites.

There are 20 Defense Environmental Restoration Account (DERA) eligible sites identified.

c. PCB, Asbestos, Lead Paint, or RADON Issues.

PCB survey is 95% complete.

d. Underground Storage Tanks (UST).

The installation has 28 active and 46 inactive underground storage tanks. A total of 23 have been tested, six failed, and none were replaced.

e. Radiological Materials and Sources

There are no Nuclear Regulatory Commission (NRC) nor DA licenses reported for radiological materials at Wheeler AAF.

7. OTHER ISSUES, CONSTRAINTS.

No other significant issues or constraints are known.

8. REVENUE GENERATING PROGRAMS.

There are no revenue generating programs.

9. PROGRAMMED ENVIRONMENTAL COSTS.

a. Summary of environmental compliance costs:

	FUNDED	UNFUNDED
FY 94	$100,000	$300,000
FY 95	$100,000	$300,000
FY 96	$100,000	$300,000
FY 97	$100,000	$175,000
FY 98	$100,000	$ 0
FY 99	$ 0	$ 0
	$500,000	$1,075,000

b. Summary of environmental restoration costs:

	FUNDED	UNFUNDED
FY 94	$250,000	$ 864,000
FY 95	$ 0	$2,000,000
FY 96	$ 0	$ 0
FY 97	$ 0	$ 0
FY 98	$ 0	$ 0
FY 99	$ 0	$ 0
	$250,000	$2,864,000

ACRONYMS

AICUZ	Air Installation Compatible Use Zone
ICUZ	Installation Compatible Use Zone
ITAMS	Integrated Training Area Management System
LCTA	Land Condition Trend Analysis
404 Wetlands	Regulated Wetlands

NONSTRUCTURAL ATTRIBUTES

Fort Totten -- 36790

1. LAND USE.

a. Land Availability (estimated quantities in acres).

(1)	Installation total	136.83
(2)	Cantonment area	122.82
(3)	Maneuver area	0
(4)	Training lands designated as sensitive/marginal by ITAMS/LCTA monitoring	0
(5)	Firing Ranges	0
(6)	Non-Impact Firing Range	0
(7)	Wetlands Sec 404 area	0
(8)	Other (Surface water areas; set aside unique areas; i.e., recreation habitat, forests; restricted use areas such as landfills, contaminated sites, safety zones.	14.01
	Duck Pond	2.61
	Old Fort Totten	11.4

b. Air Space.

(1)	Restricted Air Space.	0
(2)	Extent of Installation Compatible Use Zones (ICUZ) or National Air Space Zone (NAPZ).	N/A

2. THREATENED OR ENDANGERED SPECIES (PLANTS AND ANIMALS).

Threatened or endangered species surveys have been conducted and no Federal or State listed endangered or threatened species or critical habitats have been found to occur on the installation.

3. CULTURAL RESOURCES.

a. A Cultural Resources Management Plan (CRMP) and Historic Preservation Plan exist for the installation. The CRMP has been reviewed by the State Historic Preservation Officer (SHPO).

b. A Historic Building Survey has been conducted. One building is on the National Register. There are two sites eligible for listing; one site contains four buildings, and

the other has an unknown number of batteries and vaults and one building. In addition, there are 62 buildings and structures in a potentially eligible historic district, which is in the nomination process. The historic district is approximately two-thirds of the installation. The majority of structures date to the 1885-1914 era. All of the eligible and listed structures are in substandard condition. The estimated renovation cost for the eligible and listed buildings is $4,000,000 and potentially eligible is $6,000,000.

c. Archeological surveys have been conducted on 97.21 acres. No potentially eligible sites were identified, however seven areas were determined to be of medium to high resource preservation potential. There is storage or curation of archeological artifacts and associated records on Fort Totten. It is recommended that further archeological inventories/studies be conducted in areas of medium high resource preservation potential prior to major construction or excavation.

4. INFRASTRUCTURE ISSUES.

a. Potable Water.

Potable water is supplied under contract by the City of New York. The maximum capacity is 0.15 MGD and average daily use is 0.023 MGD.

b. Wastewater.

Wastewater is contracted through the City of New York. Plant design is 1.368 MGD and daily use is an average of approximately 0.024 MGD.

c. Solid Wastes.

Solid waste disposal is by contract with the City of New York with a contract value of $74,400. The average disposal rate is 24 CY/day at a cost of $85.52/ton.

5. AIR QUALITY.

a. The air quality region is in the New York City Air Quality Region.

b. The region is classified as non-attainment for ozone (severe) and carbon monoxide (moderate).

c. Air pollution sources are traffic, heating sources, and minor sources of VOCs.

d. The installation has no air emission credits.

e. Major projects identified to meet/maintain compliance are studies/permit fees and asbestos abatement.

f. Fort Totten is within a critical air quality region.

6. HAZARDOUS MATERIALS/SITES.

a. Use of hazardous materials.

Fort Totten is not Resource Conservation and Recovery Act (RCRA) permitted treatment, storage or disposal facility.

b. Contaminated Sites.

There is one Defense Environmental Restoration Account (DERA) eligible site identified. In addition, there is a PA/PI is underway to determine if there is any contamination at three suspected sites.

c. PCB, Asbestos, Lead Paint, or RADON Issues.

All three PCB contaminated transformers have been replaced.

d. Underground Storage Tanks (UST).

The installation has 23 underground storage tanks, 11 have been tested, two failed, and two were replaced.

e. Radiological Materials and Sources

There are no Nuclear Regulatory Commission (NRC) nor DA licenses reported for radiological materials and sources at Fort Totten.

7. OTHER ISSUES, CONSTRAINTS.

No other significant issues or constraints are known.

8. REVENUE GENERATING PROGRAMS.

There are no revenue generating programs.

9. PROGRAMMED ENVIRONMENTAL COSTS.

a. Summary of environmental compliance costs:

	Funded	Unfunded
FY 94	$ 936,000	$ 665,000
FY 95	$ 0	$1,471,000
FY 96	$ 0	$1,473,000
FY 97	$ 0	$1,310,000
FY 98	$ 0	$1,200,000
FY 99	$ 0	$ 548,000
	$ 936,000	$6,667,000

b. Summary of environmental restoration costs:

	Funded	Unfunded
FY 94	$ 177,000	$ 30,000
FY 95	$ 0	$ 500,000
FY 96	$ 0	$ 500,000
FY 97	$ 0	$ 100,000
FY 98	$ 0	$ 100,000
FY 99	$ 0	$ 100,000
	$ 177,000	$1,230,000

ACRONYMS

AICUZ	Air Installation Compatible Use Zone
ICUZ	Installation Compatible Use Zone
ITAMS	Integrated Training Area Management System
LCTA	Land Condition Trend Analysis
404 Wetlands	Regulated Wetlands

NONSTRUCTURAL ATTRIBUTES

TACOM Support Activity, Selfridge --

1. LAND USE.

a. Land Availability (estimated quantities in acres).

(1)	Installation total	622.69
(2)	Cantonment area	0
(3)	Maneuver area	0
(4)	Training lands designated as sensitive/marginal by ITAMS/LCTA monitoring	0
(5)	Firing Ranges	0
(6)	Non-Impact Firing Range	0
(7)	Wetlands Sec 404 area	67.7
(8)	Other (Surface water areas; set aside unique areas; i.e., recreation habitat, forests; restricted use areas such as landfills, contaminated sites, safety zones. Tucker Creek	10

b. Air Space.

(1)	Restricted Air Space.	0
(2)	Extent of Installation Compatible Use Zones (ICUZ) or Noise and Accident Potential Zone (NAPZ).	N/A

2. THREATENED OR ENDANGERED SPECIES (PLANTS AND ANIMALS).

No threatened or endangered species (TES) survey has been conducted. No TES are known to occur on the installation.

3. CULTURAL RESOURCES.

a. No Historic Preservation Plan/Cultural Resources Management Plan has been completed, nor have comments been obtained from the State Historic Preservation Officer (SHPO) or the Advisory Council for Historic Preservation (ACHP).

b. A historic building survey has not been conducted for the installation and no structures are known to be eligible for listing on the National Register of Historic Places.

c. An archeological survey has not been conducted, however the installation reports the presence of 86 potentially eligible archeological sites.

4. INFRASTRUCTURE ISSUES.

a. Potable Water.

Potable water is supplied by a contract with the City of Mt. Clemmons, MI. The maximum capacity is 1.5 MGD and average daily usage is 0.4 MGD. There are no restrictions to expansion of capacity.

b. Wastewater.

Wastewater treatment is provided by contract with Harrison Township. The maximum capacity is 0.629 MGD and an average daily usage of 0.44 MGD. There are no restrictions to expansion of capacity.

c. Solid Wastes.

Solid waste disposal is provided under a $183,870/year contract with Efficient Sanitation. The average disposal rate is 18.3 tons/day at a cost of $27.56/ton.

5. AIR QUALITY.

a. The air quality region is Southeastern Michigan, Environmental Protection Agency (EPA) Region V and Michigan Department of National Resources, Livonia District.

b. The region is in non-attainment for Ozone (moderate).

c. The installation reports no on-post air pollution sources.

d. The installation has no air emission credits.

e. No major air compliance projects/expenditures are indicated.

f. There are no critical air quality regions reported within 100 km of the installation.

6. HAZARDOUS MATERIALS/SITES.

a. Use of hazardous materials.

The installation is not a Resource Conservation and Recovery Act (RCRA) treatment, storage or disposal facility.

b. Contaminated sites.

An assessment to determine contamination has been conducted, and one Defense Environmental Restoration Account (DERA) eligible contaminated site was identified.

c. PCB, Asbestos, Lead Paint, and RADON issues.

PCB survey is complete and 26 contaminated transformers have been identified. Six contaminated transformers have been replaced and five drained and refilled.

d. Underground Storage Tanks (UST).

Out of five active UST's, three have been tested and all passed.

e. Radioactive Materials and Sources.

The installation does not hold a Nuclear Regulatory Commission (NRC) or DA license for radioactive materials and sources.

7. OTHER ISSUES, CONSTRAINTS.

No other significant issues or constraints are known.

8. REVENUE GENERATING PROGRAMS.

There are no revenue generating programs reported.

9. PROGRAMMED ENVIRONMENTAL COSTS.

a. Environmental compliance costs are not provided.

b. Environmental restoration costs are not provided.

ACRONYMS

AICUZ	Air Installation Compatible Use Zone
ICUZ	Installation Compatible Use Zone
ITAMS	Integrated Training Area Management System
LCTA	Land Condition Trend Analysis
404 Wetlands	Regulated Wetlands

NONSTRUCTURAL ATTRIBUTES

Fort Benning -- 13025

1. LAND USE.

a. Land Availability (estimated quantities in acres).

(1)	Installation total		181,400
(2)	Cantonment area		6,698
(3)	Maneuver area		114,750
(4)	Training lands designated as sensitive/marginal by ITAMS/LCTA monitoring		5,092
	Land reclamation	740	
	TES Sites	4,352	
(5)	Firing Ranges		41,110
(6)	Non-Impact Firing Range		8,347
(7)	Wetlands Sec 404 area	Est.	22,100
(8)	Other (Surface water areas; set aside unique areas; i.e., recreation habitat, forests; restricted use areas such as landfills, contaminated sites, safety zones.		5,403
	Contaminated sites	4	
	Landfills	250	
	Surface water areas	874	
	Open space	4,275	

b. Air Space.

(1)	Restricted Air Space.	0
(2)	Extent of Installation Compatible Use Zones (ICUZ) or Noise and Accident Potential Zone (NAPZ).	
	Zone II (off post)	2,965

2. THREATENED OR ENDANGERED SPECIES (PLANTS AND ANIMALS).

No threatened or endangered species (TES) survey has been conducted, however the following Federal and State TES are reported as occurring on the installation: Endangered animals - Picoides Borealis (Federal, Georgia, & Alabama). Threatened animals - American Alligator (Federal & Georgia), Gopher Tortoise (Federal, Georgia, and Alabama), Cyprinella Callitaenia (Georgia), Rana Areolata Sevosa (Alabama) and Bald Eagle (Federal & Georgia). Endangered floral/plants - Trillium Reliquum (Federal & Georgia); and Threatened floral and plants - Croomia Pauciflora (Georgia & Alabama), Agrimonia Incisa (Alabama), and Brickellia Cordiflora

(Alabama).

3. CULTURAL RESOURCES.

a. The installation has a Historic Preservation Plan or Cultural Resources Management Plan, but has not been coordinated with the State Historic Preservation Officer (SHPO) nor the Advisory Council on Historic Preservation (ACHP).

b. A historic building inventory has been completed for Fort Benning and approximately 551 installation buildings are reported to be listed or potentially eligible for the National Register of Historic Places. One building is reported to be in substandard condition.

c. Approximately 25% (45,500 acres) have been surveyed for archeological resources. Approximately 386 of the archeological sites located by these surveys are potentially eligible for the National Register. In addition, there is currently curation or storage of archeological artifacts and associated records at the installation.

4. INFRASTRUCTURE ISSUES.

a. Potable Water.

Ninety-nine percent of the potable water is supplied from surface water and one percent from nine wells. The design capacity of the surface water treatment plant is 18 MGD with an average use of 8.0 MGD. The nine wells have a total pumping capacity of 4.0 MGD and about 0.003 MGD are used. The system is 39 yr. old and modernization is required to meet Environmental Protection Agency (EPA) standards.

b. Wastewater.

There are two National Pollutant Discharge Elimination System (NPDES) permitted waste water treatment plants. Plant #1 has a design capacity of 4.6 MGD and an average daily usage of 2.37 MGD. Plant #2 has a design capacity of 3.8 MGD and an average daily usage of 1.94 MGD. Upgrades are needed to meet EPA standards and prevent potential bypasses/discharges.

c. Solid Wastes.

The installation's 25 acre landfill has a total remaining capacity of 96,000 tons and an estimated life expectancy of two years.

Solid waste disposal is also provided by a $1,064,711 contract with Mark Dunning Ind., Inc. Average daily volume is 280 tons/day at a cost of $30.00/ton.

5. AIR QUALITY.

a. The installation is in Region I, Columbus, Georgia and Phoenix City, Alabama.

b. The region is in attainment.

c. Air pollution sources are: steam plants, one incinerator, vehicle traffic, accidental fires and underground fuel storage tanks.

d. The installation has no air emission credits.

e. The installation has identified major air compliance projects.

f. The installation is not within 100 km of a critical air quality region.

6. HAZARDOUS MATERIALS/SITES.

a. Use of hazardous materials.

There is a Resource Conservation and Recovery Act (RCRA) Part B permitted hazardous waste storage site at the DRMO. In addition, the installation is in the process of obtaining a RCRA Part B Subpart X permit for groundwater monitoring. The permit is expected to be issued in September 1995.

b. Contaminated sites.

There are 12 known Defense Environmental Restoration Account (DERA) contaminated sites, 11 DERA eligible contaminated sites, and six sites requiring monitoring.

c. PCB, Asbestos, Lead Paint, and RADON issues.

No PCB survey has been conducted.

There is an ongoing Lead Based Paint abatement program for 3,608 Family Housing units. Debris are considered hazardous or potentially hazardous waste. The cost estimate for the first 493 units (Buildings listed on the National Register of Historic Places) is $4,005,000.

d. Underground Storage Tanks (UST).

Out of 94 active and 37 abandoned USTs, 92 have been tested, 12 were replaced and six repaired. One piping system failed testing within the last year.

e. Radioactive materials and Sources.

The medical activity holds Nuclear Regulatory Commission (NRC) and DA authorizations to use any bi-product listed under 10 CFR 35-100, 10 CFR.200 and 10 CFR 31.11 in the frame of the Nuclear Medicine Department's mission (i.e. Imaging). Currently the Nuclear Medicine Department operates a group of four rooms plus one detached room in the basement of building 9200, which require routine survey.

7. OTHER ISSUES, CONSTRAINTS.

No other significant issues or constraints are known.

8. REVENUE GENERATING PROGRAMS.

	Hunting/Fishing	Forestry
FY 92	$ 44,294	$512,000
FY 93	$ 39,372	$765,000
FY 94	$ 38,000	$803,000
	$121,566	$2,089,000

9. PROGRAMMED ENVIRONMENTAL COSTS.

a. Summary of environmental compliance costs:

	Funded	Unfunded
FY 94	$7,807,000	$21,214,000
FY 95	$ 0	$36,241,000
FY 96	$ 0	$28,420,000
FY 97	$ 0	$17,949,000
FY 98	$ 0	$14,541,000
FY 99	$ 0	$9,718,000
	$7,807,000	$128,083,000

b. Summary of restoration costs:

	Funded	Unfunded
FY 94	$14,725,000	$ 0
FY 95	$ 0	$11,029,000
FY 96	$ 0	$5,425,000
FY 97	$ 0	$3,130,000
FY 98	$ 0	$1,965,000
FY 99	$ 0	$ 442,000
	$14,725,000	$21,991,000

ACRONYMS

AICUZ	Air Installation Compatible Use Zone
ICUZ	Installation Compatible Use Zone
ITAMS	Integrated Training Area Management System
LCTA	Land Condition Trend Analysis
404 Wetlands	Regulated Wetlands

NONSTRUCTURAL ATTRIBUTES

Fort Bliss -- 48125

1. LAND USE.

a. Land Availability (estimated quantities in acres).

(1)	Installation total	1,119,471
(2)	Cantonment area	10,644
(3)	Maneuver area	915,455
(4)	Training lands designated as sensitive/marginal by ITAMS/LCTA monitoring	0
(5)	Firing Ranges	Unknown
(6)	Non-Impact Firing Range	0
(7)	Wetlands Sec 404 area	Est. 120
(8)	Other (Surface water areas; set aside unique areas; i.e., recreation habitat, forests; restricted use areas such as landfills, contaminated sites, safety zones.	770,889
	Impact Area Sites	770,762
	Landfill	106
	Contaminated sites	21

b. Air Space.

(1) Restricted Air Space. 1,554 sq. miles
(2) Extent of Installation Compatible Use Zones (ICUZ) or Noise and Accident Potential Zone (NAPZ).

2. THREATENED OR ENDANGERED SPECIES (PLANTS AND ANIMALS).

Threatened or endangered species (TES) surveys have been conducted. The following Federal and State listed species are reported to occur on Fort Bliss: Endangered animals - Peregin Falcon (Federal, Texas, & New Mexico), Southwestern Willow Flycatcher (New Mexico), Bird's Sparrow (New Mexico), Organ Mountains Colorado Chipmunk (New Mexico), Bell's Vireo (New Mexico), Gray Vireo (New Mexico), Varied Bunting (New Mexico), and Common Ground Dove (New Mexico); threatened animals - Bald Eagle (Federal, Texas, & New Mexico), Mexican Spotted Owl (Federal), and Texas Horned Lizard (Texas); and endangered plants/flora - Seed's Pincushion Cactus (Federal, Texas, & New Mexico), Lloyd's Hedgehog Cactus (Federal, Texas, & New Mexico), Alamo Beard Tongue (New Mexico), Desert Night-blooming Cereus (New Mexico), Grama Gras Cactus (New Mexico), Nodding Cliff Daisy (New Mexico), Organ Mountains Evening Primrose (New Mexico), Sand Prickly Pear

(New Mexico), Organ Mountain Pincushion Cactus (New Mexico), and Scheer's Pincushion Cactus (New Mexico). The Southwestern Willow Flycatcher (New Mexico endangered is a also a Federal candidate species. In addition, Fort Bliss is considered a habitat for the endangered species (Federal, Texas, and New Mexico) Northern Aplomado Falcon, since the species is reported to occur north and south of the installation. There is no biological opinion for all Federal and State TES for all missions on the installation, but surveys have been done on an exercise specific basis. Completion of all surveys is pending. Informal consultations with the U.S. Fish and Wildlife Service (USFWS) will continue until baseline surveys are completed in 1995 for listed species. There are no constraints to operations and development due to TES reported, since most training occurs away from known TES locations.

3. CULTURAL RESOURCES.

a. Fort Bliss has a Historic Preservation Plan/Cultural Resources Management Plan being revised, which has been reviewed by the State Historic Preservation Officer (SHPO) and the Advisory Council on Historic Preservation (ACHP).

b. A historic building survey is currently in progress. One building is listed on the National Register of Historic Places and 233 buildings are eligible.

c. Partial archeological survey(s) have been conducted on 350,000 acres and a total of 11,778 potentially eligible sites have been recorded. Thirty-one sites are reported to be listed on the National Register. Fort Bliss also currently stores and curates archeological artifacts and associated records collected on the installation. Cultural resource limitations have set aside 11,904 acres as off-limits.

4. INFRASTRUCTURE ISSUES.

a. Potable Water.

Potable water is supplied entirely by wells. The total pumping capacity of the 18 installation wells (Texas - 15 & New Mexico - 3) is 13.0 MGD, with an average use of 3.56 MGD. Consumption directly attributed to well pumping has impacted the aquifer with drawdowns of approximately 2 feet/year.

It is estimated that effective management of the area water demands and supplies over the planning period can accommodate a doubling of population in El Paso County.

b. Wastewater.

Approximately 99% of wastewater is disposed of under contract with the City of El Paso. The historical peak load for Fort Bliss is reported to be 5.36 MGD, however 6.0 MGD iss possible with some surcharge of the trunk sewers. The average daily usage for 1993 was 1.49 MGD. Additional waste water treatment is provided by septic tanks and four remote evaporation lagoons.

c. Solid Wastes.

Solid waste disposal is also carried out under a $909,416 contract with Moore Services, Inc, who manages the installation owned 106 acre landfill. The average daily volume is 75 tons/day at a cost of $38.86/ton. The landfill's remaining capacity is 210,692 tons. The useful remaining life of the landfill is eight years for putrescible wastes and four years for ruble waste.

5. AIR QUALITY.

a. The installation is in Environmental Protection Agency (EPA) Air Quality Region VI.

b. The region is not in attainment for ozone (serious), particulate (moderate), and carbon monoxide (moderate).

c. The air pollution sources are: heat/steam energy production, generators, underground storage tanks, above ground tanks, decreasing operations, painting operations, miscellaneous surface coating/solvent usage, pesticide/ herbicide usage, ethylene oxide sterilizers, abrasive blasting, woodworking operations, landfill, incinerators, engine testing, aircraft landings and takeoffs, off-road mobile sources, welding operations, miscellaneous chemical sources, asphalt operations and accidental fires.

d. The installation does not maintain air emission credits.

e. The installation has identified major projects to meet/maintain air quality compliance.

f. Critical air quality regions within 100 km of the installation are the Lincoln National Forest, White Sands National Monument, Elephant Butte and Caballo Reservoirs.

g. The only limitation to an installation activity set by air program oversees is the number of hours and megawatt output Fort Bliss's electrical peak shaving plant can operate.

6. HAZARDOUS MATERIALS/SITES.

a. Use of hazardous materials.

The installation has a Resource Conservation and Recovery Act (RCRA) Part B permit to store hazardous waste at building 11614 for up to one year. The permit is effective for 10 years beginning 17 January 1991. In addition, the installation has one 90-day storage unit, which is located at Raytheon (tenant site). Fort Bliss is also in the process of obtaining a RCRA Part B Subpart X permit for open burning/open detonation for an existing facility. Issuance is expected in July 1994.

b. Contaminated sites.

Twenty-one Defense Environmental Restoration Account (DERA) eligible sites are currently being studied or are proposed for site investigation.

c. PCB, Asbestos, Lead Paint, and RADON issues.

A PCB survey is currently underway, however no contaminated transformers have been identified. All transformers identified in a previous survey have been replaced.

The State of Texas is currently in the process of filing a lawsuit for civil penalties and injunctive relief for 10 asbestos violations dating back to December 1981. The installation is negotiating a compliance agreement to include the hiring of an Asbestos Programmer.

Priority one buildings have been surveyed for Radon. One building was found to be marginally above the threshold, however no corrective active was taken due to its marginal level (5.2 pci/l).

A program is in place to determine occurrences of lead based paint and remediation procedures.

d. Underground Storage Tanks (UST).

A total of 206 regulated tanks were tested, of which 2[illegible] failed. Initiatives to correct failures are in progress and currently eight tanks have been repaired.

e. Radioactive Materials and Sources.

The installation does not hold any Nuclear Regulatory Commission (NRC) nor Da licenses for radioactive materials and sources.

7. OTHER ISSUES, CONSTRAINTS.

No other significant issues or constraints are known.

8. REVENUE GENERATING PROGRAMS.

	Recycling (DPCA)	Recycled Waste (DRMO)
FY 92	$135,000	$139,000
FY 93	$151,000	$167,000
FY 94	$ 96,000	$ 92,000
	$382,000	$398,000

9. PROGRAMMED ENVIRONMENTAL COSTS.

a. Summary of environmental compliance costs:

	Funded	Unfunded
FY 94	$16,517,000	$12,740,000
FY 95	$ 0	$50,032,000
FY 96	$ 0	$37,220,000
FY 97	$ 0	$26,353,000
FY 98	$ 0	$28,732,000
FY 99	$ 0	$12,948,000
	$16,157,000	$168,025,000

b. Summary of restoration costs:

	Funded	Unfunded
FY 94	$3,692,000	$ 420,000
FY 95	$ 0	$7,465,000
FY 96	$ 0	$6,529,000
FY 97	$ 0	$4,227,000
FY 98	$ 0	$3,326,000
FY 99	$ -	$ -
	$3,692,000	$21,967,000

ACRONYMS

AICUZ	Air Installation Compatible Use Zone
ICUZ	Installation Compatible Use Zone
ITAMS	Integrated Training Area Management System
LCTA	Land Condition Trend Analysis
404 Wetlands	Regulated Wetlands

NONSTRUCTURAL ATTRIBUTES

Fort Eustis -- 51215

1. LAND USE.

a. Land Availability (estimated quantities in acres).

(1)	Installation total	8,228
(2)	Cantonment area	2,814
(3)	Maneuver area	0
(4)	Training lands designated as sensitive/marginal by ITAMS/LCTA monitoring	1,821
(5)	Firing Ranges	1,264
(6)	Non-Impact Firing Range	0
(7)	Wetlands Sec 404 area (Study in progress)	2,329
(8)	Other (Surface water areas; set aside unique areas; i.e., recreation habitat, forests; restricted use areas such as landfills, contaminated sites, safety zones.	0

b. Air Space.

(1)	Restricted Air Space. (Whole post)	0
(2)	Extent of Installation Compatible Use Zones (ICUZ) or Noise and Accident Potential Zone (NAPZ). Unknown ICUZ study dates to 1986 and ICUZ Zone II cannot be documented from this report. A new study is scheduled for Summer 94.	

2. THREATENED OR ENDANGERED SPECIES (PLANTS AND ANIMALS).

A Floral (plant) threatened or endangered species (TES) survey was completed in March 1994. A Faunal (animal) TES survey will begin in FY 95. One Federally listed threatened species, Bald Eagle, and one endangered species, Peregrine Falcon, occur on the installation.

3. CULTURAL RESOURCES.

a. No historic preservation plan has been completed for this installation, nor has a memorandum of agreement concerning cultural resources been signed for Fort Eustis.

b. A historical survey is in progress (17% complete) with one building, Matthew Jones House, potentially eligible for the National Register of Historic Places.

c. Archeological surveys have been conducted for all 8,228 acres with 214 potentially eligible sites identified. Limitations to development and operations include avoidance of known sites. Phase II work is required if site cannot be avoided.

4. INFRASTRUCTURE ISSUES.

a. Potable Water.

Potable water is supplied from surface water sources and is purchased from the City of Newport News. The design capacity is 9.94 MGD and Fort Eustis's usage rate is 1.7 MGD. There are no known restrictions to expansion of capacity. There is one well used as backup source on Fort Eustis. Though it has not been used, it is reported to have a pumping capacity of 1.8 MGD and excess capacity of 0.1 MGD.

b. Wastewater.

A wastewater treatment plant exists with a design capacity of 3.0 MGD and an average use of 1.7 MGD. Life expectancy is not known. The National Pollutant Discharge Elimination System (NPDES) permit is presently under review.

c. Solid Wastes.

Solid waste disposal is accomplished under a $630,455 contract. Approximately 36.28 tons/day are disposed of at a cost of $43.88/ton. There are no known limitations to increasing the contract quantity. Three inactive landfills are on the base.

5. AIR QUALITY.

a. The installation is in Environmental Protection Agency (EPA) Air Quality Region VI.

b. The region is in non-attainment for ozone.

c. Pollution sources are: vehicle painting operations, diesel powered generators, steam boilers, hospital incinerator, vehicle training, aircraft and watercraft training. Activities restricted are use of oil burning and dual fire boilers. Natural gas use must be set within limits.

d. The installation has no air emission credits.

e. Major projects have been identified to meet/maintain air compliance.

f. Fort Eustis is within 100 km of a critical air quality region, Richmond, VA.

6. HAZARDOUS MATERIALS/SITES.

a. Use of hazardous materials.

The installation is not a Resource Conservation and Recovery Act (RCRA) permitted treatment, storage or disposal facility.

b. Contaminated sites.

There are 22 Defense Environmental Restoration Account (DERA) eligible sites.

Fort Eustis was proposed for the National Priority List (NPL) in January 1994.

c. PCB, Asbestos, Lead Paint, and RADON issues.

All 17 PCB contaminated transformers have been replaced.

Majority of WWII structures contain asbestos.

d. Underground Storage Tanks (UST).

Forty-five out of 226 USTs (219 active & 7 abandoned) have been tested. Three failed and one was replaced/repaired.

e. Radioactive Materials and Sources.

There are no known radioactive materials requiring Nuclear Regulatory Commission (NRC) or DA licenses on Fort Eustis.

7. OTHER ISSUES, CONSTRAINTS.

No other significant issues or constraints are known.

8. REVENUE GENERATING PROGRAMS.

	Forestry	Hunting/Fishing
FY 92	$ 260	$ 200
FY 93	$ 800	$ 0
FY 94	$40,000	$ 200
	$41,060	$ 400

9. PROGRAMMED ENVIRONMENTAL COSTS.

a. Summary of environmental compliance costs:

	Funded	Unfunded
FY 94	$3,427,000	$3,959,000
FY 95	$ 0	$9,952,000
FY 96	$ 0	$6,949,000
FY 97	$ 0	$4,422,000
FY 98	$ 0	$4,762,000
FY 99	$ 0	$4,819,000
	$3,427,000	$34,863,000

b. Summary environmental restoration costs:

	Funded	Unfunded
FY 94	$5,500,000	$ 320,000
FY 95	$ 0	$8,008,000
FY 96	$ 0	$9,185,000
FY 97	$ 0	$3,568,000
FY 98	$ 0	$ 565,000
FY 99	$ 0	$ 98,000
	$5,500,000	$21,744,000

ACRONYMS

AICUZ	Air Installation Compatible Use Zone
ICUZ	Installation Compatible Use Zone
ITAMS	Integrated Training Area Management System
LCTA	Land Condition Trend Analysis
404 Wetlands	Regulated Wetlands

NONSTRUCTURAL ATTRIBUTES

Fort Story -- 51665

1. LAND USE.

a. Land Availability (estimated quantities in acres).

(1)	Installation total	1,451
(2)	Cantonment area	571
(3)	Maneuver area	0
(4)	Training lands designated as sensitive/marginal by ITAMS/LCTA monitoring	491
(5)	Firing Ranges	119
(6)	Non-Impact Firing Range	0
(7)	Wetlands Sec 404 area	270
(8)	Other (Surface water areas; set aside unique areas; i.e., recreation habitat, forests; restricted use areas such as landfills, contaminated sites, safety zones.	0

b. Air Space.

(1)	Restricted Air Space.	0
(2)	Extent of Installation Compatible Use Zones (ICUZ) or Noise and Accident Potential Zone (NAPZ).	0

2. THREATENED OR ENDANGERED SPECIES (PLANTS AND ANIMALS).

A contract for a survey for Federally listed threatened or endangered species has been awarded. However, no Federal or State listed endangered or threatened species or critical habitats are known to occur on the installation.

3. CULTURAL RESOURCES.

a. No memoranda of agreement concerning cultural resources have been signed nor is there a Historic Preservation Plan for Fort Story.

b. A historic building inventory has been completed for approximately 33% of Fort Story and one structure, Cape Henry Lighthouse, is listed on the National Register of Historic Places.

c. All 1,451 acres have been surveyed for archeological resources and there are no National Register eligible sites.

4. INFRASTRUCTURE ISSUES.

a. Potable Water.

Potable water is supplied from surface water and is purchased from the City of Norfolk, Virginia. The design capacity is 4.14 MGD and average daily use is 0.2 MGD.

b. Wastewater.

Wastewater is disposed of under contract with Hampton Roads Sanitation District. Maximum design capacity is 1.78 MGD and average daily use is 0.25 MGD. The current permit allows for 0.4 MGD.

c. Solid Wastes.

Solid waste is disposed of via contract with Navy PWC and BFI Industries. The main post contract value is $94,400 and the family housing contract value is $26,000. Average daily volume is six tons/day for the Navy and BFI Industries daily volume is 2.98 tons/day. Solid waste disposal cost $31.73/cu yd.There are three closed landfills on Fort Story totaling 11.5 acres.

5. AIR QUALITY.

a. The installation is in Environmental Protection Agency (EPA) Air Quality Region VI.

b. The region is not in attainment for ozone.

c. The air pollution sources are watercraft vehicle training, generators, and oil furnaces.

d. The installation has no air emission credits.

e. There are no projects mentioned to meet/maintain compliance.

f. Fort Story is not within 100 km of a critical air quality region.

6. HAZARDOUS MATERIALS/SITES.

a. Use of hazardous materials.

Fort Story is not a Resource Conservation and Recovery Act (RCRA) treatment, storage or disposal facility.

b. Contaminated Sites.

The installation has identified 11 (6 active & 5 inactive) Defense Environmental Restoration Account (DERA) eligible sites.

c. PCB, Asbestos, Lead Paint, or RADON issues.

A PCB survey is complete and there were no contaminated transformers identified.

d. Underground Storage Tanks (UST).

There are 130 USTs (126 active & 4 abandoned) at Fort Story. Seven have been tested, one failed, and none have been replaced/repaired.

e. Radioactive Materials and Sources.

There are no radiological materials requiring Nuclear Regulatory Commission (NRC) or DA licensing at Fort Story.

7. OTHER ISSUES, CONSTRAINTS.

No other significant issues or constraints are known.

8. REVENUE GENERATING PROGRAMS.

There are no revenue generating programs.

9. PROGRAMMED ENVIRONMENTAL COSTS.

a. Summary of environmental compliance costs:

	Funded	Unfunded
FY 94	$1,011,000	$ 324,000
FY 95	$ 0	$1,484,000
FY 96	$ 0	$ 755,000
FY 97	$ 0	$2,508,000
FY 98	$ 0	$ 572,000
FY 99	$ 0	$ 353,000
	$1,011,000	$5,996,000

b. Summary of environmental restoration costs:

	Funded	Unfunded
FY 94	$ 931,000	$1,899,000
FY 95	$ 0	$ 541,000
FY 96	$ 0	$1,745,000
FY 97	$ 0	$1,942,000
FY 98	$ 0	$ 712,000
FY 99	$ 0	$ 35,000
	$ 931,000	$6,874,000

ACRONYMS

AICUZ	Air Installation Compatible Use Zone
ICUZ	Installation Compatible Use Zone
ITAMS	Integrated Training Area Management System
LCTA	Land Condition Trend Analysis
404 Wetlands	Regulated Wetlands

NONSTRUCTURAL ATTRIBUTES

Fort Gordon -- 13055

1. LAND USE.

a. Land Availability (estimated quantities in acres).

(1)	Installation total	55,588
(2)	Cantonment area	5,588
(3)	Maneuver area	0
(4)	Training lands designated as sensitive/marginal by ITAMS/LCTA monitoring	37,000
(5)	Firing Ranges	13,000
(6)	Non-Impact Firing Range	0
(7)	Wetlands Sec 404 area (approx. undergoing a wetlands delineation)	11,000
(8)	Other (Surface water areas; set aside unique areas; i.e., recreation habitat, forests; restricted use areas such as landfills, contaminated sites, safety zones.	N/A
	Impact Areas (includes (5) and (6) above	13,000

b. Air Space.

(1)	Restricted Air Space.	8,000
(2)	Extent of Installation Compatible Use Zones (ICUZ) or Noise and Accident Potential Zone (NAPZ).	0

2. THREATENED OR ENDANGERED SPECIES (PLANTS AND ANIMALS).

A survey was conducted by the US Fish & Wildlife Service, titled Fort Gordon Endangered and Threatened Species Survey, dated 30 Sep 92. The following Federal and/or State species were identified: Threatened - Bald Eagle (State & Federal), Pickering Morning Glory (State), Indian Olive (State), and Gopher Tortoise (State); Endangered - Red-Cockaded Woodpecker (State & Fed), and Sweet Pitcher Plant (State); and Status Review - Pickering Morning Glory, Bachman's Sparrow, American Kestrel, Loggerhead Shrike, Pine-Gopher Snake, Southeastern Hognose Snake, Gopher Tortoise, and Southeastern Bat. The installation is following existing best management practices (BMPs) and coordinates with U.S. Fish and Wildlife Service (USFWS) when appropriate. The only constraint imposed upon the installation development and operations is to observe the 200 foot buffer zone around the

Red Cockaded Woodpecker (RCW) cavity trees.

3. CULTURAL RESOURCES.

a. No Historic Preservation Plan/Cultural Resource Management Plan has been prepared for Fort Gordon.

b. A historic building inventory has been completed for Fort Gordon; no buildings were recommended as being eligible for the National Register.

c. Approximately 44,176 of the total 55,588 acres that make up Fort Gordon have been surveyed for archeological resources. A total of 180 archeological sites have been found that may be eligible for the National Register. Additional archeological surveys will be necessary to complete the Fort Gordon archeological inventory. There is currently storage of archeological artifacts.

4. INFRASTRUCTURE ISSUES.

a. Potable Water.

Ninety-seven percent of potable water comes from surface water sources and 3% from 13 wells. The total groundwater use is 0.25 MGD with a 0.5 MGD total pumping capacity. The wells were installed at varying dates. They are expected to last an indefinite period with normal maintenance. An additional 4.1 MGD is available from commercial sources. The total surface water design capacity is 5.40 MGD with an average daily use of 3.5 MGD. Total potable water capacity from all sources is 10.0 MGD. A water treatment plant was constructed in 1969 and is expected to last for another 50 years with some upgrades based upon increasing regulatory requirements.

b. Wastewater.

A wastewater treatment plant exists with a design capacity of 5.0 MGD and an average use of 1.7 MGD and an expected useful life of 50 years with some upgrading required. The system operates under a National Pollutant Discharge Elimination System (NPDES) permit.

c. Solid Wastes.

An existing 25-acre landfill will continue to be used provided that requested funds are received, if not local landfills will be used. Total remaining landfill capacity is 36,00 tons, with an estimated life of four years.

5. AIR QUALITY.

a. The air quality region is the Northeast Georgia Region, State of Georgia.

b. The region is in attainment.

c. Air pollution sources are: Controlled burns; heating/cooling plants, vehicular traffic, accidental fires, and painting/coating operations, and fire fighter training.

d. The installation has no air emission credits.

e. A total of 29 air compliance projects have been identified between FY 94- FY 01.

f. The installation is not within 100 km of a critical air quality region.

6. HAZARDOUS MATERIALS/SITES.

a. Use of hazardous materials.

The installation has a Resource Conservation and Recovery Act (RCRA) Part B hazardous waste permit for one year storage in one facility (Bldg 10701).

b. Contaminated Sites.

An assessment was conducted by the US Army Environmental Hygiene Agency, February-June, 1989. Twenty-three (23+) plus Defense Environmental Restoration Account (DERA) eligible sites were identified.

c. PCB, Asbestos, Lead Paint, or RADON issues.

PCB survey has been completed. A total of 154 contaminated transformers were identified and 62 were replaced.

d. Underground Storage Tanks (UST).

There are 368 total tanks of which eight are regulated. All eight have been inspected and passed.

e. Radioactive Materials and Source.

No licenses are required for radiological materials or sources.

7. OTHER ISSUES, CONSTRAINTS.

No other significant issues or constraints are known.

8. REVENUE GENERATING PROGRAMS.

Installation revenue generating programs are present. No source identified. Estimated revenues are as follows:

FY 92	$78,000
FY 93	$80,000
FY 94	$156,000

9. PROGRAMMED ENVIRONMENTAL COSTS.

a. Summary of environmental compliance costs:

	FUNDED	UNFUNDED
FY 94	$ 833K	$7,160K
FY 95		10,705K
FY 96		9,050K
FY 97		9,031K
FY 98		9,053K
FY 99		5,459K
	$ 833K	$50,458K

b. Restoration costs estimated as follows:

	FUNDED	UNFUNDED
FY 94	$ 0	$1,064K
FY 95		1,378K
FY 96		1,111K
FY 97		1,060K
FY 98		294K
FY 99		252K
	$ 0	$5,159K

ACRONYMS

AICUZ	Air Installation Compatible Use Zone
ICUZ	Installation Compatible Use Zone
ITAMS	Integrated Training Area Management System
LCTA	Land Condition Trend Analysis
404 Wetlands	Regulated Wetlands

NONSTRUCTURAL ATTRIBUTES

Fort Huachuca -- 04005

1. LAND USE.

a. Land Availability (estimated quantities in acres).

(1)	Installation total	102,825
(2)	Cantonment area	5,540
(3)	Maneuver area	20,263
(4)	Training lands designated as sensitive/marginal by ITAMS/LCTA monitoring	35,484
(5)	Firing Ranges	11,985
(6)	Non-Impact Firing Range	0
(7)	Wetlands Sec 404 area	35
(8)	Other (Surface water areas; set aside unique areas; i.e., recreation habitat, forests; restricted use areas such as landfills, contaminated sites, safety zones.	29,553

b. Air Space.

(1)	Restricted Air Space. (per previous report)	73,272
(2)	Extent of Installation Compatible Use Zones (ICUZ) or Noise and Accident Potential Zone (NAPZ).	300

2. THREATENED OR ENDANGERED SPECIES (PLANTS AND ANIMALS).

With the exception of amphibians and butterfly species, the Southwest Field Biologist-Donna Howell conducted a TES survey. A biological assessment has been conducted only for the Lesser Long-nosed Bat. The Federally listed threatened Lesser Long-nosed Bat occurs on the installation, and has resulted in some mission activities being constrained. Constrained have been placed on training, testing and construction activities that may affect the Long-nosed Bat feeding behavior, or agave plants, which are the primary food source for Lesser long nosed bats. The installation has developed an extensive list of Federally listed and candidate endangered and threatened species and species of concern to the State of Arizona and other entities. Some of the species may occur on the installation, while for many of the others they are known to occur in the vicinity of the Fort Huachuca. The Federally listed threatened Southwestern Bald Eagle and Peregrine Falcon are occasionally known to

occur on the installation. The threatened Mexican Spotted Owl is also reported to occur on the installation. Any development or mission activities must consider potential impacts on these species.

3. CULTURAL RESOURCES.

a. Fort Huachuca does not currently have a Historic Preservation Plan (HPP). The U.S. Army Corps of Engineers, Los Angeles District is preparing the HPP.

b. A historic building survey has been completed for 60% of Fort Huachuca. As a result of this study 62 structures were listed and the nomination packages of three others being reviewed by State Historic Preservation Officer (SHPO). Determination of eligibility for 81 structures remain to be coordinated with SHPO, for a total of 84 potentially eligible for the National Register.

c. Archeological surveys have been conducted for 42,000 acres (57%) of the installation. A total of 295 eligible or potentially eligible archeological sites have been found by these investigations. Additional archeological surveys are needed to complete the inventory of Fort Huachuca lands. Estimated that 1% of the total land available may be restricted due to the survey findings.

d. The Native American community was consulted with during recording of the Rocky Mountain Sites (National Register Site). Individual agreements allow Native Americans to collect plant specimens.

4. INFRASTRUCTURE ISSUES.

a. Potable Water.

Potable water is provided by eight production wells, with a total pumping capacity of 8.06 MGD. However, total pumping capacity is limited by storage capacity to 6.0 MGD. Average daily use is 2.7 MGD. Drawdown rate is seven feet per year. A system to deliver spring water with a capacity of 0.11 MGD is in place but not used.

b. Wastewater.

A wastewater treatment plant with a treatment capacity of 3.85 MGD will be on line in the summer of 1995. The average daily use is about 2.1 MGD. There is National Pollutant Discharge Elimination System (NPDES) permit, however, an Aquifer Protection Permit is required from the State of Arizona.

c. Solid Wastes.

The installation waste landfill contract is with Huachuca City landfill and Waste Management of Southeast Arizona. There is no limitation and the current daily volume is 17.3 tons, at a cost of $35/ton. The total contract value is $555,947.00.

5. AIR QUALITY.

a. The air quality region is the Federal Environmental Protection Agency (EPA) Region IX; State: Arizona Department of Environmental Quality; Local: Southeast Arizona Intrastate Air Quality Control Region. State ADEQ regulates Fort Huachuca.

b. Fort Huachuca is classified as Class II attainment.

c. Air pollution sources are: boilers, incinerators, generators, misc heating systems, fuel storage and dispensing, paint spray booths, degreasing, wood working, pesticide and herbicide applications, etc.

d. The installation has no air emission credits.

e. The installation has identified major projects to meet/maintain air compliance.

f. Fort Huachuca is bordered on the south and west by Colorado National Forest. Various other areas considered to be part of Colorado National Forest are also within 100 km. Also included within the 100 km radius are: Saguaro National Monument, Chiricahua National Monument, and the Chiricahua Wilderness. There are several counties within the 100 km radius that are in non-attainment.

6. HAZARDOUS MATERIALS/SITES.

a. Use of hazardous materials.

Installation does not hold any Resource Conservation and Recovery Act (RCRA) permits.

b. Contaminated Sites.

A survey was conducted by the US Army Toxic and Hazardous Materials Agency in June of 1980. Twenty six Defense Environmental Restoration Account (DERA) sites have been identified. Contaminated areas include 10 former landfills, burn pits, and Explosive Ordinance Disposal (EOD) areas.

c. PCB, Asbestos, Lead Paint, or RADON issues.

PCB survey has been completed. An estimated 650 contaminated transformers have been replaced.

d. Underground Storage Tanks (UST).

There are 39 active and five abandoned tanks reported. Thirteen USTS have been tested with no failures, and 13 tanks have been repaired or replaced.

e. Radioactive Materials and Sources.

Installation reports one MEDAC DA Radiation Authorization, used for lead paint survey. However, the installation reports no facilities require decommissioning.

7. OTHER ISSUES, CONSTRAINTS.

No other significant issues or constraints are known.

8. REVENUE GENERATING PROGRAMS.

Fish and wildlife use permits generated:

FY 92	$6,107.50
FY 93	$2,713.00
FY 94	$2,216.00

9. PROGRAMMED ENVIRONMENTAL COSTS.

a. Summary of environmental compliance costs:

	Funded	Unfunded
FY94	$3,772K	$1,645K
FY95		6,610K
FY96		5,582K
FY97	3,500K	1,700K
FY98	3,500K	1,700K
FY99	3,500K	1,700K
	$14,272K	$18,937K

b. Summary of environmental restoration costs:

	Funded	Unfunded
FY94	$ 785K	$
FY95		1,145K
FY96		790K
FY97		390K
FY98		290K
FY99		290K
	$ 785K	$2,905K

ACRONYMS

AICUZ	Air Installation Compatible Use Zone
ICUZ	Installation Compatible Use Zone
ITAMS	Integrated Training Area Management System
LCTA	Land Condition Trend Analysis
404 Wetlands	Regulated Wetlands

NONSTRUCTURAL ATTRIBUTES

Fort Jackson -- 45455

1. LAND USE.

a. Land Availability (estimated quantities in acres).

(1)	Installation total	52,301
(2)	Cantonment area	5,140
(3)	Maneuver area	35,607
(4)	Training lands designated as sensitive/marginal by ITAMS/LCTA monitoring	0
(5)	Firing Ranges	6,422
(6)	Non-Impact Firing Range	5,132
(7)	Wetlands Sec 404 area	5,559
(8)	Other (Surface water areas; set aside unique areas; i.e., recreation habitat, forests; restricted use areas such as landfills, contaminated sites, safety zones.	0

b. Air Space.

(1) Restricted Air Space.
R6001 - small arms: ground level to 3,200 ft with 3 mile buffer around installation.
R6001 - Control from ground level to 23,000 ft with 5 mile buffer.

(2) Extent of Installation Compatible Use Zones (ICUZ) or Noise and Accident Potential Zone (NAPZ). 0

2. THREATENED OR ENDANGERED SPECIES (PLANTS AND ANIMALS).

A threatened or endangered species survey has been conducted and three Federally listed endangered species are reported to occur on the installation, the Red-cockaded Woodpecker (decreasing), Rough-leaved loosestrife (increasing), and the Smooth Conflower (stable).

3. CULTURAL RESOURCES.

a. A Historic Preservation Plan is currently under development.

b. A historic building inventory is scheduled to be completed in August 1994. To date, 30 structures have been found to be potentially eligible for the National Register of Historic Places.

c. Archeological surveys have been conducted for approximately 42,548 acres, with 128 sites found to be potentially eligible for the National Register. The installation stores archeological artifacts and associated records. A total of 11 acres (11 archeological sites) are not available for development or operations due to cultural resources.

4. INFRASTRUCTURE ISSUES.

a. Potable Water.

Ninety-nine percent of potable water is supplied by the City of Colombia and the rest by eight ground wells. The City of Colombia supplies up to 9.35 MGD with an average use of 3.5 MGD. The maximum pumping capacity of the eight wells is 0.05 MGD and the average use of the well water is 0.04 MGD. The wells only supply water to ranges and field sites.

b. Wastewater.

Wastewater disposal is carried out through contract with the City of Colombia. The contract quantity is 9.2 MGD and average use is 2.9 MGD.

The installation holds a National Pollutant Discharge Elimination System (NPDES) permit for storm water discharge from a storage tank containment wall and small waste water treatment plant at Weston Lake Recreational Area.

c. Solid Wastes.

The on-post landfill is closed. Solid waste is disposed of by a $4,180,000 contract with BFI. Average daily volume is 25 tons/day at a cost of $16.50/ton. The existing county landfill can service Fort Jackson for approximately 10 years.

5. AIR QUALITY.

a. The installation is located in the Environmental Protection Agency (EPA) Air Quality Central Region 200.

b. The region is in attainment.

c. Air pollution sources are: energy plant boilers, hot water boilers, filtered paint spray booths, fiberglass filtered spray booths, pathological incinerator, and controlled and prescribed burning.

d. The installation has no air emission credits.

e. Major projects identified in the A-106 Plan to meet/maintain air compliance are the removal and replacement of stack rain caps at the energy plant - and the update of the emissions inventory and permit.

f. The installation is not with 100 Km of a critical Air Quality Region.

6. HAZARDOUS MATERIALS/SITES.

a. Use of hazardous materials.

Fort Jackson holds a Resource Conservation and Recovery Act (RCRA) Part B permit (90 day or longer) for a hazardous waste storage facility site for disposal at the DRMO. The installation has submitted an application for a RCRA, Subpart X permit for open burning/detonation of RCRA regulated waste munitions.

b. Contaminated Sites

The installation has identified 46 solid waste management units (SWMU). Work plan for SWMU investigations are currently under review by EPA. Project to assess contamination at former UST sites is currently underway.

c. PCB, Asbestos, Lead Paint, and RADON issues.

PCB survey has been completed and a total of 88 contaminated transformers were identified and replaced.

Lead based paint abatement is conducted in family housing as necessary.

A post wide asbestos inventory is completed and all known asbestos has been removed.

Installation wide Radon testing has been completed and Fort Jackson does not exceed the health based standard.

d. Underground Storage Tanks (UST).

Out of 66 active USTs (7 regulated & 59 non-regulated), seven were tested and none failed.

e. Radiological Materials and Sources.

The installation holds a Nuclear Regulatory Commission (NRC) license for medical use. Decommissioning is required for the Nuclear Medical Clinic and Radiation Protection Office.

7. OTHER ISSUES, CONSTRAINTS.

No other significant issues or constraints are known.

8. REVENUE GENERATING PROGRAMS.

Revenue generating programs are as follows:

	1992	1993	1994
Forestry	$235,000	$301,000	$450,000
Hunting/Fishing	21,000	20,000	22,000
Recycling	185,000	448,000	242,000
	$441,000	$769,000	$714,000

9. PROGRAMMED ENVIRONMENTAL COSTS.

a. Summary of environmental compliance costs:

	Funded	Unfunded
FY 94	$3,759,000	$2,349,000
FY 95	$5,743,000	$2,579,000
FY 96	$4,778,000	$2,351,000
FY 97	$3,812,000	$ 143,000
FY 98	$3,281,000	$ 247,000
FY 99	$2,816,000	$ 149,000
	$24,189,000	$7,818,000

b. Summary of environmental restoration costs:

	Funded	Unfunded
FY 94	$1,037,000	$ 500,000
FY 95	$3,265,000	$1,850,000
FY 96	$18,700,000	$1,500,000
FY 97	$10,700,000	$1,500,000
FY 98	$5,700,000	$ 0
FY 99	$2,600,000	$ 0
	$42,002,000	$5,350,000

ACRONYMS

AICUZ	Air Installation Compatible Use Zone
ICUZ	Installation Compatible Use Zone
ITAMS	Integrated Training Area Management System
LCTA	Land Condition Trend Analysis
404 Wetlands	Regulated Wetlands

NONSTRUCTURAL ATTRIBUTES

Fort Knox -- 21405

1. LAND USE.

a. Land Availability (estimated quantities in acres).

(1)	Installation total	109,054
(2)	Cantonment area	6,861
(3)	Maneuver area	47,994
(4)	Training lands designated as sensitive/marginal by ITAMS/LCTA monitoring	0
(5)	Firing Ranges	53,112
(6)	Non-Impact Firing Range	0
(7)	Wetlands Sec 404 area	900
(8)	Other (Surface water areas; set aside unique areas; i.e., recreation habitat, forests; restricted use areas such as landfills, contaminated sites, safety zones.	1,237

b. Air Space.

(1) Restricted Air Space. R370B up to 20,000 feet over ranges and impact ares.

(2) Extent of Installation Compatible Use Zones (ICUZ) or Noise and Accident Potential Zone (NAPZ). The final joint land use agreement is to be complete in FY 94.

2. THREATENED OR ENDANGERED SPECIES (PLANTS AND ANIMALS).

A threatened or endangered species survey was completed in March 1994 and the installation was found to contain the potential habitat for the Federally listed endangered Gray Bat and Indiana Bat. There are also suspected existence of some endangered flora at the installation. Despite the presence of these species, the military mission has not been constrained, due to the location of the species in off limit stream areas and inaccessible areas.

3. CULTURAL RESOURCES.

a. A Historic Preservation Plan is currently under review.

b. A historic building survey has been completed, and five buildings/structures have been submitted to the State Historic Preservation Officer (SHPO) for potential eligibility for the National Register of Historic Places.

c. Approximately 30,000 acres have been surveyed for archeological resources and a total of 12 archeological sites have been found that may be eligible for the National Register.

4. INFRASTRUCTURE ISSUES.

a. Potable Water.

Potable water is acquired from 12 wells and one surface water source. The wells provide 66% of the daily use requirement. The total pumping capacity of the wells is 10.5 MGD and the average use from this source is 2.5 MGD. The drawdown rate is 30-50 GPM/SF. This water is processed through a water treatment plant which has a 7.0 MGD capacity. The average use from the surface water source is 1.5 MGD, which is processed through a water treatment plant with a design capacity of 3.5 MGD. The life expectancy of these systems is 20+ years.

b. Wastewater.

The design capacity of the current wastewater treatment plant is 6.0 MGD and has an average use of 3.5 MGD. A new 6.0 MGD wastewater treatment facility is under construction and will be in operation in 1994. The installation operates under a National Pollutant Discharge Elimination System (NPDES) permit.

c. Solid Wastes.

Residential solid waste is transported to a regional landfill under a $1,861,000 contract for FY 94 with Reliable Trash. Average daily volume is 70 tons a day at a cost of $80.00/ton.

A 35 acre construction/debris landfill exists on post and its operation is conducted under a $471,000 contract for FY 94 with Reliable Trash. Average daily use is 244.5 tons/day at a cost of $24.80/ton. The landfill has a capacity of 1,314,000 cubic yards and has a life expectancy of 23 years.

5. AIR QUALITY.

a. Ft. Knox is in the Kentucky North Central Air Quality Region.

b. The region is in attainment.

c. Air pollution sources are: boiler plants, a pathological incinerator, vehicle training, auto emissions, paint booths, and dust collectors.

d. The installation has no air emission credits.

e. No major air compliance projects were reported.

f. The installation is within 100 km of a critical air quality region (The City of Louisville, Kentucky).

6. HAZARDOUS MATERIALS/SITES.

a. Use of hazardous materials.

The installation has a Part B permit (90 day or longer) for one hazardous waste storage site, operated by DRMO. A Resource Conservation and Recovery Act (RCRA), Subpart X for open burning/detonation is being negotiated with the Environmental Protection Agency (EPA) for Explosive Ordinance Disposal(EOD) operations.

b. Contaminated Sites.

An assessment to determine contamination has been conducted and an assessment is ongoing for all identified solid waste management units (SWMU). A total of 18 Defense Environmental Restoration Account (DERA) eligible sites have been identified at the installation.

c. PCB, Asbestos, Lead Paint, or RADON issues.

PCB survey 95% complete. Under current electrical upgrade contracts all remaining in-service PCB equipment will be removed and disposed.

d. Underground Storage Tanks (UST).

There are a total of 244 active and 45 abandoned USTs. Two hundred and sixty-nine were tested and 25 failed. A total of 80 have been removed and none replaced/repaired.

e. Radioactive Materials and Sources.

Nuclear Regulatory Commission (NRC) licenses are held for medical treatment materials. No decommissioning requirements for radiological materials were reported.

7. OTHER ISSUES, CONSTRAINTS.

No other significant issues or constraints are known.

8. REVENUE GENERATING PROGRAMS.

Revenue generating programs are as follows:

	1992	1993	1994
Forestry	$101,000	$219,000	$ 2,000
Hunting/Fishing	143,000	144,000	149,000
	$244,000	$363,000	$151,000

9. PROGRAMMED ENVIRONMENTAL COSTS.

a. Summary of environmental compliance costs:

	Funded	Unfunded
FY 94	$4,662,000	$ 485,000
FY 95		$7,501,000
FY 96		$6,613,000
FY 97		$5,218,000
FY 98		$4,203,000
FY 99		$2,313,000
	$4,662,000	$26,333,000

b. Summary of environmental restoration costs:

	Funded	Unfunded
FY 94	$3,259,000	$ 355,000
FY 95		$3,470,000
FY 96		$1,375,000
FY 97		$1,125,000
FY 98		$ 425,000
FY 99		$ 425,000
	$3,259,000	$7,175,000

ACRONYMS

AICUZ	Air Installation Compatible Use Zone
ICUZ	Installation Compatible Use Zone
ITAMS	Integrated Training Area Management System
LCTA	Land Condition Trend Analysis
404 Wetlands	Regulated Wetlands

NONSTRUCTURAL ATTRIBUTES

Fort Lee -- 51315

1. LAND USE.

a. Land Availability (estimated quantities in acres).

(1)	Installation total	5,574
(2)	Cantonment area	2,264
(3)	Maneuver area	1,535
(4)	Training lands designated as sensitive/marginal by ITAMS/LCTA monitoring	0
(5)	Firing Ranges	1,445
(6)	Non-Impact Firing Range	8
(7)	Wetlands Sec 404 area (Inventory in progress)	est. 1,000
(8)	Other (Surface water areas; set aside unique areas; i.e., recreation habitat, forests; restricted use areas such as landfills, contaminated sites, safety zones.	640

31 IRP sites
3 conservation zones

b. Air Space.

(1)	Restricted Air Space.	0
(2)	Extent of Installation Compatible Use Zones (ICUZ) or Noise and Accident Potential Zone (NAPZ). Zone III	335

2. THREATENED OR ENDANGERED SPECIES (PLANTS AND ANIMALS).

One Federally listed threatened (State endangered) species, the Bald Eagle (Haliaeetus leucocephalus), and four State listed threatened species, Damselfly Attenuated Bluet (Enallagma daeckii), Lesser Siren (Siren intermedia), Beakrush (Rhynchospora perplexa), and Virginia Thistle (Cirsium virginianum) occur on the installation. A nesting pair of Bald Eagles restricts activities within a third of a mile radius of the nest. The impact of the conservation zone should be minimal to operations since the area primarily occurs in the Blackwater Swamp and within range of the safety fan.

3. CULTURAL RESOURCES.

a. A Historic Preservation Plan is scheduled for completion in FY 95.

b. A historic building survey has been completed for Fort Lee. Fort Lee has three WW II structures that are considered unique by the Commonwealth of Virginia. Two of the facilities are administrative and the third is a cook training facility.

c. Archeological surveys of 3,609 acres found 15 potentially eligible sites. Artifacts are curated at the Department of Historical Resources, Commonwealth of Virginia.

4. INFRASTRUCTURE ISSUES.

a. Potable Water.

Potable water is supplied by two contracts with the City of Petersburg and Virginia American Water Company (Hopewell, VA), and comes from surface water. Fort Lee's contracts provide for up to 6.0 MGD with an average use of 1.3 MGD. In addition, Fort Lee operates post chlorination facilities and utilizes a chloramine system in order to avoid the production of trihalomethanes (THM).

b. Wastewater.

Wastewater discharge is disposed of through contract with the Hopewell Regional Wastewater Treatment Plant. The maximum sewage flow limit is 2.5 MGD and average sewage outflow is 1.06 MGD. The primary treatment plant is near capacity due to local residential development. Fort Lee may partner with the local community for any equalization, or other cost effective alternative, identified via inflow/inflitration (I/I) study as a means of mitigating Fort Lee's impact on future regional needs.

c. Solid Wastes.

Fort Lee will award a comprehensive solid waste contract for FY 95 which will encompass three primary areas: solid waste, recycling, and yard waste. The current average disposal rate is 10 tons/day. Anticipated cost of the package is $1,000,000. The current tipping fee at the nearest landfill is $28/ton.

5. AIR QUALITY.

a. The air quality region is the Virginia State Capital Interstate Air Quality Control Region (Region V).

b. The region is in attainment.

c. Air pollution sources are: heating system plants, paint spray booths, and vehicular traffic.

d. The installation has no air emission credits .

e. There are two projects identified to meet/maintain air compliance, Update Air Permits and Replace Halon Fire Systems.

f. The city is within 100 km of critical air quality regions (Chesterfield County & City of Hopewell).

6. HAZARDOUS MATERIALS/SITES.

a. Use of hazardous materials.

Fort Lee does not have a Resource Conservation and Recovery Act (RCRA) Part B permit, but is under a "permit by rule." Fort Lee has declared itself a large quantity generator. Three 90-day temporary storage facilities (DPW Hazardous Waste Storage, Navy Print Plant, & Seamans Petroleum Lab) are operated on the installation.

b. Contaminated Sites.

There are 31 Installation Restoration Program (IRP) sites on the installation, 18 of which are active.

c. PCB, Asbestos, Lead Paint, or RADON issues.

A PCB survey has been completed. Thirty-one PCB contaminated transformers remain at Fort Lee. All others have been disposed of.

All permanent, semi-permanent, and some temporary buildings have been surveyed for asbestos. An active management program is remediating or removing damaged or friable asbestos.

A radon survey reported no high readings.

d. Underground Storage Tanks (UST).

Currently there 95 USTs remaining on Fort Lee. Three UST projects are scheduled for FY 95. When all UST projects are complete, less than 30 USTs will remain. Four tanks are known to leak and twelve are abandoned.

e. Radioactive Materials and Sources.

The installation does not hold any Nuclear Regulatory Commission (NRC) or DA licenses for radioactive materials.

7. OTHER ISSUES, CONSTRAINTS.

The installation has five National Pollutant Discharge Elimination System (NPDES) permitted outfalls: three at spill containment ponds (petroleum training areas) and two at water training facilities.

8. REVENUE GENERATING PROGRAMS.

	Forestry	Hunting
FY 92	$ 883	$ 0
FY 93	$ 450	$ 968
FY 94	$ 475	TBD

9. PROGRAMMED ENVIRONMENTAL COSTS.

a. Summary of environmental compliance cost are:

	Funded	Unfunded
FY 94	$2,752,000	$ 158,000
FY 95	$ 0	$3,701,000
FY 96	$ 0	$1,078,000
FY 97	$ 0	$ 947,000
FY 98	$ 0	$ 925,000
FY 99	$ 0	$ 759,000
	$2,752,000	$7,568,000

b. Summary of environmental restoration cost are:

	Funded	Unfunded
FY 94	$1,605,000	$ 0
FY 95	$ 0	$1,312,000
FY 96	$ 0	$ 387,000
FY 97	$ 0	$ 822,000
FY 98	$ 0	$ 218,000
FY 99	$ 0	$ 14,000
	$1,605,000	$2,753,000

ACRONYMS

AICUZ	Air Installation Compatible Use Zone
ICUZ	Installation Compatible Use Zone
ITAMS	Integrated Training Area Management System
LCTA	Land Condition Trend Analysis
404 Wetlands	Regulated Wetlands

NONSTRUCTURAL ATTRIBUTES

Fort Leonard Wood -- 29995

1. LAND USE.

a. Land Availability (estimated quantities in acres).

(1)	Installation total		62,911
(2)	Cantonment area		6,139
(3)	Maneuver area		3,210
(4)	Training lands designated as sensitive/marginal by ITAMS/LCTA monitoring		6,837
(5)	Firing Ranges		310
(6)	Non-Impact Firing Range		17,168
(7)	Wetlands Sec 404 area (Impounded surface water & impact areas not included)		695
(8)	Other (Surface water areas; set aside unique areas; i.e., recreation habitat, forests; restricted use areas such as landfills, contaminated sites, safety zones.		3,521
	Lakes & ponds	105	
	Landfills	248	
	Cultural resources	245	
	Contaminated sites	3	
	Species buffer	80	
	Recreation	2,840	

b. Air Space.

(1)	Restricted Air Space.		19,000
(2)	Extent of Installation Compatible Use Zones (ICUZ) or Noise and Potential Zone (NAPZ).	Zone II	11,597 (81 meters off-post)
		Zone III	5,015

2. THREATENED OR ENDANGERED SPECIES (PLANTS AND ANIMALS).

A threatened or endangered species survey is in progress. However, three Federal Endangered species (Indiana Bat, Gray Bat, and Bald Eagle), three Federal/State Candidate species (Cerulean Warbler Butternut, Royal Catchfly, and Central Missouri Cave Amphipod) and one State Candidate species (Grotto Salamander) are reported to occur on the installation. The most notable constraint created by these species are limitations in development of ranges and other training facilities near three caves reported to be used by

the bats.

3. CULTURAL RESOURCES.

a. A historic preservation plan has been prepared.

b. A historical building has been conducted. Thirteen structures have been identified as potentially eligible for the National Register for Historic Places.

c. Approximately 46% of the installation has been surveyed for archeological resources. A total of 94 potential archeological sites are eligible for the National Register. Surveys must be done prior to digging in unsurveyed areas on the installation. A total of 445 acres are not available for development due to cultural resources.

4. INFRASTRUCTURE ISSUES.

a. Potable Water.

Approximately 95% of potable water is from a surface water source. Five percent of the potable water is well water. Six wells exist on the installation, however only one is connected to the central water system. The one well's pumping capacity is 0.32 MGD with an average daily usage of 0.19 MGD. The pumping station on the river has a capacity of 11 MGD with an additional emergency backup of 3 MGD. The water treatment plant has a design capacity of 9.8 MGD and an average use of 3.76 MGD. The distribution system requires some upgrade for various components, but has an overall unlimited life expectancy with routine maintenance.

b. Wastewater.

The wastewater treatment plant has a design capacity of 8.4 MGD and an average flow of 2.3 MGD. The plant operates under a National Pollutant Discharge Elimination System (NPDES) permit. There are no known constraints to maintaining/increasing wastewater treatment.

c. Solid Wastes.

Solid waste disposal is contracted with an average daily volume of 32 tons/day at a cost of $61.54/day. The contract amount is $946,136. There is no limit on increasing the contract amount.

There is also a 2.11-acre demolition landfill with a capacity of 170,000 tons and a remaining life expectancy of two years. Additional space for expansion.

5. AIR QUALITY.

a. The air quality region is Out-state Missouri, regulated by Missouri Department of National Resources.

b. The region is in attainment.

c. Air pollution sources are: space heating boilers and furnaces, one incinerator, quarry operation, fuel storage tanks, and controlled burning.

d. The installation has no air emission credits.

e. No major projects were identified in the A-106 plan to meet/maintain compliance.

f. The installation is not within 100 km of a critical air quality region.

6. HAZARDOUS MATERIALS/SITES.

a. Use of hazardous materials.

The installation has a Resource Conservation and Recovery Act (RCRA) Interim permit. A RCRA Part B permit is currently being processed for container storage and open burning/open detonations (OB/OD).

b. Contaminated Sites.

Total of seven Defense Environmental Restoration Account (DERA) eligible sites are identified.

c. PCB, Asbestos, Lead Paint, or RADON issues.

PCB survey has been completed. A total of 223 contaminated transformers have been identified and replaced.

d. Underground Storage Tanks (UST).

There are 22 active and no abandoned USTs at Fort Leonard Wood. Fifty-two have been removed. A total of 74 were replaced/repaired, 24 tested, and three failed.

e. Radioactive Materials and Sources

The installation holds a Nuclear Regulatory Commission (NRC) license for radiopharmaceuticals and DA license for various materials and isotopes for medical use. A total of 16 rooms (approximately 6,000 SF) in the Nuclear Medicine Clinic and Health Physics portions within the hospital require surveying and cleaning prior to decommissioning.

7. OTHER ISSUES, CONSTRAINTS.

There are no other environmental issues.

8. REVENUE GENERATING PROGRAMS.

The estimated combined revenues from agricultural leases, timber sales, and fish and wildlife use permits are:

FY 92	$ 51,000
FY 93	$120,500
FY 94	$110,700

9. PROGRAMMED ENVIRONMENTAL COSTS.

a. Summary of environmental compliance costs:

	Funded	Unfunded
FY 94	$3,460,000	$2,063,000
FY 95	$ 0	$3,271,000
FY 96	$ 0	$2,467,000
FY 97	$ 0	$1,506,000
FY 98	$ 0	$1,316,000
FY 99	$ 0	$1,392,000
	$3,460,000	$12,015,000

b. Summary of environmental restoration costs:

	Funded	Unfunded
FY 94	$ 220,000	$1,352,000
FY 95	$ 0	$ 600,000
FY 96	$ 0	$ 90,000
FY 97	$ 0	$ 90,000
FY 98	$ 0	$ 450,000
FY 99	$ 0	$ 90,000
	$ 220,000	$2,672,000

ACRONYMS

AICUZ	Air Installation Compatible Use Zone
ICUZ	Installation Compatible Use Zone
ITAMS	Integrated Training Area Management System
LCTA	Land Condition Trend Analysis
404 Wetlands	Regulated Wetlands

NONSTRUCTURAL ATTRIBUTES

Fort McClellan -- 01102

1. LAND USE.

a. Land Availability (estimated quantities in acres).

		Main Post	Pelham Range	Talladega Nat'l For
(1)	Installation total	23,434	22,245	82,500
(2)	Cantonment area	2,831	0	0
(3)	Maneuver area	19,249	17,486	182,500
(4)	Training lands designated as sensitive/marginal by ITAMS/LCTA monitoring	0	0	0
(5)	Firing Ranges	210	4,759	0
(6)	Non-Impact Firing Range	0	0	0
(7)	Wetlands Sec 404 area (1,451 included in item 1.A.(3) above)	0		
(8)	Other (Surface water areas; set aside unique areas; i.e., recreation habitat, forests; restricted use areas such as landfills, contaminated sites, safety zones.	1,144	0	0

b. Air Space.

(1)	Restricted Air Space.	0	0	0
(2)	Extent of Installation Compatible Use Zones (ICUZ) or Noise and Accident Potential Zone (NAPZ). Zone II - 147 Zone III - 8			

2. THREATENED OR ENDANGERED SPECIES (PLANTS AND ANIMALS).

A threatened or endangered species (TES) survey has been conducted. Two Federally listed TES occur on the installation; the threatened Marshallia Mohrii and the endangered Tennessee Yellow-eyed Grats (Xyris Tennesseensis). An informal consultation has occurred and an interim Endangered Species Management Plan has been completed and reviewed by the U.S. Fish and Wildlife Service (USFWS).

3. CULTURAL RESOURCES.

a. There is no Historic Preservation Plan/Cultural Resources Management Plan for the installation. However, comments are obtained from the State Historic preservation Officer (SHPO) and the Advisory Council on Historic Preservation (ACHP) for undertakings that effect historic properties.

b. A historic building survey has been conducted and 89 structures are reported as eligible for listing on the National Register of Historic Places.

c. An archeological survey has been completed for 36,543 acres. A total of 32 archeological sites are reported as potentially eligible for listing on the National Register.

4. INFRASTRUCTURE ISSUES.

a. Potable Water.

A total of 99.93% of potable water is provided by contract with Anniston Water Works and Sewer Board. Maximum capacity is 15.0 MGD and average daily usage is 1.5 MGD.

The remaining 0.07% is obtained from five (4 - Pelham range & 1- Reilly Lake) spring-fed wells (Coldwater Springs). The total pumping capacity of the wells is 0.05 - 0.06 MGD. The average daily use is 0.005 MGD (0.001 MGD per well).

b. Wastewater.

Wastewater generated at the installation is treated at the Ft. McClellan Wastewater Treatment Plant, which operates under contract with the Anniston Water and Sewer Board. The plant has a capacity of 2.2 MGD and an average daily use of 1.2 MGD. MCA project upgrades will be completed in July 1994. The life expectancy is 25 years. An application has been made for a National Pollutant Discharge Elimination System (NPDES) permit.

c. Solid Wastes.

Solid waste is disposal is provided by a $4,000/month contract with Johnson Controls, Pickup Service - Urban Sanitation - Landfill. Average volume is 20 tons/day at a cost of $27.50/ton.

A 12.5 acre construction/demolition debris landfill exist on post with a remaining capacity of 13,000 tons and a life expectancy of 15 years.

5. AIR QUALITY.

a. The air quality region is the East Alabama Interstate Air Quality Region, Alabama Department of Environmental Management.

b. The region is in attainment.

c. Air pollution sources are: boilers, incinerators, generators and pumps, fuel storage and dispensing, paint spray booth operations, degreasing operations, woodworking operations, fugitive HAP/VOC emissions, pesticides, herbicides, wastewater treatment, prescribed burning, fog oil generators, welding operations, and miscellaneous heating.

d. The installation has no air emission credits.

e. There are no major projects reported to meet/maintain air quality.

f. There are no critical air quality regions within 100 km of the installation.

6. HAZARDOUS MATERIALS/SITES.

a. Use of hazardous materials.

Fort McClellan is in the process of obtaining a Resource Conservation and Recovery Act (RCRA) permit for open burning/open detonation. The permit is currently in an interim status.

b. Contaminated Sites.

Thirty (12 active) Defense Environmental Restoration Account (DERA) eligible contaminated sites have been identified .

c. PCB, Asbestos, Lead Paint, or RADON issues.

PCB survey is complete and the two contaminated transformers (>500 ppm) identified have been replaced. There are also 36 PCB non-regulated contaminated transformers (50 - 499 ppm) still in use.

It was previously reported that asbestos is remediated as buildings are renovated/demolished.

Radon survey is complete and no immediate remediation measures were previously required.

d. Underground Storage Tanks (UST).

There are 70 active UST's and 25 removed/closed in place. Thirty-five have been tested in the past year and none failed. In the past three years 36 have been replaced.

5. Radioactive Materials and Sources.

The installation holds three Nuclear Regulatory Commission (NRC) licenses and one DA license for radioactive materials and sources. The NRC licenses are for Type C broad scope by-product material for research/development and education; special nuclear material for calibration and training; and by-product material, CO-60 and CS 137 for surface contamination. The DA license is for Cobalt 57 for use and storage of a lead paint analyzer. Decommissioning is required for 25 rooms in building 1081.

7. OTHER ISSUES, CONSTRAINTS.

No other significant issues or constraints are known.

8. REVENUE GENERATING PROGRAMS.

Revenue generating programs and revenues are as follows:

	Forestry	Fish/Game
FY 92	$173,290	$ 17,826
FY 93	$341,179	$ 32,726
FY 94	$170,000	$ 38,000
	$514,639	$ 88,552

3. PROGRAMMED ENVIRONMENTAL COSTS.

a. Summary of environmental compliance costs:

	Funded	Unfunded
FY 94	$4,274,000	$3,246,000
FY 95	$ 0	$8,136,000
FY 96	$ 0	$6,091,000
FY 97	$ 0	$3,419,000
FY 98	$ 0	$2,406,000
FY 99	$ 0	$1,712,000
	$4,274,000	$25,010,000

b. Summary of environmental restoration costs:

	Funded	Unfunded
FY 94	$1,950,000	$1,450,000
FY 95	$ 0	$3,300,000
FY 96	$ 0	$6,850,000
FY 97	$ 0	$3,250,000
FY 98	$ 0	$1,200,000
FY 99	$ 0	$ 700,000
	$1,950,000	$16,750,000

ACRONYMS

AICUZ	Air Installation Compatible Use Zone
ICUZ	Installation Compatible Use Zone
ITAMS	Integrated Training Area Management System
LCTA	Land Condition Trend Analysis
404 Wetlands	Regulated Wetlands

NONSTRUCTURAL ATTRIBUTES

Fort Rucker -- 01252

1. LAND USE.

a. Land Availability (estimated quantities in acres).

(1)	Installation total	63,503
(2)	Cantonment area	5,355
(3)	Maneuver area	37,968
(4)	Training lands designated as sensitive/marginal by ITAMS/LCTA monitoring None - ITAM not implemented yet	
(5)	Firing Ranges (includes 912 acres of wetland)	13,000
(6)	Non-Impact Firing Range	NONE
(7)	Wetlands Sec 404 area 7,421 are in the maneuver area. Fort Rucker has a wetlands survey planned and financed; it is to be completed in the near future.	9,573
(8)	Other (Surface water areas; set aside unique areas; i.e., recreation habitat, forests; restricted use areas such as landfills, contaminated sites, safety zones.	4,319

Stagefields/Basefields 3,600
(off-post)
Surface Water 719

b. Air Space.

(1)	Restricted Air Space.	32,169
(2)	Extent of Installation Compatible Use Zones (ICUZ) or Noise and Accident Potential Zone (NAPZ). Zone II - 85,197 Zone III - 20,819	106,016

2. THREATENED OR ENDANGERED SPECIES (PLANTS AND ANIMALS).

A threatened or endangered species (TES) survey has been conducted by Auburn University. Currently Fort Rucker has only one resident animal listed, the American alligator. At the Federal level, the alligator

is considered "threatened due to similarity of appearance". The endangered species that looks like the American alligator is not present on Fort Rucker. Fort Rucker also has two animals listed considered threatened by the State of Alabama (Federal Candidate Category 2), the Florida Pine Snake, and the Gopher Tortoise. These two animals both inhabit zeric, sandy habitats, and often live in close association with each other. In addition, the Federal candidate species (Category 2) Southeastern American Kestrel occurs on the installation. There have been sightings of a Bald Eagle in the vicinity of Lake Tholocco. Until nesting is confirmed or sightings increase significantly, the assumption is that the birds are not resident. There are no constraints due to TES imposed upon the installation.

3. CULTURAL RESOURCES.

a. No Historic Preservation Plan nor Cultural Resources Management Plan have been prepared for Fort Rucker.

b. World War II temporary buildings at Fort Rucker were examined by a study being conducted as part of a programmatic agreement concerning the recordation of World War II temporary buildings. No additional studies were recommended for those buildings.

c. Approximately 75% (43,329 acres) of the installation has been surveyed for archeological resources. Seven prehistoric-period and one historic sites were identified. The seven prehistoric sites have been recommended as being potentially eligible for the National Register. Additional archeological surveys are needed at Fort Rucker to inventory those lands not yet examined.

4. INFRASTRUCTURE ISSUES.

a. Potable Water.

The water source for the installation is from 15 wells with a total capacity of 7.6 MGD, and an average daily usage of 3.2 MGD. The drawdown rate is 32 feet.

b. Wastewater.

Two National Pollutant Discharge Elimination System (NPDES) permitted wastewater treatment plants exist with a design capacity of 3.3 MGD and an average use of 1.5 MGD. Life expectancy is more than 10 years.

c. Solid Wastes.

All landfills were closed to receiving wastes before Oct 1993. Currently solid waste removal is provided through contract with Fairview Landscaping Inc, at an annual cost of $665,421.12. Average daily volume of 16.7 tons/day, at a cost of $20.00/ton.

5. AIR QUALITY.

a. The installation is located in Southeast Alabama Intrastate Region, regulated by the Alabama Department of Environmental Management.

b. The region is in attainment.

c. Air pollution sources are: boilers, medical waste incinerators, storage tanks, paint booths, burning, vehicular traffic, accidental fires, and helicopter engine testing, generators, fire fighting training, degreasing, wood working, pesticide/herbicides, wastewater treatment, landfills, welding, electroplating, wash-a-plane, laundry and other sources.

d. The installation has no air emission credits.

e. Major air compliance projects have been identified.

f. The installation is not within 100 km of a critical air quality region.

6. HAZARDOUS MATERIALS/SITES.

a. Use of hazardous materials.

The installation has a Resource Conservation and Recovery Act (RCRA) Part B container permitted storage site. The permit expires in August 1999. The installation has applied for a permit for Open burning/open detonation with an expected issuance date of November 1998.

b. Contaminated Sites.

An assessment to determine contamination has been done by Metcalf and Eddy, Inc. There are 33 Defense Environmental Restoration Account (DERA) eligible contaminated sites.

c. PCB, Asbestos, Lead Paint, or RADON issues.

A PCB survey has been completed. Fifty-eight contaminated transformers were identified of which 32 have been replaced.

Fort Rucker has an aggressive asbestos abatement program. An asbestos survey was completed in 1988. Since then all category 1, friable asbestos has been abated.

All of Fort Rucker has been surveyed for radon. Only 2 houses had readings that were sightly above the action level. The radon will be mitigated when the houses are renovated.

Lead-based paint is an issue in some family housing units and in some WWII wood buildings.

d. Underground Storage Tanks (UST).

The installation has 109 active tanks, and 60 abandoned tanks. Fifty-three have been tested and 18 failed. Seventeen have been replaced with above ground tanks and one is awaiting repair.

e. Radioactive Materials and Sources

There is one Nuclear Regulatory Commission (NRC) license on Fort Rucker; #01-12632-01, for Cesium 137;Iodine 125; Carbon 14; Hydrogen 3; authorized for use in the in-vitro studies (RIA) and in-vivo animal studies. There are three laboratories where radioactive materials are used. The extent of decommissioning required is limited to these three areas and would require very limited surveying and/or cleanup.

7. OTHER ISSUES, CONSTRAINTS.

No other significant issues or constraints are known.

8. REVENUE GENERATING PROGRAMS.

There are three revenue generating programs in place:

	FY 92	FY 93	FY 94
Forestry	$487,000	$356,000	$650,000
Fish/Wildlife	18,600	20,400	20,000
Agri lease	0	975	665
	$505,600	$377,175	$670,665

9. PROGRAMMED ENVIRONMENTAL COSTS.

a. Summary of environmental compliance costs ($000):

	Funded	Unfunded
FY 94	$ 3,425	$
FY 95		943
FY 96		4,064
FY 97		3,881
FY 98		2,221
FY 99		1,916
	$ 3,425	$13,025

b. Summary of environmental restoration costs ($000):

	Funded	Unfunded
FY 94	$ 2,477	$
FY 95		3,140
FY 96		2,420
FY 97		250
FY 98		250
FY 99	-	-
	$ 2,477	$ 6,060

ACRONYMS

AICUZ	Air Installation Compatible Use Zone
ICUZ	Installation Compatible Use Zone
ITAMS	Integrated Training Area Management System
LCTA	Land Condition Trend Analysis
404 Wetlands	Regulated Wetlands

NONSTRUCTURAL ATTRIBUTES

Fort Sam Houston -- 48265

1. LAND USE.

a. Land Availability (estimated quantities in acres).

(1)	Installation total	3,150
(2)	Cantonment area	1,840
(3)	Maneuver area	400
(4)	Training lands designated as sensitive/marginal by ITAMS/LCTA monitoring	0
(5)	Firing Ranges	0
(6)	Non-Impact Firing Range	0
(7)	Wetlands Sec 404 area	120
(8)	Other (Surface water areas; set aside unique areas; i.e., recreation habitat, forests; restricted use areas such as landfills, contaminated sites, safety zones.	475
	Salado Park - 25	
	Golf course - 409	
	Landfills (closed) - 41	

b. Air Space.

(1)	Restricted Air Space.	0
(2)	Extent of Installation Compatible Use Zones (ICUZ) or Noise and Accident Potential Zone (NAPZ).	0

2. THREATENED OR ENDANGERED SPECIES (PLANTS AND ANIMALS).

No threatened or endangered species (TES) survey has been conducted, however it was previously reported that the endangered Black-capped Vireo and Golden-cheeked Warbler may occur on the installation. TES populations are stabilized.

3. CULTURAL RESOURCES.

a. A Historic Preservation Plan and implementing memorandum of agreement have been completed for Fort Sam Houston and has been reviewed by the State Historical Preservation Officer (SHPO) and the Advisory Council for Historic Preservation (ACHP).

b. A historic building survey has been completed for Fort Sam Houston. A total of 795 buildings were found eligible or potentially eligible for listing on the National Register of Historic Places and many of them form the National Register district. Twenty-two buildings are in substandard condition and require extensive renovation at an estimated cost of $6,600,000.

c. Archeological surveys have been completed for all approximately 3,105 acres of Fort Sam Houston and no archeological sites were found potentially eligible for the National Register.

4. INFRASTRUCTURE ISSUES.

a. Potable Water.

The source of potable water is 100% from a total of five wells with a total pumping capacity of 10.0 MGD and an average daily use of 3.112 MGD. The drawdown rate is 20%. The wells are rotated in operation.

b. Wastewater.

Wastewater disposal is accomplished by contract with the City of San Antonio. The average amount of effluent is 4.04 MGD. There is a National Pollutant Discharge Elimination System (NPDES) permit on the installation.

c. Solid Wastes.

All 11 landfills on installation property are inactive. Solid waste is now disposed of under a $591,000 contract with Moore Services, Inc. Approximately 57.5 tons of solid waste is disposed of per day at a cost of $27.00/ton.

5. AIR QUALITY.

a. The installation is located in Air Quality Region 217.

b. The region is in attainment.

c. Air pollution sources are: traffic, accidental fires, and paint booths.

d. The installation has no air emission credits.

e. No major projects were identified to meet/maintain air compliance.

f. There are no critical air quality regions within 100 km of the installation.

6. HAZARDOUS MATERIALS/SITES.

a. Use of hazardous materials.

The installation is not a Resource Conservation and Recovery Act (RCRA) treatment, storage or disposal facility.

b. Contaminated Sites.

The installation has identified one Defense Environmental Restoration Account (DERA) eligible contaminated site.

c. PCB, Asbestos, Lead Paint, or RADON issues.

PCB survey is 50% complete, with no further information provided.

Asbestos removal process is ongoing.

Previously a Radon survey was reported to be in-progress.

A lead-based paint program is reported to be in-progress.

d. Underground Storage Tanks (UST).

All 20 active UST's were tested and none failed.

e. Radiological Materials and Sources.

The installation holds Nuclear Regulatory Commission (NRC) or DA license for medical radiological materials. The license is used for medical radiological requirements by Brooke Army Medical Center. No decommissioning requirements are reported to be required.

7. OTHER ISSUES, CONSTRAINTS.

No other significant issues or constraints are known.

8. REVENUE GENERATING PROGRAMS.

Real property leases generate $18,514/year.

9. PROGRAMMED ENVIRONMENTAL COSTS.

a. Summary of environmental compliance costs :

	Funded	Unfunded
FY 94	$5,226,000	$3,323,000
FY 95	$6,358,000	$1,337,000
FY 96	$3,406,000	$2,670,000
FY 97	$2,986,000	$2,827,000
FY 98	$3,131,000	$2,989,000
FY 99	$2,916,000	$3,100,000
	$24,023,000	$16,248,000

b. Summary of environmental restoration costs:

	Funded	Unfunded
FY 94	$ 0	$ 110,000
FY 95	$ 0	$ 25,000
FY 96	$ 0	$ 20,000
FY 97	$ 0	$ 20,000
FY 98	$ 0	$ 20,000
FY 99	$ 0	$ 40,000
	$ 0	$ 265,000

ACRONYMS

AICUZ	Air Installation Compatible Use Zone
ICUZ	Installation Compatible Use Zone
ITAMS	Integrated Training Area Management System
LCTA	Land Condition Trend Analysis
404 Wetlands	Regulated Wetlands

NONSTRUCTURAL ATTRIBUTES

Camp Bullis -- 48145

1. LAND USE.

a. Land Availability (estimated quantities in acres).

(1)	Installation total		27,994
(2)	Cantonment area		603
(3)	Maneuver area		21,169
(4)	Training lands designated as sensitive/marginal by ITAMS/LCTA monitoring		675
(5)	Firing Ranges		5,892
(6)	Non-Impact Firing Range		0
(7)	Wetlands Sec 404 area		22
(8)	Other (Surface water areas; set aside unique areas; i.e., recreation habitat, forests; restricted use areas such as landfills, contaminated sites, safety zones.		1,630
	Blanco Strip	- 206	
	FAA Restricted	- 89	
	Closed landfills	- 43	
	Stormwater impoundments & primary steam channels	- 385	
	Blast hazard	- 907	

b. Air Space.

(1)	Restricted Air Space.	6,631
(2)	Extent of Installation Compatible Use Zones (ICUZ) or Noise and Accident Potential Zone (NAPZ).	1,438

2. THREATENED OR ENDANGERED SPECIES (PLANTS AND ANIMALS).

A threatened or endangered species (TES) survey has been conducted. Two TES, Black-capped Vireo and Golden-cheeked Warbler, occur on the installation. A Biological Assessment has not been assessed since the TES populations are stabilized.

3. CULTURAL RESOURCES.

a. A Historic Preservation Plan/Cultural Resources Management Plan has been completed for Camp Bullis and has been reviewed by the State Historic Preservation Officer (SHPO) and the Advisory Council on Historic Preservation (ACHP).

b. A historic building survey has been completed and 76 buildings were identified as eligible or listed on the National Register of Historic Places.

c. An archeological survey has been completed for 14,272 acres. Nineteen sites were identified as being potentially eligible for the National register. A total of 57 acres are unavailable for development and operations due to cultural resources.

4. INFRASTRUCTURE ISSUES.

a. Potable Water.

The source of potable water is 100% from a total of two wells. The total pumping capacity of all wells is 0.6 MGD and the average use is 0.124 MGD. The wells have a drawdown rate of 50%

b. Wastewater.

The wastewater treatment plant has a design capacity of 0.4 MGD and an average daily usage of 0.2 MGD. The wastewater treatment plant is scheduled to be replaced under a FY 95 project.

c. Solid Wastes.

All 12 landfills on the installation are inactive. Details on current solid waste disposal measures were not provided.

5. AIR QUALITY.

a. The installation is located in Air Quality Region 6.

b. The region is in attainment.

c. Air pollution sources on Camp Bullis are: controlled underbrush burnings, traffic, and accidental fires.

d. The installation has no air emission credits.

e. The A-106 plan identifies an air pollution point source/emission project at Camp Bullis.

f. There are no critical air quality regions within 100 km of the installation.

6. HAZARDOUS MATERIALS/SITES.

a. Use of hazardous materials.

Camp Bullis is under am Interim status for a Resource Conservation and Recovery Act (RCRA) Part B permitted hazardous waste storage. The RCRA Part B permit is expected to be issued in June 1994.

b. Contaminated Sites.

There are no Defense Environmental Restoration Account (DERA) eligible contaminated sites at Camp Bullis.

c. PCB, Asbestos, Lead Paint, or RADON issues.

A PCB survey is 50% complete, with no further details provided.

Asbestos removal process is ongoing.

Lead-based paint removal process is ongoing.

d. Underground Storage Tanks (UST).

All four active tanks have been tested and passed.

e. Radiological Materials and Sources.

The installation does not hold any Nuclear Regulatory Commission (NRC) nor DA licenses for radiological materials and sources.

7. OTHER ISSUES, CONSTRAINTS.

No other significant issues or constraints are known.

8. REVENUE GENERATING PROGRAMS.

Property leases generate $21,415 per year.

9. PROGRAMMED ENVIRONMENTAL COSTS.

a. Summary of environmental compliance costs:

	Funded	Unfunded
FY 94	$ 763,000	$1,290,000
FY 95	$ 668,000	$1,290,000
FY 96	$1,019,000	$ 530,000
FY 97	$ 923,000	$ 490,000
FY 98	$ 918,000	$ 515,000
FY 99	$1,123,000	$ 445,000
	$5,414,000	$4,530,000

b. There are no environmental restoration costs requirements at Camp Bullis.

ACRONYMS

AICUZ	Air Installation Compatible Use Zone
ICUZ	Installation Compatible Use Zone
ITAMS	Integrated Training Area Management System
LCTA	Land Condition Trend Analysis
404 Wetlands	Regulated Wetlands

NONSTRUCTURAL ATTRIBUTES

Fort Sill -- 40755

1. LAND USE.

a. Land Availability (estimated quantities in acres).

(1)	Installation total	94,220
(2)	Cantonment area	5,436
(3)	Maneuver area	36,007
(4)	Training lands designated as sensitive/marginal by ITAMS/LCTA monitoring	14,719
(5)	Firing Ranges	38,058
(6)	Non-Impact Firing Range	Almost 0
(7)	Wetlands Sec 404 area	1,200
(8)	Other (Surface water areas; set aside unique areas; i.e., recreation habitat, forests; restricted use areas such as landfills, contaminated sites, safety zones.	789
	Surface water - 451	
	LETRA Rec Area - 150	
	Landfill - 188	

b. Air Space.

(1)	Restricted Air Space.	110,000
(2)	Extent of Installation Compatible Use Zones (ICUZ) or Noise and Accident Potential Zone (NAPZ).	
	Zone II	100,000
	Zone III	50

2. THREATENED OR ENDANGERED SPECIES (PLANTS AND ANIMALS).

A threatened or endangered species (TES) survey has been conducted. The Federally listed endangered Black -capped Vireo occurs on the installation but creates only minimal impacts on the conduct of the installation's mission.

3. CULTURAL RESOURCES.

a. A Historic Preservation Plan/Cultural Resources Management Plan has been completed and reviewed by the State Historic Preservation Officer (SHPO) or the Advisory Council for Historic Preservation (ACHP).

b. A historic building inventory is on-going. The installation reports a total of 765 historic properties, of which 49 are listed and 716 eligible for listing on the National Register of Historic Places. Fort Sill has a National Historic Landmark (NHL) District composed of 45 buildings and associated parade ground dating from the early 1870's through 1910's. Development within the NHL District is restricted in order to preserve the integrity of the setting and requires SHPO and ACHP coordination. Approximately one-fourth of the cantonment area is located within potential historic districts related to the evolution of the installation from a cavalry post to artillery center.

c. An archeological survey has been conducted of 51,706 acres and 251 sites were found potentially eligible. Approximately 100 acres are not available for development due to the presence of eligible or potentially eligible archeological sites, cemeteries and National Register of Historic Places listed sites.

d. Several nearby Native American groups (Apache, Kiowa and Comanche) frequent Fort Sill for ceremonies. Formal consultations with these groups has not been undertaken with regard to assessing traditional cultural properties except for access to archeological and ethnographic collections housed at the Fort Sill museum. No limitations exist, at present, due to consultations or agreements with interested parties, such as Native Americans.

4. INFRASTRUCTURE ISSUES.

a. Potable Water.

Potable water is 99% from surface water and less than one percent from a ground well. Potable water is primarily supplied under a contract with the City of Lawton. The maximum capacity/contracted amount is 12.5 MGD and the average daily usage is 4.0 MGD. The ground well has a pumping capacity of 0.004 MGD and an average daily usage of 0.002 MGD. The installation water treatment plant has been shut down for five years and was due to be back in operation on or about May 1994. The design capacity of the installation treatment plant is 0.05 MGD. The system will allow for 71% expansion, however there are treatment and distribution limitations.

b. Wastewater.

The upgraded National Pollutant Discharge Elimination System (NPDES) permitted wastewater treatment plant has a design capacity of 4.3 MGD. At present, the average daily usage is 2.2 MGD. The new wastewater treatment

plant is designed to last into the 21st Century.

c. Solid Wastes.

A 188 acre landfill exists on the installation with a total remaining capacity of 4,097,520 tons. The estimated useful life is 35 years. The installation is beginning to implement a composting operation, which will reduce the solid waste stream by 50-60% by the end of CY 96, thereby doubling the useful life remaining for the permitted landfill site.

5. AIR QUALITY.

a. The installation is in Environmental Protection Agency (EPA) Air Quality Region VI-EPA, Dallas, TX.

b. The region is in attainment.

c. Air pollution sources are: paint booths, POL dispensing, incinerators, traffic, controlled burns, central energy plant, accidental fires and training mission.

d. The installation has no air emission credits.

e. The installation has identified two major projects; Phase II Vapor Recovery Devices and CFC Training to meet/maintain air compliance.

f. The installation is within 100 km of a critical air quality region, Wichita Mountain National Wildlife Refuge.

6. HAZARDOUS MATERIALS/SITES.

a. Use of hazardous materials.

The installation is a less than 90 day storage site facility for hazardous waste.

b. Contaminated Sites.

An ongoing assessment to determine contamination has identified 27 active Defense Environmental Restoration Account (DERA) eligible sites. A total of 66 sites are identified on the IAP.

c. PCB, Asbestos, Lead Paint, or RADON issues.

PCB survey has been completed and 10 capacitors and one transformer were identified and replaced.

d. Underground Storage Tanks (UST).

Out of 226 USTs, 17 are active and 209 active. All 209 inactive tanks will be removed by the end of CY 94. A total of 121 above ground storage tanks have been installed to replace USTs.

e. Radioactive Materials and Sources.

Reynolds Army Community Hospital holds a Nuclear Regulatory Commission (NRC) license for medical use of radioactive materials currently used in five areas and two bathroom facilities. The Nuclear Medical Service is scheduled for immediate decommissioning and relocation to the newly built Reynolds Army Community Hospital located in building 4300 (8 - 9 rooms). The installation also holds several NRC and DA licenses for self-luminous sources on captured enemy equipment, analyzers employing sealed sources and unserviceable radioactive items (sights, fire control devices, chemical agent detectors, etc.).

7. OTHER ISSUES, CONSTRAINTS.

No other significant issues or constraints are known.

8. REVENUE GENERATING PROGRAMS.

Revenue generating programs are:

	Hunting/ Fishing	Firewood	Agri Lease
FY 92	$103,700	$ 4,300	$1,200
FY 93	$91,200	$ 4,900	$1,200
FY 94	$92,000	$ 5,000	$1,200
	$286,900	$ 14,200	$3,600

9. PROGRAMMED ENVIRONMENTAL COSTS.

a. Summary of environmental compliance costs:

	Funded	Unfunded
FY 94	$5,050,000	$ 0
FY 95	$ 0	$ 4,900,000
FY 96	$ 0	$ 3,950,000
FY 97	$ 0	$ 3,500,000
FY 98	$ 0	$ 2,350,000
FY 99	$ 0	$ 1,500,000
	$5,050,000	$16,200,000

b. Summary of environmental restoration costs:

	Funded	Unfunded
FY 94	$5,050,000	$ 4,900,000
FY 95	$ 0	$ 3,950,000
FY 96	$ 0	$ 3,500,000
FY 97	$ 0	$ 2,350,000
FY 98	$ 0	$ 1,500,000
FY 99	$ 0	$ 0
	$5,050,000	$16,200,000

ACRONYMS

AICUZ	Air Installation Compatible Use Zone
ICUZ	Installation Compatible Use Zone
ITAMS	Integrated Training Area Management System
LCTA	Land Condition Trend Analysis
404 Wetlands	Regulated Wetlands

NONSTRUCTURAL ATTRIBUTES

Presidio Monterey -- 06305

1. LAND USE.

a. Land Availability (estimated quantities in acres).

(1)	Installation total	392
(2)	Cantonment area	392
(3)	Maneuver area	0
(4)	Training lands designated as sensitive/marginal by ITAMS/LCTA monitoring	0
(5)	Firing Ranges	0
(6)	Non-Impact Firing Range	0
(7)	Wetlands Sec 404 area	0
(8)	Other (Surface water areas; set aside unique areas; i.e., recreation habitat forests; restricted use areas such as landfills, contaminated sites, safety zones.	0

b. Air Space.

(1)	Restricted Air Space.	0
(2)	Extent of Installation Compatible Use Zones (ICUZ) or Noise and Accident Potential Zone (NAPZ).	0

2. THREATENED OR ENDANGERED SPECIES (PLANTS AND ANIMALS).

No threatened or endangered species (TES) survey has been conducted, however the 1983 Master Plan Environmental Assessment mentioned there are no endangered, threatened or candidate plants or animals found on the installation.

3. CULTURAL RESOURCES.

a. The Historical Preservation Maintenance Manual draft report of June 1992, cites data contained in the Presidio of Monterey Cultural Resources Report dated 1985. Additionally, the Programmatic Memorandum of Agreement between the DOD and Advisory Council on Historic Preservation is the basis for the ongoing study as part of the Historic Preservation Maintenance Manual. The study must still be reviewed by the State Historic Preservation Officer (SHPO).

b. A historic building survey has been completed and 96 buildings contribute to the historic district.

c. Archeological surveys have been conducted and approximately 84 acres have been surveyed, with a total of 112 potential sites identified. The historic site, El Castillo (a.k.a. Monterey Monuments), consisting of six sites has been nominated for listing in the National Register of Historic Places. Archeological artifacts and associated records are currently stored on the installation. A total of 123 acres are unavailable for development. An estimated 42 acres have been set aside as a Archeological District as a mitigation measure during the Master Plan approval process. No new construction or ground disturbance is allowed within this district.

4. INFRASTRUCTURE ISSUES.

a. Potable Water.

Potable water is supplied by contract with the California American Water Company via metered connections. Storage capacity consists of two each 500,000 gallons above ground storage tanks. The contracted capacity is 5.85 MGD and average consumption is 0.4 MGD.

b. Wastewater.

Wastewater is currently treated at the Monterey Regional Water Pollution Control Agency treatment plant. The total capacity of the plant is 29 MGD. The average usage is approximately 0.2 MGD and the Master Plan projection is 2.2 MGD.

c. Solid Wastes.

Solid waste is disposed under contract with the Monterey City Disposal Service. The projected waste generation after the relocation of the Fort Ord Base Operations (BASOPS) staff to the Presidio of Monterey is estimated at 70,000 CY/year.

5. AIR QUALITY.

a. The installation is in the North Central Coast Air Basin.

b. The region is not in attainment for ozone (moderate).

c. There are no air pollution sources reported at the

installation.

d. The installation has no air emission credits.

e. There are major air compliance projects/expenditures reported.

f. The installation is not within 100 km of a critical air quality region.

6. HAZARDOUS MATERIALS/SITES.

a. Use of hazardous materials.

The installation is not a Resource Conservation and Recovery Act (RCRA) treatment, storage or disposal facility.

b. Contaminated sites.

The installation has identified three Defense Environmental Restoration Account (DERA) eligible sites. A total of eight Installation Restoration Program (IRP) sites have been identified.

c. PCB, Asbestos, Lead Paint, and RADON issues.

PCB survey has been completed and there are no known contaminated transformers on the installation.

d. Underground Storage Tanks (UST).

Five USTs remain on the installation and are scheduled for removal.

e. Radioactive Materials and Sources.

The installation holds no Nuclear Regulatory Commission (NRC) or DA licenses for radioactive materials or sources.

7. OTHER ISSUES, CONSTRAINTS.

No other significant issues or constraints are known.

8. REVENUE GENERATING PROGRAMS.

There are no revenue generating programs.

9. PROGRAMMED ENVIRONMENTAL COSTS.

a. Summary of environmental compliance costs:

	Funded	Unfunded
FY 94	$ 535,000	$ 0
FY 95	$ 0	$ 387,000
FY 96	$ 0	$ 590,000
FY 97	$ 0	$ 585,000
FY 98	$ 0	$ 530,000
FY 99	$ 0	$ 560,000
	$ 535,000	$2,652,000

b. Summary of environmental restoration costs:

	Funded	Unfunded
FY 94	$2,616,000	$ 0
FY 95	$ 0	$ 565,000
FY 96	$ 0	$1,400,000
FY 97	$ 0	$ 900,000
FY 98	$ 0	$ 900,000
FY 99	$ -	$ -
	$2,616,000	$3,765,000

ACRONYMS

AICUZ	Air Installation Compatible Use Zone
ICUZ	Installation Compatible Use Zone
ITAMS	Integrated Training Area Management System
LCTA	Land Condition Trend Analysis
404 Wetlands	Regulated Wetlands

NONSTRUCTURAL ATTRIBUTES

Carlisle Barracks -- 42155

1. LAND USE.

a. Land Availability (estimated quantities in acres).

(1)	Installation total	402
(2)	Cantonment area	218.7
(3)	Maneuver area	0
(4)	Training lands designated as sensitive/marginal by ITAMS/LCTA monitoring	0
(5)	Firing Ranges	0
(6)	Non-Impact Firing Range	0
(7)	Wetlands Sec 404 area	6.3
(8)	Other (Surface water areas; set aside unique areas; i.e., recreation habitat, forests; restricted use areas such as landfills, contaminated sites, safety zones. Recreation	177

b. Air Space.

(1)	Restricted Air Space.	0
(2)	Extent of Installation Compatible Use Zones (ICUZ) or Noise and Accident Potential Zone (NAPZ).	0

2. THREATENED OR ENDANGERED SPECIES (PLANTS AND ANIMALS).

A threatened or endangered species (TES) survey has been conducted and no Federal nor State listed endangered or threatened species or critical habitats are known to occur on the installation.

3. CULTURAL RESOURCES.

a. The installation has a Historic Preservation Plan/Cultural Resources Management Plan. Comments are obtained from the State Historical Preservation Officer (SHPO) and the Advisory Committee on Historic Preservation (ACHP).

b. A historic building inventory has been completed and there are 104 historic buildings reported on Carlisle Barracks. Twenty-two buildings are listed and 82 eligible for listing on the National Register of Historic Places.

c. An archeological survey has been completed for 90 acres. Two archeological sites have been found to be potentially eligible for the Historic Register.

4. INFRASTRUCTURE ISSUES.

a. Potable Water.

Potable water is supplied from an installation spring. The pumping capacity is 1.0 MGD and the average use is 0.35 MGD. The spring produces approximately 3.0 MGD.

b. Wastewater.

Wastewater is disposed under contract with the Borough of Carlisle, Carlisle, Pennsylvania. The wastewater treatment plant has maximum capacity of 0.25 MGD and average daily usage of 0:245 MGD. An increase in the average usage will require negotiation for additional plant capacity with the Borough of Carlisle.

c. Solid Wastes.

Solid waste is disposed under a $148,798 contract with Waste management, Inc. Average daily volume is 4.8 tons/day at a cost of $85/ton.

5. AIR QUALITY.

a. The installation is in the South Central Pennsylvania Intrastate Air Quality Control Region.

b. The region is in non-attainment for ozone (marginal).

c. Air pollution sources are central heat plant boilers.

d. The installation has no air emission credits.

e. No projects are identified as necessary to meet/maintain air compliance.

f. The installation is not within 100 km of a critical air quality region.

6. HAZARDOUS MATERIALS/SITES.

a. Use of hazardous materials.

The installation is not a Resource Conservation and Recovery Act (RCRA) hazardous waste storage facility.

b. Contaminated sites

An assessment has been conducted to determine contaminated sites. There are no Defense Environmental Restoration Account (DERA) eligible sites identified on the installation.

c. PCB, Asbestos, Lead Paint, and RADON issues.

A PCB survey has been completed and 13 of the 15 contaminated transformers identified have been replaced.

d. Underground Storage Tanks (UST).

There are 25 active and six abandoned USTs on the installation. Fourteen tanks have been tested and the three failed tanks are to be removed.

e. Radiological Materials and Sources.

The installation holds no Nuclear Regulatory Commission (NRC) nor DA licenses for radiological materials and sources.

7. OTHER ISSUES, CONSTRAINTS.

No other significant issues or constraints are known.

8. REVENUE GENERATING PROGRAMS.

There are no revenue generating programs identified on the installation.

9. PROGRAMMED ENVIRONMENTAL COSTS.

a. Summary of environmental compliance costs:

	Funded	Unfunded
FY 94	$2,584,000	$ 0
FY 95	$ 0	$1,115,000
FY 96	$ 0	$ 513,000
FY 97	$ 0	$ 264,000
FY 98	$ 0	$ 182,000
FY 99	$ 0	$ 172,000
	$2,584,000	$2,583,000

b. There are no environmental restoration costs requirements at Carlisle Barracks.

ACRONYMS

AICUZ	Air Installation Compatible Use Zone
ICUZ	Installation Compatible Use Zone
ITAMS	Integrated Training Area Management System
LCTA	Land Condition Trend Analysis
404 Wetlands	Regulated Wetlands

NONSTRUCTURAL ATTRIBUTES

Fort Leavenworth -- 20395

1. LAND USE.

a. Land Availability (estimated quantities in acres).

(1)	Installation total	5,634
(2)	Cantonment area	2,461
(3)	Maneuver area	0
(4)	Training lands designated as sensitive/marginal by ITAMS/LCTA monitoring	0
(5)	Firing Ranges	0
(6)	Non-Impact Firing Range	0
(7)	Wetlands Sec 404 area	1,359
(8)	Other (Surface water areas; set aside unique areas; i.e., recreation habitat, forests; restricted use areas such as landfills, contaminated sites, safety zones.	1,814

b. Air Space.

(1)	Restricted Air Space.	0
(2)	Extent of Installation Compatible Use Zones (ICUZ) or Noise and Accident Potential Zone (NAPZ).	0

2. THREATENED OR ENDANGERED SPECIES (PLANTS AND ANIMALS).

A threatened or endangered species survey has not been performed; however, the Federally listed threatened species American Bald Eagle is reported to occur on the installation as a transient only. It was also previously reported that a 1359-acre wetland area near the Missouri River is a potential habitat for five endangered fish species, two threatened plant species one threatened mammal species, and three other candidate mammals.

3. CULTURAL RESOURCES.

a. Fort Leavenworth has prepared an installation Historic Preservation Plan. The entire installation is considered to be part of a National Historic Landmark district.

b. A historic building survey has been conducted. There are 99 buildings listed and 170 buildings eligible for the National Register of Historic Places.

c. A total of 5,000 acres have been surveyed for archeological sites. One site is listed and 45 potentially eligible for the National Register of Historic Places.

4. INFRASTRUCTURE ISSUES.

a. Potable Water.

The source of potable water for the installation is 100% from five wells. The total pumping capacity of the wells is 5.58 MGD, with an average use of 1.2 MGD.

b. Waste water.

Waste water service is contracted with the City of Leavenworth with a contract amount of $424,000 in 1993. The maximum capacity is 5.45 MGD and average daily use is 2.175 MGD.

c. Solid Wastes.

Solid waste disposal is provided by a $100,000/year contract with Forest View Landfill in Kansas City, Missouri. Average daily volume is 210 tons/day at a cost of $11.50/ton.

5. AIR QUALITY.

a. Air Quality Region is the Northeast Kansas Intrastate Air Quality Region.

b. The region is in attainment.

c. Air pollution sources are boilers, emergency generators, petroleum storage tanks and refueling activities, incinerator, hospital laboratory, dry cleaning, shoe repair, blueline production, screen print shop, printing plant, silkscreen printing, pesticides/herbicides, furniture repair, carpenter/wood shop, debris burning, and degreasing operations.

d. No air emission credits are maintained.

e. A major project, Perchloroethylene Recovery Equipment, has been identified to meet/maintain compliance.

e. The installation is not within 100 km of a critical air quality region.

6. HAZARDOUS MATERIALS/SITES.

a. Use of hazardous materials.

The installation has a Resource Conservation and Recovery Act (RCRA) Part B permit for one hazardous waste storage site, which expires in April 1995. The installation is in the process of renewing the permit.

b. Contaminated Sites.

There are 18 Defense Environmental Restoration Account (DERA) eligible sites (6 at one location) identified by the installation.

c. PCB, Asbestos, Lead Paint, or RADON issues.

PCB survey is complete and all 35 contaminated transformers identified were replaced.

d. Underground Storage Tanks (UST).

Out of 21 active and one abandoned UST, 21 were tested and none failed.

e. Radioactive Materials and Sources.

A DA license for radioactive materials is held for two sealed sources (Model FA1C, Lead-In-Paint Analyzers).

7. OTHER ISSUES, CONSTRAINTS.

No other significant issues or constraints are known.

8. REVENUE GENERATING PROGRAMS.

There are no revenue generating programs except for the Disciplinary Barracks farm and greenhouse, which only offset operations costs.

9. PROGRAMMED ENVIRONMENTAL COSTS.

a. Summary of environmental compliance costs:

	Funded	Unfunded
FY 94	$2,163,000	$ 107,000
FY 95		$1,318,000
FY 96		$1,060,000
FY 97		$ 935,000
FY 98		$ 935,000
FY 99		$ 935,000
	$2,163,000	$5,290,000

b. Summary of environmental restoration costs:

	Funded	Unfunded
FY 94	$ 900,000	$1,427,000
FY 95		$1,632,000
FY 96		$1,043,000
FY 97		$ 563,000
FY 98		$3,310,000
FY 99		$ 680,000
	$ 900,000	$8,655,000

ACRONYMS

AICUZ	Air Installation Compatible Use Zone
ICUZ	Installation Compatible Use Zone
ITAMS	Integrated Training Area Management System
LCTA	Land Condition Trend Analysis
404 Wetlands	Regulated Wetlands

NONSTRUCTURAL ATTRIBUTES

Fort McNair -- 11605

1. LAND USE.

a. Land Availability (estimated quantities in acres).

(1)	Installation total	99.2
(2)	Cantonment area	40.6
(3)	Maneuver area	0
(4)	Training lands designated as sensitive/marginal by ITAMS/LCTA monitoring	9.2
(5)	Firing Ranges	0
(6)	Non-Impact Firing Range	0
(7)	Wetlands Sec 404 area	4-mile frontage
(8)	Other (Surface water areas; set aside unique areas; i.e., recreation habitat, forests; restricted use areas such as landfills, contaminated sites, safety zones.	50.2

b. Air Space.

(1)	Restricted Air Space. (areas not defined)	200 feet
(2)	Extent of Installation Compatible Use Zones (ICUZ) or Noise and Accident Potential Zone (NAPZ).	Unknown

2. THREATENED OR ENDANGERED SPECIES (PLANTS AND ANIMALS).

A threatened or endangered species survey has been conducted, however there are no Federal or State listed endangered or threatened species or critical habitats reported to occur on the installation.

3. CULTURAL RESOURCES.

a. The installation has a Historic Preservation Plan/ Cultural Resources Management Plan which has been reviewed by the State Historic Preservation Officer (SHPO) and the Advisory Council for Historic Preservation (ACHP). It was previously reported that all projects which may have an effect on historic properties are conducted under a Memorandum Agreement between the Army, the District of Columbia SHPO and the Advisory Council on Historic Preservation.

b. A historic building survey has been conducted; 58 structures were identified as eligible or listed on the National Register of Historic Places.

c. An archeological survey has been completed for all 99.2 acres and 16 sites were identified as eligible for listing on the National Register.

4. INFRASTRUCTURE ISSUES.

a. Potable Water.

Fort McNair receives its water from the Army Corps of Engineers facility, Washington Aqueduct, in Washington, DC. There is no contract limit and the average daily consumption is 0.45 MGD.

b. Wastewater.

The city of Washington, D.C. disposes of wastewater with no daily limits. Average daily discharge is 0.45 MGD.

c. Solid Wastes.

Solid waste removal/disposal is by a $204,420 contract with Urban Service. The daily volume is 3-5 tons/day at a cost of $70.00/ton. There are no limitations on volume increases.

5. AIR QUALITY.

a. Fort McNair is in the National Capital Interstate Air Quality Region, District of Columbia Environmental Control Division.

b. The region is in non-attainment; however, the pollutants and their severity were to be determined during the city inspection in June 1994.

c. Air pollution sources are: boiler plant, underground storage tanks, paint shop, and mobile sources.

d. The installation has no air emission credits.

e. An air emissions inventory and permit is required to meet/maintain air compliance.

f. The installation is in a critical air quality region.

6. HAZARDOUS MATERIALS/SITES.

a. Use of hazardous materials.

Fort McNair is not a Resource Conservation and Recovery Act (RCRA) treatment, storage or disposal facility.

b. Contaminated sites

An environmental assessment determined that there is one Defense Environmental Restoration Account (DERA) eligible contaminated site.

c. PCB, Asbestos, Lead Paint, and RADON issues.

PCB survey has been completed and seven regulated contaminated transformers were identified, of which five were replaced and two retro-filled.

d. Underground Storage Tanks (UST).

Seventeen USTs have been tested, of which 13 failed. All 17 USTs were removed and eight new USTs were installed.

e. Radioactive Materials and Sources.

The dental clinic holds a Nuclear Regulatory Commission (NRC) or DA license for x-ray equipment The clinic is under the control of the Walter Reed Army Medical Center, which is responsible for any decommissioning requirements.

7. OTHER ISSUES, CONSTRAINTS.

No other significant issues or constraints are known.

8. REVENUE GENERATING PROGRAMS.

There are no revenue generating programs.

9. PROGRAMMED ENVIRONMENTAL COSTS.

a. Summary of environmental compliance costs:

	Funded	Unfunded
FY 94	$ 392,000	$ 10,000
FY 95	$ 525,000	$ 6,000
FY 96	$ 355,000	$ 25,000
FY 97	$ 275,000	$ 0
FY 98	$ 315,000	$ 25,000
FY 99	$ 235,000	$ 0
	$2,097,000	$ 66,000

b. Summary of restoration costs:

	Funded	Unfunded
FY 94	$ 0	$ 150,000
FY 95	$ 0	$ 200,000
FY 96	$ 0	$ 50,000
FY 97	$ 0	$ 50,000
FY 98	$ 0	$ 50,000
FY 99	$ -	$ -
	$ 0	$ 500,000

ACRONYMS

AICUZ	Air Installation Compatible Use Zone
ICUZ	Installation Compatible Use Zone
ITAMS	Integrated Training Area Management System
LCTA	Land Condition Trend Analysis
404 Wetlands	Regulated Wetlands

NONSTRUCTURAL ATTRIBUTES

West Point Mil Reservation -- 36993

1. LAND USE.

a. Land Availability (estimated quantities in acres). Includes Stewart Army Subpost and Galeville.

(1)	Installation total		17,103
	West Pt	- 16,080	
	Stewart Sub-post	- 402	
	Galeville	- 621	
(2)	Cantonment area		1,524
(3)	Maneuver area		591
(4)	Training lands designated as sensitive/marginal by ITAMS/LCTA monitoring		9,679
(5)	Firing Ranges		2,500
(6)	Non-Impact Firing Range		350
(7)	Wetlands Sec 404 area		1,091
(8)	Other (Surface water areas; set aside unique areas; i.e., recreation habitat, forests; restricted use areas such as landfills, contaminated sites, safety zones.		3,666
	Recreation	- 3,151	
	Water Surface	- 515	

b. Air Space.

(1) Restricted Air Space. All range areas are restricted in July and August

(2) Extent of Installation Compatible Use Zones (ICUZ) or Noise and Accident Potential Zone (NAPZ). Less than 1 acre.

2. THREATENED OR ENDANGERED SPECIES (PLANTS AND ANIMALS).

A threatened or endangered species (TES) survey was conducted by the New York State Biological Survey (7 Oct 93). No permanent resident TES's were identified. During the winter migratory period, the Federally listed endangered Bald Eagle occurs occasionally and helicopter crews are instructed to stay at or above 1000 feet above ground level if possible, and to watch for and avoid contact with Bald Eagles in the areas where observed.

3. CULTURAL RESOURCES.

a. West Point has a Programmatic Agreement with the State Historical Preservation Office. There is a Cultural Resources Management Plan (CRMP) and the installation is in the process of developing a Historic Preservation Plan (HPP).

b. A historic building inventory has been completed for West Point. West Point has a National Historic Landmark (NHL) architectural district and numerous other National Register eligible buildings are scattered throughout the facility. The survey listed 259 buildings as either on or eligible for the National Register. One building is in substandard condition. A memorandum of agreement (MOA) for Stony Lonesome II preserves two redoubts and six hut sites (5 acres). A total of 250 acres are set aside/defined as NHL.

c. An archeological site location model has been prepared for West Point. Approximately one percent of West Point's total 17,103 acres were surveyed to test this model. Approximately 80 archeological sites were found by this survey; many of these are considered to be potentially eligible for the National Register. Historic records show that there are at least 90 potential historic sites at West Point. Additional surveys will be necessary to complete the archeological inventory.

4. INFRASTRUCTURE ISSUES.

a. Potable Water.

Potable water is supplied from surface water sources. Two water treatment plants exist with design capacities of 4.0 MGD and 2.0 MGD. The combined average use is 2.254 MGD. Ongoing work is required to upgrade the plant within the next 10-15 years. The STAS facility is under the control of the Town of New Windsor with the finalized contract being completed.

b. Wastewater.

Three wastewater treatment facilities exist on the installation. The Traget Hill facility has a design capacity of 2.0 MGD, a daily use of 1.5 MGD and a life of 30 years. The Buckner facility has a design capacity of 0.25 MGD, a daily use of 0.1 MGD and a life of 20 years. This facility is only operated from June through September. Upgrading of this facility is necessary. The STAS facility has a design capacity of 0.5 MGD, use of 0.4 MGD. This facility also requires

upgrading and is in the negotiation process of turning it over to the Town of Windsor with all contract data pending. All three operate under a National Pollutant Discharge Elimination System (NPDES) permit.

c. Solid Wastes.

Solid waste is disposed of under contract. The contract includes the operation of a transfer station, a range site and a burn site. The average volume of disposal material is 30 tons per day, at an average cost of $38/ton for USMA, and $60/ton for STAS.

5. AIR QUALITY.

a. The designated Air Quality Region in which the installation is located is Hudson Valley Air Quality Control Region.

b. The region is a non-attainment area for ozone (severe).

c. Air pollution sources are: powerhouse, incinerator, spray paint booth, dry cleaning plant, welding shop, rifle range, sawdust blower, burn pit, and traffic.

d. Air emission credit status is unreported.

e. Major air compliance projects have been identified to meet/maintain air compliance.

f. The installation is within a critical air quality region.

g. The Central Power Plant is restricted to fuel burning of 5,620,000 gallons per year.

6. HAZARDOUS MATERIALS/SITES.

a. Use of hazardous materials.

The installation is in the process of applying for a Resource Conservation and Recovery Act (RCRA) Subpart X permit for open burning of unused propellant from artillery firing. Ongoing discussion with NYS DEC and EPA Region II. The activity is covered by interim status.

b. Contaminated sites.

The installation has identified six Defense Environmental Restoration Account (DERA) eligible contaminated sites.

c. PCB, Asbestos, Lead Paint, and RADON issues.

PCB: A PCB survey has been completed. 28 contaminated transformers have been identified. 14 have been replaced and 14 refitted.

Asbestos: An asbestos management plan survey is on-going in FY 93. Based on the survey results of the first 90 buildings (over 2 million square feet), abatement measures will be performed.

Lead Paint: An assessment survey will take place in FY 93.

Radon: A review of past monitoring activity is in progress. Mitigation and/or additional monitoring will be dependent on the results.

d. Underground Storage Tanks (UST).

There are 250 tanks present of which 100 having been tested. Ten tanks have failed the testing, seven having been replaced.

e. Radioactive Materials and Sources.

Nuclear Regulatory Commission (NRC) Byproduct Material License #31D-02102-02 and #SUB-311 are present. DARA A321-10-01 is also present. All are for small quantities of radioactive materials for use in the education and training of the cadets. Materials are used primarily in Bartlett Hall, 3 to 5 classrooms/laboratories and Washington Hall, Cadet Supply Room with minimum survey and cleanup due to the small quantities of material.

7. OTHER ISSUES, CONSTRAINTS.

No other environmental issues or constraints are reported.

8. REVENUE GENERATING PROGRAMS.

Two revenue generating programs are in place.

	Forestry	Fish/Wildlife
FY 92	$ 38,000	$ 90,000
FY 93	$ 50,000	$ 8,900
FY 94	$ 49,000	$ 9,000
	$137,000	$107,900

9. PROGRAMMED ENVIRONMENTAL COSTS.

a. Summary of environmental compliance costs:

	Funded	Unfunded
FY 94	$3,058 K	$4,028 K
FY 95	2,841 K	7,921 K
FY 96	2,661 K	3,461 K
FY 97	2,710 K	2,692 K
FY 98	2,343 K	1,849 K
FY 99	2,352 K	2,060 K
	$15,965 K	$22,011 K

b. Summary of environmental restoration costs.

	Funded	Unfunded
FY 94	$ 925 K	$ 780 K
FY 95	0	$2,265 K
FY 96	0	$3,770 K
FY 97	0	$7,295 K
FY 98	0	$ 445 K
FY 99	0	$ 445 K
	$ 925 K	$15,000 K

ACRONYMS

AICUZ	Air Installation Compatible Use Zone
ICUZ	Installation Compatible Use Zone
ITAMS	Integrated Training Area Management System
LCTA	Land Condition Trend Analysis
404 Wetlands	Regulated Wetlands

NONSTRUCTURAL ATTRIBUTES

Holston AAP -- 47305

1. LAND USE.

a. Land Availability (estimated quantities in acres).

(1)	Installation total	6,024
(2)	Cantonment area	39
(3)	Maneuver area	0
(4)	Training lands designated as sensitive/marginal by ITAMS/LCTA monitoring	0
(5)	Firing Ranges	0
(6)	Non-Impact Firing Range	0
(7)	Wetlands Sec 404 area (15 miles of stream)	63
(8)	Other (Surface water areas; set aside unique areas; i.e., recreation habitat, forests; restricted use areas such as landfills, contaminated sites, safety zones.	3,727

b. Air Space.

(1)	Restricted Air Space.	0
(2)	Extent of Installation Compatible Use Zones (ICUZ) or Noise and Accident Potential Zone (NAPZ). Exempt from ICUZ contours	

2. THREATENED OR ENDANGERED SPECIES (PLANTS AND ANIMALS).

A Floral/Fauna threatened or endangered species (TES) survey was conducted in February 1991. Federal listed endangered species that reported to occur at the installation include the Indiana Bat, Gray Bat, and Bald Eagle. Federally listed threatened species occurring on the installation are Sharp Shinned Hawk and Cooper's Hawk. Nine animal and three plant are listed as Federal candidate species. In addition, 18 animal and 16 plant species are State listed threatened and endangered species occurring on the installation.

3. CULTURAL RESOURCES.

a. The installation has not yet prepared a Historic Preservation Plan/Cultural Resource Management Plan. Comments are obtained from the State Historic Preservation Cultural and Advisory Council for Historic Preservation on a case by case basis.

b. The historic structure report identified 115 buildings as being historically significant, all but one as part of a historic district. All WW II era buildings are reported as potentially eligible.

c. An archeological survey has not been conducted for the Holston AAP. However, one prehistoric archeological site is potentially eligible for listing on the National Register. Many of the installation lands are recommended in the overview as having a high potential for possessing archeological resources.

4. INFRASTRUCTURE ISSUES.

a. Potable Water.

Potable water is purchased from the City of Kingsport, TN. Water usage is 0.282 MGD.

b. Wastewater.

The installation operates one sanitary treatment plant which has a capacity of 0.75 MGD. Current use is 0.475 MGD and the useful life of the plant is 25 years. No upgrade is required. The installation also contracts sewage treatment with the City of Kingsport Water Department.

The installation operates one industrial wastewater plant with 7.5 MGD capacity and a usage rate of 3.9 MGD. The plant has a useful life of 25 years and requires two upgrades -- nitrate removal and clarifier and pumps.

A National Pollutant Discharge Elimination System (NPDES) permit exists which requires the installation to discharge cleaner than river water. An intake is also used for process/drinking water supply.

c. Solid Wastes.

Two types of solid waste are handled: contaminated and uncontaminated. Contaminated waste consists primarily of explosive compounds. The two landfills (9 acre flyash & 13 acre sanitary) were scheduled for closure in March 1994, however the State has allowed an extension until 1996. It is reported that there is sufficient space remaining for on-site disposal pending the construction of a new landfill. Uncontaminated waste disposal volume was previously reported at 13 tons/day.

5. AIR QUALITY.

a. Air Quality Region is Eastern Tennessee/Southwestern Virginia 207.

b. Region is in attainment.

c. Air pollution sources were previously reported as coal-fired boilers, acid tank vents, process vessel vents, refuse incinerator, and OB of explosive and explosive contaminated wastes. An air emissions inventory is currently underway. Holston currently has 204 permits which will be consolidated into one in Spring 1995.

d. Installation maintains no air emission credits.

e. Major air compliance projects have been identified by the installation.

f. The installation is not within 100 km of a critical air quality region.

6. HAZARDOUS MATERIALS/SITES.

a. Use of hazardous materials.

A Resource Conservation and Recovery Act (RCRA) permit was applied for in 1988 and issuance is expected in 1995. Currently the installation has an Interim status permit for treatment of D003 explosive waste by open burning.

b. Contaminated Sites.

There are 24 Defense Environmental Restoration Account (DERA) eligible sites (open burning areas) identified.

c. PCB, Asbestos, Lead Paint, or RADON issues.

PCB survey has been completed. Forty-six transformers contain PCBs and are being replaced only as they fail.

d. Underground Storage Tanks (UST).

The two remaining USTs are scheduled for removal in December 1994.

e. Radioactive Materials and Sources.

The installation currently holds no Nuclear Regulatory Commission (NRC) nor DA licenses for radioactive material. However, a contractor formerly held DARP 41-01-01 for Tritium, Nickel, and CS-137, which was

terminated in 1985. The contractor is required to fund any related cleanup costs.

7. OTHER ISSUES, CONSTRAINTS.

No other significant issues or constraints are known.

8. REVENUE GENERATING PROGRAMS.

	Agri	Forestry	Fish/Wild	Industr
FY 92	$15,200	$11,000	$ 3,000	$ 315
FY 93	$15,165	$ 0	$10,761	$ 760
FY 94	$15,000	$ 0	$10,700	$ 700

9. PROGRAMMED ENVIRONMENTAL COSTS.

a. Total environmental compliance cost for FY 94 - FY 99.

Funded: $5,715,000
Unfunded: $11,303,000

b. Total environmental restoration cost for FY 94 - FY 99.

Funded: $814,000
Unfunded: $16,055,000

ACRONYMS

AICUZ	Air Installation Compatible Use Zone
ICUZ	Installation Compatible Use Zone
ITAMS	Integrated Training Area Management System
LCTA	Land Condition Trend Analysis
404 Wetlands	Regulated Wetlands

NONSTRUCTURAL ATTRIBUTES

Iowa AAP -- 19105

1. LAND USE.

a. Land Availability (estimated quantities in acres).

(1)	Installation total	19,124
(2)	Cantonment area	185
(3)	Maneuver area	N/A
(4)	Training lands designated as sensitive/marginal by ITAMS/LCTA monitoring	N/A
(5)	Firing Ranges	N/A
(6)	Non-Impact Firing Range	N/A
(7)	Wetlands Sec 404 area	191
(8)	Other (Surface water areas; set aside unique areas; i.e., recreation habitat, forests; restricted use areas such as landfills, contaminated sites, safety zones.	7,876
	Surface water	110 acres
	Shoreline	9 miles
	Streamlines	21 miles

b. Air Space.

(1)	Restricted Air Space.	0
(2)	Extent of Installation Compatible Use Zones (ICUZ) or Noise and Accident Potential Zone (NAPZ). Zones are on-post	N/A

2. THREATENED OR ENDANGERED SPECIES (PLANTS AND ANIMALS).

A survey for threatened or endangered species is currently ongoing by the Nature Conservancy. The Federally listed threatened Bald Eagle is reported to occur on the installation.

3. CULTURAL RESOURCES.

a. An archeological overview and historic structure report were prepared for Iowa AAP in the early 1980's. The installation is in the process of preparing a Historic Preservation Plan. No cultural resource memoranda of agreement has been prepared for this facility.

b. A historic building survey has been conducted and two structures have been identified as eligible for the National Register of Historic Places. Both buildings are in substandard condition. In addition, many of the World War II era permanent and semi-permanent buildings (over 800) may be potentially eligible.

c. Approximately 50% of the installation's lands have been surveyed for archeological resources. Recent surveys have identified approximately 25 potential archeological sites. Much of the unsurveyed lands are thought to have a high potential for possessing archeological sites.

Currently, an estimated 100 acres are not available for development or operations due to cultural resources.

4. INFRASTRUCTURE ISSUES.

a. Potable Water.

Water is 100% from contract with the city of Burlington. Maximum capacity is 3.0 MGD with an average use is 0.575 MGD.

b. Wastewater.

Wastewater design capacity is 0.85 MGD with average use of 0.413 MGD. Industrial wastewater treatment is at 7 different sites with a capacity of 0.432 MGD. Three sites are active averaging .036 MGD each. There is a new National Pollutant Discharge Elimination System (NPDES) permit that has reduced limits, and will require further review.

c. Solid Wastes.

There is one seven acre installation owned flyash landfill with a life expectancy of 20 years. Solid waste removal/disposal contracted with Des Moines County with volume of 3,170 tons/year.

5. AIR QUALITY.

a. The air quality region is Burlington - Keokuk GS.

b. The region is in attainment.

c. Air pollution sources are: one coal-fired main heating plant, one natural gas/fuel oil heating plant, three incinerators, and about 50 other sources (i.e. paint/glue booths, explosive processing areas, and generators. All

areas operate under a permit from the Iowa Department of Natural Resources).

d. The installation has no air emission credits.

e. Major air compliance projects identified are the replacement of main heating plant, restoration of existing facilities, asbestos survey, and restoration of asbestos-covered steam lines.

6. HAZARDOUS MATERIALS/SITES.

a. Use of hazardous materials.

There are Resource Conservation and Recovery Act (RCRA) Part B permits for five storage sites. The installation is also in the process of obtaining a new RCRA Part B permit.

b. Contaminated Sites.

Thirty Defense Environmental Restoration Account (DERA) eligible sites have been identified.

The installation is on the National Priority List (NPL).

c. PCB, Asbestos, Lead Paint, or RADON issues.

Total of 175 PCB contaminated transformers are being replaced on as needed basis.

d. Underground Storage Tanks (UST).

Out of a total of three tanks all were tested and passed.

e. Radioactive Materials and Sources.

There is one piece of equipment, SUC-1381 DU assembly, that requires a DA or Nuclear Regulatory Commission (NRC) license for radiological materials. The equipment is contractor owned and any required cleanup is the responsibility of the contractor.

7. OTHER ISSUES, CONSTRAINTS.

No other significant issues or constraints are known.

8. REVENUE GENERATING PROGRAMS.

	FY 92	FY 93	FY 94
Agriculture	$538,000	$569,000	$617,000
Fish/Wildlife	$ 13,000	$ 10,471	$ 5,000
Industrial	$ 1,850	$ 1,850	$ 1,850
	$552,850	$611,321	$623,850

9. PROGRAMMED ENVIRONMENTAL COSTS.

a. Total environmental compliance cost for FY 94 - FY 99 are:

Funded: $3,696,000

Unfunded: $11,464,000

b. Total environmental restoration cost for FY 94 - FY 99 are:

Funded: $2,563,000

Unfunded: $14,385,000

ACRONYMS

AICUZ	Air Installation Compatible Use Zone
ICUZ	Installation Compatible Use Zone
ITAMS	Integrated Training Area Management System
LCTA	Land Condition Trend Analysis
404 Wetlands	Regulated Wetlands

NONSTRUCTURAL ATTRIBUTES

Lake City AAP -- 29405

1. LAND USE.

a. Land Availability (estimated quantities in acres).

(1)	Installation total	3,935
(2)	Cantonment area	5
(3)	Maneuver area	0
(4)	Training lands designated as sensitive/marginal by ITAMS/LCTA monitoring	0
(5)	Firing Ranges	434
(6)	Non-Impact Firing Range	442
(7)	Wetlands Sec 404 area	39
(8)	Other (Surface water areas; set aside unique areas; i.e., recreation habitat, forests; restricted use areas such as landfills, contaminated sites, safety zones. (80 acres of water surface)	1,348

b. Air Space.

(1)	Restricted Air Space.	0
(2)	Extent of Installation Compatible Use Zones (ICUZ) or Noise and Accident Potential Zone (NAPZ).	
	Zone I is on-post	
	Zone II off-post	975 meters
	Zone III off-post	96 meters

2. THREATENED OR ENDANGERED SPECIES (PLANTS AND ANIMALS).

No threatened or endangered species (TES) survey has been conducted. No Federally listed endangered or threatened species are reported to occur on the installation. However, five State listed TES were previously reported as occurring on the installation. The military mission has not been affected by these species presence.

3. CULTURAL RESOURCES.

a. An archeological overview and historic structures report were prepared for Lake City AAP in the early 1980's. The installation does not have a historic preservation plan. No Memoranda of Agreement have been prepared for this facility.

b. The installation reports that virtually all WW II era permanent and semi-permanent buildings (approximately 286) are potentially eligible for the National Register of Historic Places. Limitations to development are that maintenance on facilities must retain the original appearance.

c. Approximately 17% of the installation's lands have been surveyed for archeological resources. One archeological site was found during these investigations. Other Lake City AAP lands are thought to have a moderate potential for possessing archeological resources.

4. INFRASTRUCTURE ISSUES.

a. Potable Water.

Potable water is 100% well water. The installation has 14 wells with a total pumping capacity of 1.50 MGD. Current use is 1.1 MGD. Industrial water supply is from the same source as potable water.

b. Wastewater.

Sanitary treatment of all wastewater is through a Publicly Owned Treatment Works (POTW). Sewer capacity is 0.85 MGD.

Industrial wastewater treatment is provided through the use of three treatment plants: an industrial plant which has 1.5 MGD capacity and a 0.7 MGD use; a neutralized explosive treatment plant with a 0.36 MGD capacity and a 0.18 MGD use; and a pyrotechnic plant which has a 1,500 GPD capacity and a 1,000 GPD use. The latter two plants each have a life of 30 years. A National Pollutant Discharge Elimination System (NPDES) permit exists for the installation (Permit No. MO-0004880). This permit is only for non-contact cooling water and storm water.

c. Solid Wastes.

The installation uses two landfills and also has a contract waste collector. The two landfills are each 18 acres in size. One is used for construction debris and has a 1,000-ton capacity and has a life expectancy of two years. The other, used for industrial wastewater treatment sludge, is closed.

Solid waste is also disposed of by a $148,000 contract. The contract (annually renewed) is with Waste Management for Domestic Trash at a rate of 4 tons/day

and a cost of $142.17 per ton.

5. AIR QUALITY.

a. Air Quality Region is Metropolitan Kansas 94.

b. The region is in attainment.

c. Installation reports 24 air pollution sources, but does not specify types.

d. No air emission credits are maintained.

e. The installation does not indicate any projects to meet/maintain compliance.

f. There are no critical air quality regions within 100 km.

6. HAZARDOUS MATERIALS/SITES.

a. Use of hazardous materials.

The installation has Resource Conservation and Recovery Act (RCRA) Part B incinerator permit. The installation is in the process of obtaining a RCRA Part B permit for Container storage, explosive storage, and treatment tank.

b. Contaminated Sites.

There are 35 Defense Environmental Restoration Account (DERA) sites.

The installation is on the National Priority List (NPL). Three sites currently in the Remedial Investigation/Feasibility Study (RI/FS) stage and one in the remedial design stage.

c. PCB, Asbestos, Lead Paint, or RADON issues.

PCB survey has been completed with contaminated transformers identified.

d. Underground Storage Tanks (UST).

Out of four active and one abandoned USTs, four were tested, none failed, two were replaced, and one is new.

e. Radioactive Materials and Sources

A contractor holds a Nuclear Regulatory Commission (NRC) and a DA license for radiological materials. Contractor is funding survey and cleanup of firing range, which is in the process of being decommissioned for depleted uranium contamination. The survey is almost complete and anticipate sand and soil removal for off-site disposal as radioactive waste.

7. OTHER ISSUES, CONSTRAINTS.

No other significant issues or constraints are known.

8. REVENUE GENERATING PROGRAMS.

Industrial outgrants of 42 acres produce no revenue.

9. PROGRAMMED ENVIRONMENTAL COSTS.

a. Total environmental compliance costs for FY 94 - FY 99 are:

Funded: $ 2,474,000
Unfunded: $35,093,000

b. Total environmental restoration costs for FY 94 - FY 99 are:

Funded: $ 1,725,000
Unfunded: $20,788,000

ACRONYMS

AICUZ	Air Installation Compatible Use Zone
ICUZ	Installation Compatible Use Zone
ITAMS	Integrated Training Area Management System
LCTA	Land Condition Trend Analysis
404 Wetlands	Regulated Wetlands

NONSTRUCTURAL ATTRIBUTES

Lone Star AAP -- 48305

1. LAND USE.

a. Land Availability (estimated quantities in acres).

(1)	Installation total	15,546
(2)	Cantonment area	0
(3)	Maneuver area	0
(4)	Training lands designated as sensitive/marginal by ITAMS/LCTA monitoring	0
(5)	Firing Ranges	0
(6)	Non-Impact Firing Range	0
(7)	Wetlands Sec 404 area	158
(8)	Other (Surface water areas; set aside unique areas; i.e., recreation habitat, forests; restricted use areas such as landfills, contaminated sites, safety zones.	0

b. Air Space.

(1)	Restricted Air Space. feet over demolition field	2,000
(2)	Extent of Installation Compatible Use Zones (ICUZ) or Noise and Potential Zone (NAPZ). Zones are on-post	

2. THREATENED OR ENDANGERED SPECIES (PLANTS AND ANIMALS).

A threatened or endangered species survey has not been conducted, however the Federally listed threatened American Bald Eagle was previously reported as occurring on the installation.

3. CULTURAL RESOURCES.

a. The installation does not have a Historic Preservation Plan nor a Cultural Resource Management Plan.

b. A historic building survey has been completed and no structures were identified as potentially eligible for the National Register of Historic places. However, WW II buildings were recommended for evaluation as they turn 50 years old.

c. Approximately 58% (9,017 acres) have been surveyed for archeological resources. Forty-five of the archeological sites discovered by these investigations may be eligible for the National Register. The archeological overview found that there may be 425 potential historic archeological sites on AAP lands. Unsurveyed Lone Star lands were previously reported as having a high potential for possessing archeological resources.

4. INFRASTRUCTURE ISSUES.

a. Potable Water.

Potable water is provided by contract with the Texarkana Water Supply Company. Capacity is 7.7 MGD and average daily use is 0.472 MGD. Restrictions to expansion include the need for a new $500,000 water tower and replacement of water lines in the production acres.

b. Wastewater.

There is one sanitary treatment facility with a capacity of 3.0 MGD and an average daily outflow of 1.5 MGD. There are seven industrial wastewater treatment plants (1 - lead with a 20 GPM capacity, 1 - chrome with a 10 GPM capacity, & 5 - "pink water" with a capacity 170 GPM capacity. All of the plants have a National Pollutant Discharge Elimination System (NPDES) permit.

c. Solid Wastes.

There is a 9.32 acre construction debris landfill with a remaining capacity of 7,500 tons and a life expectancy of 29 years. The Red River Army Depot also uses this landfill which will decrease the useful life. There is a new 68 acre MSWL landfill under construction with a capacity of 1.28 million tons and an estimated useful life of 28 years.

Solid waste is also disposed of via a $145,000 commercial contract with the Western Waste Landfill. Average daily volume is 18 tons/day at a cost of $90.16/ton.

5. AIR QUALITY.

a. Air Quality Region is Shreveport- Texarkana-Tyler 22.

b. Region is in attainment.

c. Air pollution sources on the installation are destructors, high explosives burning ground demolition filed, and vehicle operations.

d. The installation has no air emission credits.

e. No major air compliance projects were reported.

f. The installation is not within 100 km of a critical air quality region.

6. HAZARDOUS MATERIALS/SITES.

a. Use of hazardous materials.

The installation has a Resource Conservation and Recovery Act (RCRA) Part B permit for hazardous waste storage. The installation is in the process of obtaining a Subpart X permit for open burning/detonation.

b. Contaminated Sites.

Twenty-five Defense Environmental Restoration Account (DERA) eligible sites have been identified.

Lone Star is on the National Priority List (NPL).

c. PCB, Asbestos, Lead Paint, or RADON issues.

A total of 133 PCB contaminated transformers have been identified of which 49 were replaced.

d. Underground Storage Tanks (UST).

There is one regulated tank, which has passed testing.

e. Radioactive Materials and Sources.

The installation does not hold any Nuclear Regulatory Commission (NRC) nor DA licenses for radioactive materials and sources, however the contractor holds four NRC licenses and five permits for sealed sources. The contractor is required to survey and cleanup for decommissioning purposes IAW 32CFR655.

7. OTHER ISSUES, CONSTRAINTS.

No other significant issues or constraints are known.

8. REVENUE GENERATING PROGRAMS.

	Industrial
FY 92	$4,000,000
FY 93	$4,268,000
FY 94	$4,000,000

9. PROGRAMMED ENVIRONMENTAL COSTS.

a. Summary of total compliance costs for FY 94 -FY 99 are:

Funded	$ 0
Unfunded	$ 8,718,000

b. Summary of total restoration costs for FY 94 -FY 99 are:

Funded	$ 4,344,000
Unfunded	$11,792,000

ACRONYMS

AICUZ	Air Installation Compatible Use Zone
ICUZ	Installation Compatible Use Zone
ITAMS	Integrated Training Area Management System
LCTA	Land Condition Trend Analysis
404 Wetlands	Regulated Wetlands

NONSTRUCTURAL ATTRIBUTES

McAlester AAP -- 40520

1. LAND USE.

a. Land Availability (estimated quantities in acres).

(1)	Installation total	44,964
(2)	Cantonment area	781
(3)	Maneuver area	4,306
(4)	Training lands designated as sensitive/marginal by ITAMS/LCTA monitoring	0
(5)	Firing Ranges	0
(6)	Non-Impact Firing Range	380
(7)	Wetlands Sec 404 area	150
(8)	Other (Surface water areas; set aside unique areas; i.e., recreation habitat, forests; restricted use areas such as landfills, contaminated sites, safety zones.	39,048

b. Air Space.

(1) Restricted Air Space. Yes, munitions going off at certain times of day.

(2) Extent of Installation Compatible Use Zones (ICUZ) or Noise and Accident Potential Zone (NAPZ).

Zone II	Off-post	20
Zone III	On-post	0

2. THREATENED OR ENDANGERED SPECIES (PLANTS AND ANIMALS).

A threatened or endangered species (TES) survey has been conducted by the Nature Conservancy. Habitats exist for the American Burying Beetle in the Black Jack/Post Oak forest and brush land. A Biological Opinion has not been rendered, however it is reported that the TES population is stabilized.

3. CULTURAL RESOURCES.

a. The installation has no Historic Preservation Plan or Cultural Resources Management Plan.

b. A historic building survey has not been conducted, however, the installation is reported to have over 1,474

structures potentially eligible for the National Register of Historic Places.

c. An archeological survey has been completed for McAlester AAP and a total of 44,965 acres were surveyed. There are 449 archeological sites reported as potentially eligible for listing the National Register.

4. INFRASTRUCTURE ISSUES.

a. Potable Water.

All potable water (and process water) is from a surface water impoundment. There is one treatment plant with a design capacity of 1.5 MGD and average daily usage of 0.7 MGD. The plant was constructed in 1943, however no major problems exist. The installation also supplies potable water to two local communities plus one school district.

b. Wastewater.

There is one sewage treatment plant with a design capacity of 0.95 MGD, an average daily usage of 0.35 MGD.

There is one National Pollutant Discharge Elimination System (NPDES) permitted industrial wastewater treatment plant with a capacity of 0.03 MGD.

c. Solid Wastes.

There is a permitted 50 acre Type IV "Other Industrial Waste Landfill," with a remaining useful life of eight years.

There is also a $25,844 non-industrial solid waste removal contract with Your Trash Service, Inc. The average daily volume is 15 tons/day at a cost of $10.20/ton.

5. AIR QUALITY.

a. Air Quality Control Region 188 Southeastern Oklahoma Interstate.

b. Region is in attainment.

c. Air pollution sources are ammunition processing, landfills, boilers, generators, chemical labs, machine shops/safety kleen, fuel handling, wood/paint/print shops,

deactivation furnace, water treatment, pesticides and incinerator.

d. No air pollution credits are maintained.

e. Major projects identified in the A-106 Plan to meet/maintain air compliance are: Air Quality Operating Permit, Air Permit, and Thermal Incinerator.

f. The installation is not within 100 km of a critical air quality region.

5. HAZARDOUS MATERIALS/SITES.

a. Use of hazardous materials.

The installation has a Resource Conservation and Recovery Act (RCRA) Part B permit for a storage facility, which expires in September 2002. The installation is also in the process of obtaining three RCRA permits. The RCRA Subpart O permit for the Deactivation Furnace has an expected issuance of December 1994. One RCRA Subpart X permit for open burning/open detonation expected issuance is June 1995. The other RCRA Subpart X permit for Super Critical has an expected issuance of December 1995.

b. Contaminated Sites.

An assessment has been conducted for contamination. The installation contains 44 Defense Environmental Restoration Account (DERA) eligible contaminated sites

c. PCB, Asbestos, Lead Paint, or RADON issues.

A PCB survey is complete; all 33 contaminated transformers have been replaced.

The installation has an aggressive asbestos program/survey.

The DA/AMCCOM Radon program passed with no failures.

d. Underground Storage Tanks (UST).

All USTs have been removed.

e. Radiological Materials and Sources.

Neither the installation nor the contractor hold any Nuclear Regulatory Commission (NRC) or DA licenses for radiological materials or sources.

7. OTHER ISSUES, CONSTRAINTS.

No other significant issues or constraints are known.

8. REVENUE GENERATING PROGRAMS.

Revenue generating programs and revenues for FY 92 - FY 94 are:

Agriculture - $108,000
Hunting - $91,000
Mineral (revenue goes to BLM)

9. PROGRAMMED ENVIRONMENTAL COSTS.

a. Summary of environmental compliance costs:

	Funded	Unfunded
FY 94	$1,907,000	$ 345,000
FY 95	$1,435,000	$ 27,000
FY 96	$ 0	$1,123,000
FY 97	$ 0	$1,233,000
FY 98	$ 0	$ 993,000
FY 99	$ 0	$ 803,000
	$3,342,000	$4,524,000

b. Summary of environmental restoration costs:

	Funded	Unfunded
FY 94	$1,007,000	$2,255,000
FY 95	$ 0	$3,270,000
FY 96	$ 0	$2,695,000
FY 97	$ 0	$2,545,000
FY 98	$ 0	$2,545,000
FY 99	$ 0	$1,045,000
	$1,007,000	$14,355,000

ACRONYMS

AICUZ	Air Installation Compatible Use Zone
ICUZ	Installation Compatible Use Zone
ITAMS	Integrated Training Area Management System
LCTA	Land Condition Trend Analysis
404 Wetlands	Regulated Wetlands

NONSTRUCTURAL ATTRIBUTES

Milan AAP -- 47475

1. LAND USE.

a. Land Availability (estimated quantities in acres).

(1)	Installation total	22,436
(2)	Cantonment area	132
(3)	Maneuver area	0
(4)	Training lands designated as sensitive/marginal by ITAMS/LCTA monitoring	0
(5)	Firing Ranges	0
(6)	Non-Impact Firing Range	0
(7)	Wetlands Sec 404 area	336
(8)	Other (Surface water 30 acres)	7,449

b. Air Space.

(1)	Restricted Air Space.	No
(2)	Extent of Installation Compatible Use Zones (ICUZ) or Noise and Accident Potential Zone (NAPZ). Zones I and II extend off-post	

2. THREATENED OR ENDANGERED SPECIES (PLANTS AND ANIMALS).

A survey is presently being conducted by the Nature Conservancy to determine the status of Federal or State listed endangered and threatened species or critical habitats.

3. CULTURAL RESOURCES.

a. An archeological overview and historic structure report were prepared for Milan AAP in 1984. The installation has a Historic Preservation Plan and implementing programmatic agreement, which has been reviewed by the State Historic Preservation Officer (SHPO) and Advisory Council on Historic Preservation (ACHP).

b. An Historic Building Survey has been conducted; only one building was identified as eligible for the National Register of Historic Places, the Governor Browning House.

c. Approximately 45% of the installation's lands have been surveyed for archeological resources. None of the archeological sites discovered by these investigations are

considered to be eligible for the National Register. The archeological overview found that there may be 405 potential historic archeological sites on Milan AAP lands; however, most of these are believed to be badly disturbed. Unsurveyed Milan lands are recommended as having a moderate potential for possessing archeological resources.

4. INFRASTRUCTURE ISSUES.

a. Potable Water.

All potable water comes from five active wells with a total capacity of 4.8 MGD and an average usage of 1.0 MGD. Three inactive wells exist with a total capacity of 3.45 MGD.

b. Wastewater.

The installation has two wastewater treatment plants with a total design capacity of 1.75 MGD. Average use is 0.22 MGD. It is anticipated that the sewage treatment system will require upgrading or replacement within the next 5 years.

Seven industrial wastewater treatment systems exist consisting of six "pinkwater" treatment systems (capacity 0.5 MGD) and one coal-pile storm water runoff treatment system (capacity .36 MGD). Three of the industrial wastewater systems are inactive. The six "pinkwater" industrial wastewater systems have a total design capacity of 360 GPM. The coal-pile runoff system has a design capacity of 250 GPM. Plans are being developed to eliminate the coal-pile runoff treatment system by storing the coal under roof.

National Pollutant Discharge Elimination System (NPDES) permit(s) has been issued. Expansion constraints are due to technology restriction of 40 or 80 gpm per system. The main plant is 1.75 MGD.

c. Solid Waste.

The existing sanitary landfill is almost at capacity and will likely be closed by FY 95. The state has issued a class 2 permit for a new sanitary landfill. The proposed landfill is 225 acres in size, with a capacity of 540,000 tons, and would have an estimated useful life of 100 years.

A contract exists for the collection and disposal of domestic wastes, with Waste Management, Inc. Average daily volume is 16 yards/week.

5. AIR QUALITY.

a. The installation is in the Western Tennessee Interstate Air Quality Control Region.

b. The region is in attainment.

c. No air emission credits are maintained.

d. Air pollution sources on post are from underbrush burning, powerhouse, traffic, and accidental fires.

e. A major air compliance project identified is an asbestos survey.

f. The installation is not within 100 km of a critical air quality region.

6. HAZARDOUS MATERIALS/SITES.

a. Use of hazardous materials.

The installation is a Resource Conservation and Recovery Act (RCRA) facility for treatment, storage and disposal. Sixteen RCRA part B storage facilities have been permitted. The permit issued on 28 Sep 90, expires in the year 2000. The installation has also applied for (1 Oct 93) a Subpart X, Open burning/Open detonation permit, and expects issuance during FY 95.

b. Contaminated Sites.

A facility assessment to determine contamination was conducted in 1978. An unspecified number of Defense Environmental Restoration Account (DERA) eligible sites require restoration.

The installation is on the National Priority List (NPL).

c. PCB, Asbestos, Lead Paint, or RADON issues.

PCB survey has been completed and all 28 transformers identified were replaced. Two are in storage awaiting shipment.

d. Underground Storage Tanks (UST).

The installation reports that seven tanks have been tested with no failures. Thirteen tanks have been replaced.

e. Radioactive Materials and Sources

The installation holds six Nuclear Regulatory Commission (NRC) licenses for Nickel 63 (50 m curie) and depleted uranium (DU) (3M kg). Decommissioning requirements are unknown.

7. OTHER ISSUES, CONSTRAINTS.

No other significant issues or constraints are known.

8. REVENUE GENERATING PROGRAMS.

Four revenue generating programs are in place:

	AGRICULTURE	FORESTRY	F &W	Industrial
FY92	$313,067	$ 59,000	$ 23,000	$ 0
FY93	$321,231	$ 2,573	$ 21,158	$ 0
FY94	$230,000	$ 70,000	$ 21,000	$ 0
	$864,298	$131,573	$ 65,158	$ 0

9. PROGRAMMED ENVIRONMENTAL COSTS.

a. Total environmental compliance costs for FY 94 - FY 99 are:

Funded - $6,272,000
Unfunded - $6,722,000

b. Total environmental restoration costs for FY 94 - Fy 99 are:

Funded - $22,446,000
Unfunded - $42,266,000

ACRONYMS

AICUZ	Air Installation Compatible Use Zone
ICUZ	Installation Compatible Use Zone
ITAMS	Integrated Training Area Management System
LCTA	Land Condition Trend Analysis
404 Wetlands	Regulated Wetlands

NONSTRUCTURAL ATTRIBUTES

Pine Bluff Arsenal -- 05087

1. LAND USE.

a. Land Availability (estimated quantities in acres).

(1)	Installation total	14,943
(2)	Cantonment area	5,238
(3)	Maneuver area	0
(4)	Training lands designated as sensitive/marginal by ITAMS/LCTA monitoring	0
(5)	Firing Ranges	48
(6)	Non-Impact Firing Range	591
(7)	Wetlands Sec 404 area (134 acres of wetland listed on the installation master plan; however, a total of 2500 acres may be applicable upon completion of USFWS site assessment in 1995.)	134
(8)	Other (Surface water areas; set aside unique areas; i.e., recreation habitat, forests; restricted use areas such as landfills, contaminated sites, safety zones.	8,932

b. Air Space.

(1)	Restricted Air Space.	0
(2)	Extent of Installation Compatible Use Zones (ICUZ) or Noise and Accident Potential Zone (NAPZ). Exempt from ICUZ contours.	N/A

2. THREATENED OR ENDANGERED SPECIES (PLANTS AND ANIMALS).

Two surveys for TES have been conducted. One by the U.S. Fish and Wildlife Service (USFWS) with the Arkansas Game and Fish commission, and one by Environmental Consultants, Inc. The Federally listed threatened Bald Eagle and threatened American Alligator are reported to occur on the arsenal. However, neither of these species have constrained the present military mission. A biological assessment is unnecessary because all TES found to occur on the installation are either nonresident (i.e., alligator) or transient (i.e., bald eagle).

3. CULTURAL RESOURCES.

a. Both a Historic Preservation and a Cultural Resources Inventory were prepared in 1993. State Historic Preservation Officer (SHPO) did not concur with several aspects of the Cultural Resources Inventory. A Programmatic Agreement between PBA, SHPO, and the Advisory Council on Historic Preservation is in the process of being prepared and will be sent to them for their approval. The Section 106 review process is complied with on all undertakings that could affect historic properties.

b. A Historic Properties Report was prepared by McDonald & Mack, Partnership, in 1984. The historic structure report did not recommend any buildings as being historically significant.

c. The inventory phase of the archeological survey was completed in 1990 and the final report was completed in 1993. All 14,943 acres were surveyed using archival search, geomorphological analysis aerial remote sensing, and field investigation. Seven sites were recommended for additional investigation to determine their eligibility for nomination to the National Register of Historic Places. All sites (205 acres) identified by the 1990 survey requiring further investigation have been preserved in place through a program of avoidance. The location of these sites have been provided at initial planning stages to all personnel whose actions might adversely impact these properties.

4. INFRASTRUCTURE ISSUES.

a. Potable Water.

Potable water (and process water) is provided by eleven serviceable raw water wells; 5 wells are active and 6 wells are in stand-by status. Total pumping capacity is 11 MGD. The treatment plant capacity is 2.0 MGD with an average daily usage of 1.0 MGD.

b. Wastewater.

There are two National Pollutant Discharge Elimination System (NPDES) permitted sanitary waste treatment facilities. The combined total capacity is 3.0 MGD and average daily usage is 0.65 MGD. The north arsenal system has a capacity of 1.0 MGD and a usage of 0.34 MGD. The south arsenal system has a capacity of 2.0 MGD and a usage of 0.31 MGD. Both systems are permitted and have a life expectancy of 31 plus years if upgrading is performed i.e. enlarging wet well, installing larger capacity pumps at the outfall of the clarigesters, replace pumps and electrical service at lift stations

and repair cracked and displaced sewer lines and man holes serving the South Plant, and installing automated handling of treatment chemicals at both plants.

The NPDES permitted industrial wastewater treatment capacity is 1.0 MGD with average use of 0.4 MGD. Life expectancy is 45 years. Installation of liquid or bulk dry chemical feed systems and carbon recovery system is required.

c. Solid Wastes.

The existing landfill will be closed by October 94. Off post disposal by contractor began December 93. Contract is with ASCO Sanitation at a cost of $156.08/ton. Average daily volume is 2 tons.

5. AIR QUALITY.

a. The air quality region is Central Arkansas 16.

b. Region is in attainment.

c. Air pollution sources are pyrotechnic production, incineration operations, industrial boilers, open air testing and disposal operations, and other minor sources.

d. No air emission credits are maintained.

e. The only air compliance major project identified was a requirements contract for point source air emissions testing.

f. The installation is not within 100 km of a critical air quality region.

6. HAZARDOUS MATERIALS/SITES.

a. Use of hazardous materials.

The installation operates Resource Conservation and Recovery Act (RCRA) Part B permitted sites. There are five fully permitted RCRA Part B storage facilities. There is a 90 day accumulation site with the pyrotechnic production area. There is also an Interim Status permit authority for the storage of chemical agent munitions and munitions related items classified as hazardous waste. The Chemical Stockpile Disposal Facility to be built on the installation will include permitted areas for the storage of wastes in both containers and tanks. The installation is in the

process of obtaining a Subpart X permit for Interim Status Miscellaneous Treatment Units. The installation is also in the process of getting a RCRA permit reissued for hazardous waste landfills.

b. Contaminated Sites.

Numerous assessments have been conducted to determine the presence, extent and source of contamination. A total of 72 Defense Environmental Restoration Account (DERA) eligible contaminated sites are on record in the Defense Site Environmental Restoration Tracking System (DSERTS).

The installation is not on the National Priority List (NPL).

c. PCB, Asbestos, Lead Paint, or RADON issues.

PCB inventory is completed, and a total of 353 contaminated transformers were identified. A total of 155 have been removed.

d. Underground Storage Tanks (UST).

Five of 55 regulated tanks have been tested, with no failures.

e. Radioactive Materials and Sources.

The installation holds one Nuclear Regulatory Commission (NRC) and one DA license for two Cesium 137 Texas Nuclear Sealed Sources.

7. OTHER ISSUES, CONSTRAINTS.

No other significant issues or constraints are known.

8. REVENUE GENERATING PROGRAMS.

Four revenue generating programs are in place; forestry management programs, Sikes Act activities (hunting and fishing), scrap metal recycling, and industrial outgrants.

	Forestry	Sikes Act	Recycling	Outgrants
FY 92	$ 59,000	$ 13,000	$ 53,000	$ 1,000
FY 93	$ 19,000	$ 15,000	$ 54,000	$ 1,000
FY 94	$ 10,000	$ 15,000	$ 50,000	$ 1,000

9. PROGRAMMED ENVIRONMENTAL COSTS.

a. Summary of environmental compliance costs ($000).

	Funded	Unfunded
FY 94	$ 2,525	$ 3,904
FY 95	0	4,508
FY 96	0	5,612
FY 97	0	1,584
FY 98	0	2,688
FY 99	0	1,193
	$ 2,525	$19,489

b. Summary of environmental restoration costs ($000).

	Funded	Unfunded
FY 94	$ 440	$ 0
FY 95	0	425
FY 96	0	87
FY 97	0	87
FY 98	0	97
FY 99	0	97
	$ 440	$ 793

ACRONYMS

AICUZ	Air Installation Compatible Use Zone
ICUZ	Installation Compatible Use Zone
ITAMS	Integrated Training Area Management System
LCTA	Land Condition Trend Analysis
404 Wetlands	Regulated Wetlands

NONSTRUCTURAL ATTRIBUTES

Radford AAP -- 51565

1. LAND USE.

a. Land Availability (estimated quantities in acres).

(1)	Installation total	6901
(2)	Cantonment area	50
(3)	Maneuver area	N/A
(4)	Training lands designated as sensitive/marginal by ITAMS/LCTA monitoring	N/A
(5)	Firing Ranges	N/A
(6)	Non-Impact Firing Range	N/A
(7)	Wetlands Sec 404 area	2
(8)	Other (Surface water areas; set aside unique areas; i.e., recreation habitat, forests; restricted use areas such as landfills, contaminated sites, safety zones. (8 miles of streams, 13 miles of shoreline)	5100

b. Air Space.

(1)	Restricted Air Space.	No
(2)	Extent of Installation Compatible Use Zones (ICUZ) or Noise and Accident Potential Zone (NAPZ). Zones are on-post	

2. THREATENED OR ENDANGERED SPECIES (PLANTS AND ANIMALS).

A threatened or endangered species (TES) survey has not been conducted.

3. CULTURAL RESOURCES.

a. The installation does not have a Historic Preservation Plan. No cultural resource memoranda of agreement has been prepared for this facility. The installation obtains comments from the State Historic Preservation Officer (SHPO) on a case-by-case basis.

b. The Historic Structure survey is complete. All buildings are reported as potentially eligible due to their association with WWII.

c. The installation reports that no archeological survey has been completed. Radford lands are recommended in a previously reported archeological overview as having a moderate potential for possessing archeological resources. It is reported that there may be 17 potential historic archeological sites.

4. INFRASTRUCTURE ISSUES.

a. Potable Water.

All potable and process water comes from surface water intakes from the New River. Radford has two surface water intakes (Bldg 408 and 4330). Water from building 408 intake is treated in buildings 409 and 419. Building 419 has a rated design capacity of 2.0 MGD. Building 4330 design capacity is 1.0 MGD. Total design capacity is 3.0 MGD. It should be noted that process water is also withdrawn for use in the production of propellants. The average water withdrawal rates for both potable and process water for 1991 was 14.7 MGD. The majority of the system was installed during initial plant construction (1940's). Upgrades have been implemented to maintain compliance with new Safe Drinking Water Act requirements.

b. Wastewater.

Radford has 5 active major wastewater discharge points that include treatment processes. One additional treatment plant (TNT production) is inactive. Total combined treatment capacity of these plants is 19.96 MGD. In addition, to these wastewater flows, Radford discharges large amounts of non-contact cooling water, storm water, and equipment wash down water. These flows equate to an additional wastewater discharge potential of 21.87 MGD. Total wastewater/storm/non-contact cooling water capacity approximates 41.83 MGD. Total sewer capacity is 1.1 MGD. The average daily usage is 20.148 MGD.

The biological wastewater treatment plant (outfall 029) is currently being upgraded. A project to replace the sludge handling facilities for the two main acid wastewater treatment plants (outfall 005 and 007) has been proposed. This new sludge handling project is currently unfunded in the FY 96 production base support program.

The installations National Pollutant Discharge Elimination System (NPDES) permit expires in 1991. Currently wastewater is allowed to be discharged via administrative continuance of expired permit granted by

the Commonwealth of Virginia. The new permit is expected to be released for public comment in July 1994. The draft NPDES permit limits are based on the Organic Chemical, Plastics and Synthetic Fiber, Explosives Manufacture, and Nitric Acid effluent guidelines. These guidelines are not only based on wastewater flow rates, but production rates. The guidelines for explosives and Nitric acid are true production rates, limited in that they are directly tied to production rates. The State is proposing to use the FY 91 and 92 production rates to establish the pollutant loading. However, the State has recognized the need for Radford to produce more and is willing to work out any needs that Radford may have in the future.

c. Solid Wastes.

The State has granted a variance for the continued use of two on-post landfills (construction debris and fly ash/industrial landfills). This variance allows the existing landfills to be used as long as lateral expansion is not attempted.

The construction debris landfill is 3.75 acres, has an additional 6 year estimated useable life, and has 6,500 tons of remaining capacity. The Fly ash landfill is 10 acres, has an additional 3-4 years useful life and a remaining capacity of 125,000 tons.

5. AIR QUALITY.

a. The Air Quality Region is Eastern Tennessee/Southwestern Virginia 207.

b. The region is in attainment.

c. Radford has numerous sources of air pollutant discharges. The major sources include the open burning of waste propellent, the open and overfire (air curtain destructor) burning of propellent contaminated solid wastes, two coal fired power houses (one with advanced air pollution abatement equipment installed and one inactive),nitrogen oxide emissions from the nitration of cotton/paper linters (state of the art selective catalyst nitrogen oxide pollution abatement equipment to be installed FY 1993 PBS PROJECT 5932793A), nitrogen oxide (NOX) and sulfur oxide (SOX) emissions from the Nitric Acid and Sulfuric Acid concentrators (NAC/SAC), NOX emissions from the Ammonia Oxidation Plant (AOP), and tow explosive waste incinerator (state of the art air pollution abatement equipment ($2.8 million) installed on EWIs in FY 1991).

d. The installation has no air emission credits.

e. The installation has identified numerous air compliance projects.

f. Jefferson National Forest is located within 100 km of Radford.

g. Radford AAP is required to investigate Volatile Organic Compound emissions from the multibase propellent manufacture.

6. HAZARDOUS MATERIALS/SITES.

a. Use of hazardous materials.

The installation is in the process of obtaining Resource Conservation and Recovery Act (RCRA) Part B permits. Radford has both a RCRA Corrective Action Permit (issued by Region III Environmental Protection Agency (EPA)), and Explosives Waste Incinerator Treatment, Storage, and Disposal (TSDF) facility permit. The EWI operating permit was contested and a Compliance Agreement entered into with both the EPA and the State. All actions required by RAAP for the EWI permit have been completed. This includes the completion of a $2.8 million, pollution abatement project. Permits for the EWI and Corrective Action issued by EPA on 13 Dec 89. The State issued the EWI permit on 8 Nov 89.

b. Contaminated Sites.

The U.S. Army Toxic and Hazardous Materials Agency issued a revised Preliminary Assessment updated 21 Nov 90. A total of 98 Solid Waste Managements units had been identified in the RCRA Corrective Action Permit. Forty-three sites have been identified as needing further review and potential corrective action.

c. PCB, Asbestos, Lead Paint, or RADON issues.

PCB survey 98% complete, and a total of 313 transformers identified, with 270 having been replaced.

d. Underground Storage Tanks (UST).

Twenty-nine USTs were identified in the 1989 survey, however due to the age of Radford, previously unknown USTs are frequently identified. All active USTs are tested as required by State and Federal Regulations. 21 tanks have been or are currently being repaired and/or

replaced.

e. Radioactive Materials and Sources.

The installation holds Nuclear Regulatory Commission (NRC) licenses for multiple radioactive materials and sources. All sources are in sealed units and therefore it is not expected decommissioning would be difficult.

7. OTHER ISSUES, CONSTRAINTS.

No other significant issues or constraints are known.

8. REVENUE GENERATING PROGRAMS.

Four revenue generating programs are in place ($000):

	Mineral	Agric	Fish&Wild	Industrial
FY 92	$8,000	$6,300	$15,000	$18,833
FY 93	$8,000	$6,934	$12,726	$11,008
FY 94	$8,000	$6,900	$13,000	$11,000

9. PROGRAMMED ENVIRONMENTAL COSTS.

a. Total environmental compliance costs for FY 94 - 99 are as follows:

Funded: $ 1.050,000
Unfunded: $179,575,000

b. Total environmental restoration costs for FY 94 -99 are as follows:

Funded: $1,050,000
Unfunded: $7,610,000

ACRONYMS

AICUZ	Air Installation Compatible Use Zone
ICUZ	Installation Compatible Use Zone
ITAMS	Integrated Training Area Management System
LCTA	Land Condition Trend Analysis
404 Wetlands	Regulated Wetlands

NONSTRUCTURAL ATTRIBUTES

Blue Grass Activity-LBAD -- 21045

1. LAND USE.

a. Land Availability (estimated quantities in acres).

(1)	Installation total	14,596
(2)	Cantonment area	3,982
(3)	Maneuver area	0
(4)	Training lands designated as sensitive/marginal by ITAMS/LCTA monitoring	0
(5)	Firing Ranges	50
(6)	Non-Impact Firing Range	0
(7)	Wetlands Sec 404 area	1,400
(8)	Other (Surface water areas; set aside unique areas; i.e., recreation habitat, forests; restricted use areas such as landfills, contaminated sites, safety zones. surface water:	180

b. Air Space.

(1)	Restricted Air Space.	0
(2)	Extent of Installation Compatible Use Zones (ICUZ) or Noise and Accident Potential Zone (NAPZ).	1,138

2. THREATENED OR ENDANGERED SPECIES (PLANTS AND ANIMALS).

A threatened or endangered (TES) species has been completed. Previously, the Federally listed endangered Running Buffalo Clover was reported to occur on the installation. The U.S. Fish and Wildlife Service is in the progress of preparing a Biological Assessment. Currently, TES critical habitat is having no effect on operations.

3. CULTURAL RESOURCES.

a. The installation is now in the process of preparing a Historic Preservation Plan.

b. A historic building survey is being conducted as part of the Historic Preservation Plan; however, to date, no buildings have been found potentially eligible for listing on the National Register of Historic Places. It was previously reported that many of the Blue Grass Depot World War II era permanent and semi-permanent buildings

(approximately 976) should be evaluated for National Register eligibility as they become 50 years old.

c. A preliminary Archeological survey of 20% of the depot was conducted in September 1993. A total of 200 acres are reported to have been surveyed, with two sites identified as potentially eligible for the National Register. One site, a 10 acre Indian Mound, is not available for development nor operations. It was previously reported that unsurveyed lands have a moderate potential for possessing archeological resources.

4. INFRASTRUCTURE ISSUES.

a. Potable Water.

The water supply is entirely from a surface water source. The water treatment plant has a design capacity of 0.72 MGD and an unspecified average daily use, with a 20 years life expectancy.

b. Wastewater.

The two National Pollutant Discharge Elimination System (NPDES) permitted wastewater treatment plants have a design capacity of 0.12 MGD and an average daily usage of 0.06 MGD.

c. Solid Wastes.

Solid wastes are disposed under a $160,250 contract, at a cost of $23.71/ton.

5. AIR QUALITY.

a. The air quality region is the Bluegrass Intrastate Air Quality Control Region.

b. The region is in attainment.

c. The air pollution sources are: surface coating, oil fired furnaces, POL tanks, open burning/open detonation, waste burning furnaces, and depainting.

d. The installation has no air emission credits.

e. No major projects to meet/maintain air quality have been identified.

f. The installation is within 100 km of a critical air quality region (Daniel Boone National Forest).

6. HAZARDOUS MATERIALS/SITES.

a. Use of hazardous materials.

The installation is currently operating under an Interim Resource Conservation and Recovery Act (RCRA) Status (Part A). The installation has three RCRA Part B permits applications under review: Storage of hazardous waste, including chemical munitions, in 42 igloos; Other treatment of hazardous waste including open burning/open detonation; and incineration of conventional munitions in an APE1236 deactivation furnace (popping plant). A fourth application is to be submitted in the near future for the construction and operations of a chemical demil facility.

b. Contaminated sites.

Fifty-four Defense Environmental Restoration Account (DERA) eligible sites have been identified by the installation.

c. PCB, Asbestos, Lead Paint, and RADON issues.

PCB survey has been completed and 73 (11 > 500 ppm & 62 > 50 ppm < 500 ppm) contaminated transformers have been identified, of which 27 have been replaced.

d. Underground Storage Tanks (UST).

Four out of four tanks have been tested and are in compliance.

e. Radioactive Materials and Sources.

The installation holds Nuclear Regulatory Commission (NRC) and DA licenses for Chemical Agent Detectors (Nickel 63, 250 microcurie). Two buildings would have to be decommissioned prior to relocating operations. Survey is estimated to cost $25,000. Cleanup is unlikely as sealed sources make contamination unlikely.

7. OTHER ISSUES, CONSTRAINTS.

No other significant issues or constraints are known.

8. REVENUE GENERATING PROGRAMS.

The installation reported $89,000 for FY 92 - FY 94, but did not indicate the source of the revenue.

9. PROGRAMMED ENVIRONMENTAL COSTS.

a. Summary of environmental compliance costs:

	Funded	Unfunded
FY 94	$ 800,000	$ 0
FY 95	$ 672,000	$ 0
FY 96	$ 445,000	$ 100,000
FY 97	$ 395,000	$ 69,000
FY 98	$ 222,000	$ 30,000
FY 99	$ 255,000	$ 20,000
	$2,789,000	$ 219,000

b. Summary of environmental restoration costs:

	Funded	Unfunded
FY 94	$6,991,000	$ 315,000
FY 95	$ 0	$4,560,000
FY 96	$ 0	$ 385,000
FY 97	$ 0	$2,520,000
FY 98	$ 0	$1,750,000
FY 99	$ 0	$1,155,000
	$6,991,000	$10,685,000

ACRONYMS

AICUZ	Air Installation Compatible Use Zone
ICUZ	Installation Compatible Use Zone
ITAMS	Integrated Training Area Management System
LCTA	Land Condition Trend Analysis
404 Wetlands	Regulated Wetlands

NONSTRUCTURAL ATTRIBUTES

Camp Stanley Storage Activity -- 48545

1. LAND USE.

a. Land Availability (estimated quantities in acres).

(1)	Installation total	3,843
(2)	Cantonment area	1,756
(3)	Maneuver area	0
(4)	Training lands designated as sensitive/marginal by ITAMS/LCTA monitoring	0
(5)	Firing Ranges	830
(6)	Non-Impact Firing Range	1,257
(7)	Wetlands Sec 404 area	0
(8)	Other (Surface water areas; set aside unique areas; i.e., recreation habitat, forests; restricted use areas such as landfills, contaminated sites, safety zones.	0

b. Air Space.

(1)	Restricted Air Space.	0
(2)	Extent of Installation Compatible Use Zones (ICUZ) or Noise and Accident Potential Zone (NAPZ).	0

2. THREATENED OR ENDANGERED SPECIES (PLANTS AND ANIMALS).

A threatened or endangered species (TES) survey has been conducted. The Federally listed endangered Black -capped Vireo and Golden-cheeked Warbler occur on the installation. However, no part of the installation, has been designated a TES critical habitat. No consultation is taking place with the U.S. Fish and Wildlife Service (USFWS).

3. CULTURAL RESOURCES.

A Historic Preservation Plan/Cultural Resources Management Plan has not been completed. Neither a historic building survey nor an archeological survey have been completed.

4. INFRASTRUCTURE ISSUES.

a. Potable Water.

Potable water is supplied by five wells with a total pumping capacity of 5.4 MGD and an average daily usage of 0.04 - 0.08 MGD. One well is out of operation due to contamination by halogenated volatile solvents. The source of contamination is under investigation in consultation with the U.S. Environmental Protection Agency (USEPA) and the Texas Natural Resource Conservation Commission.

b. Wastewater.

The National Pollutant Discharge Elimination System (NPDES) permitted wastewater treatment plant has a design capacity of 0.03 MGD and average daily usage of 0.01 MGD.

c. Solid Wastes.

Solid waste disposal is provided by a $7,696 contract with Garbage Gobbler. The average daily volume is less than a ton.

5. AIR QUALITY.

a. The air quality region is the Texas Natural Resource Conservation Commission Region 13.

b. The region is in attainment.

c. The only air pollution source reported is controlled underbrush fires.

d. The installation has no air emission credits.

e. The installation identified no major air compliance projects.

f. The installation is not within 100 km of a critical air quality region.

6. HAZARDOUS MATERIALS/SITES.

a. Use of hazardous materials.

The installation is a less than 90 day storage site facility for hazardous waste.

b. Contaminated Sites.

An assessment to determine contamination has not been conducted.

c. PCB, Asbestos, Lead Paint, or RADON issues.

PCB survey has been completed and 11 contaminated transformers were identified and replaced.

d. Underground Storage Tanks (UST).

Out of 25 UST's, there are four active USTs (3 being replaced by above ground storage tanks), seven inactive tanks are pending removal, and 14 have already been removed. Twenty-two tanks were tested and three removed before testing. Twelve of the tested tanks failed.

e. Radioactive Materials and Sources.

The installation does not hold a Nuclear Regulatory Commission (NRC) or DA license for radioactive materials and sources.

7. OTHER ISSUES, CONSTRAINTS.

The Environmental Protection Agency (EPA) issued a compliance order to the installation in June 1993 for failure to have a closure plan for an inactive open burning/open detonation (OB/OD) area and to have the area listed on the Part A Resource Conservation and Recovery Act (RCRA) permit application. The EPA assessed fines of $345,000 for each violation for a total of $693,000.

8. REVENUE GENERATING PROGRAMS.

No revenue generating programs are reported.

9. PROGRAMMED ENVIRONMENTAL COSTS.

a. No environmental compliance costs are reported.

b. No environmental restoration costs are reported.

ACRONYMS

AICUZ	Air Installation Compatible Use Zone
ICUZ	Installation Compatible Use Zone
ITAMS	Integrated Training Area Management System
LCTA	Land Condition Trend Analysis
404 Wetlands	Regulated Wetlands

NONSTRUCTURAL ATTRIBUTES

Hawthorne AAP -- 32225

1. LAND USE.

a. Land Availability (estimated quantities in acres).

(1)	Installation total	144,830
(2)	Cantonment area	170
(3)	Maneuver area	N/A
(4)	Training lands designated as sensitive/marginal by ITAMS/LCTA monitoring	N/A
(5)	Firing Ranges	650
(6)	Non-Impact Firing Range	1
(7)	Wetlands Sec 404 area Includes 50 miles of streams and 8 miles of shore.	296
(8)	Other (Surface water areas; set aside unique areas; i.e., recreation habitat, forests; restricted use areas such as landfills, contaminated sites, safety zones.	
	Reservoir	16.5

b. Air Space.

(1) Restricted Air Space.

Yes, airspace is restricted for burning, demolition, and ballistic testing.

(2) Extent of Installation Compatible Use Zones (ICUZ) or Noise and Accident Potential Zone (NAPZ). Zones are on-post

2. THREATENED OR ENDANGERED SPECIES (PLANTS AND ANIMALS).

The Nature Conservative, Inc. conducted a survey in February 1993, entitled Flora/Fauna Survey. The Federal threatened Bald Eagle and the Federally endangered Peregrine Falcon, occur on the installation. In addition, seven Federal candidate category 2 species (Spotted Bat, Fletches Dark Kangaroo Mouse, Black Tee, Harlequin Duck, Loggerhead Strike, Mountain Quailo, and Northern Goshawk) occur on the installation. There are no constraints to the installation development and operations. Tes populations are reported as increasing.

3. CULTURAL RESOURCES.

a. The installation is developing a Historic Preservation Plan/Cultural Resources Management Plan. The installation obtains the comments of the State Historic Preservation Officer (SHPO) and Advisory Council for Historic Preservation (ACHP) on a case by case basis.

b. The historic structure report prepared in the early 1980's recommended 36 buildings as being historically significant. However, the Nevada SHPO feels that many of the installation's 2,600 World War II era permanent and semi-permanent buildings may be eligible for the National Register.

c. Approximately 2,936 acres of the installation's 148,517 total acres, have been surveyed for archeological resources. Fifteen archeological sites were recorded by these surveys and many of the unsurveyed lands are recommended in the overview as having a high potential for possessing archeological resources. Currently there is storage of nine Indian artifacts, from a COE Archeological survey. Approximately 20 acres of lake shore line are not available for development or operations due to the presence of major archeological sites.

d. Consultations with Native Americans are conducted on a case by case basis as cultural properties are identified.

4. INFRASTRUCTURE ISSUES.

a. Potable Water.

From November to March, 90% of the potable water is obtained from surface water. The average daily usage is 1.0 MGD. From March through October (high demand) about 30% comes from installation wells with a total pumping capacity of 3.80 MGD. Total potable water capacity is 5.4 MGD. About 1.2 MGD is the average daily use. The main system was installed in 1952.

b. Wastewater.

Two Imhoff tanks are used to treat sewage. They have a capacity of 3.0 MGD and about 0.032 MGD of sewage are treated daily. The system has a 20 year life expectancy. The system has a National Pollutant Discharge Elimination System (NPDES) permit.

There is an industrial wastewater treatment facility that is capable of treating 2.88 MGD. About 30,000 gallons of treated effluent is discharged to the sewage system per month. The facility has a NPDES permit.

c. Solid Wastes.

The sanitary landfill was enclosed in 1993, but the installation reports no impact. There is a 53 acre construction debris landfill with a remaining useful life of about 20 years. There is no contract in place for the disposal of solid waste.

5. AIR QUALITY.

a. The installation is in the Carson Desert Air Quality Control Region, State of Nevada Environmental Protection Agency (EPA).

b. The region is in attainment.

c. Steam boilers are the only potential source of air pollutants.

d. The installation maintains no air emissions credits.

e. No air compliance projects are reported.

f. There is not a critical air quality region within 100 km of the installations.

6. HAZARDOUS MATERIALS/SITES.

a. Use of hazardous materials.

There are three Resource Conservation and Recovery Act (RCRA) permits, for 90 day or longer hazardous waste storage under an Interim Status. The installation is also in the process of obtaining a Sub-part X permit, and expects issuance during CY 94.

b. Contaminated Sites.

An on-going assessment by contract administered by U.S. Army Corps of Engineers Sacramento District has so far identified 126 Defense Environmental Restoration Account (DERA) eligible sites.

c. PCB, Asbestos, Lead Paint, or RADON issues.

A PCB survey has been completed and all identified contaminated transformers were replaced.

d. Underground Storage Tanks (UST).

Installation has 1,514 regulated tanks and 15 non-regulated tanks. Testing is in progress with no other information available.

e. Radioactive Materials and Sources

Installation possesses both Nuclear Regulatory Commission (NRC) and DA licenses for depleted uranium. Survey of the ammunition holding areas may be required for decommissioning.

7. OTHER ISSUES, CONSTRAINTS.

No other significant issues or constraints are known.

8. REVENUE GENERATING PROGRAMS.

Two revenue generating programs are in place.

	Fish/Wildlife	Industrial
FY 92	$4,000	$ 777
FY 93	3,294	2,331
FY 94	3300	2,000
	$10,594	$5,108

9. PROGRAMMED ENVIRONMENTAL COSTS.

a. Cost estimate for compliance for FY 94 - FY 99:

Funded: $797,000
Unfunded: $3,212,000

b. Cost estimate for restoration for FY 94 - FY 99:

Funded: $29,533,000
Unfunded: $22,958,000

ACRONYMS

AICUZ	Air Installation Compatible Use Zone
ICUZ	Installation Compatible Use Zone
ITAMS	Integrated Training Area Management System
LCTA	Land Condition Trend Analysis
404 Wetlands	Regulated Wetlands

NONSTRUCTURAL ATTRIBUTES

Pueblo Depot Activity -- 08505

1. LAND USE.

a. Land Availability (estimated quantities in acres).

(1)	Installation total	22,654
(2)	Cantonment area	23
(3)	Maneuver area	0
(4)	Training lands designated as sensitive/marginal by ITAMS/LCTA monitoring	0
(5)	Firing Ranges	2000
(6)	Non-Impact Firing Range	60
(7)	Wetlands Sec 404 area Intermittent Wetlands	1000
(8)	Other (Surface water areas; set aside unique areas; i.e., recreation habitat, forests; restricted use areas such as landfills, contaminated sites, safety zones.	727

Surface Water	20
Rec Area	80
Landfills	135
Sewage Plant	46
Safety Area	446

b. Air Space.

(1)	Restricted Air Space.	640
(2)	Extent of Installation Compatible Use Zones (ICUZ) or Noise and Accident Potential Zone (NAPZ).	N/A

2. THREATENED OR ENDANGERED SPECIES (PLANTS AND ANIMALS).

No survey has been conducted, however, according to the information provided to the installation by the U.S. Fish and Wildlife Service (USFWS), approximately 10 Federally listed species are present but they were not identified. Their presence has not impacted the mission functions. The existence of these species must be considered in development proposals.

3. CULTURAL RESOURCES.

a. No Historic Preservation Plan/Cultural Resources Management Plan Memoranda of Agreement have been prepared for this facility.

b. A historic building survey was prepared for Pueblo Depot which indicated 332 buildings are eligible for the National Register.

c. An archeological survey is currently in progress.

4. INFRASTRUCTURE ISSUES.

a. Potable Water.

Potable water is supplied by 9 wells with a total pumping capacity of 3.3 MGD, and a 0.3 MGD daily usage rate.

b. Wastewater.

One wastewater treatment facility exists with a 3.5 MGD capacity and an average use of 0.1145 MGD. The treatment plant has been inactive since June 1991. Waste water is diverted into a lagoon, because of low input to the plant. The installation has a National Pollutant Discharge Elimination System (NPDES) permit.

c. Solid Wastes.

The installation generates 628 cubic yards per month of solid waste, which is removed through contract with the Pikes Peak Sanitation Co. at a cost of $13.50/cubic yard.

5. AIR QUALITY.

a. The air quality region is the San Isabel Region, which is regulated by the Environmental Protection Agency (EPA), and the Pueblo Huefarro, Los Animas region regulated by the Colorado Dept of Health Air Pollution Control.

b. The region is in attainment.

c. Air pollution sources are: coal and oil fired boiler plants, USTs, ASTs,Pesticide and Herbicide, open burning/open detonation, Swimming Pool

d. The installation has no air emission credits.

e. No major air compliance projects are reported.

f. The installation is not within 100 km of a critical air quality region.

5. HAZARDOUS MATERIALS/SITES.

a. Use of hazardous materials.

The installation has a Resource Conservation and Recovery Act (RCRA) Part B permit for three 90 day or longer storage site and one 90 day hazardous waste storage sites. The permits expire in 2002.

b. Contaminated Sites.

An assessment for contamination has been made by Black & Vetch Waste Science Technology, and an RDRA facility investigation is still ongoing.

c. PCB, Asbestos, Lead Paint, or RADON issues.

The PCB survey is complete with 59 contaminated transformers identified and 13 replaced.

There is an active asbestos management program. Previously the installation reported all asbestos containing structures had been surveyed, and a small crew of trained persons is in readiness for any removal requirement. Other larger problem areas were out for bid on a contract for removal.

Random sampling for lead based paint was accomplished in the housing area. Critical areas were scraped and repainted.

The Radon program has been completed. The only areas with readings between 5 and 20 picocuries per liter were areas that had been shut up. Following aeration,levels return to normal (resampling was accomplished). The basement of one house in the housing area had a level above 10 picocuries. A ventilation fan was placed in the area. No other problems were encountered, all other readings were below 4.9 picocuries.

d. Underground Storage Tanks (UST).

All eight tanks have been tested. Three failed and contract work is being finalized for repair or replacement of the three tanks.

e. Radioactive Materials and Sources

Installation has a license for a "Calibration source." The installation reports that the Nuclear Regulatory Commission (NRC) says Pueblo is exempt from decommissioning. However, if closed, there are two rooms in one building that will be surveyed.

7. OTHER ISSUES, CONSTRAINTS.

No other significant issues or constraints are known.

8. REVENUE GENERATING PROGRAMS.

The installation reported an estimated $25,000 was generated for FY 92 by leasing land for grazing (8,214 acres). No other information was provided.

9. PROGRAMMED ENVIRONMENTAL COSTS.

a. Summary of environmental compliance costs from 1383 report May 1992 ($000):

	Funded	Unfunded
FY 94	$ 1,058	$ 0
FY 95	1,006	0
FY 96	698	0
FY 97	698	0
FY 98	698	0
FY 99	698	
	$ 4,856	$ 0

b. Restoration costs for ongoing efforts under BRAC I Base Closure Account are currently estimated:

Funded: $21,029K
Unfunded: $135,139K

ACRONYMS

AICUZ	Air Installation Compatible Use Zone
ICUZ	Installation Compatible Use Zone
ITAMS	Integrated Training Area Management System
LCTA	Land Condition Trend Analysis
404 Wetlands	Regulated Wetlands

NONSTRUCTURAL ATTRIBUTES

Savanna Depot Activity -- 17795

1. LAND USE.

a. Land Availability (estimated quantities in acres).

(1)	Installation total	13,062
(2)	Cantonment area	30
(3)	Maneuver area	700
(4)	Training lands designated as sensitive/marginal by ITAMS/LCTA monitoring	0
(5)	Firing Ranges	0
(6)	Non-Impact Firing Range	0
(7)	Wetlands Sec 404 area (1,000 acres surface water bodies)	6,174
(8)	Other (Surface water areas; set aside unique areas; i.e., recreation habitat, forests; restricted use areas such as landfills, contaminated sites, safety zones.	0

b. Air Space.

(1)	Restricted Air Space. (Included in ICUZ area)	415
(2)	Extent of Installation Compatible Use Zones (ICUZ) or Noise and Accident Potential Zone (NAPZ).	1,348

2. THREATENED OR ENDANGERED SPECIES (PLANTS AND ANIMALS).

An informal survey for threatened or endangered species (TES) has been conducted. The Bald Eagle is the only Federally listed threatened species known to occur on the installation. A biological assessment, Avian study, is to be conducted during the summer of 1994. Currently, regulators requests that a 1/4 mile buffer zone be established around eagle nests during the nesting season. The TES population is reported to be increasing.

3. CULTURAL RESOURCES.

a. A Historical Preservation Plan or Cultural Resources Management Plan has not been initiated. However, an archeological overview and historic structures report were

prepared for Savannah Depot in the early 1980's.

b. The historic building survey recommended that 52 buildings may be historically or architecturally significant enough to merit nomination to the National Register. One building, Beatty House, is in substandard condition and will cost $250,000 to renovate. The Beatty House (Cat II) cannot be demolished and must be maintained in weather tight conditions.

c. Thirty-eight acres have been surveyed for archeological sites and five sites have been found to be potentially eligible for the National Register. Savanna Depot lands are recommended in the archeological overview as having a high potential for possessing archeological resources.

4. INFRASTRUCTURE ISSUES.

a. Potable Water.

Potable water is supplied by four wells with a total pumping capacity of 7.6 MGD and an average use of 0.25 MGD. Excess capacity is 7.35 MGD and the drawdown rate is 40 feet.

b. Wastewater.

The National Pollutant Discharge Elimination System (NPDES) permitted wastewater treatment plant has a design capacity of 0.36 MGD and has an average use of 0.154 MGD and a 50 year life expectancy.

c. Solid Wastes.

Solid waste is disposed of via a $38,000 annual contract with Moring Disposal. Average daily volume is 2.5 tons/day at a cost of $42.60 tons a day. The depot landfill is closed.

5. AIR QUALITY.

a. The air quality regions are Illinois Environmental Protection Agency (EPA) Regions 68 and 69.

b. The regions are in attainment.

c. Air pollution sources are: boilers, furnaces, incinerator (CWP) & (EWI), fire training, POL tanks, and detonation area.

d. The installation has no air emission credits.

e. An air emissions inventory is necessary to meet/maintain air quality compliance.

f. The installation is not within 100 km of a critical air quality region.

g. The State of Illinois prohibits open burning for demil, however open detonation is permitted.

6. HAZARDOUS MATERIALS/SITES.

a. Use of hazardous materials.

There are currently four Resource Conservation and Recovery Act (RCRA) interim status permitted storage sites (converted igloos). RCRA Part B permit(s) are under review at the State EPA and expected issuance is the fall/winter 1994.

b. Contaminated Sites.

There are 74 Defense Environmental Restoration Account (DERA) eligible contaminated sites currently being assessed.

The installation is on the National Priority List (NPL) for washout lagoons, old lap plant grounds, old landfill, and current open detonation facility.

c. PCB, Asbestos, Lead Paint, or RADON issues.

A PCB survey has been completed. Fifty-nine out of 100 contaminated transformers have been replaced.

d. Underground Storage Tanks (UST).

There are 40 active USTs. One is tested each year, none have failed, and a total 16 have been replaced.

e. Radioactive Materials and Sources

The installation holds Nuclear Regulatory Commission (NRC)/DA licenses for storage, shipment, maintenance and demil of depleted uranium ammunition and components. Decommissioning surveys are required for 31 storage and operations buildings, but cleaning is unlikely for radioactive materials.

7. OTHER ISSUES, CONSTRAINTS.

No other significant issues or constraints are known.

8. REVENUE GENERATING PROGRAMS.

Unspecified revenue generating program revenues are:

FY 92	$29,000
FY 93	$30,000
FY 94	$31,000
	$90,000

9. PROGRAMMED ENVIRONMENTAL COSTS.

a. Summary of environmental compliance costs:

	Funded	Unfunded
FY 94	$1,000,000	$ -
FY 95	$1,200,000	$ -
FY 96	$1,300,000	$ -
FY 97	$1,400,000	$ -
FY 98	$ -	$ -
FY 99	$ -	$ -
	$4,900,000	$ -

b. Summary of environmental restoration costs:

	Funded	Unfunded
FY 94	$6,383,000	$3,000,000
FY 95	$ 0	$7,800,000
FY 96	$ 0	$19,300,000
FY 97	$ 0	$17,100,000
FY 98	$ 0	$13,900,000
FY 99	$ 0	$10,900,000
	$6,383,000	$72,000,000

ACRONYMS

AICUZ	Air Installation Compatible Use Zone
ICUZ	Installation Compatible Use Zone
ITAMS	Integrated Training Area Management System
LCTA	Land Condition Trend Analysis
404 Wetlands	Regulated Wetlands

NONSTRUCTURAL ATTRIBUTES

Seneca Army Depot -- 36760

1. LAND USE.

a. Land Availability (estimated quantities in acres).

(1)	Installation total	10,581
(2)	Cantonment area	775
(3)	Maneuver area	0
(4)	Training lands designated as sensitive/marginal by ITAMS/LCTA monitoring	0
(5)	Firing Ranges	90
(6)	Non-Impact Firing Range	9,315
(7)	Wetlands Sec 404 area (approximately 100 acres surface water)	418
(8)	Other (Surface water areas; set aside unique areas; i.e., recreation habitat, forests; restricted use areas such as landfills, contaminated sites, safety zones.	376

b. Air Space.

(1)	Restricted Air Space. to 2,000 ft above sea level	776 acres
(2)	Extent of Installation Compatible Use Zones (ICUZ) or Noise and Accident Potential Zone (NAPZ). Zone III	6.89

2. THREATENED OR ENDANGERED SPECIES (PLANTS AND ANIMALS).

A threatened or endangered species (TES) survey has not been conducted, however the U.S. Fish and Wildlife Service has determined that a biological assessment is not required. No Federal or State listed endangered or threatened species or critical habitats are known to occur on the installation.

3. CULTURAL RESOURCES.

a. The installation does not have a historic preservation plan or implementing memoranda of agreement.

b. The historic building survey has been conducted and one building was recommended as eligible for the National Register of Historic Places.

c. No archeological inventory has been conducted for Seneca Depot. No potential sites have been identified. Seneca Depot lands are believed to have at least a moderate potential for possessing archeological resources.

4. INFRASTRUCTURE ISSUES.

a. Potable Water.

All potable water is supplied from a surface water source. The intake capacity is 1.6 MGD and the average use is 0.15 MGD.

b. Wastewater.

The total design capacity of the two National Pollutant Discharge Elimination System (NPDES) permitted wastewater treatment plants is 0.625 MGD with an average use of 0.35 MGD. Treatment plants were upgraded in 1989.

c. Solid Wastes.

There are no landfills on the installation. All solid waste is disposed under a five year contract valued at $571,000. Average daily volume is 1.1 tons/day at a cost of $55/ton. There are no limitation to increases in contract quantity.

5. AIR QUALITY.

a. The installation is located in the Genesee, Finger Lakes Air Quality Control Region.

b. The region is in attainment, however it is classified as a transport region for ozone.

c. Air pollution sources are: five powerhouses, two incinerators, 16 ventilating points, open burning (propellants, open detonation, & fire training), and traffic.

d. The installation has no air emission credits.

e. The installation has not identified any projects as necessary to meet/maintain air quality compliance.

f. The installation is not within 100 km of a critical air quality region.

6. HAZARDOUS MATERIALS/SITES.

a. Use of hazardous materials.

The installation is a Resource Conservation and Recovery Act (RCRA) permitted facility and is in the process of obtaining RCRA Part B permits. Issuance is expected in 1995.

b. Contaminated Sites.

The installation has identified 53 Defense Environmental Restoration Account (DERA) eligible contaminated sites.

The installation is on the National Priority List (NPL). Two NPL sites are in the Remedial Investigation/Feasibility Study (RI/FS) stage and are expected to be submitted in October 1994.

c. PCB, Asbestos, Lead Paint, or RADON issues.

PCB survey has been completed with all 40 contaminated transformers having been replaced.

d. Underground Storage Tanks (UST).

There are 57 active, 95 temporarily out of service, and one abandoned UST. Thirty tanks were tested, one failed and was replaced with an above ground tank.

e. Radioactive Materials and Sources.

Nuclear Regulatory Commission (NRC) and DA licenses held by the installation and decommissioning requirements are as follows: NRC license to receive, store, ship and demilitarize 30mm depleted uranium ammunition requiring surveys of 70 igloos and five maintenance buildings; DA license for calibration check sources requiring surveys of two rooms; NRC license to receive, ship, and store 25mm - 120mm DU ammunition requiring surveys of 42 igloos and four maintenance buildings; NRC license to receive, ship, and store 20 mm DU ammunition requiring survey of one igloo; NRC license to receive, ship, and store LAW rockets with PM-147 sights requiring survey in one igloo; NRC license to receive and ship sealed sources requiring surveys of two buildings;and NRC license to receive, ship and store M43A1 Detectors requiring survey of one building. A NRC license is held for storage of various radioactive ores, however these ores are no longer stored at the installation. Surveys have been performed in the location the ore was stored and the installation is awaiting NRC approval of the survey.

7. OTHER ISSUES, CONSTRAINTS.

Seneca is not in compliance with surface water treatment rules. The installation is pursuing privatization of water system and development of regional water districts. Completion of this action is expected in 1996.

8. REVENUE GENERATING PROGRAMS.

The installation reported revenue generating programs as follows:

	Hunting	Timbered
FY 92	$ 804	$ 788
FY 93	$1,208	$ 119
FY 94	$1,000	$ 125

9. PROGRAMMED ENVIRONMENTAL COSTS.

a. Total environmental compliance costs for FY 94 - FY 99 are:

Funded	$ 9,516,000
Unfunded	$25,973,000

b. Total environmental restoration costs for FY 94 - FY 99 are:

Funded	$ 12,195,000
Unfunded	$235,665,000

ACRONYMS

AICUZ	Air Installation Compatible Use Zone
ICUZ	Installation Compatible Use Zone
ITAMS	Integrated Training Area Management System
LCTA	Land Condition Trend Analysis
404 Wetlands	Regulated Wetlands

NONSTRUCTURAL ATTRIBUTES

Sierra Army Depot -- 06815

1. LAND USE.

a. Land Availability (estimated quantities in acres).

(1)	Installation total	96,430
(2)	Cantonment area	830
(3)	Maneuver area	10
(4)	Training lands designated as sensitive/marginal by ITAMS/LCTA monitoring	0
(5)	Firing Ranges	64,138
(6)	Non-Impact Firing Range	32,292
(7)	Wetlands Sec 404 area	0
(8)	Other (Surface water areas; set aside unique areas; i.e., recreation habitat, forests; restricted use areas such as landfills, contaminated sites, safety zones.	2,348

b. Air Space.

(1)	Restricted Air Space.	100
(2)	Extent of Installation Compatible Use Zones (ICUZ) or Noise and Accident Potential Zone (NAPZ).	
	Zone II	68,000
	Zone III	10,510

2. THREATENED OR ENDANGERED SPECIES (PLANTS AND ANIMALS).

A threatened or endangered species (TES) survey has been conducted, however no Biological Assessment has been rendered by the U.S. Fish and Wildlife Service (USFWS). The Federally threatened Bald Eagle and Federally endangered Peregrine Falcon are TES reported to occur at the installation. The TES populations are reported as stabilized. No constraints exist which affect mission or development activities.

3. CULTURAL RESOURCES.

a. A Historic Preservation Plan has been completed and reviewed by the State Historic Preservation Officer (SHPO) or Advisory Council for Historic Properties (ACHP).

b. A historic buildings survey has been completed and no buildings were identified as being historically significant.

c. No archeological surveys have been conducted, however one archeological site was identified as potentially eligible for listing in the National Register. An archeological overview recommended that installation lands have a moderate potential for possessing archeological resources. Archeological artifacts and associated records are stored or curated on the installation.

4. INFRASTRUCTURE ISSUES.

a. Potable Water.

Potable water comes from four wells that have a combined pumping capacity of 4.0 MGD and a daily usage of 0.7 MGD. The drawdown rate is eight feet. Excess capability is 0.5 MGD due to summer irrigation. The USAEHA Geohydrologic study No. 38-26-KIWY-93 identifies that heavy pumping on well #2 may cause migration of the TCE plume towards the well.

b. Wastewater.

There is a wastewater plant with a design capacity of 0.336 MGD and a daily effluent volume of 0.105 MGD. Upgrade requirements would be normal maintenance costs for the ponds. There is no National Pollutant Discharge Elimination System (NPDES) permit. There are no known or potential constraints to maintaining or expanding wastewater treatment and discharge.

c. Solid Wastes.

There is a 40 acre landfill on the installation with 522,480 tons of remaining capacity and a useful life of 28.5 years.

5. AIR QUALITY.

a. The installation is located in the Lassen County Air Pollution Region.

b. The region is in attainment.

c. The pollution sources on the installation are: demolition ground, deactivation furnace, boilers, paint booths and paper incinerator.

d. The installation has no air emission credits.

e. No projects have been identified as necessary to meet/maintain air quality standards.

f. The installation is within 100 km of a critical air quality region, Washoe County (City of Reno), Nevada.

6. HAZARDOUS MATERIALS/SITES.

a. Use of hazardous materials.

The installation is a treatment facility using thermal treatment and incineration to treat military explosives. The installation is in the process of obtaining Resource Conservation and Recovery Act (RCRA) Part B permits for a deactivation furnace, June 1994, and the demolition grounds, June 1995.

b. Contaminated Sites.

There are 23 Defense Environmental Restoration Account (DERA) eligible contaminated sites identified.

c. PCB, Asbestos, Lead Paint, or RADON issues.

PCB survey is complete and 75 contaminated transformers were identified with ten being replaced.

d. Underground Storage Tanks (UST).
All forty-three tanks have been tested and none failed.

e. Radioactive Materials and Sources.

The installation has a Nuclear Regulatory Commission (NRC)/DA license to handle depleted uranium munitions. There are approximately 120 igloos and eight buildings that would require a survey and perhaps cleaning at an estimated cost of $2,000,000. The likelihood of cleaning is low as the DU munitions are a sealed source.

7. OTHER ISSUES, CONSTRAINTS.

No other significant issues or constraints are known.

8. REVENUE GENERATING PROGRAMS.

There are no revenue generating programs.

9. PROGRAMMED ENVIRONMENTAL COSTS.

a. Summary of environmental compliance costs:

	Funded	Unfunded
FY 94	$1,246,000	$ 412,000
FY 95	$2,981,000	$ 0
FY 96	$1,205,000	$ 0
FY 97	$1,172,000	$ 0
FY 98	$1,145,000	$ 0
FY 99	$1,182,000	$ 0
	$8,931,000	$ 412,000

b. Summary of environmental restoration costs:

	Funded	Unfunded
FY 94	$5,450,000	$ 0
FY 95	$7,350,000	$ 0
FY 96	$ 0	$1,300,000
FY 97	$ 0	$ 800,000
FY 98	$ 0	$ 800,000
FY 99	$ --	$ --
	$12,800,000	$2,900,000

ACRONYMS

AICUZ	Air Installation Compatible Use Zone
ICUZ	Installation Compatible Use Zone
ITAMS	Integrated Training Area Management System
LCTA	Land Condition Trend Analysis
404 Wetlands	Regulated Wetlands

NONSTRUCTURAL ATTRIBUTES

Tooele Army Depot -- 49575

1. LAND USE.

a. Land Availability (estimated quantities in acres).

		North (Depot)	South (Storage)
(1)	Installation total	24,732	19,364
(2)	Cantonment area	40	0
(3)	Maneuver area	N/A	N/A
(4)	Training lands designated as sensitive/marginal by ITAMS/LCTA monitoring	2400	N/A
(5)	Explosive Impact Firing Range	1,716	1,587
(6)	Non-Impact Areas	N/A	N/A
(7)	Wetlands Sec 404 area	0	0
(8)	Other (Surface water areas; set aside unique areas; i.e., recreation habitat, forests; restricted use areas such as landfills, contaminated sites, safety zones.	20,576	17,177

b. Air Space.

(1)	Restricted Air Space.	1470	N/A
(2)	Extent of Installation Compatible Use Zones (ICUZ)		
	Zone II	4300	900
	Zone III	1250	150

2. THREATENED OR ENDANGERED SPECIES (PLANTS AND ANIMALS).

A threatened or endangered species (TES) survey has been conducted by the Soil Conservation Service. It was previously reported that the Federally listed threatened Bald Eagle is a frequent visitor to the installation. In

addition, the installation is included in the range of the Peregrine Falcon but this bird has not been sighted in the area. Neither species has impacted the installation's development or operations.

3. CULTURAL RESOURCES.

a. The installation has not prepared a Historic Preservation or Cultural Resource Management Plan.

b. A historic properties report was completed for TEAD in 1984, and was reviewed by the Utah State Historic Preservation Office (SHPO) in 1991. SHPO concurred with the report findings of no historic buildings located at TEAD.

c. An archeological overview and management plan was developed for TEAD in 1984. This document identifies 3 archaeological sites at TEAD. Site 1 contains "Petroglyph rock art formations" and site 2 contains the "Steward Pit House Mounds", and Site 3 is a family cemetery. The Petroglyph site is protected from weathering by a covered shelter. No additional action is required at this time to further protect this site. The "Stewart Pit House Mounds" site is located in the buffer zone between the ammunition storage area and the installation boundary. It is protected from vandals by the installation's security fence system. This site is currently being left in its "undisturbed" condition. Approximately 25 acres are not available for development or operations.

4. INFRASTRUCTURE ISSUES.

a. Potable Water.

Potable water is supplied by eight wells. The total pumping capacity of the wells is 8.9 MGD and the daily usage is approximately 0.725 MGD.

b. Wastewater.

The government owned/contractor operated (GOCO) wastewater treatment plant has adesign capacity of 0.17 MGD with a daily usage of 0.03 MGD and have a useful life of 15 years. The sanitary sewer maximum design capacity is 0.12 MGD, with an average daily use of 0.098 MGD. Life expectancy is 15 years.

No National Pollutant Discharge Elimination System (NPDES) permit is required. Effluent discharges to the local POTW is regulated through a pre-treatment agreement with Tooele City.

c. Solid Wastes.

An existing landfill was to be closed in October 1993, however an extension was obtained. The landfill must be closed no later than November 1995. The existing landfill (89 acres, unlimited remaining capacity) will be replaced by class IV landfills pending State approvals. Future collection of solid waste will be done on a contract basis. The yearly quantity of solid waste is about 80,000 cubic yards.

There is a Class IV contract with U.S. Eagle Inc. for an annual total of $834,000. Daily use is 5 tons at a cost of $22.00 per ton.

5. AIR QUALITY.

a. The air quality region is the Tooele County, State of Utah Region regulated by the State of Utah, Department of Environmental Quality, Division of Air Quality.

b. The region is in an attainment.

c. Air pollution sources are: 26-paint booths, 57 boilers, 13 degreasers/strip tanks, 28 dynos/test cells, 10 fuel storage tanks, 125(+) heaters, 7 incinerators, 2 OB/OD area, 13 emergency generators, and 6 blast booths.

d. The installation maintains no air emission credits.

e. The installation reported no major projects to meet/maintain air quality.

f. Non-attainment areas within 100 km of the installation include portions of Davis County to the Northeast, Salt Lake County located approximately 85 km to the Southeast.

6. HAZARDOUS MATERIALS/SITES.

a. Use of Hazardous Materials.

The installation has Resource Conservation and Recovery Act (RCRA) Part B permit(s) for 28 hazardous waste treatment facilities (10 - incinerators, 2 brine reduction, & 16 treatment tanks) and 51 hazardous waste storage sites. The TEAD-North sites permit expires in June 1998 and the TEAD-South sites permit expires in April 2003. In addition, the installation is in the process of obtaining RCRA Subpart X permit(s) for open burning/open detonation.

b. Contaminated Sites.

An assessment has been conducted by the Army Environmental Center and will be ongoing until 1996. There are currently 46 sites on TEAD-N and 29 on TEAD-S identified on the installation.

The installation is on the National Priority List (NPL). TEAD-N has been designated as a NPL site. Within TEAD-N there are 17 sites being investigated under Comprehensive Environmental Response, Compensation and Liability Act (CERCLA), and 29 sites being investigated under RCRA. Regulatory oversight of the TEAD-N CERCLA sites is being managed by the State of Utah and the EPA under a FFA. The RCRA sites in both TEAD-N and TEAD-S are being managed under a Post Closure Permit issued by the State of Utah.

c. PCB, Asbestos, Lead Paint, or Radon Issues

There are approximately 141 PCB transformers currently in operation at TEAD (North and South Areas). 131 are reported as contaminated, 36 have been replaced.

It was previously reported that no problem areas were identified by a completed Asbestos site survey. Asbestos is being managed in place.

It was previously reported that TEAD was appointed DESCOM Center for Technical Excellence for the reduction of waste paints. TEAD is in the process or prototyping a powder painting system.

It was previously reported that a Radon survey indicated all findings below the U.S. Army threshold limit of 4 pci/1.

d. Underground Storage Tanks (UST).

TEAD has 25 regulated USTs all of which have been tested and all are in compliance.

e. Radioactive Materials and Sources

Installation has two Nuclear Regulatory Commission (NRC) licenses for Nickel 63 & Gas Chromatograph and Depleted Uranium munitions, and one DA licenses for miscellaneous calibration equipment. A survey and possible cleanup of five facilities will be required.

7. OTHER ISSUES, CONSTRAINTS.

No other significant issues or constraints are known.

8. REVENUE GENERATING PROGRAMS.

Revenue is generated through grazing leases and fishing licenses.

	Grazing	Fishing
FY 92	$80,000	$1,500
FY 93	$80,000	$9,681
FY 94	$80,000	$9,500
	$240,000	$20,681

9. PROGRAMMED ENVIRONMENTAL COSTS.

a. Summary of environmental compliance costs.

	Funded	Unfunded
FY 94	$4,707K	$ 0K
FY 95	$3,087K	$130K
FY 96	$3,077K	$ 77K
FY 97	$2,956K	$275K
FY 98	$2,937K	$275K
FY 99	$3,136K	$275K
	$19,900K	$1,032K

b. Summary of environmental restoration costs.

	Funded	Unfunded
FY 94	$4,847K	$ 219K
FY 95		$11,427K
FY 96		$20,305K
FY 97		$23,510K
FY 98		$30,410K
FY 99		$22,310K
	$4,874K	$108,181K

ACRONYMS

AICUZ	Air Installation Compatible Use Zone
ICUZ	Installation Compatible Use Zone
ITAMS	Integrated Training Area Management System
LCTA	Land Condition Trend Analysis
404 Wetlands	Regulated Wetlands

NONSTRUCTURAL ATTRIBUTES

Umatilla Depot Act -- 41725

1. LAND USE.

a. Land Availability (estimated quantities in acres).

(1)	Installation total	19,728
(2)	Cantonment area	0
(3)	Maneuver area	0
(4)	Training lands designated as sensitive/marginal by ITAMS/LCTA monitoring	0
(5)	Firing Ranges	0
(6)	Non-Impact Firing Range	0
(7)	Wetlands Sec 404 area	0
(8)	Other (Surface water areas; set aside unique areas; i.e., recreation habitat, forests; restricted use areas such as landfills, contaminated sites, safety zones.	2,400

b. Air Space.

(1)	Restricted Air Space.	1,750	
(2)	Extent of Installation Compatible Use Zones (ICUZ) or Noise and Accident Potential Zone (NAPZ).	100	
	Zone II (Off Post)		5

2. THREATENED OR ENDANGERED SPECIES (PLANTS AND ANIMALS).

A survey for threatened or endangered species has not been conducted, however an ecological assessment was conducted in January 1993 as part of Remedial Investigation/Feasibility Study (RI/FS). Threatened or endangered species were not reported, however previously it was mentioned that the Federally listed endangered Bald Eagle and Peregrine Falcon are known to occur in the area. In addition, it was mentioned that the candidate Ferruginous Hawk, Swainson's Hawk, and Long-billed Curlew had also been observed.

3. CULTURAL RESOURCES.

a. Neither a Historic Preservation Plan nor a Cultural Resources Management Plan has been conducted.

b. A historic building survey has been completed and two structures were found to be eligible for the National Register of Historic Places. The installation does not have a historic preservation plan and no cultural resource memoranda of agreement has been prepared for this facility.

c. An archeological survey is scheduled to begin in 4th Qtr FY 94. The potential for significant archeological properties being located at Umatilla Depot was previously reported as moderate to low.

4. INFRASTRUCTURE ISSUES.

a. Potable Water.

All potable water comes from seven wells. The total pumping capacity is 3.38 MGD with an average use of 0.3 MGD.

b. Wastewater.

Two IMHOFF tanks are provided for wastewater treatment which have a total capacity of 0.585 MGD. It was previously reported that one of the tanks, which has a 0.545 MGD capacity, is not used. The average daily effluent is 0.015 MGD. National Pollutant Discharge Elimination System (NPDES) permit is not required.

c. Solid Wastes.

A five acre landfill with a 37,500 ton capacity was closed for municipal waste in April 1994. Treated soils are still allowed until the end of FY 97. The landfills life expectancy is three years.

Solid waste disposal is now contracted with an unknown daily capacity. The contract value is $66,000 with a cost per ton of $205. The only limitation to expansion of the contract quantity is a requirement to rebid if additional dumpsters are required.

5. AIR QUALITY.

a. The air quality region is undetermined at this time.

b. The attainment status is unknown at this time.

c. Air pollution sources are: open burn/open detonation areas and fire tube boiler fueled with black oil or diesel.

d. The installation has no air emission credits.

e. No air compliance projects are reported.

f. There is not a critical air quality region within 100 km of the installation.

6. HAZARDOUS MATERIALS/SITES.

a. Use of hazardous materials.

The installation has a Resource Conservation and Recovery Act (RCRA) Part B permit for a collection site, HWL-10. The installation is also in the process of applying for a RCRA Part B permit for chemical demil. A RCRA Interim status permit is being reviewed for an incinerator with an estimated start date of July 1995. A possible RCRA Subpart X permit may be required for open detonation of non-stockpile items.

b. Contaminated Sites.

There are 13 Defense Environmental Restoration Account (DERA) eligible sites identified.

The installation is on the NPL. There is one NPL site. The Federal Facilities Agreement was signed in October 1989 and the Record of decision was signed in September 1992. Previously, it was reported that during the 1950's until 1965, UMDA operated an explosives washout plant. The plant processed munitions to remove and recover explosives using a pressurized hot water system. Operation of the plant included flushing and draining the explosives washout system. The wash water produced was discharged to two adjacent unlined rectangular lagoons constructed in the native sandy-gravelly soil. The north and south lagoons measure 80 feet by 39 feet and 80 feet by 27 feet respectively. A total of 85,000,000 gallons of water was estimated to have been discharged into the lagoons. Environmental assessments conclude that the discharges have caused contamination of the alluvial aquifer and confirmed the presence of explosives (TNT/RDX) in the soil and groundwater. Umatilla is designated as a chemical agent disposal facility.

c. PCB, Asbestos, Lead Paint, or RADON issues.

A PCB survey has been completed and all 64 contaminated transformers were replaced.

d. Underground Storage Tanks (UST).

Two tanks were identified and tested and both are in compliance.

e. Radioactive Materials and Sources

A byproduct license is held by AMCCOM Rock Island for by product materials from M8 Alarm. No cleanup is expected for the buildings where the M8 Alarms are used and stored.

7. OTHER ISSUES, CONSTRAINTS.

Umatilla stores 12% of the nation's chemical agents.

8. REVENUE GENERATING PROGRAMS.

Recycling and reuse programs generated $212 (51,000 lbs) in FY 93.

9. PROGRAMMED ENVIRONMENTAL COSTS.

a. Total environmental compliance costs were reported as $1,000,000 with no dates specified.

b. Total Base Closure (BRAC) Account restoration costs are estimated at $31,700,000 through FY 95. Restoration costs past FY 95 are unfunded.

ACRONYMS

AICUZ	Air Installation Compatible Use Zone
ICUZ	Installation Compatible Use Zone
ITAMS	Integrated Training Area Management System
LCTA	Land Condition Trend Analysis
404 Wetlands	Regulated Wetlands

NONSTRUCTURAL ATTRIBUTES

Adelphi Labs -- 24234

1. LAND USE.

a. Land Availability (estimated quantities in acres).

(1)	Installation total	137.17
(2)	Cantonment area	23.7
(3)	Maneuver area	0
(4)	Training lands designated as sensitive/marginal by ITAMS/LCTA monitoring	0
(5)	Firing Ranges	0
(6)	Non-Impact Firing Range	0
(7)	Wetlands Sec 404 area	75.5
(8)	Other (Surface water areas; set aside unique areas; i.e., recreation habitat, forests; restricted use areas such as landfills, contaminated sites, safety zones. Forested -	37.97

b. Air Space.

(1)	Restricted Air Space.	0
(2)	Extent of Installation Compatible Use Zones (ICUZ) or Noise and Accident Potential Zone (NAPZ).	0

2. THREATENED OR ENDANGERED SPECIES (PLANTS AND ANIMALS).

A threatened or endangered species (TES) survey has been conducted and no TES are known to occur on the installation.

3. CULTURAL RESOURCES.

a. The Cultural Resources Management Plan is in draft form and has been reviewed by the Maryland State Historic Preservation Officer (SHPO). The SHPO and Advisory Council on Historic Preservation (ACHP) will also review the final copy.

b. A historic building survey has been conducted for structures built up to the end of WW II. A Phase I for the Cold War context is in the planning stages and is projected for FY 95. Presently there are no buildings eligible for the National Register of Historic Places.

c. An archeological survey has been completed (Phase I) and two sites were identified as potentially eligible for the National Register. A Phase II was recommended for both sites. The archeological contractor is currently holding the artifacts obtained from the past surveys. The installation is working with the SHPO to establish a memorandum of agreement (MOA) for curation of any potential artifacts from past and future surveys at the Maryland Historical Trust. Approximately 20 acres were determined to have a high potential for archeological sites.

4. INFRASTRUCTURE ISSUES.

a. Potable Water.

Potable water is supplied from surface water sources and is provided under contract with the Washington Sanitary Sewer Commission (WSSC). The maximum capacity is 3.83 MGD, and the average use is 0.159 MGD.

b. Waste water.

Waste water disposal is provided under contract to WSSC. The maximum capacity is 4.6 MGD and average daily usage is 0.146 MGD. There is no National Pollutant Discharge Elimination System (NPDES) permit, however the installation does hold a waste water operating permit from the WSSC.

c. Solid Wastes.

Solid waste disposal is provided by a $18,500 contract with Heritage. Average daily volume data is not known, however landfill costs are reported as $64.39/ton.

5. AIR QUALITY.

a. The installation is in Maryland Air Quality Region IV.

b. The region is not in attainment for ozone (serious).

c. Air pollution sources are: boiler, furnace, and vehicular traffic.

d. The installation has no air emission credits.

e. No major projects were identified in the A-106 Plan to meet/maintain air compliance.

f. The installation is within 100 km of numerous national parks and wildlife refuges.

6. HAZARDOUS MATERIALS/SITES.

a. Use of hazardous materials.

The installation is currently operating under a consent order with the State of Maryland awaiting State issuance of the Part B permit. The permit will be for the storage of hazardous waste containers in building 104 before transporting off post during disposal.

b. Contaminated sites.

No further remedial action planned (NFRAP) for 39 Defense Environmental Restoration Account (DERA) eligible sites.

c. PCB, Asbestos, Lead Paint, and RADON issues.

PCB survey has been completed and all 36 contaminated transformers have been replaced.

d. Underground Storage Tanks (UST).

All 17 USTs have been tested of which 13 were replaced/repaired and four are scheduled for replacement.

e. Radiological Materials and Sources.

The installation holds four Nuclear Regulatory Commission (NRC) licenses for radiological materials and sources: sealed CO-60 sources in Irradiator Facility; sealed calibration sources; storage of 60 fission foils awaiting shipment to DOE; and possession and testing of neutron irradiated hardware and electronics.

7. OTHER ISSUES, CONSTRAINTS.

No other significant issues or constraints are known.

8. REVENUE GENERATING PROGRAMS.

The only revenue generating programs is firewood sales with the following revenue: FY 92 - $ 0.00, FY 93 - $100.00, & FY 94 - $150.00.

9. PROGRAMMED ENVIRONMENTAL COSTS.

a. Summary of environmental compliance costs:

	Funded	Unfunded
FY 94	$ 581,000	$ 194,000
FY 95	$ 685,000	$ 178,000
FY 96	$1,488,000	$ 135,000
FY 97	$ 909,000	$ 104,000
FY 98	$ 986,000	$ 856,000
FY 99	$ 100,000	$ 856,000
	$4,749,000	$1,519,000

b. There are no restoration costs required at the installation.

ACRONYMS

AICUZ	Air Installation Compatible Use Zone
ICUZ	Installation Compatible Use Zone
ITAMS	Integrated Training Area Management System
LCTA	Land Condition Trend Analysis
404 Wetlands	Regulated Wetlands

NONSTRUCTURAL ATTRIBUTES

USA Cold Regions Research Lab -- 33450

1. LAND USE.

a. Land Availability (estimated quantities in acres).

(1)	Installation total	30
(2)	Cantonment area	30
(3)	Maneuver area	N/A
(4)	Training lands designated as sensitive/marginal by ITAMS/LCTA monitoring	N/A
(5)	Firing Ranges	N/A
(6)	Non-Impact Firing Range	N/A
(7)	Wetlands Sec 404 area	0
(8)	Other (Surface water areas; set aside unique areas; i.e., recreation habitat, forests; restricted use areas such as landfills, contaminated sites, safety zones.	N/A

b. Air Space.

(1)	Restricted Air Space.	N/A
(2)	Extent of Installation Compatible Use Zones (ICUZ) or Noise and Accident Potential Zone (NAPZ).	N/A

2. THREATENED OR ENDANGERED SPECIES (PLANTS AND ANIMALS).

A threatened or endangered species (TES) survey has not been conducted.

3. CULTURAL RESOURCES.

a. The Cold Regions Lab does not have a Historic Preservation Plan nor Cultural Resources Management Plan.

b. A historical building survey has not been completed.

c. An archeological survey has not been completed.

4. INFRASTRUCTURE ISSUES.

a. Potable Water.

Potable water is provided through a contract with the town of Hanover, NH. Average daily use is 4,000 gallons per day. Design capacity was not provided. Industrial water supply is provided by the five wells at a 1.0 MGD rate.

b. Wastewater.

Wastewater treatment design capacity for disposal is provided by contract with the town of Hanover. Average daily usage is 4000 gallons per day and capacity is estimated to be 0.08 MGD. A National Pollutant Discharge Elimination System (NPDES) permit is required for discharge of industrial cooling water obtained from on-site wells. Groundwater is contaminated with TCE and is treated in a groundwater treatment plant prior to discharge. There are no limits for expansion other than the capacity of the groundwater treatment plant.

c. Solid Wastes.

Solid waste disposal information not provided. The installation previously reported that solid waste disposal was provided by contract with Northeast Waste Services. The disposal quantity was 0.44 tons per day.

5. AIR QUALITY.

a. The installation is in the Grafton County, New Hampshire Air Quality Region.

b. The region is in non-attainment for ozone (severe).

c. Air pollution source is an emergency generator used in commercial power interruptions.

d. The installation has no air emission credits.

e. No major air compliance projects/expenditures are indicated.

f. The installation is not within 100 km of a critical air quality region.

6. HAZARDOUS MATERIALS/SITES.

a. Use of hazardous materials.

No Resource Conservation and Recovery Act (RCRA) permitted hazardous waste storage facilities.

b. Contaminated sites.

Sixteen areas of contamination have been identified. A phase two remedial investigation completed in May 1994 indicated that four of those areas (AOC's 2, 9, 13, & 15) should be remediated.

The installation is not on the National Priority List (NPL). A Preliminary Assessment and Site Inspection (PA/SI) has been submitted to the EPA for HRS scoring.

c. PCB, Asbestos, Lead Paint,and RADON issues.

A PCB survey has not been completed.

d. Underground Storage Tanks (UST).

Both USTs have been tested and passed leak tests.

e. Radioactive Materials and Sources.

Licenses are required by the Nuclear Regulatory Commission (NRC) and/or DA for licensed materials primarily for sealed sources in instruments. Three rooms and one small storage building will be surveyed for decommissioning.

7. OTHER ISSUES, CONSTRAINTS.

No other significant issues or constraints are known.

8. REVENUE GENERATING PROGRAMS.

There are no revenue generating programs on the installation.

9. PROGRAMMED ENVIRONMENTAL COSTS.

a. Summary of environmental compliance costs:

	Funded	Unfunded
FY 94	Unknown	$ 100,000
FY 95		$ 100,000
FY 96		$ 50,000
FY 97		
FY 98		
FY 99		
	Unknown	$ 250,000

b. Summary of environmental restoration costs:

	Funded	Unfunded
FY 94	$1,239,000	$ 0
FY 95		$ 644,000
FY 96		$ 190,000
FY 97		$ 200,000
FY 98		$ 210,000
FY 99		220,000
	$1,239,000	$1,464,000

ACRONYMS

AICUZ	Air Installation Compatible Use Zone
ICUZ	Installation Compatible Use Zone
ITAMS	Integrated Training Area Management System
LCTA	Land Condition Trend Analysis
404 Wetlands	Regulated Wetlands

NONSTRUCTURAL ATTRIBUTES

Detroit Arsenal -- 26155
and Detroit Arsenal Tank Plant

1. LAND USE.

a. Land Availability (estimated quantities in acres).

(1)	Installation total	341
(2)	Cantonment area	0
(3)	Maneuver area	N/A
(4)	Training lands designated as sensitive/marginal by ITAMS/LCTA monitoring	N/A
(5)	Firing Ranges	N/A
(6)	Non-Impact Firing Range	N/A
(7)	Wetlands Sec 404 area	N/A
(8)	Other (Surface water areas; set aside unique areas; i.e., recreation habitat, forests; restricted use areas such as landfills, contaminated sites, safety zones.	N/A

b. Air Space.

(1)	Restricted Air Space.	N/A
(2)	Extent of Installation Compatible Use Zones (ICUZ) or Noise and Accident Potential Zone (NAPZ).	N/A

2. THREATENED OR ENDANGERED SPECIES (PLANTS AND ANIMALS).

A threatened or endangered (TES) survey was performed (dated 6 March 1991) by the US Fish & Wildlife Service (USFWS) IAW Section 7(c) of the Endangered Species Act. No known endangered plants or animals were found.

3. CULTURAL RESOURCES.

a. No Historic Preservation Plan or Cultural Resources, Management Plan has been prepared for this facility.

b. The installations are currently undergoing a historical survey through the Corps of Engineers-Fort Worth District (COE-FW) under an Army Environmental Center contract.

c. An archeological survey will be conducted for the Arsenal as part of the COE-FW survey.

4. INFRASTRUCTURE ISSUES.

a. Potable Water.

All potable water is provided by the city of Warren, Michigan through commercial contract. Annual cost is $131,117. Maximum capacity is 10.856 MGD, with an average daily use of 0.465 MGD.

b. Wastewater.

Waste water service is provided by the City of Warren, Michigan. The maximum capacity is 7.52 MGD, with an average daily usage of 0.325 MGD. The installation has a National Pollutant Discharge Elimination System (NPDES) permit.

c. Solid Wastes.

Solid waste removal is provided through commercial contract, with an annual cost of $106,132 ($19.04/ton), and an average daily volume of 15.27 tons/day.

5. AIR QUALITY.

a. The installation is in the Southeastern Michigan, Environmental Protection Agency (EPA) Region V, and Michigan Department of Natural Resources, Livonia District.

b. The region is in a non-attainment area for particulates, (sulfur dioxide, nitrogen dioxide, and lead). All are listed as serious.

c. Air pollution sources on the installation are: Boilerhouse, paint booths, vehicle exhaust, and traffic.

d. The installation has no air emission credits.

e. The installation reports an air compliance project for the Design Modify Central Heating Plant.

f. The installation is in a critical air quality region.

6. HAZARDOUS MATERIALS/SITES.

a. Use of hazardous materials.

The installation does not hold any Resource Conservation and Recovery Act (RCRA) permits.

b. Contaminated sites.

One Defense Environmental Restoration Account (DERA)

eligible site has been identified (infield area of the test track), during the assessment conducted by the COE-Nashville contractor, JAYCOR (6 Dec 93).

c. PCB, Asbestos, Lead Paint, and RADON issues.

A PCB survey has been completed, 22 contaminated transformers were identified, with 4 replaced between May 92 and May 93.

d. Underground Storage Tanks (UST).

There are 10 active tanks. All have been inspected with no failures.

e. Radioactive Materials and Sources

The installation holds the following Nuclear Regulatory Commission (NRC) and/or DA licenses: NRC 21-01222-02 byproduct license used to calibrate radiac instruments, support TACOM R&D efforts and to act as level ash detectors for coal dust bunkers; NRC 29-01022-08 by-product license for Instrument AN/UDM-2 containing Strontium 90 used to calibrate radiac instruments for the Army, DA authorizations for A21-12-02 source license for Radium 226 used to calibrate radiac instruments and used in detection instrumentation; and DA Permit 21-DATP-12-03 authorizes installation/mounting of Tritium and Thorium radioactive commodities into/onto M1 and M60 tanks during tank production.

NRC 21-01222-02 affects three (3) buildings. Two buildings have only one room with the radioactive materials. The third building has radioactive sources throughout the facility. Two of the buildings have built in sources, which will require removal, survey and disposal of sources. One of the buildings will require survey, disposal of sources and likely decontamination, for the one room affected. Located in one building and in one room, the AN/UDM-2 would only have to be relocated. Area survey and source wipes show no contamination. DA Authorization A21-12-02 source is located in one building and in one room. The room is the same room indicated above, which requires survey, disposal of sources and maybe decontamination. DA Permit 21-DATP-12-03 is located in one building, General Dynamics Land System Division (GDLS) under the permit, is responsible for decontamination of premises and restoration of the premises to the original condition for unrestricted use IAW U.S. NRC criteria, upon completion of project or contract.

7. OTHER ISSUES, CONSTRAINTS.

No other significant issues or constraints are known.

8. REVENUE GENERATING PROGRAMS.

There are no revenue generating programs, except paper recycling which shows a profit of about $3000 per year.

9. PROGRAMMED ENVIRONMENTAL COSTS.

a. Summary of environmental compliance costs: ($000)

	FUNDED	UNFUNDED
FY 94	$300	$100
FY 95	623	80
FY 96	0	345
FY 97	0	1,233
FY 98	0	320
FY 99	0	0
	$923	$2,078

b. Summary of environmental restoration costs ($000)

	FUNDED	UNFUNDED
FY 94	$ 250	$ 0
FY 95	1,600	0
FY 96	1,143	0
FY 97	457	0
FY 98	0	0
FY 99	0	0
	$3,450	$ 0

ACRONYMS

AICUZ	Air Installation Compatible Use Zone
ICUZ	Installation Compatible Use Zone
ITAMS	Integrated Training Area Management System
LCTA	Land Condition Trend Analysis
404 Wetlands	Regulated Wetlands

NONSTRUCTURAL ATTRIBUTES

Fort Detrick -- 24225

1. LAND USE.

a. Land Availability (estimated quantities in acres).

(1)	Installation total		1143
(2)	Cantonment area		311
(3)	Maneuver area		0
(4)	Training lands designated as sensitive/marginal by ITAMS/LCTA monitoring		0
(5)	Firing Ranges		0
(6)	Non-Impact Firing Range		0
(7)	Wetlands Sec 404 area (22 acres of wetlands; 4 acres of which are surface water and might be outside Sec 404 jurisdiction.)		22
(8)	Other		810
	Mission (various tenants)	274	
	Landfill	87	
	Habitat	30	
	Recreation	108	
	Leased land & other open space	311	

b. Air Space.

(1)	Restricted Air Space.	0
(2)	Extent of Installation Compatible Use Zones (ICUZ) or National Air Space Zones (NAPZ)	0

Fort Detrick has an emergency helicopter landing pad. The only current restrictions are related to safe landing approaches. Noise measurements were taken by USAEHA, and it has been concluded that the noise environment for the entire installation is compatible with residential use.

2. THREATENED OR ENDANGERED SPECIES (PLANTS AND ANIMALS).

No Federal survey has been conducted. The US Fish and Wildlife Service has documented that no threatened or endangered species are present on or near the facility, and no Biological Assessment is required.

3. CULTURAL RESOURCES.

a. The installation has a Historic Preservation Plan that has been reviewed by the State Historic Preservation Officer (SHPO) and the Advisory Council for Historic Preservation (ACHP).

b. A historic building survey has been completed. Three buildings are on the Historic Register, along with one object. A 19th Century Lime Kiln (object) is eligible. Two other buildings appear eligible when they are included as a group with the three buildings already on the register, as part of a historic property, or "historic district". One building will require extensive renovation (historic barn).

c. Phase 1 Archeological Survey of the entire post, 1,143 acres has been completed. No artifacts discovered were of sufficient size or importance to warrant curation. All artifacts are labeled and identified.

4. INFRASTRUCTURE ISSUES.

a. Potable Water.

All potable water is treated surface water. Filters are the limiting process and have a capacity of 4.25 MGD. Average daily use is 1.37 MGD. Units were built between 1945 and 1969. Mechanisms are repaired or replaced as needed. A renovation project of the filter units in 1994 will increase their capacity to 7.0 MGD. Transmission capacity is limited to 4.25 MGD, but could easily be increased by construction of a water pumping station at the main post and/or an additional water main to the main post. With proper maintenance, and properly timed replacements/renovations of key units, this plant should be able to remain in operation for 25 or more years.

b. Wastewater.

The treatment plant design capacity is 2.0 MGD with an average daily use of 0.925 MGD. The plant was built in 1945 and upgraded throughout the following years. The last major renovation was in 1979. Mechanisms are repaired and/or replaced as needed. Permit parameters include mass loadings. With increased flow, lower effluent concentrations could be required. With proper maintenance this plant can be used for 20 or more years.

c. Solid Wastes.

Installation has an approved landfill of 60.9 acres, of which 6.5 acres are currently operating (at a cost of $54.42/short ton). The total remaining capacity is 600,000 tons, with an estimated usable life of 31.1 years. Beyond the approved landfill, there is no available land on Fort Detrick that is suitable for a landfill.

5. AIR QUALITY.

a. The installation is in the Central Maryland Air Quality Control Region (Area II).

b. The region is in non-attainment for Ozone/(NOX). (Serious)

c. The boiler plants are the most significant source of air pollution. There also exists an incineration facility, but it is not considered a significant source of emissions.

d. The installation maintains no air emission credits.

e. No major air compliance projects/expenditures are indicated.

f. The installation is not located within 100 km of any critical air quality regions.

6. HAZARDOUS MATERIALS/SITES.

a. Use of hazardous materials.

The installation has no Resource Conservation and Recovery Act (RCRA) permitted hazardous waste treatment, storage or disposal facilities.

b. Contaminated Sites.

Numerous studies have been performed in the past. The latest is the development of the Remedial Investigation Workplan by a contractor through Army Environmental Center (AEC). There are two known Defense Environmental Restoration Account (DERA) eligible contaminated sites. Further investigation is included in the RI Workplan. The other sites are only possible contamination.

c. PCB, Asbestos, Lead Paint, or RADON.

PCB survey has been completed. The last PCB transformer was removed in 1990.

d. Underground Storage Tanks (UST).

Of the 29 active tanks, 17 have been tested. The remaining tanks are exempt from testing. Only one tank failed a test and it has been replaced.

e. Radioactive Materials and Sources.

There are three Nuclear Regulatory Commission (NRC) licenses in effect. The USAMRIID Nuclear Regulatory Commission (NRC) license 19-11831-01 is for possession and use of by-product material in sealed sources for irradiation of materials in which the source is not removed from its shield. The USAMRIID Nuclear Regulatory Commission (NRC) license 19-11831-03 is for possession and use of by-product for research and development. The USAG NRC license 19-01151-02 is for radiation waste brokerage for Fort Detrick tenants: US Army Medical Research Institute of Infectious Diseases; US Department of Agriculture; and Frederick Cancer Research and Development Center (National Institute of Health). The USAMRIID currently maintains 4 buildings utilizing 117 laboratories for their licensed activities. Decommissioning would require survey and if necessary, clean-up of all radiological use areas. The USAG has only one building, the radiological waste processing and storage facility, requiring decommissioning. In order to decommission, the waste compactor, wall surfaces and 4800 sq ft of floor surface would be surveyed and cleaned. Also the following items would have to be disposed as waste: the sink used to discharge aqueous liquids, internal piping, PVC piping leading to the manhole outside of the building, approx. 50 feet of 6 inch sewer leading to the sanitary sewer line, four 500 gallon tanks used to decay liquids, associated piping and pumps. Assessments of the need to dispose of the 8 inch sewer line as radiological waste also needs to be completed.

7. OTHER ISSUES, CONSTRAINTS.

No other significant issues or constraints are known.

8. REVENUE GENERATING PROGRAMS.

There are two revenue generating programs, Agricultural and Grazing, which generated the following:

FY 92	$2,651.08
FY 93	$2,651.08
FY 94	$2,651.08
	$7,953.24

9. PROGRAMMED ENVIRONMENTAL COSTS.

a. Summary of environmental compliance costs:

	Funded	Unfunded
FY 94	$689K	359K
FY 95	448K	58K
FY 96	258K	425K
FY 97	381K	195K
FY 98	476K	89K
FY 99	206K	0
	$2,458K	1,126K

b. Summary of environmental restoration costs:

	Funded	Unfunded
FY 94	0	$2,009K
FY 95	0	$ 500K
FY 96	0	$1,500K
FY 97	-	-
FY 98	-	-
FY 99	-	-
	$ 0	$4,009K

ACRONYMS

AICUZ	Air Installation Compatible Use Zone
ICUZ	Installation Compatible Use Zone
ITAMS	Integrated Training Area Management System
LCTA	Land Condition Trend Analysis
404 Wetlands	Regulated Wetlands

NONSTRUCTURAL ATTRIBUTES

Fort Monmouth -- 34555

1. LAND USE.

a. Land Availability (estimated quantities in acres).

(1)	Installation total		1,097
	(a) Main Post	637	
	(b) Charles Wood Area	460	
(2)	Cantonment area		1,005
(3)	Maneuver area		0
(4)	Training lands designated as sensitive/marginal by ITAMS/LCTA monitoring		0
(5)	Firing Ranges		0
(6)	Non-Impact Firing Range		0
(7)	Wetlands Sec 404 area		80
(8)	Other (Surface water areas; set aside unique areas; i.e., recreation habitat, forests; restricted use areas such as landfills, contaminated sites, safety zones.		12

b. Air Space.

(1)	Restricted Air Space.	N/A
(2)	Extent of Installation Compatible Use Zones (ICUZ) or Noise and Accident Potential Zone (NAPZ).	N/A

2. THREATENED OR ENDANGERED SPECIES (PLANTS AND ANIMALS).

No threatened or endangered species (TES) survey has been conducted. However, no Federal or State listed endangered or threatened species or critical habitats are known to occur on the installation.

3. CULTURAL RESOURCES.

a. An archeological overview and historic structure report were prepared for Fort Monmouth in the early 1980's.

b. The historic structure report recommended that 104 buildings be nominated to the National Register of Historic Places. Of these buildings, 79 are contained on the main post and the Charles Wood area. The remainder are either on the Evans area (BRAC 93 disposal) or have been demolished.

c. No archeological surveys have been conducted for this installation. The archeological overview found that Fort Monmouth lands are extremely disturbed and have only a low potential for possessing intact archeological resources.

4. INFRASTRUCTURE ISSUES.

a. Potable Water.

Potable water is supplied under contract with the New Jersey American Water Company. There are no contract restrictions and the average daily use is 0.69 MGD. The capacity of the Fort Monmouth distribution system is 4.17 MGD.

b. Wastewater.

Wastewater discharge is accomplished under contract with the Northeast Monmouth County Regional Sewage Authority. The average daily effluent is 0.65 MGD. The capacity of the collection system is 5.4 MGD. The sewage authority has recently implemented a ban on new sewer connections until a newly expanded plant obtains a permit to operate at a new capacity.

c. Solid Wastes.

Forty-two percent of the Fort Monmouth solid waste stream is recycled under contract to the base operations commercial activities contractor, E-Systems. The remaining solid waste is handled by contract and hauled to the Monmouth County Reclamation Center. The average disposal amount is about 8 tons/day at a cost of $68.70/ton.

5. AIR QUALITY.

a. The air quality region is Monmouth County.

b. The area is not in attainment for ozone (severe) and nitrogen oxide (severe).

c. Air pollution sources are boilers, emergency generators, gas stations, storage tanks, dust collectors, and vehicular traffic.

d. The installation has no air emission credits.

e. Major air compliance projects have been identified on the installation.

f. Fort Monmouth reported that there are no critical air quality regions within 100 km of the installation.

g. Based on 1993 air emissions inventory, Fort Monmouth exceeds the New Jersey DEPE emission statement reporting limits for nitrogen oxide and volatile organic compounds. However, Fort Monmouth is currently converting from oil fired boilers to natural gas, which should reduce emissions.

6. HAZARDOUS MATERIALS/SITES.

a. Use of hazardous materials.

The installation is not a Resource Conservation and Recovery Act (RCRA) treatment, storage or disposal facility.

b. Contaminated Sites.

A preliminary assessment to determine contamination has been conducted, however no Defense Environmental Restoration Account (DERA) sites were identified despite the presence of seven landfills.

c. PCB, Asbestos, Lead Paint, or RADON issues.

PCB survey has been completed and 84 contaminated transformers were identified. All 32 PCB Class contaminated transformers (>499 ppm) have been replaced. The remaining 52 contaminated transformers (50 - 499 ppm) are still in use.

A wall to wall asbestos survey was conducted at Fort Monmouth and was completed in November 1992. Approximately 2.9 million square feet of buildings and structures located at the Main Post, Charles Wood Area and Evans Area were surveyed.

Fort Monmouth previously reported that a lead paint survey in family housing and child care facilities was to occur in FY 93.

Fort Monmouth conducted a radon survey for all priority one buildings in 1989. Test data revealed radon levels are within acceptable limits.

d. Underground Storage Tanks (UST).

There are 193 active USTs remaining on Fort Monmouth, of which one is abandoned. A total of 105 USTs are not in use, 11 have been tested and passed, and 45 have been replaced with above ground storage tanks.

e. Radioactive Materials and Sources.

The installation holds three Nuclear Regulatory Commission (NRC) licenses for research and development for training and instrument calibrations and irradiation of materials for purposes of research and development. These materials are in use at the Evans area, scheduled for disposal as a result of BRAC 93. Some of the radioactive sources will be moved to the Charles Wood area. Decommissioning requirements are currently under study for inclusion in the BRAC 93 Decommissioning Plan.

7. OTHER ISSUES, CONSTRAINTS.

No other significant issues or constraints are known.

8. REVENUE GENERATING PROGRAMS.

There are no revenue generating programs.

9. PROGRAMMED ENVIRONMENTAL COSTS.

a. Summary of environmental compliance costs:

	Funded	Unfunded
FY 94	$2,510,000	$ 115,000
FY 95	$3,077,000	$ 160,000
FY 96	$2,077,000	$ 0
FY 97	$1,540,000	$ 0
FY 98	$ 919,000	$ 0
FY 99	$ 863,000	$ 0
	$10,986,000	$ 275,000

b. Summary of environmental restoration costs:

	Funded	Unfunded
FY 94	$ 900,000	$ 0
FY 95	$ 0	$ 0
FY 96	$ 0	$ 0
FY 97	$ 0	$ 0
FY 98	$ 0	$ 0
FY 99	$ 0	$ 0
	$ 900,000	$ 0

ACRONYMS

AICUZ	Air Installation Compatible Use Zone
ICUZ	Installation Compatible Use Zone
ITAMS	Integrated Training Area Management System
LCTA	Land Condition Trend Analysis
404 Wetlands	Regulated Wetlands

NONSTRUCTURAL ATTRIBUTES

Natick Res Dev & Eng Center -- 25690

1. LAND USE.

a. Land Availability (estimated quantities in acres).

(1)	Installation total	174
(2)	Cantonment area	155
(3)	Maneuver area	0
(4)	Training lands designated as sensitive/marginal by ITAMS/LCTA monitoring	0
(5)	Firing Ranges	0
(6)	Non-Impact Firing Range	0
(7)	Wetlands Sec 404 area Natick RD&E Ctr - 3 Hudson Housing - 16	19
(8)	Other (Surface water areas; set aside unique areas; i.e., recreation habitat, forests; restricted use areas such as landfills, contaminated sites, safety zones.	0

b. Air Space.

(1)	Restricted Air Space.	0
(2)	Extent of Installation Compatible Use Zones (ICUZ) or Noise and Accident Potential Zone (NAPZ).	N/A

2. THREATENED OR ENDANGERED SPECIES (PLANTS AND ANIMALS).

A threatened or endangered species (TES) survey has been conducted and there are no known Federal or State TES or habitats known to occur on the installation.

3. CULTURAL RESOURCES.

a. Both an Historic Property Report and an archeological overview of the R&D center and the housing area supported by Natick RD&E Center were completed in 1984. The State Historic Preservation Officer (SHPO) was consulted.

b. The historic structure report recommended that the Climate Chambers, be nominated to the National Register. Recently the installation remodeled that building and mitigated for its loss. However, many of the Research Center facilities were associated with the development of

Cold War weapons systems and may later prove historically significant on that account. Off post housing areas have not been surveyed.

c. Archeological surveys have not been conducted for 174 acres (Natick RD&E Ctr - 78, Hudson Housing - 86, Wayland housing - 6, and Needham Housing 4). The archeological overview found that there were no potential historic archeological sites. The only limitation to development is that additional archeological surveys are required prior to demolition or new construction.

4. INFRASTRUCTURE ISSUES.

a. Potable Water.

Potable water is supplied by two wells. The combined pumping capacity of the wells is 0.374 MGD and the average usage rate is 0.162 MGD.

b. Wastewater.

There is no wastewater treatment plant reported at Natick, since the installation operates under a state sewer permit. Natick's National Pollutant Discharge Elimination System (NPDES) permit is used for mechanical cooling only. Potential permit restrictions are Ph, flow, and temperature restrictions. Maximum capacity is 0.40 MGD. The installation is currently addressing Mercury contamination in the sewer system.

c. Solid Wastes.

Solid waste disposal is provided by a $69,000 commercial contract with East Coast Disposal Contractors Inc. Average daily volume is 14.3 tons/day at a cost of $19.41 tons/day.

5. AIR QUALITY.

a. The installation is located in Environmental Protection Agency (EPA) Region 1.

b. Air quality for the area is non-attainment for ozone (serious).

c. The air pollution sources are: power plant, incinerator, vehicular traffic, and chemical fume hoods.

d. The installation has no air emission credits.

e. There are two major projects, conversion of boiler plant to natural gas and replacement of CFC equipment to HCFC, necessary to meet/maintain air quality standards.

f. The installation is not within a 100 km of a critical air quality region.

6. HAZARDOUS MATERIALS/SITES.

a. Use of hazardous materials.

The installation is not a Resource Conservation and Recovery Act (RCRA) treatment, storage, or disposal facility.

b. Contaminated Sites.

There are 13 Defense Environmental Restoration Account (DERA) eligible contaminated sites.

c. PCB, Asbestos, Lead Paint, or RADON issues.

PCB survey is complete and 19 contaminated transformers were identified with 16 being replaced and three retro fitted.

d. Underground Storage Tanks (UST).

There are 10 active and one abandoned USTs on-post and 59 active USTs off-post (Housing Areas). Ten were tested and none failed. All of the USTs were replaced in 1989 and 1991.

e. Radioactive Materials and Sources.

A Nuclear Regulatory Commission (NRC) license is held for research as defined in 10 CFR 30.4, Animal Studies. Survey and decontaminate for current operational areas required for 13 rooms in three buildings. Review of records, possible recovery, and re-decontamination for previous operational areas required for five buildings.

7. OTHER ISSUES, CONSTRAINTS.

A Biological Waste Incinerator Permit is required.

8. REVENUE GENERATING PROGRAMS.

There are no revenue generating programs.

9. PROGRAMMED ENVIRONMENTAL COSTS.

a. Summary of environmental compliance costs:

	Funded	Unfunded
FY 94	$3,071,000	$ 656,000
FY 95	$5,355,000	$ 650,000
FY 96	$4,345,000	$4,154,000
FY 97	$ 991,000	$3,289,000
FY 98	$ 593,000	$2,447,000
FY 99	$ 502,000	$2,244,000
	$14,857,000	$13,440,000

b. Summary of environmental restoration costs for DERA sites:

	Funded	Unfunded
FY 94	$ 80,000	$ 5,000
FY 95	$ 0	$1,210,000
FY 96	$ 0	$ 320,000
FY 97	$ 0	$ 285,000
FY 98	$ 0	$ 135,000
FY 99	$ 0	$ 975,000
	$ 80,000	$2,930,000

ACRONYMS

AICUZ	Air Installation Compatible Use Zone
ICUZ	Installation Compatible Use Zone
ITAMS	Integrated Training Area Management System
LCTA	Land Condition Trend Analysis
404 Wetlands	Regulated Wetlands

NONSTRUCTURAL ATTRIBUTES

Picatinny Arsenal, NJ

1. LAND USE.

a. Land Availability (estimated quantities in acres).

(1)	Installation total	6,493
(2)	Cantonment area	1,953
(3)	Maneuver area	0
(4)	Training lands designated as sensitive/marginal by ITAMS/LCTA monitoring	N/A
(5)	Firing Ranges	N/A
(6)	Non-Impact Firing Range	0
(7)	Wetlands Sec 404 area (Doesn't include surface water acreage)	1,183
(8)	Other (Surface water areas; set aside unique areas; i.e., recreation habitat, forests; restricted use areas such as landfills, contaminated sites, safety zones.	3,048
	Surface Water Area - 308	
	Forests - 3,048.7	

b. Air Space.

(1)	Restricted Air Space.	No
(2)	Extent of Installation Compatible Use Zones (ICUZ) or Noise and Accident Potential Zone (NAPZ). Zones are on-post	

2. THREATENED OR ENDANGERED SPECIES (PLANTS AND ANIMALS).

No Federal or State listed endangered and threatened species or critical habitats occur on the installation.

3. CULTURAL RESOURCES.

a. An archeological overview and historic structure report were prepared for Picatinny Arsenal in the early 1980's. The installation does not have a Historic Preservation Plan/Cultural Resource Management Plan (CRMP). However, the installation does have contracts in progress for three Preliminary documents for the CRMP.

b. Boston Affiliates, Inc. is presently doing a new historic building survey. This survey indicates three structures potentially eligible for inclusion on the National Register. Two buildings will require substantial renovation.

c. No archeological survey has been conducted. However, it was previously reported that the archeological overview found that there may be 85 potential historic archeological sites on Arsenal lands. Approximately 1,738 acres of Picatinny Arsenal lands are too badly disturbed to merit survey and the remainder are recommended as having moderate to low potential for possessing archeological resources.

4. INFRASTRUCTURE ISSUES.

a. Potable Water.

Potable water is 100% well water. There are four existing wells (three active, one for emergency use). They have a total pumping capacity of 2.51 MGD. Average water use is currently 0.728 MGD. Water from Picatinny Arsenal's wells is routinely treated via a stripping column for low levels of TCE and Radon. In order to address newly published health advisory limits for RDX, Picatinny Arsenal has identified corrective technology and plans to upgrade the existing water treatment plant in FY 95.

b. Wastewater.

Wastewater is treated by contract with the Rockaway Valley Regional Sewage Authority (RVRSA). The permit from RVRSA has limit of 2.0 MGD. Current usage is 0.37 MGD at a cost of $1.47 per 1,000 gal.

The installation operates one industrial waste water pretreatment plant which has a 0.5 MGD capacity. Current average use of the plant is 0.37 MGD. Life expectancy is at least 30 additional years. An upgrade project on associated systems (sewer mains, lift stations, etc.) should be completed in the 1999 time frame. The industrial wastewater pretreatment plant discharges explosively contaminated wastewater.

c. Solid Wastes.

No landfills are on the installation. The installation contracts the solid waste disposal with Louis Pinto and Sons at a cost of $200.00 per ton. Average daily volume is 5.4 tons. The contract is valued at $515,600.

5. AIR QUALITY.

a. Installation located within the New Jersey-New York-Connecticut Interstate Air Quality Control Region (AQCR) regulated by the New Jersey Department of Environmental Protection and Energy.

b. Picatinny Arsenal is located in a region that has an attainment status for carbon monoxide, particulate matter, sulfur dioxide, nitrogen dioxide, and lead (severe).

c. The sources of air pollution at PA are combustion sources such as the powerhouse boilers and vehicular emissions.

d. The installation maintains no air emission credits.

e. The installation is programmed to replace the burners in two of our boilers to meet new emission limits for nitrogen oxides.

f. The installation is within a critical air quality region.

6. HAZARDOUS MATERIALS/SITES.

a. Use of hazardous materials.

The installation has four Resource Conservation and Recovery Act (RCRA) Part B permitted hazardous waste storage sites, and no disposal facility. Permits were issued in Nov 1988, and expire in March, 1996. The installation is in the process of obtaining Subpart X permit (for open burning/detonation), EPA Region II (New York) has reviewed the permit application and sent a Notice of Deficiency to Picatinny Arsenal. PA is currently preparing a response to the notice. Expected date of issuance is 4th Quarter, FY 94.

The New Jersey Department of Environmental Protection and Energy has reviewed the hazardous waste incinerator permit application (trial burn permit) and issued a Notice Of Deficiency to PA. PA is currently preparing a response to the notice. The expected date of issuance for the Trial Burn Permit is October 1994.

b. Contaminated Sites.

There are 156 Defense Environmental Restoration Account (DERA) eligible sites identified on the installation.

Picatinny Arsenal is a National Priority List (NPL) site with an effective Interagency Agreement, a Hazard Ranking Score of 42.92 and off-site contamination. The sites at PA have been grouped by the Argonne National Laboratories RI Concept Plan into 16 areas, based on types of activity and location. Green Pond Brook has subsequently been identified as a separate area for investigation.

c. PCB, Asbestos, Lead Paint, or RADON issues.

A survey of 831 transformers was conducted in 1987-88. Currently there are a total of 845 transformers at PA. There are currently 383 new, dry or non-PCB transformers(50 ppm). There are 126 PCB contaminated (50-500 ppm) that are in-service and not required to be replaced. There are 3 PCB transformers that are in-service not required to be replaced and quarterly inspections are conducted. As a result of the initial 1987-1988 survey a total of 112 transformers have been removed or replaced. Additionally Phase I of a MCA Three Phase Electrical Upgrade Program which will replace 283 transformers is underway. Phase II and Phase III will replace 210 and 180 transformers respectively.

The installation asbestos management program was officially established in June 1991 when an Asbestos Management Plan was written and the program was staffed with a Program Manager and Planner/Estimator. An installation asbestos survey has been on-going and to date approximately 2,400,000 sq ft of floor space in 274 structures have been assessed for asbestos containing materials (ACM). This is approximately 60% of PA. Limited funding has precluded the completion of the survey. In addition to the survey effort, PA has established a contract to remove ACM where warranted.

All structures at PA were monitored for radon levels between FY 89 -FY 91. All residences and regularly occupied building areas containing greater than the 4 picocurie/liter action level have been remediated successfully.

d. Underground Storage Tanks (UST).

The total number of active underground tanks is 47, of which, 6 are planned to be closed. Thirteen tanks were tested and all failed. Three tanks were removed, 9 closed in place and 1 repaired. Additionally 28 underground tanks were removed and have been replaced with above ground tanks. A total of 40 tanks were removed and not replaced.

e. Radioactive Materials and Sources.

The installation holds four Nuclear Regulatory Commission (NRC) or DA licenses for radioactive materials and sources. The NRC 29-00047-02 Broad Scope License-this license permits a wide variety of activity using a potentially large number of isotopes. The SUB-348 Source Material License deals with depleted uranium and uranium penetrators. The SNM-561 license covers the Californium Multiplier enriched uranium plates. The 29-00047-06 license covers a number of radiographic sources. The total estimated cost to decommission facilities covered by these licenses is $700,000 based on estimates accepted by the NRC and estimates of cleanup of areas covered in those estimates.

7. OTHER ISSUES, CONSTRAINTS.

The installation has numerous permits pertaining to various items of equipment (filters, scrubbers, etc) that pertain to mission functions.

8. REVENUE GENERATING PROGRAMS.

There are two revenue generating programs. Firewood sales and Hunting/Fishing/Trapping.

	Firewood ($000)	H/F/T ($000)
FY 92	$1.3	$3.4
FY 93	$0.58	$3.3
FY 94	$1.1	$4.1

9. PROGRAMMED ENVIRONMENTAL COSTS.

A. Summary of environmental compliance costs ($000):

	Funded	Unfunded
FY 94	$7,733	$720
FY 95	$6,058	$4,612
FY 96	$10,926	$450
FY 97	$6,114	$0
FY 98	$4,575	$605
FY 99	$4,118	$1,073
	$39,524	$7,460

B. Summary of environmental restoration costs ($000):

	Funded	Unfunded
FY 94	$18,389	$ 1,000
FY 95	20,127	
FY 96	22,429	
FY 97	27,509	
FY 98	25,029	
FY 99	13,759	
	$127,242	$ 1,000

ACRONYMS

AICUZ	Air Installation Compatible Use Zone
ICUZ	Installation Compatible Use Zone
ITAMS	Integrated Training Area Management System
LCTA	Land Condition Trend Analysis
404 Wetlands	Regulated Wetlands

NONSTRUCTURAL ATTRIBUTES

Redstone Arsenal -- 01202

1. LAND USE.

a. Land Availability (estimated quantities in acres).

(1)	Installation total	37,910
(2)	Cantonment area	1,030
(3)	Maneuver area	N/A
(4)	Training lands designated as sensitive/marginal by ITAMS/LCTA monitoring	3,560
(5)	Explosive Impact Areas	15,837
(6)	Non-Impact Firing Range	N/A
(7)	Wetlands Sec 404 area	9,559
(8)	Other (Surface water areas; set aside unique areas; i.e., recreation, habitat, forests; restricted use areas such as landfills, contaminated sites, safety zones.	7,924

b. Air Space.

(1)	Restricted Air Space.	N/A
(2)	Extent of Installation Compatible Use Zones (ICUZ) or Noise and Accident Potential Zone (NAPZ).	N/A

2. THREATENED OR ENDANGERED SPECIES (PLANTS AND ANIMALS).

A survey for threatened or endangered species (TES) is underway, to be completed in FY 95. A biological assessment has not been performed. U.S. Fish and Wildlife Service (USFWS) has advised that consultation should wait until ongoing installation investigations are completed. Installation does not expect serious constraints on development at present. One TES is known to occur on RSA, the Alabama Cave Shrimp - status of population is unknown. Extensive wetland areas are present on the installation and activities potentially affecting these habitats are subject to the evaluation criteria established by Section 404(b)(1) of the Clean Water Act.

3. CULTURAL RESOURCES.

a. A Cultural Resources Management Plan has been developed and reviewed by the State Historic Preservation Officer (SHPO) and the Advisory Council on

Historic Preservation (ACHP). The installation has not obtained comments of the SHPO and ACHP for undertakings as require under section 106 of the NHPA.

b. The 1984 report recommends that 10 Marshall Space Flight Center (MSFC) buildings be considered eligible for the National Register. Also, in the 1984 report the Arsenal's 749 WWII era permanent and semi-permanent buildings were not deemed appropriate for National Register eligibility; a reevaluation is required.

c. Archeological surveys have intensively examined approximately 10,000 of the 38,235 acres that make up Redstone Arsenal. More than 289 archeological sites have been found by these surveys. Twenty of these sites are eligible for the National Register and more can be expected to occur in unsurveyed areas. The southern portion of the Arsenal, adjacent to the Tennessee River, has a very high potential for possessing significant archeological resources. Additional archeological surveys will be required for Redstone Arsenal.

d. Contact has been made with the Chickasaw Indian Tribe, regarding traditional cultural properties, but this did not result in any limitations.

4. INFRASTRUCTURE ISSUES.

a. Potable Water.

Potable water is supplied by a surface water source. Two water treatment plants exist with a total design capacity of 9.0 MGD and an average use of 5.1 MGD. Each has a life expectancy of 15 years.

Bottled water and water purchased from the City of Huntsville is provided for some remote sites. Quantities were not reported.

Two industrial water treatment plants exist with a total design capacity of 34.0 MGD and an average use of 8.48 MGD. One plant has a 20 year life expectancy and the other has a 10-year life.

b. Wastewater.

A sanitary wastewater treatment plant exists with a design flow of 6.0 MGD and an average usage of 2.7 MGD. The plant operates under a third party contract and the contractor has a National Pollutant Discharge Elimination System (NPDES) permit. The life of the contract is 32 years.

One industrial wastewater treatment plant is nearing completion on the installation. This plant is owned and operated by a tenant, George C. Marshall Space Flight Center, NASA. This plant has a separate State Indirect Discharge Permit.

c. Solid Wastes.

The U.S. Army MICOM has a contract with the Solid Waste Disposal Authority in Huntsville for the disposal of solid waste in the amount of up to 50 tons per day at no cost. Transport is handled by separate contract. The installation has a 70-acre landfill which receives 150 to 225 cubic yards of solid construction type waste per day and has a remaining capacity of 2.5 million cubic yards, and an estimated useful life of 22 years.

5. AIR QUALITY.

a The installation is in Air Quality Region VII.

b. The region is in attainment.

c. The air pollution sources are: open burning, spray paint booths, parts cleaning, vehicular traffic, storage tanks, rocket test firings, boiler plants and fire fighter training areas.

d. The installation has no air emission credits.

e. Major air compliance projects have been identified on the installation.

f. Critical air quality regions within 100 km from the installation are Gadsen, AL and Sipsey Wilderness.

6. HAZARDOUS MATERIALS/SITES.

a. Use of hazardous materials.

The installation is currently operating one site under a Resource Conservation and Recovery Act (RCRA) Part B Permit and Part A Interim Status. Thirteen storage igloos have been set aside for hazardous waste storage. Redstone Arsenal is in the process of obtaining a RCRA subpart X permit for thermal treatment. Issuance expected in 1997.

b. Contaminated Sites.

One hundred seven locations are suspected to contain hazardous waste from past disposal, treatment or storage practices.

Fifteen sites on RSA were proposed for the National Priority List (NPL) in June 1994.

c. PCB, Asbestos, Lead Paint, and RADON issues.

A PCB survey is 10% complete. Transformers are routinely taken out of service and replaced.

The Arsenal has an active asbestos testing program. Since 1987, 1500 buildings have been surveyed. Radon survey is nearly complete. Sixty to eighty sites need remediation to reduce radon levels.

d. Underground Storage Tanks (UST).

Twenty-one of 67 underground storage tanks are regulated. All tanks have been tested in 1993 with only four failures. Eleven tanks have been replaced.

e. Radiological Materials and Sources.

The installation holds no Nuclear Regulatory Commission (NRC) or DA licenses for radiological materials or sources.

7. OTHER ISSUES, CONSTRAINTS.

No other significant issues or constraints are known.

8. REVENUE GENERATING PROGRAMS.

Four revenue generating programs are in place.

	Timber Sales	Agri Leases	Wildlife	Mineral
FY 92	$138,000	$ 38,400	$ 7,000	$ 100
FY 93	$109,000	$ 41,000	$ 7,000	$ 100
FY 94	$170,000	$ 41,600	$ 8,000	$ 100

9. PROGRAMMED ENVIRONMENTAL COSTS.

a. Summary of environmental compliance costs ($000):

	Funded	Unfunded
FY 94	$ 2,557	$7,919
FY 95	1,886	3,562
FY 96	2,699	1,629
FY 97	1,714	2,292
FY 98	1,493	3,895
FY 99	1,395	928
	$11,744	$20,225

b. Environmental restoration costs:

Estimated FY 94 DERA eligible costs requested in the Dec 93, 1383 Report are $11 million. Data is not available for FY 95 through FY 99.

ACRONYMS

AICUZ	Air Installation Compatible Use Zone
ICUZ	Installation Compatible Use Zone
ITAMS	Integrated Training Area Management System
LCTA	Land Condition Trend Analysis
404 Wetlands	Regulated Wetlands

NONSTRUCTURAL ATTRIBUTES

Rock Island Arsenal -- 17775

1. LAND USE.

a. Land Availability (estimated quantities in acres).

(1)	Installation total	891
(2)	Cantonment area	765
(3)	Maneuver area	N/A
(4)	Training lands designated as sensitive/marginal by ITAMS/LCTA monitoring	N/A
(5)	Firing Ranges	N/A
(6)	Non-Impact Firing Range	N/A
(7)	Wetlands Sec 404 area	27
(8)	Other (Surface water areas; set aside unique areas; i.e., recreation habitat, forests; restricted use areas such as landfills, contaminated sites, safety zones. Recreational Habitat, Forest	99

b. Air Space.

(1)	Restricted Air Space.	0
(2)	Extent of Installation Compatible Use Zones (ICUZ) or Noise and Accident Potential Zone (NAPZ). Zones on-post	

2. THREATENED OR ENDANGERED SPECIES (PLANTS AND ANIMALS).

No threatened or endangered species (TES) survey has been conducted; however, the installation previously reported that the Federally listed threatened Bald Eagle, Higgins' Eye Pearly Mussel and Illinois Mud Turtle were reported to occur on, and adjacent to the installation. In addition, one unnamed State listed species is also reported to occur. The presence of these species has not constrained the installation's military mission.

3. CULTURAL RESOURCES.

a. The installation does not have a Historic Preservation Plan. Comments have been obtained from the State Historic Preservation Officer/Advisory Council for Historic Preservation for applicable

undertakings.

b. A building survey has been conducted. Most of Rock Island Arsenal falls within a National Register district that is made up of approximately 55 buildings. 25 additional buildings are eligible to be listed. Some of the more significant buildings within the National Register district make up two separate National Historic Landmark districts.

c. An archeological overview and historic structure report were prepared for Rock Island Arsenal in the early 1980's. Approximately 891 acres of the Arsenal have been surveyed for archeological resources and 31 potential sites were recorded by these efforts. The remainder of the Arsenal lands are believed to have a low potential for possessing archeological resources. Archeological artifacts and associated records are stored at the historical office and museum.

4. INFRASTRUCTURE ISSUES.

a. Potable Water.

All water is provided by surface water source. The treatment plant design capacity is 4.00 MGD but the average daily use is 1.0 MGD. A potential source of contamination is a potential tanker accident or similar catastrophe up-stream from lock and dam 15.

b. Wastewater.

Maximum design capacity for the Rock Island Sanitary District is 9.0 MGD. Average daily use is 1.2 MGD. Life expectancy program were started in FY94 to upgrade the sanitary sewer system.

The Arsenal has three industrial wastewater plants which pre-treat 0.018 MGD average discharge before releasing to the City of Rock Island's system. Contracted amount is 300,000 gallons/year with a cost of $257,000/year. Maximum capacity is 16.0 MGD and an average daily usage of 8.0 MGD.

c. Solid Wastes.

The Arsenal does not operate a landfill. All solid wastes are collected and removed by contractors.

5. AIR QUALITY.

a. The installation is in the Metropolitan Quad Cities Interstate Air Quality Control Region.

b. The region is in attainment.

c. The pollution sources are: power plants, furnaces, foundry processes, paint booths, shot blasting, metallizing, metal finishing, vapor degreasing, rubber mixing, welding, metal preparation, machining, test firing, gasoline dispensing, and incinerator.

d. The installation maintains no air emission credits.

e. Major air compliance projects/expenditures have been identified.

f. The installation is not within 100 km of a critical air quality region.

6. HAZARDOUS MATERIALS/SITES.

a. Use of hazardous materials.

The installation manages various materials such as solvents, paint and plating wastes and metal finishing wastes. Installation has an Interim Part A status for a storage unit.

b. Contaminated Sites.

An assessment by USATHAMA identified 15 Defense Environmental Restoration Account (DERA) eligible sites.

c. PCB, Asbestos, Lead Paint, or RADON issues.

All of the 13 PCB contaminated transformers have been replaced.

It was previously reported that Asbestos had been identified and studies of lead paint and RADON were underway.

d. Underground Storage Tanks (UST).

All eight regulated tanks have been tested, with no failures.

e. Radioactive Materials and Sources

The installation holds Nuclear Regulatory Commission (NRC) or DA licenses for radioactive materials or sources. No further information provided.

7. OTHER ISSUES, CONSTRAINTS.

No other significant issues or constraints are known.

8. REVENUE GENERATING PROGRAMS.

Installation reports revenues of $54,000 per year for 190 acres leased for a golf course.

9. PROGRAMMED ENVIRONMENTAL COSTS.

a. No environmental compliance costs estimates were reported.

b. Total environmental restoration costs are $22,811,000.

ACRONYMS

AICUZ	Air Installation Compatible Use Zone
ICUZ	Installation Compatible Use Zone
ITAMS	Integrated Training Area Management System
LCTA	Land Condition Trend Analysis
404 Wetlands	Regulated Wetlands

NONSTRUCTURAL ATTRIBUTES

Military Ocean Terminal Bayonne -- 34515

1. LAND USE.

a. Land Availability (estimated quantities in acres).

(1)	Installation total	678.8
(2)	Cantonment area	426.4
(3)	Maneuver area	0
(4)	Training lands designated as sensitive/marginal by ITAMS/LCTA monitoring	0
(5)	Firing Ranges	0
(6)	Non-Impact Firing Range	0
(7)	Wetlands Sec 404 area	20
(8)	Other (Surface water areas; set aside unique areas; i.e., recreation habitat, forests; restricted use areas such as landfills, contaminated sites, safety zones.	232.4

b. Air Space.

(1)	Restricted Air Space.	0
(2)	Extent of Installation Compatible Use Zones (ICUZ) or Noise and Accident Potential Zone (NAPZ).	0

2. THREATENED OR ENDANGERED SPECIES (PLANTS AND ANIMALS).

No threatened or endangered (TES) species survey has been conducted; however, no TES were reported.

3. CULTURAL RESOURCES.

a. Military Ocean Terminal, Bayonne does not have a historic preservation plan or an implementing memorandum of agreement.

b. No architectural or archeological surveys have been conducted for this facility. The State Historic Preservation Officer should be contacted to determine whether the level of archeological and architectural surveys necessary for this facility.

4. INFRASTRUCTURE ISSUES.

a. Potable Water.

Potable water is supplied under contract with the City of Bayonne. The maximum capacity is 0.45 MGD, and the average use is 0.45 MGD.

b. Wastewater.

The wastewater treatment facility has a design capacity of 0.35 MGD and an average use of 0.094 MGD. The plant has a 15-year life expectancy and operates under a National Pollutant Discharge Elimination System (NPDES) permit. The permit restricts discharges to 0.18 MGD.

c. Solid Wastes.

Solid wastes are disposed under a $240,000/year contract with Hudson Jersey Sanitation Co.. The average daily volume is 35 tons/day at a cost of $135/ton. There are no limitations to expanding the quantity of the contract.

5. AIR QUALITY.

a. The installation is in the Environmental Protection Agency (EPA) Region II Air Quality Control Region.

b. The region is not in attainment for ozone (marginal).

c. The air pollution sources are the boiler plant and tank vents.

d. The installation has no air emission credits.

e. No major projects have been identified to meet/maintain air compliance.

f. The installation is within a critical air quality region.

6. HAZARDOUS MATERIALS/SITES.

a. Use of hazardous materials.

There are no Resource Conservation and Recovery Act (RCRA) permits required at Bayonne.

b. Contaminated Sites.

One Defense Environmental Restoration Account (DERA) site has been identified.

c. PCB, Asbestos, Lead Paint, or RADON issues.

PCB survey has been completed. All 114 contaminated transformers have been replaced.

There is an on-going asbestos management program at the facility.

d. Underground storage tanks (UST).

Of the 13 active and five abandoned USTs, two of the three tested failed. Eight are to be replaced.

e. Radiological Materials and Sources.

The installation holds no licenses for radiological materials and sources.

7. OTHER ISSUES, CONSTRAINTS.

No other significant issues or constraints are known.

8. REVENUE GENERATING PROGRAMS.

	Paper	Scrap Metal
FY 92	$ 1,780	$ 39,800
FY 93	$ 5,166	$ 5,133
FY 94	$ 5,744	$ 30,700
	$ 12,690	$ 75,633

9. PROGRAMMED ENVIRONMENTAL COSTS.

a. Summary of environmental compliance costs:

	Funded	Unfunded
FY 94	$ 200,000	$4,765,000
FY 95	$ 5,000	$1,920,000
FY 96	$ 5,000	$1,775,000
FY 97	$ 5,000	$1,550,000
FY 98	$ 10,000	$ 125,000
FY 99	$ 5,000	$ 125,000
	$ 230,000	$10,260,000

b. Summary of restoration costs:

	Funded	Unfunded
FY 94	$ 0	$ 475,000
FY 95	$ 0	$ 547,000
FY 96	$ 0	$ 450,000
FY 97	$ 0	$ 410,000
FY 98	$ 0	$ 125,000
FY 99	$ 0	$ 125,000
	$ 0	$2,125,000

ACRONYMS

AICUZ	Air Installation Compatible Use Zone
ICUZ	Installation Compatible Use Zone
ITAMS	Integrated Training Area Management System
LCTA	Land Condition Trend Analysis
404 Wetlands	Regulated Wetlands

NONSTRUCTURAL ATTRIBUTES

Oakland Army Base -- 06605

1. LAND USE.

a. Land Availability (estimated quantities in acres).

(1)	Installation total	422
(2)	Cantonment area	78.5
(3)	Maneuver area	0
(4)	Training lands designated as sensitive/marginal by ITAMS/LCTA monitoring	0
(5)	Firing Ranges	0
(6)	Non-Impact Firing Range	0
(7)	Wetlands Sec 404 area	0
(8)	Other (Surface water areas; set aside unique areas; i.e., recreation habitat, forests; restricted use areas such as landfills, contaminated sites, safety zones.	56.7
	Surface water - 54.4	
	Contaminated sites - 2.3	

b. Air Space.

(1)	Restricted Air Space.	0
(2)	Extent of Installation Compatible Use Zones (ICUZ) or Noise and Accident Potential Zone (NAPZ).	0

2. THREATENED OR ENDANGERED SPECIES (PLANTS AND ANIMALS).

A threatened or endangered species (TES) survey has been conducted and no Federal or State listed endangered or threatened species or critical habitats are known to occur on the installation.

3. CULTURAL RESOURCES.

a. A Historic Preservation Plan is currently being prepared and the preliminary submittal has been reviewed and commented on by the National Parks Service, Western Region, Preservation Assistance Branch of the National Register Programs, California State Historic Preservation Office and the Advisory Council on Historic Preservation, Western Division Headquarters.

b. A historic building survey has been conducted and 23 structures in two historic districts have been identified as eligible for listing on the National Register of Historic Places.

c. An archeological survey has been conducted for 297 acres, however no archeological sites were identified as eligible for the National Register.

4. INFRASTRUCTURE ISSUES.

a. Potable Water.

Potable water is supplied under contract with the East Bay Municipal Utility District with a contracted amount of 0.061 MGD. The maximum capacity of the treatment plant is 13.536 MGD and the average daily consumption is 0.167 MGD. Sources of water contamination are water pipe breaks and lack of backflow preventers. However, a project is currently ongoing to install backflow preventers and is 70% complete.

b. Wastewater.

Wastewater treatment is provided under contract with the East Bay Municipal Utility District with a contracted amount of 0.038 MGD. The life expectancy is 30 years for 70% of the system and none for the remaining 30%. The main wastewater treatment plant is currently operating at 68% capacity. The maximum capacity is 1.584 MGD, and the average use is 0.105 MGD. A past attempt by the utility to acquire adjoining Army property for expansion was denied , due to contingency requirements. A National Pollutant Discharge Elimination System (NPDES) non-profit storm water discharge permit has been acquired for storm water discharge into San Francisco Bay.

c. Solid Wastes.

Solid waste disposal is conducted under a $519,648 contract with the U.S. Navy Public Works Center. The average daily volume is 73.4 tons/day at a cost of $28.28/ton.

5. AIR QUALITY.

a. The installation is in the Bay Area Air Quality Management District.

b. The region is in non-attainment area for ozone (moderate) and carbon monoxide (unknown severity).

c. Air pollution sources are consumer products, industrial operations and automobile traffic.

d. The installation has no air emission credits.

e. No major air compliance projects/expenditures are indicated.

f. The installation is in a critical air quality region.

6. HAZARDOUS MATERIALS/SITES.

a. Use of hazardous materials.

The installation is not a Resource Conservation and Recovery Act (RCRA) treatment, storage or disposal facility.

b. Contaminated sites.

There is one contaminated site being considered for Defense Environmental Restoration Account (DERA).

c. PCB, Asbestos, Lead Paint, and RADON issues.

PCB survey has been completed and all three contaminated transformers have been replaced.

An asbestos survey was completed in 1990.

d. Underground Storage Tanks (UST).

There are 11 active USTs on the installation. All tanks have been tested and passed.

e. Radioactive Materials and Sources.

The installation holds no Nuclear Regulatory Commission (NRC) or DA licenses for radioactive materials and sources.

7. OTHER ISSUES, CONSTRAINTS.

No other significant issues or constraints are known.

8. REVENUE GENERATING PROGRAMS.

There are no revenue generating programs reported on the installation.

9. PROGRAMMED ENVIRONMENTAL COSTS.

a. Summary of environmental compliance costs:

	Funded	Unfunded
FY 94	$ 557,000	$ 591,000
FY 95	$2,167,000	$ 0
FY 96	$ 128,000	$ 100,000
FY 97	$ 0	$ 0
FY 98	$ 0	$ 0
FY 99	$ 0	$ 0
	$2,852,000	$ 691,000

b. Summary of environmental restoration costs:

	Funded	Unfunded
FY 94	$ 0	$ 630,000
FY 95	$ 0	$ 665,000
FY 96	$ 0	$ 430,000
FY 97	$ 0	$ 0
FY 98	$ 0	$ 0
FY 99	$ 0	$ 0
	$ 0	$1,725,000

ACRONYMS

AICUZ	Air Installation Compatible Use Zone
ICUZ	Installation Compatible Use Zone
ITAMS	Integrated Training Area Management System
LCTA	Land Condition Trend Analysis
404 Wetlands	Regulated Wetlands

NONSTRUCTURAL ATTRIBUTES

Military Ocean Terminal Sunny Point -- 37745

1. LAND USE.

a. Land Availability (estimated quantities in acres).

(1)	Installation total (includes 4,267 acre explosive buffer zone per easement)	16,396
(2)	Cantonment area	1,618
(3)	Maneuver area	N/A
(4)	Training lands designated as sensitive/marginal by ITAMS/LCTA monitoring	N/A
(5)	Firing Ranges	N/A
(6)	Non-Impact Firing Range	N/A
(7)	Wetlands Sec 404 area	4,000
(8)	Other (Surface water areas; set aside unique areas; i.e., recreation habitat, forests; restricted use areas such as landfills, contaminated sites, safety zones. Explosive buffer zone -	10,778

b. Air Space.

(1)	Restricted Air Space.	0
(2)	Extent of Installation Compatible Use Zones (ICUZ) or Noise and Accident Potential Zone (NAPZ).	0

2. THREATENED OR ENDANGERED SPECIES (PLANTS AND ANIMALS).

A threatened or endangered species (TES) survey has not been conducted; however, two Federally listed species are reported to occur on the installation: the endangered Red-cockaded Woodpecker and the threatened American Alligator. In addition, an endangered plant Rough Leafed Loosestrife is reported to be present. The U.S. Fish and Wildlife Service (USFWS) rendered Biological Opinions, Jeopardy for the Red-cockaded woodpecker and No Jeopardy for the Rough Leafed Loosestrife, on the impact of mission on the continued existence of TES. Expansion in areas supporting the woodpecker or the plant would require Formal Consultation with the U.S. Fish and Wildlife Service.

3. CULTURAL RESOURCES.

a. A Historical Preservation Plan/Cultural Resources Management Plan has been completed for the installation.

b. A historic building survey was conducted for MOTSU, and no buildings were reported as eligible for listing on the National Register of Historic Places.

c. Approximately 2,600 have been surveyed for archeological resources. Thirty-two sites have been identified that may be eligible for the National Register. Additional archeological surveys will be required for those lands not yet examined. Six acres at the Fort Johnston Housing Area are unavailable for development and any repairs that disturb the soil must be coordinated with the State Historic Preservation Officer.

4. INFRASTRUCTURE ISSUES.

a. Potable Water.

Potable water is 22% from two wells and 78% from surface water. Potable water is supplied under contract with Brunswick County. The contracted amount is 0.1 MGD, with a maximum capacity of 0.4 MGD. The average daily usage is 0.048 MGD. The two installation wells have a pumping capacity of 0.288 MGD and an average daily usage of 0.012 MGD. The well drawdown rate is five feet.

b. Wastewater.

The installation has a wastewater treatment facility with a design capacity of 0.05 MGD and an average use of 0.01 MGD. The plant has an indefinite life expectancy. National Pollutant Discharge Elimination System (NPDES) permits exist for three treatment lagoons, wharves, and restricts discharge to 10,000 GPD each.

c. Solid Wastes.

Solid waste disposal is at the Brunswick County landfill at no cost. The average daily volume is 1.2 tons/day at an internal cost of $27.50/ton.

5. AIR QUALITY.

a. The installation is in the South Coastal Plain Intrastate Air Quality Region regulated by the North Carolina Division of Environmental Management, Air Quality Section.

b. The region is in attainment.

c. Air pollution sources are: oil fire heaters/boilers, diesel cranes and generators, lumber burn pile, controlled burning, welding shops, abrasive blasting area, woodworking areas, underground storage tanks, above ground storage tanks, mobile storage tanks, pesticide/herbicide shop, degreasing tanks, paint booth, sewage treatment lagoons, water treatment facility, print shop and photo processing.

d. The installation has no air emission credits.

e. There is one major air compliance project, CFC/Halon Reduction.

f. The installation is not within 100 km of a critical air quality region.

6. HAZARDOUS MATERIALS/SITES.

a. Use of hazardous materials.

The installation is not a Resource Conservation and Recovery Act (RCRA) treatment, storage or disposal facility.

b. Contaminated sites.

The installation has identified four Defense Environmental Restoration Account (DERA) eligible contaminated sites .

c. PCB, Asbestos, Lead Paint, and RADON issues.

PCB survey has been completed and 17 of the 32 contaminated transformers have been replaced.

A comprehensive asbestos survey has been conducted. It was previously reported that asbestos is known to exist in 25 buildings.

d. Underground Storage Tanks (UST).

There are 18 active and one abandoned UST. Seven tanks were tested and none failed. Twenty-two UST's have

been replaced/removed.

e. Radioactive Materials and Sources.

The installation does not hold any Nuclear Regulatory Commission (NRC) or DA licenses for radiological materials and sources.

7. OTHER ISSUES, CONSTRAINTS.

Maintenance dredging and the proposed deep draft dredging in front of the three wharves requires submission of an Environmental Impact Statement (EIS), however, there is no significant environmental impact.

8. REVENUE GENERATING PROGRAMS.

Revenue generating programs are:

	Forestry	Railroad	Reclaimed Lumber
FY 92	$ 49,960	$800,000	$ 73,239
FY 93	$ 13,600	$800,000	$ 45,653
FY 94	$ 18,000	$800,000	$ 28,000
	$ 81,560	$2,400,000	$146,892

9. PROGRAMMED ENVIRONMENTAL COSTS.

a. Summary of environmental compliance costs:

	Funded	Unfunded
FY 94	$ 970,000	$ 20,000
FY 95	$ 0	$ 221,000
FY 96	$ 0	$ 111,000
FY 97	$ 0	$ 111,000
FY 98	$ 0	$ 161,000
FY 99	$ 0	$ 116,000
	$ 970,000	$ 740,000

b. Summary of environmental restoration costs:

	Funded	Unfunded
FY 94	$ 800,000	$ 500,000
FY 95	$ 0	$ 0
FY 96	$ 600,000	$ 0
FY 97	$ 0	$ 0
FY 98	$ 0	$ 0
FY 99	$ 0	$ 0
	$1,400,000	$ 500,000

ACRONYMS

AICUZ	Air Installation Compatible Use Zone
ICUZ	Installation Compatible Use Zone
ITAMS	Integrated Training Area Management System
LCTA	Land Condition Trend Analysis
404 Wetlands	Regulated Wetlands

NONSTRUCTURAL ATTRIBUTES

Aberdeen Proving Ground -- 24015

1. LAND USE.

a. Land Availability (estimated quantities in acres).

(1)	Installation total		72,516
(2)	Cantonment area		5,680
(3)	Maneuver area		100
(4)	Training lands designated as sensitive/marginal by ITAMS/LCTA monitoring		0
(5)	Firing Ranges		32,864
(6)	Non-Impact Firing Range		0
(7)	Wetlands Sec 404 area		13,546
(8)	Other (Surface water areas; set aside unique areas; i.e., recreation habitat, forests; restricted use areas such as landfills, contaminated sites, safety zones.		20,346
	Surface Water -	17,981	
	Storage Area -	463	
	Carroll Island -	1,286	
	Grace's Quarters -	610	

b. Air Space.

(1)	Restricted Air Space. Airspace only restricted during periods of range or test operations.	66,836

(2) Extent of Installation Compatible Use Zones (ICUZ) or Noise and Accident Potential Zone (NAPZ).

Zone II (off post)	900
Zone III	0

2. THREATENED OR ENDANGERED SPECIES (PLANTS AND ANIMALS).

Numerous threatened or endangered species (TES) surveys have been conducted. The Federally listed endangered Bald Eagle occurs on the installation. Section 7 consultations and associated Biological Assessments have limited the times and operations of one range and required monitoring of roost sites near other sites. The Eagle population as well as nesting and roosting areas are expanding.

3. CULTURAL RESOURCES.

a. The installation Historic Preservation Plan is currently in draft form and the installation has obtained comments from the State Historic Preservation Officer (SHPO) and Advisory Council of Historic Preservation (ACHP).

b. A historic building survey has been completed. Two structures are currently listed and 912 are potentially eligible for listing on the National Register of Historic Places. Many of Aberdeen's facilities were associated with the development of Cold War weapons systems and may later prove historically significant.

c. A total of 72,000 acres have been surveyed for archeological sites. The installation has identified 312 sites potentially eligible for the National Register.

4. INFRASTRUCTURE ISSUES.

a. Potable Water.

Potable water is provided entirely by surface water. Two water treatment plants exist with a design capacity of 8.0 MGD and the average daily usage is 3.0 MGD.

b. Waste Water.

Two National Pollutant Discharge Elimination System (NPDES) permitted wastewater treatment plants exist with a combined capacity of 5.8 MGD. The average daily effluent is about 2.1 MGD. Upgrading is required for the biological nutrient removal process, number and size of clarifiers, size of effluent pumps and pipes. Industrial wastewater discharges are to sanitary sewer system from domestic facilities, laboratories and cooling systems.

c. Solid Wastes.

Two solid waste landfills exist totaling 50 acres with a remaining capacity of 10,000 tons. The 17 acre Phillips Army Airfield landfill has a life expectancy of four years and the 33 acre Westwood landfill has a life expectancy of 15 years.

Solid waste is also disposed of through a $400,000 contract with Hartford Sanitation Services. Average daily volume is 16 tons/day at a cost of $66.00/ton.

5. AIR QUALITY.

a. The air quality region is Maryland & Environmental Protection Agency (EPA) Region III.

b. The region is not in attainment for ozone (severe).

c. Air pollution sources are: automobile traffic, paint spray booths, decreasing facilities, boilers, incinerators, vehicle training and accidental.

d. The installation has no air emission credits.

e. The installation has identified the Employee Commute Option and Title V permit as major air compliance projects.

f. The installation is within a critical air quality region.

6. HAZARDOUS MATERIALS/SITES.

a. Hazardous Materials.

The installation has Resource Conservation and Recovery Act (RCRA) Part B permits for storage in five facilities: Treatment, Storage, and Disposal; PCB Storage; Thermal Treatment; Chemical Transfer; and N-Field Munitions Storage Bunker. The installation is also in the process of obtaining a State of Maryland permit for all five facilities and a RCRA Part B, Subpart X permit for open burning/detonation.

b. Contaminated Sites.

A total of 350 Defense Environmental Restoration Account (DERA) eligible contaminated sites have been identified with an estimated restoration cost of $1.0 billion.

The installation is on the National Priority List (NPL). There are 360 solid waste management units (SWMU) managed under an interagency agreement (IAG). These sites are further broken down in to 13 study areas of which ten are on the NPL.

c. PCB, Asbestos, Lead Paint, or RADON issues.

PCB survey has been completed and 222 contaminated transformers (156 - 50-499 Ppm & 66 - > 500 Ppm) have been identified. A total of 98 (37 - 50-499 Ppm & 61 - > 500 Ppm) have been replaced.

d. Underground Storage Tanks (UST).

Heating oil underground storage tanks are regulated There are 229 active and 391 abandoned UST's on the installation. A total of 355 have been tested of which 98 failed. A total of 400 have been replaced/repaired.

e. Radiological Materials and Sources.

Tenant organizations on the installation hold at least 19 Nuclear Regulatory Commission (NRC), DA, or other licenses for radiological materials and sources. The cost of decommissioning is not known.

7. OTHER ISSUES, CONSTRAINTS.

No other significant issues or constraints are known.

8. REVENUE GENERATING PROGRAMS.

There are no revenue generating programs reported on the installation.

9. PROGRAMMED ENVIRONMENTAL COSTS.

a. Summary of environmental compliance costs:

	Funded	Unfunded
FY 94	$23,561,000	$4,754,000
FY 95	$28,503,000	$6,794,000
FY 96	$25,901,000	$5,265,000
FY 97	$21,433,000	$5,793,000
FY 98	$20,817,000	$4,054,000
FY 99	$17,078,000	$2,469,000
	$137,293,000	$29,129,000

b. Summary of environmental restoration costs:

	Funded	Unfunded
FY 94	$29,655,000	$70,966,000
FY 95	$ 0	$104,980,000
FY 96	$ 0	$97,350,000
FY 97	$ 0	$90,760,000
FY 98	$ 0	$53,887,000
FY 99	$ 0	$56,867,000
	$29,655,000	$474,810,000

ACRONYMS

AICUZ	Air Installation Compatible Use Zone
ICUZ	Installation Compatible Use Zone
ITAMS	Integrated Training Area Management System
LCTA	Land Condition Trend Analysis
404 Wetlands	Regulated Wetlands

NONSTRUCTURAL ATTRIBUTES

Dugway Proving Ground -- 49295

1. LAND USE.

a. Land Availability (estimated quantities in acres).

(1)	Installation total		802,724
(2)	Cantonment area		680
(3)	Maneuver area		0
(4)	Training lands designated as sensitive/marginal by ITAMS/LCTA monitoring		33,000
(5)	Firing Ranges		48,272
	White Sage	9,434	
	Cedar Mtn	14,593	
	German Village	24,245	
(6)	Non-Impact Firing Range		0
(7)	Wetlands Sec 404 area (Study in progress)		15,000
(8)	Other (Surface water areas; set aside unique areas; i.e., recreation habitat, forests; restricted use areas such as landfills, contaminated sites, safety zones.		705,772

b. Air Space.

(1)	Restricted Air Space. (Whole post)	802,724
(2)	Extent of Installation Compatible Use Zones (ICUZ) or Noise and Accident Potential Zone (NAPZ).	N/A

2. THREATENED OR ENDANGERED SPECIES (PLANTS AND ANIMALS).

Plant surveys, but no wildlife survey has been conducted for threatened or endangered species. No Federal or State listed endangered or threatened species or critical habitats are known to occur on the installation.

3. CULTURAL RESOURCES.

a. A Historic Preservation Plan is scheduled for FY 95.

b. The historic structure report identified two of the proving ground's structures (Bldgs 8100 & 8104) as being

historically significant. One is in need of repair. Many of Dugway's facilities were associated with the development of Cold War weapons systems and may later prove historically significant on that account.

c. No potential eligible sites were identified, however previously over 200 known and reported archeological sites were reported. Many of these sites were reported to be eligible for the National Register. In addition, the archeological overview determined that Dugway Proving Ground lands has a high potential for possessing intact archeological resources. It was also previously reported that a memorandum of understanding with the State Historic Preservation Officer exempting two thirds of Dugway Proving Ground lands from archeological survey was in effect.

4. INFRASTRUCTURE ISSUES.

a. Potable Water.

There are 31 wells on Dugway, but only six provide all potable water. Total pumping capacity is 3.49 MGD and average usage is 0.55 MGD. Excess capacity for the six wells is 3.0 MGD.

b. Wastewater.

Wastewater treatment is provided by four aerated lagoon systems. Combined capacity is 1.08 MGD and combined usage is 0.31 MGD. Two of the four facilities are new, a third is currently being replaced, and a new system is planned for the forth facility next year. There are no National Pollutant Discharge Elimination System (NPDES) permits required for the facilities at Dugway. A Groundwater Discharge permit issued by the State of Utah is required for one of the facilities and will be required for the new system scheduled for next year.

c. Solid Wastes.

There is one 150-acre landfill that is 34% full. The current usage rate is 109 cubic yards/year. The expected life expectancy is 15 years with adequate space for expansion.

5. AIR QUALITY.

a. The installation is in the Toole Region regulated by the Department of Environmental quality, Division of Air Quality.

b. The Utah region is in attainment.

c. Pollution sources on the installation are; two incinerators, vehicle traffic, fuel storage tanks, road construction, and solvent tanks.

d. The installation has no air emission credits.

e. No major projects were identified in the A-106 plan to meet/maintain air quality compliance.

f. Salt Lake, Davis, and Utah Counties are critical air quality regions within 100 km.

6. HAZARDOUS MATERIALS/SITES.

a. Use of hazardous materials.

The Central Hazardous Waste Storage Facility has 18 Resource Conservation and Recovery Act (RCRA) Part B permitted 90-day hazardous waste storage sites. A RCRA Part B permit is in progress for Igloo G waste storage and open burn/open detonation waste treatment.

b. Contaminated Sites.

Clean-up is required for over 171 Defense Environmental Restoration Account (DERA) eligible sites.

A Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) Preliminary Assessment is in progress.

c. PCB, Asbestos, Lead Paint, or RADON issues.

PCB survey has been completed, with all contaminated transformers replaced.

d. Underground Storage Tanks (UST).

Of 700 USTs on Dugway, only 22 are regulated. All 22 regulated tanks have been tested with two currently under going corrective action.

e. Radioactive Materials and Sources.

No radiological testing is conducted at Dugway. Radioactive test were conducted in the 1950s using materials with a short half-life. The extent of the testing and residual effects is unknown and undetermined.

7. OTHER ISSUES, CONSTRAINTS.

No other significant issues or constraints are known.

8. REVENUE GENERATING PROGRAMS.

There are no revenue generating programs.

9. PROGRAMMED ENVIRONMENTAL COSTS.

a. Summary of environmental compliance costs:

	Funded	Unfunded
FY 94	$3,640,000	$ 0
FY 95	$3,978,000	$ 600,000
FY 96	$6,147,000	$ 605,000
FY 97	$5,074,000	$ 509,000
FY 98	$4,832,000	$ 509,000
FY 99	$5,299,000	$ 509,000
	$28,970,000	$2,720,000

b. Summary of environmental restoration costs:

	Funded	Unfunded
FY 94	$6,902,000	$ 0
FY 95	0	17,100,000
FY 96	0	13,100,000
FY 97	0	11,200,000
FY 98	0	6,200,000
FY 99	0	4,200,000
	$6,902,000	$51,800,000

ACRONYMS

AICUZ	Air Installation Compatible Use Zone
ICUZ	Installation Compatible Use Zone
ITAMS	Integrated Training Area Management System
LCTA	Land Condition Trend Analysis
404 Wetlands	Regulated Wetlands

NONSTRUCTURAL ATTRIBUTES

White Sands Missile Range -- 35955

1. LAND USE.

a. Land Availability (estimated quantities in acres).

(1)	Installation total		2,164,244
(2)	Cantonment area		12,859
(3)	Maneuver area		0
(4)	Training lands designated as sensitive/marginal by ITAMS/LCTA monitoring		0
(5)	Firing Ranges		2,353,208
(6)	Non-Impact Firing Range		149,750
(7)	Wetlands Sec 404 area		4,660
(8)	Other (Surface water areas; set aside unique areas; i.e., recreation habitat, forests; restricted use areas such as landfills, contaminated sites, safety zones.		3,223,525*
	Surface Water	24,960	
	Hunting Area	1,152,000	
	Cliff faces	11,520	
	Sheltered Land	2,162,440	
	Landfill/SWMU	255	

* Due to the nature of the mission of WSMR, there are numerous areas that are within the overfly and safety zones for open air test ranges. These areas, while not part of the installation total, have been included in (8), accounting for the lack of numeric consistency.

b. Air Space.

(1)	Restricted Air Space.	5,000 sq. mi.
(2)	Extent of Installation Compatible Use Zones (ICUZ) or Noise and Accident Potential Zone (NAPZ).	0

2. THREATENED OR ENDANGERED SPECIES (PLANTS AND ANIMALS).

No threatened or endangered species (TES) survey has been conducted on the installation. Special assessments are conducted on a project by project basis, but this has accounted for less than 5% of the installation. It was previously reported that four Federally listed endangered

species occur on the installation: Bald Eagle, Peregrine Falcon, Northern Aplomado Falcon, and Todsen's Pennyroyal (plant). The bald eagle is a transient visitor; while the peregrine falcon uses portions of the range as foraging habitat even though marginal nesting habitat is present. Although the installation is in the historic breeding range of the northern aplomado falcon, only individual birds have been documented in the area. Three populations of the Todsen's pennyroyal are known to occur on the installation, and two of these are located within the designated critical habitat for this plant. In addition to these four species, the installation has been identified as a potential reintroduction site for the Federally listed endangered Mexican Wolf which is now considered to be extinct within the United States. Approximately 25 other State listed endangered and threatened species or Federal candidate species have been documented to occur on the installation and another 60 species are expected to occur based on the availability of suitable habitat. Of particular interest, two species previously believed to be extinct have been documented to be present. Because of the large number of endangered and threatened species and others of special concern present on the installation, some military operations and missions have been constrained and all development plans must be carefully considered for the potential impacts to these species.

3. CULTURAL RESOURCES.

a. An archeological overview and historic structure report were prepared for White Sands Missile Range in the early 1980s. The installation has a historic preservation plan and an implementing memorandum of agreement.

b. Many of White Sands' facilities were associated with the development of Cold War weapons systems and may later prove historically significant on that account. The Trinity site (47,360 acres) at White Sands, was the location of the first atomic test, and is a National Historic Landmark. There are restrictions on development in Trinity National Landmark, precluding development of permanent structures. There are also restrictions on operations which would create shock or blast fronts which could damage the historic structures in the area.

c. Archeological surveys have been conducted for only 101,000 acres of installation lands, however a large number of potentially significant sites have been located. To date, 247 registered historic sites, 1,345 registered archeological sites and 1,908 identified but uncategorized sites have been identified. There may be as many as 78,000 additional sites located on the remaining area. The geographic size of the range and extremely low impact that the majority of WSMR's test missions create makes it

infeasible operationally and economically to perform a boundary-to-boundary survey of the range. Surveys are performed of new areas "as required" basis, using customer funding, and the results placed in both installation and New Mexico data bases for future referral and land management actions.

4. INFRASTRUCTURE ISSUES.

a. Potable Water.

All potable water is derived from 22 wells at 11 sites. Total pumping capacity is 5.885 MGD and average usage is approximately 2.8 MGD. The main installation and Soledad Canyon well fields are susceptible to horizontal saline-water encroachment caused by the depletion of the fresh water aquifer. Vertical saline-water encroachment is also possible from below the well fields in the cone of depressions with increased depth below land surface of the static and pumping water levels.

b. Wastewater.

The installation has one treatment plant with a design capacity of 1.0 MGD and an average use of 0.54 MGD. The life of the plant is 30 years. Throughout the rest of the installation, WSMR sites are serviced by either septic tank systems or individual holding tanks. This system is over 20 years old and will require replacement in the next 6 years. The subject of a National Pollutant Discharge Elimination System (NPDES) permit is under discussion with the State of New Mexico. There are currently no permit restrictions affecting discharge amounts.

c. Solid Wastes.

The installation has four landfills: 60-acre Main Post landfill, a contractor's 15 acre landfill, a 15 acre asbestos landfill, and a 10 acre Stallion Range Center landfill. The main landfill is currently listed as having 8-12 months remaining useful life. The other three landfills have a life expectancy of at least two years. Negotiations are ongoing with commercial disposal companies for contract following closure of the existing landfills.

5. AIR QUALITY.

a. The air quality region is Environmental Protection Agency (EPA) Region VI.

b. The region is in attainment.

c. There are no known air pollution sources.

d. The installation has no air emission credits.

e. The installation has identified major projects to meet/maintain air compliance.

f. There is a critical air quality region within 100 km, El Paso, TX/Juarez, Mexico, which is in non-attainment for ODC, CO, and PM10.

6. HAZARDOUS MATERIALS/SITES.

a. Use of hazardous materials.

There is one Resource Conservation and Recovery Act (RCRA) Part B permitted hazardous waste storage facility located 6 miles east of main post. There is also a RCRA Part X Open burning/open detonation (OB/OD) facility at the Hazardous Test Area operating under interim status.

b. Contaminated Sites.

The installation identified 73 Defense Environmental Restoration Account (DERA) eligible sites and are scheduled for cleanup under RCRA Corrective Action Permit.

c. PCB, Asbestos, Lead Paint, or RADON issues.

PCB survey has been completed and 125 contaminated transformers have been identified. To date, 100 have been replaced.

d. Underground Storage Tanks (UST).

There are a total of six tanks, all of which are new.

e. Radioactive Materials and Sources.

WSMR has numerous Nuclear Regulatory Commission (NRC) and DA licenses. The major utilization of radioactive material at WSMR is under controlled laboratory conditions. A large scale decontamination effort would not be required to comply with decommissioning of WSMR radiological activities.

OTHER ISSUES, CONSTRAINTS.

No other significant issues or constraints are known.

REVENUE GENERATING PROGRAMS.

There are no revenue generating programs.

PROGRAMMED ENVIRONMENTAL COSTS.

a. Summary of environmental compliance costs:

	Funded	Unfunded
FY 94	$ 931 K	$ 280 K
FY 95	$2,459 K	$ 713 K
FY 96	$3,171 K	$2,226 K
FY 97	$2,322 K	$1,839 K
FY 98	$1,795 K	$1,602 K
FY 99	$1,485 K	$1,627 K
	$12,163 K	$8,287 K

b. Summary of environmental restoration costs:

	Funded	UNFUNDED
FY 94	$4,227 K	$ 0
FY 95	$3,590 K	0
FY 96	$14,270 K	0
FY 97	$2,400 K	0
FY 98	$2,270 K	0
FY 99	$2,270 K	0
	$29,027 K	$ 0

ACRONYMS

AICUZ	Air Installation Compatible Use Zone
ICUZ	Installation Compatible Use Zone
ITAMS	Integrated Training Area Management System
LCTA	Land Condition Trend Analysis
404 Wetlands	Regulated Wetlands

NONSTRUCTURAL ATTRIBUTES

Yuma Proving Ground -- 04985

1. LAND USE.

a. Land Availability (estimated quantities in acres).

(1)	Installation total	834,174
(2)	Cantonment area	10,836
(3)	Maneuver area	0
(4)	Training lands designated as sensitive/marginal by ITAMS/LCTA monitoring	0
(5)	Firing Ranges	587,819
(6)	Non-Impact Firing Range	0
(7)	Wetlands Sec 404 area	0
(8)	Other (Surface water areas; set aside unique areas; i.e., recreation habitat, forests; restricted use areas such as landfills, contaminated sites, safety zones.	240,131

b. Air Space.

(1)	Restricted Air Space.	1,200,000
(2)	Extent of Installation Compatible Use Zones (ICUZ) or Noise and Accident Potential Zone (NAPZ).	
	Zone II	275
	Zone III	20

2. THREATENED OR ENDANGERED SPECIES (PLANTS AND ANIMALS).

A threatened or endangered species (TES) survey has been partially completed. It was previously reported that two Federally listed endangered species were transient visitors to the installation: Bald Eagle and Peregrine Falcon. The Brown Pelican may also be a casual visitor. In addition, seven other un-named candidate species also are reported to occur at Yuma Proving Ground. The presence of these species have not significantly constrained the mission and related developments.

3. CULTURAL RESOURCES.

a. The installation does not have a historic preservation plan. YPG is operating under Programmatic

Agreement with the State Historic Preservation Officer/Advisory Council for Historic Preservation. A memorandum of agreement to prepare a historic preservation plan has been signed.

b. The historic structure report identified no buildings as being historically or architecturally important. However, many of Yuma Proving Ground's facilities were associated with the development of Cold War weapons systems and may later prove historically significant on that account.

c. Approximately 320 acres of the Proving Ground have been surveyed for archeological resources and two of the recorded sites may be eligible for the National Register. A third site may be identified as a result of a current ongoing survey. The remainder of the Proving Ground lands are believed to have a moderate potential for possessing archeological resources.

d. The Quechan and Yavapai Nations have conducted site visits to the installation. These tribes and others are provided copies of surveys and reports, which have bearing on their cultural heritage.

4. INFRASTRUCTURE ISSUES.

a. Potable Water.

All installation potable water comes from 16 wells, with a total pumping capacity of 6.0 MGD and an average use of 1.3 MGD. The drawdown rate is 1 - 21 feet.

b. Wastewater.

An evaporative lagoon system exists for wastewater treatment. The system is situated in five locations, two of which require expansion. The design capacity totals 0.552 MGD. The average use is 0.47 MGD. YPG operates under an Arizona Aquifer Protection Program which permits the use of five waste water disposal systems. Currently no outstanding NOVs. Newly tightened environmental regulations will require, Best Available Demonstrated Control Technology (BADCT), zero discharge to groundwater. In addition, a septic tank and grease trap pumping service contract exists with a total annual use of 123,000 gallons.

c. Solid Wastes.

A 44 acre landfill with a total capacity of 63,000 tons exists which has an estimated useful life of 10 years. A contract exists for solid waste removal to the landfill with a volume of 17 tons per day, at a cost of

$8.74/ton.

5. AIR QUALITY.

a. The installation is in a unspecified air quality region regulated by the Arizona Department of Environmental Quality.

b. The installation (4%) is located partially in a region that is non-attainment for PM-10, (moderate).

c. Pollution sources are: open burning/open detonation areas, fire fighters training facility, vehicle test courses, vehicular traffic, and munitions testing.

d. The installation has no air emission credits.

e. The installation has identified major projects to meet/maintain air compliance.

f. Critical air quality region within 100 km consist of a PM-10 non attainment area partially located on YPG with the majority to the south over the City of Yuma, and Southern Yuma County Agricultural Area.

g. Restrictions on open burning during inversion hours-constraint minimal.

6. HAZARDOUS MATERIALS/SITES.

a. Use of hazardous materials.

The installation has applied for a Resource Conservation and Recovery Act (RCRA) Part B permit for hazardous waste storage for over 90 days. Additionally, the installation has applied for a RCRA Subpart X permit for open burning/open detonation, which is currently under an interim status.

b. Contaminated Sites.

Assessments for contamination have been conducted and forty-two Defense Environmental Restoration Account (DERA) eligible sites have been identified . YPG will receive RCRA NOD in Spring 1995 requiring action to be taken on three contaminated sites. Additionally, YPG is negotiating a bilateral agreement with the Arizona DEQ to develop a schedule for grouped or operable units that are (DERA) eligible (12 priority, 17 secondary) Expected date of Arizona Interagency agreement (IAG) is Jan 95. Restoration program schedule will be in place at that time. Remediation has already begun on two

DERA funded projects.

c. PCB, Asbestos, Lead Paint, or RADON issues.

PCB survey has been completed and 56 out of 66 contaminated transformers have been replaced.

d. Underground Storage Tanks (UST).

There are seven active and 10 closed tanks. Seven have been tested with no failures and 10 replaced.

f. Radioactive Materials and Sources.

YPG has two Nuclear Regulatory Commission (NRC) licenses for depleted Uranium penetrators and American-241 & Cesium-137, and two DARA licenses for recovery of fired artillery rounds and shooting down drone UH-1 helicopters. The license decommissioning plan submitted for SMB-1411 indicates n estimated cost of decommissioning of $153,000,000.

7. OTHER ISSUES, CONSTRAINTS.

No other significant issues or constraints are known.

8. REVENUE GENERATING PROGRAMS.

The revenue generating program consists of hunting permits, and out grants. Outgrants (leases) total combined income of $7.8 K. Estimate for FY 94 is the same. Hunting program total income of $1.8 K, in FY 94.

9. PROGRAMMED ENVIRONMENTAL COSTS.

a. Summary of environmental compliance costs:

	Funded	Unfunded
FY 94	$1,166 K	$4,684 K
FY 95	0	4,438 K
FY 96	0	4,005 K
FY 97	0	3,080 K
FY 98	0	2,714 K
FY 99	0	2,202 K
	$1,166 K	$21,123 K

b. Summary of environmental restoration costs:

	Funded	Unfunded
FY 94	$ 445 K	$ 280 K
FY 95	0	$1,930 K
FY 96	0	$2,350 K
FY 97	0	$1,650 K
FY 98	0	$1,650 K
FY 99	0	$1,650 K
	$ 445 K	$8,025 K

ACRONYMS

AICUZ	Air Installation Compatible Use Zone
ICUZ	Installation Compatible Use Zone
ITAMS	Integrated Training Area Management System
LCTA	Land Condition Trend Analysis
404 Wetlands	Regulated Wetlands

NONSTRUCTURAL ATTRIBUTES

Fitzsimons AMC -- 08055

1. LAND USE.

a. Land Availability (estimated quantities in acres).

(1)	Installation total	576.5
(2)	Cantonment area	576.5
(3)	Maneuver area	0
(4)	Training lands designated as sensitive/marginal by ITAMS/LCTA monitoring	0
(5)	Firing Ranges	0
(6)	Non-Impact Firing Range	0
(7)	Wetlands Sec 404 area	0
(8)	Other (Surface water areas; set aside unique areas; i.e., recreation habitat, forests; restricted use areas such as landfills, contaminated sites, safety zones. Recreational	69

b. Air Space.

(1)	Restricted Air Space.	0
(2)	Extent of Installation Compatible Use Zones (ICUZ) or Noise and Accident Potential Zone (NAPZ).	N/A

2. THREATENED OR ENDANGERED SPECIES (PLANTS AND ANIMALS).

A threatened or endangered species survey has been conducted and no Federal or State listed endangered or threatened species or critical habitats are known to occur on the installation.

3. CULTURAL RESOURCES.

a. Fitzsimons AMC does not have a historic preservation plan nor an implementing memorandum of agreement.

b. An architectural survey of the facility was completed and 125 structures are reported as eligible for the National Register. One of these structures is reported in substandard condition and scheduled for demolition.

c. Eight acres of the total 576.5 acres that make up this facility has been surveyed for archeological resources. No archeological sites were found during this survey.

4. INFRASTRUCTURE ISSUES.

a. Potable Water.

Potable water is supplied under contract with the City of Denver. Average daily use is 0.5 MGD. Contracted capacity is reported as 5.76 MGD.

b. Wastewater.

A National Pollutant Discharge Elimination System (NPDES) permitted wastewater treatment plant exists with a design capacity of 1.0 MGD and an average use of 0.35 MGD. There are no known constraints to maintaining or expanding wastewater treatment.

c. Solid Wastes.

No landfills exist on the installation. Solid wastes is disposed of by a $70,000 contract to the Denver Arapahoe Site. Average volume of waste is 17 tons/day at a cost of $7.36/short ton. There are no known limitations to expanding the contract quantity.

5. AIR QUALITY.

a. The air quality region is the Denver Metro Area.

b. The region is in non-attainment for particulate matter, carbon monoxide and ozone (serious).

c. The only air pollution source reported is the central heating plant.

d. The installation has no air emission credits.

e. No major air compliance projects are reported.

f. Fitzsimons is within a critical air quality region.

6. HAZARDOUS MATERIALS/SITES.

a. Use of hazardous materials.

The installation does not hold any Resource Conservation and Recovery Act (RCRA) permits.

b. Contaminated Sites.

There is one Defense Environmental Restoration Account (DERA) eligible contaminated site.

c. PCB, Asbestos, Lead Paint, or RADON issues.

A PCB survey has been completed. All eight contaminated transformers have been replaced.

d. Underground Storage Tanks (UST).

There are 15 USTs of which three are regulated. Six tanks have been tested and none failed.

e. Radioactive Materials and Sources.

By product Material License and Broad Scope Medical license are held for radiological materials. The decommissioning plan calls for 10 buildings and numerous rooms to be surveyed and cleaned up.

7. OTHER ISSUES, CONSTRAINTS.

No other significant issues or constraints are known.

8. REVENUE GENERATING PROGRAMS.

The installation operates an agricultural lease program which has generated $900 each year since FY 92.

9. PROGRAMMED ENVIRONMENTAL COSTS.

a. Summary of environmental compliance costs are not provided.

b. Estimated environmental restoration costs are $700,000.

ACRONYMS

AICUZ	Air Installation Compatible Use Zone
ICUZ	Installation Compatible Use Zone
ITAMS	Integrated Training Area Management System
LCTA	Land Condition Trend Analysis
404 Wetlands	Regulated Wetlands

NONSTRUCTURAL ATTRIBUTES

Tripler Army Medical Center-15875

1. LAND USE.

a. Land Availability (estimated quantities in acres).

(1)	Installation total	367
(2)	Cantonment area	1
(3)	Maneuver area	0
(4)	Training lands designated as sensitive/marginal by ITAMS/LCTA monitoring	0
(5)	Firing Ranges	0
(6)	Non-Impact Firing Range	0
(7)	Wetlands Sec 404 area	0
(8)	Other (Surface water areas; set aside unique areas; i.e., recreation habitat, forests; restricted use areas such as landfills, contaminated sites, safety zones.	366

b. Air Space.

(1)	Restricted Air Space. Medevac Helicopter Landing Pad	
(2)	Extent of Installation Compatible Use Zones (ICUZ) or National Air Space Zone (NAPZ).	N/A

2. THREATENED OR ENDANGERED SPECIES (PLANTS AND ANIMALS).

No threatened or endangered species (TES) survey has been conducted and no Federal or State listed endangered or threatened species or critical habitats have been found to occur on the installation.

3. CULTURAL RESOURCES.

a. Tripler AMC does not have a Cultural Resources Management Plan nor a Historic Preservation Plan.

b. A Historic Building Survey was conducted in 1977 and no facilities were found to be eligible for the National Register of Historic Places.

c. An Archeological survey has been conducted on 71.63 acres. No sites were found to be potentially eligible for the National Register.

4. INFRASTRUCTURE ISSUES.

a. Potable Water.

Potable water is supplied by two wells. The maximum pumping capacity is 1.9 MGD and average daily use is 0.3 MGD.

b. Wastewater.

Wastewater is provided by the Fort Shafter Pump Station through a contract with the City and County of Honolulu. Cost breakdown is unavailable due to multiple integration wastewater streams.

c. Solid Wastes.

Solid waste disposal is by contract with Honolulu Disposal with a contract value of $352,000. The average disposal rate is $58.41/ton, and a usage of 53 tons/day.

5. AIR QUALITY.

a. The air quality region is the State of Hawaii.

b. The region is in attainment.

c. Air pollution sources are traffic, boilers, electrical generators, ethylene oxide sterilizers.

d. The installation has no air emission credits.

e. The installation identified no major projects to meet/maintain air compliance.

f. The installation is not within 100 km of a critical air quality region.

6. HAZARDOUS MATERIALS/SITES.

a. Use of hazardous materials.

The installation is not a Resource Conservation and Recovery Act (RCRA) permitted treatment, storage or disposal facility.

b. Contaminated Sites.

An assessment has been done by F. Weston in 1992 and five Defense Environmental Restoration Account (DERA) eligible contaminated sites were identified.

c. PCB, Asbestos, Lead Paint, or RADON Issues.

PCB transformer survey is 95% complete with no further data provided.

d. Underground Storage Tanks (UST).

The installation has 13 active and one inactive underground storage tanks, eight have been tested, two failed and none have been replaced.

e. Radiological Materials and Sources

Tripler holds both a Nuclear Regulatory Commission (NRC) license (53-00458-04, expires 9.30.96) and a DA Radiation Authorization (53-01-94, expires 10.1.94). Decommissioning surveys and possible cleanup are required for three buildings.

7. OTHER ISSUES, CONSTRAINTS.

No other significant issues or constraints are known.

8. REVENUE GENERATING PROGRAMS.

There are no revenue generating programs.

9. PROGRAMMED ENVIRONMENTAL COSTS.

a. Summary of environmental compliance costs:

	Funded	Unfunded
FY 94	$ 174,000	$ 0
FY 95	$ 120,000	$ 0
FY 96	$ 148,000	$ 35,000
FY 97	$ 151,000	$ 35,000
FY 98	$ 156,000	$ 36,000
FY 99	$ 158,000	$ 36,000
	$ 907,000	$ 142,000

b. Summary of environmental restoration costs:

	Funded	Unfunded
FY 94	$1,722,000	$ 600,000
FY 95	$ 0	$1,046,000
FY 96	$ 0	$1,069,000
FY 97	$ 0	$ 0
FY 98	$ 0	$ 0
FY 99	$ 0	$ 0
	$1,722,000	$2,715,000

ACRONYMS

AICUZ	Air Installation Compatible Use Zone
ICUZ	Installation Compatible Use Zone
ITAMS	Integrated Training Area Management System
LCTA	Land Condition Trend Analysis
404 Wetlands	Regulated Wetlands

NONSTRUCTURAL ATTRIBUTES

Walter Reed AMC -- 11865

1. LAND USE.

a. Land Availability (estimated quantities in acres).

(1)	Installation total	297
(2)	Cantonment area	297
(3)	Maneuver area	0
(4)	Training lands designated as sensitive/marginal by ITAMS/LCTA monitoring	0
(5)	Firing Ranges	0
(6)	Non-Impact Firing Range	0
(7)	Wetlands Sec 404 area	27
(8)	Other (Surface water areas; set aside unique areas; i.e., recreation habitat, forests; restricted use areas such as landfills, contaminated sites, safety zones.	0

b. Air Space.

(1)	Restricted Air Space.	N/A
(2)	Extent of Installation Compatible Use Zones (ICUZ) or Noise and Accident Potential Zone (NAPZ).	N/A

2. THREATENED OR ENDANGERED SPECIES (PLANTS AND ANIMALS).

No threatened or endangered species (TES) survey has been conducted, but an environmental assessment was conducted for the Forest Glen Section of the installation. No Federal or State listed endangered or threatened species or critical habitats are known to occur on the installation.

3. CULTURAL RESOURCES.

a. Walter Reed AMC does not have a complete historic preservation plan or an implementing memorandum of agreement. Plan is under development and comments have been obtained from the State Historical Preservation Officer (SHPO) and the Advisory Council for Historic Preservation (ACHP).

b. A partial Historic building survey has resulted in 40 structures on the Main Section and 26 structures at Forest

Glen being placed on the National Register as part of the Forest Glen historic district.

c. Only partial archeological surveys have been conducted for this facility with no sites found eligible for the National Register. It is assumed that Walter Reed AMC has at least a moderate potential for possessing significant archeological remains. No development will be conducted in the 23.5 acres of the National Park Seminary Historical District.

4. INFRASTRUCTURE ISSUES.

a. Potable Water.

Potable water is supplied under contract with the District of Columbia. Maximum capacity for the Main Post is 4.4 MGD with an average usage of 1.337 MGD. The Forest Glen section has a maximum capacity of 0.501 MGD and average usage of 0.315 MGD.

b. Wastewater.

Wastewater is disposed under contract with the District of Columbia. The average discharge for the Main Post is 1.255 MGD and 0.138 MGD for the Forest Glen section. National Pollutant Discharge Elimination System (NPDES) permit is with the District of Columbia.

c. Solid Wastes

Solid wastes are removed under contract. The average volume is 26.7 tons per day, with a total contract cost of $665,977.00.

5. AIR QUALITY.

a. The facility is located in the Air Quality Control Region 047.

b. The region is classified as non-attainment for ozone (serious).

c. Air pollution sources are: boiler plants, incinerators, and vehicular traffic.

d. The facility has no air emission credits.

e. Major projects have been identified as necessary to meet/maintain air quality standards.

f. The installation is within a critical air quality region.

6. HAZARDOUS MATERIALS/SITES.

a. Use of hazardous materials.

The Installation is not a Resource Conservation and Recovery Act (RCRA) permitted hazardous waste treatment, storage or disposal facility.

b. Contaminated Sites.

The installation has not identified any Defense Environmental Restoration Account (DERA) sites.

c. PCB, Asbestos, Lead Paint, or RADON issues.

PCB survey is completed for transformers over 500 ppm and 80% complete for 50-500 ppm. A total of 63 contaminated transformers have been identified and 43 replaced.

d. Underground Storage Tanks (UST).
Twenty three tanks out of thirty-one have been tested, 12 failed and none replaced.

e. Radioactive Materials and Sources.

The installation reports that no Nuclear Regulatory Commission (NRC) or DA licenses are held for radioactive materials and sources.

7. OTHER ISSUES, CONSTRAINTS.

No other significant issues or constraints are known.

8. REVENUE GENERATING PROGRAMS.

There are no revenue generating programs.

9. PROGRAMMED ENVIRONMENTAL COSTS.

a. Summary of environmental compliance costs:

	Funded	Unfunded
FY 94	$4.294 M	$0.528 M
FY 95	3.932 M	0.515 M
FY 96	1.263 M	0.486 M
FY 97	0.833 M	0.295 M
FY 98	1.125 M	0.129 M
FY 99	0.617 M	0.578 M
	$12.064 M	$2.531 M

b. Summary of environmental restoration costs:

	Funded	Unfunded
FY 94	$3.194 M	$0.033 M
FY 95	0.579 M	2.750 M
FY 96	0.055 M	0 M
FY 97	0.010 M	0 M
FY 98	0.005 M	0 M
FY 99	0.005 M	0 M
	$3.848 M	$2.783 M

ACRONYMS

AICUZ	Air Installation Compatible Use Zone
ICUZ	Installation Compatible Use Zone
ITAMS	Integrated Training Area Management System
LCTA	Land Condition Trend Analysis
404 Wetlands	Regulated Wetlands

NONSTRUCTURAL ATTRIBUTES

Lima Army Tank Plant -- 39335

1. LAND USE.

a. Land Availability (estimated quantities in acres).

(1)	Installation total	369
(2)	Cantonment area	169
(3)	Maneuver area (Dismounted only - 139,631)	0
(4)	Training lands designated as sensitive/marginal by ITAMS/LCTA monitoring (NASA Goldstone Deep Space Site - 33,241; Protected species - 21,500; Archeological - 3,250; & Recreational - 7,166)	0
(5)	Firing Ranges	0
(6)	Non-Impact Firing Range	0
(7)	Wetlands Sec 404 area	0
(8)	Other (Surface water areas; set aside unique areas; i.e., recreation habitat, forests; restricted use areas such as landfills, contaminated sites, safety zones.	200

b. Air Space.

(1)	Restricted Air Space.	0
(2)	Extent of Installation Compatible Use Zones (ICUZ) or Noise and Accident Potential Zone (NAPZ).	0

2. THREATENED OR ENDANGERED SPECIES (PLANTS AND ANIMALS).

A threatened or endangered species (TES) has not been conducted, however a Biological Survey is planned for FY 95.

3. CULTURAL RESOURCES.

a. The installation does not have a Historic Preservation Plan nor a Cultural Resources Management Plan.

b. A historic building survey has been completed and there are no structures eligible for the National Register.

c. An archeological survey has been conducted and there no archeological sites identified as potentially eligible for the historic Register. Development and operations are reported to be restricted on a total of only 369 acres at Lima due to cultural resources.

4. INFRASTRUCTURE ISSUES.

a. Potable Water.

Potable water is provided by a contract with the City of Lima, OH. Maximum capacity is 4.32 MGD and average daily usage is 0.12 MGD.

b. Waste Water.

Waste water treatment is provided by contract with the City of Lima, OH. The design capacity is 0.374 MGD and an average use of 0.06 MGD. The installation's current National Pollutant Discharge Elimination System (NPDES) permit is for storm water discharges only.

c. Solid Wastes.

Solid waste is disposed of through a $242,000 contract with General Dynamics Land Systems. Average daily volume is 43.09 tons/day (boiler ash & refuse) at a cost of $57.94 per ton.

5. AIR QUALITY.

a. The air quality region is Region V.

b. The region is in attainment.

c. The air pollution sources are vehicle emissions and industrial sources.

d. The installation has no air emission credits.

e. There are no major projects identified in the A-106 plan to meet/maintain air compliance.

f. There are several counties within 100 km of Lima Army Tank Plant in critical air quality regions.

6. HAZARDOUS MATERIALS/SITES.

a. Use of hazardous materials.

The installation is not a Resource Conservation and Recovery Act (RCRA) treatment, storage, or disposal facility for hazardous materials.

b. Contaminated Sites.

An assessment to determine contamination identified no Defense Environmental Restoration Account (DERA) eligible sites.

c. PCB, Asbestos, Lead Paint, or RADON issues.

PCB survey has been completed and all nine contaminated transformers were replaced.

d. Underground Storage Tanks (UST).

There are 11 USTs reported, however none have been tested.

e. Radioactive Materials and Sources.

The installation holds one Nuclear Regulatory Commission (NRC) license for depleted Uranium (U-238) and seven DA permits for various equipment containing radioactive materials (i.e. MRS Tritium (H-3) cell, Thorium Combustor liner, GPS Night Sights, DU, & X-ray machines). Surveys and cleaning for decommissioning are required for four buildings at an estimated cost of $1,267,276.

7. OTHER ISSUES, CONSTRAINTS.

No other significant issues or constraints are known.

8. REVENUE GENERATING PROGRAMS.

There are no revenue generating programs.

9. PROGRAMMED ENVIRONMENTAL COSTS.

a. Summary of total environmental compliance costs:

FY 94	$ 322,000
FY 95	$ 252,000
FY 96	$1,769,000
FY 97	$4,791,000
FY 98	$6,841,000
FY 99	$1,368,000
	$15,343,000

b. There are no restoration costs reported as being required at Lima Army Tank Plant.

ACRONYMS

AICUZ	Air Installation Compatible Use Zone
ICUZ	Installation Compatible Use Zone
ITAMS	Integrated Training Area Management System
LCTA	Land Condition Trend Analysis
404 Wetlands	Regulated Wetlands

NONSTRUCTURAL ATTRIBUTES

Stratford Army Eng Plant -- 09540

1. LAND USE.

a. Land Availability (estimated quantities in acres).

(1)	Installation total	116.5
(2)	Cantonment area	N/A
(3)	Maneuver area	N/A
(4)	Training lands designated as sensitive/marginal by ITAMS/LCTA monitoring	N/A
(5)	Firing Ranges	N/A
(6)	Non-Impact Firing Range	N/A
(7)	Wetlands Sec 404 area	N/A
(8)	Other (Surface water areas; set aside unique areas; i.e., recreation habitat, forests; restricted use areas such as landfills, contaminated sites, safety zones. Reparian rights -	39.5

b. Air Space.

(1)	Restricted Air Space.	N/A
(2)	Extent of Installation Compatible Use Zones (ICUZ) or Noise and Accident Potential Zone (NAPZ). 1/2 mile radius from the plant off-post	

2. THREATENED OR ENDANGERED SPECIES (PLANTS AND ANIMALS).

No Federal or State listed endangered or threatened species or critical habitats are known to occur on the installation. However, the potential exists for endangered species to occur in wetlands on the installation. This potential should be considered in future management decisions.

3. CULTURAL RESOURCES.

a. An archeological overview and historic structure report were prepared for Stratford Engine Plant in 1984. No historic preservation plan or implementing memoranda of agreement have been prepared for this facility.

b. The historic structure report recommended that two buildings may be historically or architecturally significant enough to merit nomination to the National Register.

However, this report is now somewhat dated and many of the Stratford Engine Plant World War II era permanent and semi-permanent buildings (approximately 53) should be evaluated for National Register eligibility as they become 50 years old.

c. Archeological surveys have not been conducted for Stratford Engine Plant and may not be warranted due to prior ground disturbance. The archeological overview recommended that installation lands have a low potential for possessing archeological resources.

4. INFRASTRUCTURE ISSUES.

a. Potable Water.

Potable water is supplied by the Bridgeport Hydraulics Company as needed. The daily use is approximately 2.5 MGD.

b. Wastewater.

Wastewater is produced by the manufacturing process used in the production of turbine engines. Industrial activities result in wastewater contaminated with heavy metals, cyanide, caustics, acids, oils, greases, fuels and solvents. The wastewater is treated at the chemical waste treatment plant and oil abatement treatment plant. Eight outfalls are permitted under National Pollutant Discharge Elimination System (NPDES) permit number CT0002984. Sanitary waste is disposed of through the local sanitary municipal plant.
The chemical waste treatment plant has an average daily use of 0.12 GPD and a maximum capacity of 0.36 MGD. The oil abatement treatment plant has a daily average use of 0.98 MGD and a maximum capacity of 6.0 MGD. Total sewer capacity is 0.37 MGD. Expansion of the treatment plants is possible with permits.

c. Solid Wastes.

Solid wastes are disposed of under contract with no on-site disposal. Solid waste includes sludges from the chemical waste treatment plant and oil abatement treatment plant, scrap metal and wood, waste paper and small amounts of waste food scraps and medical wastes. Stratford disposes of approximately 240 short tons of hazardous material at a cost of $713/ton and 1,127 short tons of non-hazardous solid waste. Non-hazardous waste disposal cost for material that can be cleanly burned is $75/ton and $90/ton for landfill trash.

5. AIR QUALITY.

a. The air quality region is Environmental Protection Agency (EPA) Region I.

b. The region is not in attainment for ozone (severe) and carbon monoxide (moderate).

c. Air pollution sources are: turbine engine test cells and overall plant emissions. Current efforts are aimed at reducing industrial air pollution sources, such as the elimination of trichloroethane for part cleaning.

d. The installation has no air emission credits.

e. No major projects required for the A-106 Plan to meet/maintain compliance were identified.

f. Stratford Army Engine Plant is within a critical air quality region.

6. HAZARDOUS MATERIALS/SITES.

a. Use of Hazardous Materials.

Textron Lycoming applied in December 1990 for a Resource Conservation and Recovery Act (RCRA) Part B permit for hazardous waste storage sites, but has not yet received a permit. Closure of three former storage lagoons and a former equalization basin for the chemical waste treatment plant was completed in the summer of 1989.

b. Contaminated sites.

At present, there are no contaminated sites identified as Defense Environmental Restoration Account (DERA) eligible. An assessment to determine contamination at the installation is currently being conducted. A preliminary assessment screening conducted by Woodward Clyde Consultants is currently on-going and is expected to be complete by October 1995.

c. PCB, Asbestos, Lead Paint, and RADON issues.

PCB survey has been completed. Seventeen contaminated transformers were identified and 12 were replaced.

d. Underground Storage Tanks (UST).

There are two active 3,000 gallon tanks. All other USTs have been removed.

e. Radioactive Materials and Sources.

Textron Lycoming holds Nuclear Regulatory Commission (NRC) licenses for radiological materials for manufacturing with source material and sealed sources for analysis, and a DA license for manufacturing. The radioactive material is low level thorium for engine components. Textron Lycoming is no longer machining any parts with thorium and is currently qualifying parts without it. Decommissioning would require cleaning and/or monitoring three buildings with an area of approximately 500,000 SF at an approximate cost of $580,000. Additionally, checking and, if necessary, pulling 3,689 linear feet of drain may be required for decommissioning.

7. OTHER ISSUES, CONSTRAINTS.

No other significant issues or constraints were identified.

8. REVENUE GENERATING PROGRAMS.

There are no revenue generating programs reported.

9. PROGRAMMED ENVIRONMENTAL COSTS.

a. Summary of environmental compliance costs:

	Funded	Unfunded
FY 94	$ 0	$ 320,000
FY 95	$ 0	$ 800,000
FY 96	$ 0	$1,150,000
FY 97	$ 0	$1,250,000
FY 98	$ 0	$1,250,000
FY 99	$ 0	$1,250,000
	$ 0	$6,020,000

b. Restoration costs are estimated at $175,000,000. The levels of contamination (hydrocarbon & metal contamination) are low and is only required if the facility is closed.

ACRONYMS

AICUZ	Air Installation Compatible Use Zone
ICUZ	Installation Compatible Use Zone
ITAMS	Integrated Training Area Management System
LCTA	Land Condition Trend Analysis
404 Wetlands	Regulated Wetlands

NONSTRUCTURAL ATTRIBUTES

Watervliet Arsenal -- 36990

1. LAND USE.

a. Land Availability (estimated quantities in acres).

(1)	Installation total	140
(2)	Cantonment area	29
(3)	Maneuver area	N/A
(4)	Training lands designated as sensitive/marginal by ITAMS/LCTA monitoring	N/A
(5)	Firing Ranges	N/A
(6)	Non-Impact Firing Range	N/A
(7)	Wetlands Sec 404 area	N/A
(8)	Other (Surface water areas; set aside unique areas; i.e., recreation habitat, forests; restricted use areas such as landfills, contaminated sites, safety zones.	111

b. Air Space.

(1)	Restricted Air Space.	No
(2)	Extent of Installation Compatible Use Zones (ICUZ) or Noise and Accident Potential Zone (NAPZ).	
	Zone II extends off-post	2
	Zone III extends off-post	0.5

2. THREATENED OR ENDANGERED SPECIES (PLANTS AND ANIMALS).

A threatened or endangered species (TES) survey has been conducted. Final report has not been completed. However, it was previously reported that no Federal or State listed endangered or threatened species or critical habitats are known to occur on the installation.

3. CULTURAL RESOURCES.

a. A Historic Preservation Plan has been prepared and comments have been obtained from the State Historic Preservation Officer (SHPO) and the Advisory Council for Historic Preservation (ACHP).

b. A Historic Building survey has been completed and a

total of 70 buildings have been identified as eligible for the National Register. It was previously reported that this district includes 64 buildings and 4 structures in a 113 acre area. One facility requires an estimated $100 K in renovations.

c. An archeological overview and historic structure report were prepared for Watervliet Arsenal in the early 1980s. A total of 140 acres of the installation have been surveyed and 172 potential historic archeological sites were identified on arsenal lands.

4. INFRASTRUCTURE ISSUES.

a. Potable Water.

Potable water is obtained by contract with the City of Watervliet with a total capacity of 13.0 MGD.

b. Wastewater.

Sewage treatment is provided through contract with the City of Watervliet. The design capacity is 1.90 MGD and the average usage is 0.16 MGD. The city holds a National Pollutant Discharge Elimination System (NPDES) permit.

c. Solid Wastes.

Solid waste disposal is provided by a $265,000 contract with Browning-Ferris Industries with a volume of 3.7 tons/day, at a cost of $65.00/ton.

5. AIR QUALITY.

a. Air Quality Region is the Ozone Transport region-Environmental Protection Agency (EPA); NYS DEC.

b. Region is classified as non-attainment for ozone (moderate).

c. There are 75 sources of pollution including welding machines, sand blasters, solvent cleaning, forges, and vehicles.

d. No emission credits are maintained.

e. A compliance fee was required to meet/maintain air compliance requirements.

f. The installation is within a critical air quality region. New York State is one of 10 states within the ozone

transport region which extends from Northern Virginia to Maine.

6. HAZARDOUS MATERIALS/SITES.

a. Use of hazardous materials.

Installation is not a Resource Conservation and Recovery Act (RCRA) permitted treatment, storage or disposal facility.

b. Contaminated Sites.

The installation has identified 28 Defense Environmental Restoration Account (DERA) eligible contaminated sites.

c. PCB, Asbestos, Lead Paint, or RADON issues.

A PCB survey has identified 35 PCB contaminated transformers, of which none have been replaced. Eight of the 35 were declassified to non-PCB status in 1993 via filtration technology.

d. Underground Storage Tanks (UST).

There are 24 active tanks, of which nine have been tested, with one failure. Two have been replaced/ repaired and one is scheduled for removal June 94.

e. Radioactive Materials and Sources.

Installation has Nuclear Regulatory Commission (NRC) licenses for: Source Material license research for DU companies; a Byproduct Material license for sealed sources for analyzers; and a Specific Byproduct Material license for tritium in sealed sources. A DA Authorization is also held for H-3 for calibration of gasy liquids sealed sources for analyzers-lead paint analyzer. Decommission cost will be minor and limited to clean up and survey of a 2 room laboratory and one 12 foot storage room. Contamination is limited and removable.

7. OTHER ISSUES, CONSTRAINTS.

No other significant issues or constraints are known.

8. REVENUE GENERATING PROGRAMS.

There are no revenue generating programs.

9. PROGRAMMED ENVIRONMENTAL COSTS.

a. Total environmental compliance costs for FY 94 - FY 99 are:

Funded	-	$ 90,280
Unfunded	-	$ 510,000

b. Total environmental restoration cost for FY 94 - FY 99 are:

Funded	-	$ 1,400,000
Unfunded	-	$18,600,000

ACRONYMS

AICUZ	Air Installation Compatible Use Zone
ICUZ	Installation Compatible Use Zone
ITAMS	Integrated Training Area Management System
LCTA	Land Condition Trend Analysis
404 Wetlands	Regulated Wetlands

NONSTRUCTURAL ATTRIBUTES

Anniston Army Depot -- 01012

1. LAND USE.

a. Land Availability (estimated quantities in acres).

(1)	Installation total		18,113
(2)	Cantonment area		33
(3)	Maneuver area		0
(4)	Training lands designated as sensitive/marginal by ITAMS/LCTA monitoring		2,834
(5)	Firing Ranges		1,399
(6)	Non-Impact Firing Range		0
(7)	Wetlands Sec 404 area * Study is underway.		Unknown
(8)	Other (Surface water areas; set aside unique areas; i.e., recreation habitat, forests; restricted use areas such as landfills, contaminated sites, safety zones.		15,162
	Chemical Limited Area	762	
	Agricultural Area	33	
	Surface Water	40	
	TNT Washout Facility	15	
	Forest	11,935	
	Cemetery	10	
	Improved Ground	1,744	
	Roads, parking, & open fields	623	

b. Air Space.

(1)	Restricted Air Space.	0
(2)	Extent of Installation Compatible Use Zones (ICUZ) or Noise and Accident Potential Zone (NAPZ).	0

2. THREATENED OR ENDANGERED SPECIES (PLANTS AND ANIMALS).

A threatened or endangered species (TES) survey is scheduled for completion in June 1994. However, no TES or critical habitat are known to occur on the installation.

3. CULTURAL RESOURCES.

a. A draft Historic Preservation Plan exist and has been reviewed by the State Historic Preservation Officer and the Advisory Council on Historic Preservation.

b. An historic building survey has been conducted and no structures were found potentially eligible for the Historic Register of Historic Places.

c. An archeological survey is 95% complete (14,515 acres) with an expected completion date of June 1995. No sites are eligible for the National Register.

4. INFRASTRUCTURE ISSUES.

a. Potable Water.

All of the installation's potable water is supplied from Coldwater Springs by contract with the City of Anniston. Maximum capacity is 5.7 MGD and average daily usage is 1.2 MGD.

b. Wastewater.

One National Pollutant Discharge Elimination System (NPDES) permitted wastewater treatment plant exists with a total capacity of 0.52 MGD and a average use of 0.2 MGD. The life expectancy is 20 years.

One NPDES permitted industrial wastewater treatment plant exists with a capacity of 0.25 MGD and an average use of 0.113 MGD. The life expectancy is 20 years.

c. Solid Wastes.

Solid waste disposal is provided by a $258,967 contract with BFI, Inc. The average daily volume is 4.25 tons/day at a cost of $20.00/ton. The installation has landfill in closure.

5. AIR QUALITY.

a. The air quality region is the East Alabama Interstate Air Quality Control Region.

b. The region is in attainment.

c. Air pollution sources are: coal fired boilers, paint booths, abrasive blasting, vapor decreasing, electroplating operations, open burning, and traffic.

d. The installation has no air emission credits.

e. Several projects have been identified in the A-106 Plan to meet/maintain air compliance.

f. Two critical air quality regions (Birmingham, AL - Lead, Ozone, & TSP and Gadsden, AL - TSP) are within 100 km of the installation.

6. HAZARDOUS MATERIALS/SITES.

a. Use of hazardous materials.

The installation operates under interim status Resource Conservation and Recovery Act (RCRA) permits and is in the process of obtaining four RCRA Part B permits for the storage of hazardous waste, Chemical Demil Facility, Deactivation and Reclamation Incinerator, and open burning/open detonation.

b. Contaminated Sites.

The installation has identified 44 Defense Environmental Restoration Account (DERA) eligible sites.

The installation is on the National Priority List (NPL).

c. PCB, Asbestos, Lead Paint, or RADON issues.

Seventy PCB contaminated transformers have been identified, of which four have been replaced and 23 have been disposed of/stored.

An asbestos survey is complete and all known friable asbestos has been removed. Non-friable asbestos is still present in several locations, however an annual survey is conducted on their status.

A Radon survey is complete with one housing unit mitigated.

A lead based paint survey is complete in which preliminary results indicated several contaminated housing units.

d. Regulated underground storage tanks.

The installation has 48 USTs, which are tested periodically and replaced/repaired based on test results.

e. Radiological Materials and Sources.

The installation holds eight Nuclear Regulatory Commission (NRC) and three DA licenses for radiological materials and sources for various pieces of equipment

and ammunition (i.e. Weapon sights, chemical detectors, fire control devices, gauges, laboratory instruments, Depleted Uranium (DU) rounds, etc.). It is reported that no radiological decommissioning is required, however 32 structures would require a final survey prior to release for other uses.

7. OTHER ISSUES, CONSTRAINTS.

No other significant issues or constraints are known.

8. REVENUE GENERATING PROGRAMS.

The installation reported revenue generating programs, but did not indicate what they were or what the revenue was generated in FY 92, FY 93, and FY 94.

9. PROGRAMMED ENVIRONMENTAL COSTS.

a. Summary of environmental compliance costs:

FY 94	Funded:	$ 5,466,000
FY 95 - FY 99	Unfunded	$22,143,000

b. Summary of environmental restoration costs:

FY 94	Funded:	$ 1,076,000
FY 95 - FY 99	Unfunded	$35,200,000

ACRONYMS

AICUZ	Air Installation Compatible Use Zone
ICUZ	Installation Compatible Use Zone
ITAMS	Integrated Training Area Management System
LCTA	Land Condition Trend Analysis
404 Wetlands	Regulated Wetlands

NONSTRUCTURAL ATTRIBUTES

Red River Army Depot -- 48515

1. LAND USE.

a. Land Availability (estimated quantities in acres).

(1)	Installation total	19,081
(2)	Cantonment area	0
(3)	Maneuver area	806
(4)	Training lands (designated as sensitive/marginal by ITAMS/LCTA monitoring)	0
(5)	Firing Ranges	673
(6)	Non-Impact Firing Range	0
(7)	Wetlands Sec 404 area	N/A
(8)	Other (Surface water areas; set aside unique areas; i.e., recreation habitat, forests; restricted use areas such as landfills, contaminated sites, safety zones.	17,602

b. Air Space.

(1)	Restricted Air Space.	N/A
(2)	Extent of Installation Compatible Use Zones (ICUZ) or Noise and Accident Potential Zone (NAPZ).	0

2. THREATENED OR ENDANGERED SPECIES (PLANTS AND ANIMALS).

No Federal or State listed endangered or threatened species or critical habitats are known to occur on the installation. No survey was conducted, however the U.S. Fish and Wildlife Service Regional Office was contacted and they determined that the fish and wildlife are not affected by the installation mission.

3. CULTURAL RESOURCES.

a. An archeological overview and historic structure report were prepared for Red River Depot in the early 1980's. The installation has a Historic Preservation Plan, which has not been reviewed by the State Historic Preservation Officer/Advisory Council for Historic Preservation.

b. The historic structure report did not recommend any of the Depot buildings as being historically significant.

c. Approximately 65% (9,500) of the installation's lands have been surveyed for archeological resources. Fifty-eight (58) of the archeological sites discovered by these investigations may be eligible for the National Register. It was previously reported that unsurveyed Red River lands have a high potential for possessing archeological resources.

4. INFRASTRUCTURE ISSUES.

a Potable Water.

All potable water is obtained from surface water. Design capacity of the plant is 3.0 MGD, with usage of 1.2 MGD. The plant was designed in the 1940's, but was refurbished in 1989 to include computer controlled systems.

b. Wastewater.

A wastewater treatment plant exists with a design capacity of 3.0 MGD and an average use of 0.4 MGD. A National Pollutant Discharge Elimination System (NPDES) permit exists. A dechlorination system or alternate system may be required in the future.

An industrial wastewater treatment plant exists with a design capacity of 1.25 MGD. The average use of the plant is 0.4 MGD. A NPDES permit exists.

c. Solid Wastes.

The existing 42.2 acre landfill is being closed. A new 59-acre landfill will be constructed and operated by Lone Star AAP. The new landfill's estimated usable life is 20 years. Adequate space to support future landfills exists. A contract is in existence with Western Waste Inc., New Boston,Tx. Total cost is $850,000.00 with a daily volume of 122 tons at a cost of $20.89 per ton.

5. AIR QUALITY.

a. The installation is in the Shreveport-Texarkana-Tyler 22 Air Quality Control Region.

b. The region is in attainment.

c. There are 65 air pollution sources including: boilers, paint booths, abrasive cleaning, degreasing, plating, and furnaces.

d. The installation has no air emission credits.

e. No major projects have been identified in the A-106 plan.

f. The installation in not within 100 km of a critical air quality region.

5. HAZARDOUS MATERIALS/SITES.

a. Use of hazardous materials.

The installation is a Resource Conservation and Recovery Act (RCRA) facility and has four RCRA Part B permitted 90 day storage areas and three RCRA Part B permitted hazardous waste storage buildings. The original permit application was 10 July 1989, with a renewal of 1 April 1994 and an expiration of 2 August 1998.

b. Contaminated Sites.

An assessment by the Fort Worth Corps of Engineers district office was completed in April 1992. Twenty-eight Defense Environmental Restoration Account (DERA) eligible contaminated sites were identified.

c. PCB, Asbestos, Lead Paint, or RADON issues.

A PCB survey is complete. Sixty-two of 76 identified contaminated transformers have been replaced.

d. Underground Storage Tanks (UST).

All underground storage tanks have been removed.

e. Radioactive Materials and Sources

Numerous Nuclear Regulatory Commission (NRC) licenses are held by the installation. BML 12-00722-06 for Tritium Fire Control Devices. BML 12-00722-13 used in Model M43A1 Chemical Agent Detectors, containing americium 241. BML 12-00722-14 used in Chemical Agent Monitor, contains nickel 63 source.

There are six (6) buildings with a total of 68,400 sq ft that require decommissioning. The probability of contamination is lower than in operational nuclear

facilities because the only radioactive materials stored ar RRAD are in the form of sealed source containers. When necessary 'scope surveys' will be conducted.

7. OTHER ISSUES, CONSTRAINTS.

No other significant issues or constraints are known.

8. REVENUE GENERATING PROGRAMS.

Revenue is generated from Forestry and Fish/Wildlife programs. Yearly totals are as follows.

FY92 revenue	$676,497
FY93 revenue	$1,285,522
FY94 (est)	$1,100,000

9. PROGRAMMED ENVIRONMENTAL COSTS.

a. Summary of environmental compliance costs:

	Funded	Unfunded
FY94	$2.280M	$0.349M
FY95		$2.538M
FY96		$1.200M
FY97		$1.728M
FY98		$1.200M
FY99		$1.200M
	$2.280M	$8,215M

b. Summary of environmental restoration costs:

	Funded	Unfunded
FY94	$1.361M	
FY95		$1.030M
FY96		$1.242M
FY97		$0.686M
FY98		$0.412M
FY99		$0.250M
	$1.361M	$3.620M

ACRONYMS

AICUZ	Air Installation Compatible Use Zone
ICUZ	Installation Compatible Use Zone
ITAMS	Integrated Training Area Management System
LCTA	Land Condition Trend Analysis
404 Wetlands	Regulated Wetlands

NONSTRUCTURAL ATTRIBUTES

Letterkenny Army Depot -- 42345

1. LAND USE.

a. Land Availability (estimated quantities in acres).

(1)	Installation total	19,243
(2)	Cantonment area	2,306
(3)	Maneuver area	0
(4)	Training lands designated as sensitive/marginal by ITAMS/LCTA monitoring	0
(5)	Firing Ranges	0
(6)	Non-Impact Firing Range	460
(7)	Wetlands Sec 404 area	345
(8)	Other (Surface water areas; set aside unique areas; i.e., recreation habitat, forests; restricted use areas such as landfills, contaminated sites, safety zones.	11,017
	Safety zone	4,792
	Recreation	323

b. Air Space.

(1)	Restricted Air Space.	89
(2)	Extent of Installation Compatible Use Zones (ICUZ) or Noise and Accident Potential Zone (NAPZ).	N/A

2. THREATENED OR ENDANGERED SPECIES (PLANTS AND ANIMALS).

A survey for Federal listed endangered or threatened species or critical habitats has been conducted and none are known to occur on the installation. However, the installation previously reported that two State listed species (bag turtles - State endangered and Allegheny wood rat - State threatened) are found at Letterkenny Depot.

3. CULTURAL RESOURCES.

a. There is a Historic Preservation Plan for the installation.

b. A historic building survey has been completed. Six structures are Category II sites.

c. Archeological surveys of 366 acres have found 345 potential historic archeological sites on the installation.

4. INFRASTRUCTURE ISSUES.

a. Potable Water.

Potable water is supplied from a surface source. A water treatment plant exists with 1.0 MGD capacity and an average use of 0.684 MGD. The plant was constructed in 1955, however there are no known life expectancy problems due to upgrades.

b. Wastewater.

Two National Pollutant Discharge Elimination System (NPDES) permitted sewage treatment plants exist. One with a capacity of 0.5 MGD and a current average flow of 0.08 MGD. The second plant has a capacity of 0.01 MGD. Current flow is described as a trickle.

An NPDES permitted industrial wastewater treatment plant exists with a capacity of 0.288 MGD and an average flow of 0.145 MGD.

c. Solid Wastes.

All solid waste is transported off-post. Ninety-six percent is transported to a local landfill under a $250,000 contract and 4% is contracted through the DRMO. Average daily volume is 12 tons/day at a cost of $92.00/ton and there is no limit to contract quantity.

5. AIR QUALITY.

a. The installation is in the Franklin County, Pennsylvania Air Quality Region.

b. The region is in non-attainment for ozone.

c. Air pollution sources are: paint booths, boilers, vapor degreasers, blast booths, chrome plating line, flame spray metallizing booth, open burning/open detonation of munitions, and open burning of wood dunnage.

d. The installation has no air emission credits.

e. Expenditures have been for the installation of VOC emission control devices (ECD) to meet/maintain air compliance. The ECD is scheduled to be on-line in June 1994.

f. The installation is in a critical air quality region.

6. HAZARDOUS MATERIALS/SITES.

a. Use of hazardous materials.

The installation is in the process of pursuing a Resource Conservation and Recovery Act (RCRA) Part B permit for drum/container storage and operation of a deactivation furnace. The permit is currently being reviewed by the state regulatory agency. Issuance is expected in FY 94. The installation has a RCRA Part A, Interim Status permit which allows greater than 90 day storage for hazardous waste drums until the Part B is approved.

b. Contaminated Sites.

The installation has 66 Defense Environmental Restoration Account (DERA) eligible sites (including 46 within SE area, 11 within PDO area, & 9 within ammunition area).

The installation is on the National Priority List (NPL). The Southeastern Area (SE) composed of the Southeast Industrial Area and the Disposal Area is used for maintenance of tracked vehicles and missiles. The Property Disposal Area (PDO) contains the former PDO and current DRMO. The SE area was placed on the NPL in 1987 with a HRS score 34.21 and the PDO was placed on the NPL in 1989 with a HRS score of 37.51.

c. PCB, Asbestos, Lead Paint, or RADON issues.

Sixty-two out of ninety-two contaminated transformers have been replaced. Active PCB management program ongoing.

d. Underground Storage Tanks (UST).

All Thirty-four regulated tanks have been tested. Three USTs were replaced.

e. Radioactive Materials and Sources

Nuclear Regulatory Commission (NRC) or DA licenses are held for tritium used in optical sights, depleted uranium (DU) storage, and isotopes for calibrating and testing equipment. Eight buildings will require survey and cleaning for decommissioning at a cost of $100,000. Thirty-five igloos with DU munitions will require survey to comply with NRC licensing at a cost of $50,000.

7. OTHER ISSUES, CONSTRAINTS.

No other significant issues or constraints are known.

8. REVENUE GENERATING PROGRAMS.

Revenue generating programs consists of agricultural outleasing, forestry, and wildlife. Revenues are as follows: FY 92 - $65,400, FY 93 - $64,300, & FY 94 - $72,320.

9. PROGRAMMED ENVIRONMENTAL COSTS.

a. Summary of environmental compliance cost are:

	Funded	Unfunded
FY 94	$5,029,000	$ 0
FY 95	$ 0	$8,750,000
FY 96	$ 0	$9,450,000
FY 97	$ 0	$7,991,000
FY 98	$ 0	$7,080,000
FY 99	$ 0	$6,246,000
	$5,029,000	$39,517,000

b. Summary of environmental restoration cost are:

	Funded	Unfunded
FY 94	$16,780,000	$
FY 95	$ 0	$
FY 96	$ 0	$
FY 97	$ 0	$
FY 98	$ 0	$
FY 99	$ 0	$
	$16,780,000	$71,120,000

ACRONYMS

AICUZ	Air Installation Compatible Use Zone
ICUZ	Installation Compatible Use Zone
ITAMS	Integrated Training Area Management System
LCTA	Land Condition Trend Analysis
404 Wetlands	Regulated Wetlands

NONSTRUCTURAL ATTRIBUTES

Tobyhanna Army Depot -- 42780

1. LAND USE.

a. Land Availability (estimated quantities in acres).

(1)	Installation total	1,345
(2)	Cantonment area	103
(3)	Maneuver area	0
(4)	Training lands designated as sensitive/marginal by ITAMS/LCTA monitoring	0
(5)	Firing Ranges	104
(6)	Non-Impact Firing Range	652
(7)	Wetlands Sec 404 area	202
(8)	Other (Surface water areas; set aside unique areas; i.e., recreation habitat, forests; restricted use areas such as landfills, contaminated sites, safety zones.	936

b. Air Space.

(1)	Restricted Air Space.	0
(2)	Extent of Installation Compatible Use Zones (ICUZ) or Noise and Accident Potential Zone (NAPZ).	0

2. THREATENED OR ENDANGERED SPECIES (PLANTS AND ANIMALS).

A TES survey has been conducted by the Nature Conservancy. The report titled "An Inventory of Significant Plant and Animal Species and Natural communities of the Tobyhanna Army Depot, Tobyhanna, Pennsylvania, February, 1994." No Federal or State listed endangered or threatened species or critical habitats are reported to occur on the installation.

3. CULTURAL RESOURCES.

a. The Installation does not have a Historic Preservation or Cultural Resources Management Plan.

b. A historic buildings survey has been conducted. The historic structure report did not recommend any buildings as being historically significant.

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c. An archeological survey of the installation has not been made. An "Archeological Overview and Management Plan" was completed in May 1984. Further study along wetlands and streams was recommended. Legacy Program Funding of $25 K to complete survey is scheduled for the later part of FY 1994.

4. INFRASTRUCTURE ISSUES.

a. Potable Water.

One hundred percent of installation water comes from six wells. The total pumping capacity is 0.94 MGD and the average daily use is 0.338 MGD. Drawdown rate is 58 feet.

Industrial water supply is also taken from the six wells and the average use is included in the above rates.

b. Wastewater.

A sewage treatment plant exists with a design capacity of 0.802 MGD and an average use of 0.128 MGD. The life expectancy is anticipated through the year 2055. A National Pollutant Discharge Elimination System (NPDES) permit exists.

There is also a sulfide pretreatment plant with a design capacity of 0.058 MGD and an average use of 0.014 MGD. Life expectancy is until 2018. Facilities have a NPDES permit.

c. Solid Wastes.

Installation reports there are no landfills in operation. A contract exists to dispose of solid wastes, with Waste Management of Scranton, at an annual cost of $375,000. The average daily volume is 8.2 tons at a cost of $58.22 per ton.

5. AIR QUALITY.

a. The installation is in the Wilkes-Barre/Scranton, Pennsylvania Air Basin, Pennsylvania Department of Environmental Resources, Bureau of Air Quality.

b. Air quality in the region is in non attainment for ozone (marginal).

c. Air pollution sources are: surface coating booths, combustion units, media blast booths, welding shop, UST/AST, and other minor sources.

d. The installation has no air emission credits.

e. The depot completed an air emission inventory in FY 93 and will complete an air sampling contract in FY 94. There are no further projects required. The depot is meeting its VOC limitations (ozone) by using compliance surface coatings rather than resorting to expensive air pollution control equipment.

f. The depot is in a non-attainment air basin for ozone and lies within the Ozone Transit Corridor. However, the depot is more than 100 kilometers from any reportable regions.

6. HAZARDOUS MATERIALS/SITES.

a. Use of hazardous materials.

The depot is a Resource Conservation and Recovery Act (RCRA) storage facility. One RCRA permitted storage facility exists for one year storage of hazardous wastes. The depot is applying for a RCRA Part B storage permit modification.

b. Contaminated Sites.

An assessment has been performed by the Army Environmental Center (AEC). Sixty-five Defense Environmental Restoration Account (DERA) sites are listed under the Federal Facility Agreement. This number includes two National Priority List (NPL) sites which are designated as one Operable Unit A & B. Fifty-four of the DERA sites require no further action.

The installation is on the National Priority List (NPL).

c. PCB, Asbestos, Lead Paint, or RADON issues.

PCB survey has been completed. Eight of nine identified transformers have already been replaced.

d. Underground Storage Tanks (UST).

There are 47 regulated tanks, 37 have been tested and two failed. To date, 15 have been repaired or replaced.

e. Radioactive Materials and Sources.

The installation does not hold a Nuclear Regulatory Commission (NRC) license for radioactive materials. The depot has seven areas consisting of 81,900 square

feet of space which must be surveyed and closed to the extent necessary. Also, the Depot has a landfill contamination with radioactive material.

7. OTHER ISSUES, CONSTRAINTS.

No other significant issues or constraints are known.

8. REVENUE GENERATING PROGRAMS.

There are no revenue generating programs.

9. PROGRAMMED ENVIRONMENTAL COSTS.

a. Total funded compliance requirements ($000). Unfunded costs not provided.

	Funded
FY 94	$2,208
FY 95	$2,236
FY 96	$2,180
FY 97	$2,231
FY 98	$2,309
FY 99	$2,313
	$13,477

b. Total funded environmental restoration costs ($000). Unfunded costs not provided.

	Funded
FY 94	$1,870
FY 95	$5,555
FY 96	$2,065
FY 97	$2,065
FY 98	$2,095
FY 99	$1,395
	$15,045

ACRONYMS

AICUZ	Air Installation Compatible Use Zone
ICUZ	Installation Compatible Use Zone
ITAMS	Integrated Training Area Management System
LCTA	Land Condition Trend Analysis
404 Wetlands	Regulated Wetlands