

RCRA PART B PERMIT APPLICATION
FOR
THE HAZARDOUS WASTE STORAGE FACILITY
(BUILDING 1365)

TRAVIS AIR FORCE BASE

Prepared for:

Travis Air Force Base
60 CES/CEVC
411 Airmen Drive (B570)
Travis AFB, California 94535-2001

October 2005

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Acronyms and Abbreviations

°F	degrees Fahrenheit
AF	Air Force
AFB	Air Force Base
AFI	Air Force Instruction
AMW	Air Mobility Wing
AOC	area of concern
AST	aboveground storage tank
ASTM	American Society of Testing Materials
Btus/lb	British thermal units per pound
CAMU	Corrective Action Management Unit
CCR	California Code of Regulations
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
CES/CEV	Civil Engineer Squadron, Environmental Flight
CFR	Code of Federal Regulations
CPR	cardiopulmonary resuscitation
CRT	cathode ray tube
DoD	U.S. Department of Defense
DOT	U.S. Department of Transportation
DRMO	Defense Reutilization and Marketing Office
DTSC	California Department of Toxic Substances Control
EPCRA	Emergency Planning and Community Right-to-Know Act
ERP	Environmental Restoration Program
FEMA	Federal Emergency Management Agency
FFA	Federal Facility Agreement
gpm	gallons per minute
HAZCOM	hazard communication
HAZWOPER	hazardous waste operations and emergency response
HWAP	hazardous waste accumulation point
HWMP	hazardous waste management plan
HWPS	hazardous waste profile sheet
ICP	Integrated Contingency Plan
ID	identification
in	inch
IRP	Installation Restoration Program
LRS	Logistics Readiness Squadron

Acronyms and Abbreviations (Continued)

MSG	Mission Support Group
msl	mean sea level
MXG	Maintenance Group
NAICS	North American Industrial Classification System
NEWIOU	North, East, and West Industrial Operable Unit
NFPA	National Fire Protection Association
NPDES	National Pollutant Discharge Elimination System
NPL	U.S. EPA's National Priorities List
OPLAN	operations plan
OSC	on-scene commander
OSHA	Occupational Safety and Health Administration
OWS	oil/water separator
PCB	polychlorinated biphenyl
psig	pounds per square inch gauge
QA/QC	quality assurance/quality control
RCRA	Resource Conservation and Recovery Act
RWQCB	Regional Water Quality Control Board
SAP	satellite accumulation point
SARA	Superfund Amendments and Reauthorization Act
SOP	standard operating procedure
SPR Plan	spill prevention and response plan
SWPPP	stormwater pollution prevention plan
TCE	trichloroethene
TPH	total petroleum hydrocarbons
TSDF	treatment, storage, and disposal facility
U.S. EPA	United States Environmental Protection Agency
UL	Underwriter's Laboratory
USGS	United States Geological Survey
VOC	volatile organic compound

1.0 Introduction

The California Environmental Protection Agency (Cal/EPA), Department of Toxic Substances Control (DTSC) issued a hazardous waste facility permit, identification number CA5570024575, to Travis Air Force Base (AFB) on April 4, 1993 (revised February 16, 1995) for the base's hazardous waste Storage Facility (Building 1365). In accordance with the requirements of 40 Code of Federal Regulations (CFR) 270.13 and 270.14, Title 22, California Code of Regulations (CCR) Parts 66270.13 – 66270.23, and other federal and state regulations, as appropriate, Travis AFB must submit a Part A and Part B permit application to the California DTSC to renew this permit. This application contains the information to support renewal of that permit.

1.1 General Facility Information

General information on the Storage Facility is provided in Table 1-1.

Table 1-1. General Facility Information

Facility name	Travis AFB Storage Facility
U.S. EPA facility ID number	CA5570024575
Facility Owner	United States Air Force/Federal Government 60 AMW/CC Travis AFB, CA 94535-2176
Facility Operator	United States Government 60 CES/CEV 411 Airmen Drive (B570) Travis AFB, CA 94535-2001
Mailing Address of Primary Contact	Mr. Dave Musselwhite 60 CES/CEVC 411 Airmen Drive (B570) Travis AFB, CA 94535-2001 707-424-7516
Standard Industrial Code that Represents the Principal Products and Services Provided	9711
North American Industry Classification System (NAICS) Code for the Site	928110

1.2 Topographic Map Content

An area topographic map is included as Figure 1-1. This map shows geographic features up to 2,000 feet beyond the Storage Facility boundaries and meets the requirements of 22 CCR 66270.14 (b)(18).

There are no known water springs, injection wells, municipal wells, or drinking water wells in the area of the Storage Facility. The Sacramento Aqueduct, however, is within a one-mile radius of the Storage Facility. The locations of groundwater monitoring and extraction wells at the site are on the map and described in Section 2.0.

1.3 Native American Reference

The facility is not located on Native American lands.

1.4 Facility Contact

The facility contact and preparer of this permit application is Mr. Dave Musselwhite, Chief of Environmental Compliance for Travis AFB. URS has provided technical and administrative support in preparation of this application. Mr. Musselwhite's address and phone number are provided in Table 1-1.

1.5 Treatment Processes

Treatment processes are not associated with this Storage Facility.

1.6 Hazardous Waste Summary

A list of 40 CFR and California hazardous wastes and estimated annual amounts managed at Travis AFB is provided in Section 3.0 of this application.

Figure 1-1 (2 pages)

Plate

Figure 1-1 (Page 2 of 2)

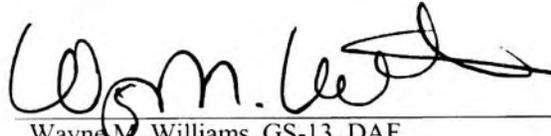
1.7 Construction Permits

Since the Storage Facility began operating at its current location, major construction activities have included increasing the size of Building 1365, extending the fire suppression system into new areas, and installing containment curbs and ramps. In addition the tank farm and waste transfer area were added in 1992 and 1995, respectively. Regular maintenance activities (e.g., floor sealing) also occur at the facility. Because the building is located on a military base, the construction activities mentioned above did not require permits.

1.8 Certification

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to ensure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those directly responsible for gathering the information, the information is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Signature:



Wayne M. Williams, GS-13, DAF
Chief Environmental Flight

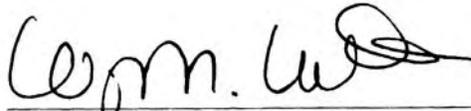
Date Signed:

26 OCT 05

1.9 Waste Minimization Certification

I hereby certify under penalty of law that personnel under my direction and supervision at this facility are undertaking specific steps in accordance with a program in place to minimize the amount and toxicity of hazardous wastes generated at this facility to a degree economically practicable and that the method utilized for the treatment, storage, or disposal of hazardous wastes is the practicable method currently available to this facility which minimizes the present and future threat to human health and the environment. I am aware that there are significant penalties for false certification, including the possibility of fine and imprisonment for flagrant falsifications.

Signature:



Wayne M. Williams, GS-13, DAF
Chief Environmental Flight

Date Signed:

26 OCT 05

This certification is repeated annually. Copies of the certification are part of the operating record.

2.0 Site Description

This section provides general information about Travis AFB, such as location, property boundaries, topography, geology, land use, and traffic.

2.1 General Site Location and Operating History

Travis AFB, the busiest military air terminal in the United States, is located in northern California. Situated approximately 50 miles northeast of San Francisco and 40 miles southwest of Sacramento, the base is within the eastern city limits of Fairfield in Solano County (see Figure 2-1). The installation covers 5,228 acres in a predominantly agricultural area located on a relatively level floor of the western edge of the Sacramento Valley, between the Coastal and Sierra Nevada Mountains.

The host unit at Travis AFB is the 60th Air Mobility Wing (60 AMW). The mission of the 60 AMW is to provide high-quality services and support for America's Global Reach through a responsive and flexible combat-ready air mobility force. As the largest airlift organization in the Air Force, the 60 AMW operates a cargo fleet of C-5 Galaxy and KC-10 Extender aircraft. The 60 AMW is responsible for implementing the command mission of strategic airlift, providing rapid and reliable airlift to any point in the world in support of national objectives. The Wing also fulfills the global logistics needs of the U.S. Department of Defense (DoD). Today, Travis AFB personnel include approximately 14,500 active duty officers, enlisted personnel, civilians, and reservists.

The 60 AMW is responsible for implementing the mission of strategic airlift through its subordinate organizations. The 60th Operations Group conducts flight operations, as well as air traffic control, and manages the air transportation of both cargo and personnel. The 60th Mission Support Group (MSG) is responsible for facility security, maintenance, transportation, and contracting, as well as personnel issues. A large civil engineering force performs maintenance and upkeep of facilities required to support a large base population. The 60th Maintenance Group (60 MXG) operates a large aircraft maintenance complex, including the

Figure 2-1

8.5 x 11 B&W

flight line. The 60th Medical Group operates David Grant Medical Center, the Air Force's second largest health care facility.

2.2 Storage Facility Operations

Travis AFB has developed a management program to monitor the storage, use, and disposal of hazardous waste. The hazardous and potentially hazardous waste streams generated at Travis AFB consist primarily of waste petroleum products, spent solvents, and various chemicals. Wastes are typically accumulated in 55-gallon drums at satellite accumulation points (SAPs) or at daily empty sites. Wastes from SAPs are characterized before transport to the Storage Facility, and are stored at the Storage Facility prior to disposal off site. Waste from the daily empty sites is first transported to a 90-day hazardous waste accumulation point (HWAP), then to the Storage Facility. Occasionally, non-regulated, non-hazardous wastes are also stored at the Storage Facility.

The Storage Facility consists of a drum storage building, Building 1365, and a tank farm east of the building. The tank farm contains six aboveground storage tanks (ASTs) for storage of used oil or used fuel. A small office building, Building 1366, is also located within the fencing that surrounds the facility. Detailed information on the operation of the Storage Facility is provided in Section 6.0.

2.3 Waste Treatment Units

Hazardous waste is not treated at the Storage Facility; however, waste generated from silver recovery operations at three buildings is transported to the Storage Facility. Silver recovery takes place in medical and dental x-ray laboratories in Buildings 775 and 777 and from non-destructive inspection x-ray processes conducted in Building 803. Hazardous waste sludge and fixer generated in x-ray operations are properly containerized and labeled at the point of generation, then transported to the Storage Facility.

Oil/water separators (OWSs) were included as hazardous waste treatment activities in the prior Part B permit. However, since that time, it has been determined that the influent to the OWSs is not a hazardous waste. Therefore, the OWSs are not treating a hazardous waste and thus are not included as a hazardous waste treatment area. In addition,

when the OWSs are serviced, trucks pump liquid and/or solids from the OWSs and transport the waste directly off site. Waste from the OWSs does not pass through the on-base Storage Facility.

Travis AFB also has two tiered permits (Conditionally Exempt Specified Waste Stream) issued by the Solano County Environmental Management Department for treating hazardous waste resin by curing. Subsequent to curing, the resultant resin is no longer a hazardous waste. This waste is disposed of as a non-hazardous solid waste and is not transported to the Storage Facility.

2.4 Aerial Photograph

Figures 2-2 and 2-3 are aerial photographs of the northeast portion of Travis AFB. The Storage Facility is identified in the northeast corner of the base boundary shown on Figure 2-2. The areas around the Storage Facility are as follows:

- **North:** This area is undeveloped and has numerous vernal pools.
- **East:** This area is undeveloped and has numerous vernal pools. The Travis AFB runway is located further to the east. The area southeast of the Storage Facility is observed to have disturbed/graded soil and a small building. Further to the southeast is another area of disturbed soil near the base boundary.
- **South:** The access road, undeveloped land, and surface water are present to the south. Further south is Collins Drive, beyond which are Travis AFB buildings and associated parking areas.
- **West:** Undeveloped land is situated west of the Storage Facility, beyond which is Collins Drive. A small building is located further to the west, on the east side of Collins Drive.

Based on the information in the aerial photographs, the Storage Facility is in a fairly remote area at least 1,000 feet from on-base residential areas and at least 800 feet from other active industrial areas.

2.5 Legal Property Boundaries and Parcel Numbers

The legal boundaries of Travis AFB are shown on the facility map (Figure 2-4). The written legal description of these boundaries is included as Attachment A to this permit application.

Figure 2-2

8.5 x 11 B&W

Figure 2-3

8.5 x 11 B&W

Figure 2-4 (2 pages)

Plate

Figure 2-4 (Page 2 of 2)

2.6 Topography

Travis AFB is situated on a nearly flat alluvial plain that is flanked to the north and west by low dissected hills and hillocks. Regional topography ascends to over 1,300 feet above mean sea level (msl) in the Coast Ranges to the north and west. Elevation is near sea level in the marshes to the south.

The topographical map, showing the area within 1 mile of the Storage Facility presents the detailed layout at and around the Storage Facility (Figure 1-1). Additional information regarding the location of the Storage Facility follows.

Latitude	38° 16' 38" N (NAD 27)
Longitude	121° 55' 07" W (NAD 27)
Elevation	Between 60 and 70 feet above mean sea level
Township	5 North
Range	1 West
Section	13 (southeast quarter)
Principal meridian	Mt. Diablo

NAD = North American datum

2.7 Surrounding Land Uses

The primary land use in the area surrounding the base is agricultural, with irrigated cropland located directly northeast of the base. Solano County sustains a growing industrial base, with manufacturing providing an expanding sector of the local economy. A few commercial service/light industrial areas are located near Travis AFB on the northern perimeter along Peabody and Vanden Roads, and to the southeast in the Lambie Road Industrial Park near Highway 12.

Suisun Marsh is situated south and southwest of the base (south of Highway 12). This is an 85,000-acre tidal marsh containing wildlife habitats of national importance. Joyce Island State Game Refuge is located within Suisun Marsh. The marsh is protected under the State Suisun Marsh Protection Act of 1977, which requires affected local governments to bring policies and regulations into conformity with the Act. The other important marsh area in Solano County is Napa Marsh, which is a 6,300-acre area containing bird habitats and wetlands. Solano County also has important wetlands and riparian areas along a number of its waterways, including Putah Creek, Ulatis Creek, the Sacramento River and Delta, Miner

Slough, Prospect Slough, Lindsey-Hass-Barker Slough, and the French Island Area. Residential development in recent years in Solano County has been confined primarily to the urban areas, and most future residential development will continue to occur within the cities that are best equipped to accommodate and service this development. The County's long-term plan is to maintain essential agricultural lands while developing a more diversified economic base.

Wetlands are located within 100 feet of the Storage Facility to the north, east, and south. Many of these wetlands have been identified as vernal ponds and were created by the differential subsidence of a former landfill. As part of the remedial activities associated with this landfill, the ponds will be destroyed, the landfill re-compacted, and a new cap placed on the landfill to retard surface water accumulation and water infiltration through the landfill. Mitigation efforts will also be included as part of the remediation effort.

2.8 Geology and Hydrogeology of the Site

Travis AFB is located in the Suisun-Fairfield Basin along the western edge of the Sacramento Valley section of the Great Valley physiographic province. The Suisun-Fairfield Basin is bordered to the north and the west by the foothills of the Coast Ranges, to the east by the Sacramento Valley, and to the south by the Suisun Marsh (a part of the San Francisco Bay estuary system). The tidal marsh drainage joins the flow from the Sacramento and San Joaquin Rivers through the Suisun Bay and Carquinez Strait for eventual discharge to the Pacific Ocean via San Francisco Bay. The Suisun-Fairfield Basin is characterized by moderately sloping hills to the north, stretching into an alluvial plain with a gradational contact southward to Suisun Marsh.

Native soils at Travis AFB consist primarily of silt and clay loams, including Antioch, San Ysedro, Millsap, Solano, and Dibble-Los Osos soils. In general, the silt and clay soils contain minor amounts of sand and exhibit low permeabilities, poor drainage characteristics, and low water tables.

2.8.1 Locations of Holocene Faults

There is evidence of some seismic activity in the vicinity of Travis AFB in Holocene time. However, no faults exist within 3,000 feet of the facility.

Travis AFB straddles the axis of a southeast-plunging asymmetric anticline that extends from the town of Cannon (approximately 2 miles north of the base) to Denverton to the south. The axis of the anticline is a fault that strikes approximately N35W, known as the Vaca-Kirby Hills Fault. To the north, the axis is delineated by the drainage path of Union Creek as it crosses the base.

The Vaca-Kirby Hills Fault, a part of the active San Andreas system, has been mapped as passing through Travis AFB, entering on the north in the vicinity of North Gate Park, more commonly known as the Duck Pond Park. The Vaca-Kirby Hills Fault is considered active, and the maximum probable earthquake (an earthquake of maximum magnitude occurring within 100 years) within 10 miles of Travis AFB is estimated as 6 on the Richter Scale. Nearby earthquakes in 1892, 1928, and 1965 have been attributed to the Vaca-Kirby Hills Fault.

The location and nature of faults at Travis AFB could have a significant influence on base hydrogeology. Fault zones can act either as barriers to groundwater flow or as groundwater conduits, depending on the nature of the material in the fault zone. If the fault zone consists of finely ground rock and clay (gouge), the material may have a very low hydraulic conductivity and act as a barrier to groundwater flow. In consolidated rock, faults can often act as groundwater conduits, because broken and brecciated rock in the fault zone may have a high porosity and permeability. Basewide groundwater flow maps do not suggest groundwater flow patterns that are readily attributable to influence from faults.

2.8.2 Groundwater in the Vicinity of the Facility

Travis AFB lies along the northeastern margin of the Suisun-Fairfield Basin, straddling the Vaca-Kirby Hills Fault. In this area of the basin, folded and upturned tertiary marine strata are covered by a veneer of Pleistocene and Recent alluvium, often cropping out at the surface (typical of the Travis AFB landscape). Given their fine-grained, consolidated nature, tertiary marine strata have very low permeabilities and are not considered useful for groundwater supply. Groundwater use in this area is restricted almost entirely to domestic activities, stock watering, and irrigation.

The alluvial cover in the Travis AFB vicinity is generally less than 50 feet thick. To the west, the alluvium thickens to more than 200 feet and provides groundwater supplies to

the Fairfield community. The Sonoma Volcanics, consisting of volcanic flow rocks, tuffs, and pyroclastics, are present on the western side of the Suisun-Fairfield Basin. The fractured flow rocks and porous tuffs of this formation also yield good-quality groundwater. The porosity and permeability of these deposits are sometimes fairly high, with pumping rates exceeding 500 gallons per minute (gpm) for some wells in the area. The average pumping rate, however, is 200 gpm.

Groundwater flow across the Suisun-Fairfield Basin is southeast or south from the Vaca Mountain into the northwestern part of the basin from the valleys of Green, Suisun, Gordon, and Ledge wood Creeks. Groundwater flow in the area from Fairfield to a point near the western limit of Travis AFB is primarily to the south, with possible southeasterly flow from the Laurel Creek Valley located to the north. In the area now covered by Travis AFB, groundwater flow was inferred to be primarily to the south or southeast, with possible southwesterly flow across the area southwest of the base. Data compiled during the Installation Restoration Program (IRP) Stage 1 Study at Travis AFB indicated that the pattern has not changed significantly. Groundwater flow across the various Stage 1 sites studied on the base commonly flowed southeast or south, with a few instances of local southwesterly flow.

2.8.3 Well Locations, Surface Water Flows, and Drainage

Recharge to the groundwater occurs through direct precipitation and locally through infiltration from Union and Denver ton Creeks. However, groundwater resources at Travis AFB and in its immediate surroundings are very limited. Given these limitations, the water supply for Travis AFB is purchased from the City of Vallejo Water Department (surface water diverted from the Delta via Cache Slough and treated at a Vallejo treatment plant north of the base). Water from off-site production wells owned and operated by Travis AFB, located at the golf course annex approximately 4 miles north of the base, is used to supplement the City-supplied water.

The locations of known surface water bodies on site or within 2,000 feet of the facility are shown on the regional USGS topographic map, Figure 1-1.

Natural surface drainage in the Fairfield-Travis AFB area is generally southward toward Denver ton, Hill, and Suisun Sloughs. These patterns have been substantially altered in

the area of Travis AFB by runway construction, installation of storm drains and perimeter ditches, and general development including industrial shops, maintenance yards, roads, and housing.

Surface drainage at the base is collected and conveyed to Hill Slough via Union Creek and to Denverton Slough via Denverton Creek. The surface runoff from the base is collected by eight independent drainage systems. One system drains the northeastern portion of the base and discharges to Denverton Creek. The other seven systems drain the central and southern portions of the base through a network of surface drainage ditches and storm sewers. These systems discharge to Union Creek on the southern portion of the base.

Union Creek enters Travis AFB as two branches north of the base. The main branch enters the base from the north and is impounded shortly after to form Duck Pond, a recreational pond. The creek is then routed through base storm sewers until it again forms a creek along the southeastern installation boundary. The other branch is routed westward as an open ditch along the western base boundary and then through the southwestern segment of the base. The drainage is then routed under the runway through a storm sewer and recombines with the main channel of Union Creek approximately 1,000 feet upstream of the base boundary.

Flow in Union Creek is heavily influenced by the amount of impervious surfaces (e.g., runways and open areas), which increases surface runoff at the base. The water level within Union Creek has been observed to rise rapidly during a rain event.

At the Storage Facility, precipitation either infiltrates site soils where exposed, or it runs off roofs and paved, uncontained areas into unlined ditches that surround the building and the tanks. This runoff is channeled through unlined ditches and combines with runoff from other areas until it reaches an inlet to the storm sewer pipeline system while still on the base. After traveling through the base's storm sewer pipeline system, the runoff is discharged and ultimately ends up in Union Creek.

At the tank containment and the tank farm waste transfer areas, precipitation collects within the bermed and ramped areas until a drainage valve is manually opened to allow uncontaminated rainwater to flow to the unlined ditches. The facility staff follow the

drainage procedure to ensure that the collected water does not contain contaminants prior to opening the valves to release the captured water.

2.9 Relationship of the Facility to the 100-Year Flood Plain

Travis AFB is within a federal property, and Federal Emergency Management Agency (FEMA) floodplain maps do not extend to inside the base. In addition, Travis AFB has not officially mapped areas within the base to identify whether there is a 100-year floodplain on base. A compliance schedule to complete a floodplain assessment for the Storage Facility is included in Attachment B.

2.10 Water Intake and Discharges

Water is supplied to Travis AFB from the City of Vallejo and groundwater wells located outside the base boundary. The Storage Facility and the tank farm do not have water supplied to them, with the exception of water for fire suppression systems. The office building, Building 1366, has water supplied to it for use in the lavatory.

Wastewater from Travis AFB is transported to an off-base wastewater treatment plant for treatment prior to discharge. The Storage Facility, tank farm, and office building do not contain drains to the on-base wastewater system. Instead, only the office building lavatory discharges to an on-site septic system.

Groundwater monitoring wells associated with remedial investigations and monitoring of a former landfill are located within the fenced area of the Storage Facility. These wells are properly sealed and extend approximately 2 feet above the surface. Therefore, surface water is not expected to enter these wells. No injection wells are located on or near the Storage Facility.

2.11 Traffic

Primary access to Travis AFB is provided by Air Base Parkway through the Main Gate, except during construction modifications at the Main Gate when the David Grant Medical Center gate will provide primary access. A secondary gate located off Air Base Parkway at Parker Road provides direct access to the David Grant Medical Center. Other secondary gates

include the North Gate on Burgan Boulevard, the South Gate at Ragsdale Street, and the Forbes Gate. The North Gate provides access to the family and unaccompanied housing areas, the Forbes Gate slows access to off-base schools, and the South Gate provides access to the aerial port. The South Gate is the base's primary commercial delivery gate.

Travis Avenue and Hickam Avenue serve as the principal arterials on base. After entering the Main Gate at Air Base Parkway, Travis Avenue extends to Burgan Boulevard. Hickam Avenue parallels Travis Avenue and extends from the David Grant Medical Center to Burgan Boulevard. A third east-west roadway, Hangar Road, provides access to aircraft maintenance and operations functions on the Travis AFB flight line.

The two main north-south roadways on base, Ragsdale Street and Burgan Boulevard, are collector roadways that distribute traffic from the arterial roadways and from the North and South Gates. Cannon Drive, along with Broadway Street and First Street, are also collectors, providing access to the family housing areas on the north side of the base.

Traffic for hazardous waste operations consists of on-site government vehicles and on-site and off-site contractor vehicles. On a typical workday, six vehicles enter the secured compound at Building 1365 for delivery or pick-up of hazardous waste.

All vehicles that remove hazardous waste from Travis AFB are contractor vehicles consisting of tank trucks (tank waste removal) and trucks with flatbed or box trailers (drum, asbestos, and transformer removal). Waste is normally transferred to the contractor's vehicle through vacuum/pump hoses that are contractor supplied and operated, or by loading drums on trailers by forklift.

The routes from the four base entry ports to Building 1365 and the tanks are as follows:

- From Air Base Parkway through Main Gate, Air Base Parkway becomes Travis Avenue, then left on Burgan Boulevard, and right on Collins Drive.
Alternate Route: From Air Base Parkway through Main Gate, becomes Travis Avenue, right on Challenger Lane, left on "E" Street, right on Vanderberg Drive, straight to Collins Drive, take right onto Collins Drive.
- From Air Base Parkway right on Parker Road through David Grant Medical Center Gate, left on Hickam Avenue, left on Burgan Boulevard, and right on Collins Drive.

- From Scandia Road through South Gate, Scandia Road becomes Ragsdale Street, right on Travis Avenue, left on Burgan Boulevard, and right on Collins Drive.
- From North Gate Road through North Gate, left on Collins Drive.

These routes to the Storage Facility are highlighted in the map contained in Attachment C. All paved roads and streets on Travis AFB are capable of supporting all vehicles of maximum legal weight. The four access roads to Travis AFB have an asphalt concrete surface with 20,000 pounds/axle load-bearing capacity.

2.12 Weather Monitoring Station

Travis AFB operates a weather station as part of its flight operations. Climate data indicate that the prevailing wind direction is from the southwest and west-southwest, except during the winter when the prevailing wind direction is from the north and north-northeast. Attachment D contains the current wind roses (one for each quarter) showing the prevailing wind speeds and directions at the site.

Annual mean temperatures on base range from a low of 46 degrees Fahrenheit (°F) in December and January to a high of 72°F in July and August. Annual mean precipitation ranges from a high of 5 inches in January to a low of 0.1 inch in July. A chart showing the mean temperatures and precipitation is included in Attachment D.

2.13 Fire Control System

A water supply system exists at the Storage Facility to provide sufficient water volume and pressure for fire fighting equipment. Fire hydrants are strategically located at both ends of Building 1365 and just outside the entry gate to the facility.

A wet pipe automatic fire suppression system has been installed throughout Building 1365 in the bay and apron areas. No sprinkler heads were installed in the areas storing reactive wastes. Hand-held dry chemical fire extinguishers (20-pound canisters) are also located near the hazardous waste storage bays.

2.14 Security and Access Control

Perimeter security at Travis AFB consists of a 6-foot-high chain-link fence with three strands of barbed wire on top. Normal access to the base is restricted to four gates (see Section 2.11) manned by security forces. Security and Storage Facility access are discussed in Section 5.0.

3.0 Hazardous Waste Characteristics

The types of hazardous waste, as defined in 40 CFR 261, stored at the Storage Facility are listed in the Part A permit application. This section describes the waste-generating processes and the physical and chemical properties of the wastes.

3.1 General Description

Travis AFB is classified as a large-quantity generator of hazardous waste under both Resource Conservation and Recovery Act (RCRA) and California regulations because the base typically generates more than 1,000 kilograms of hazardous waste in a calendar month. Travis AFB is also classified as a small-quantity handler of universal waste because it does not accumulate more than 5,000 kilograms of universal waste at any one time.

3.1.1 Waste Generation

Hazardous wastes (as identified under RCRA and/or California regulations) generated at Travis AFB include flammable solvents, contaminated fuels and lubricants, stripping chemicals, waste petroleum products, waste paint, absorbent materials, spilled and outdated materials, and asbestos. Universal wastes generated at Travis AFB include spent batteries, lamps, mercury-containing thermometers, and cathode ray tubes (CRTs).

Four types of activities generate the majority of RCRA- and California-regulated waste at Travis AFB: (1) aircraft maintenance, (2) vehicle maintenance, (3) equipment maintenance, and (4) facility maintenance. These activities are responsible for approximately 95% of the total volume of RCRA- and California-regulated wastes generated at Travis AFB.

As of June 2004, over 275 hazardous or potentially hazardous waste streams were generated at Travis AFB. A list of the shops that generate hazardous or potentially hazardous waste streams is presented in Table 3-1. Information is organized by building number and organization, and includes the shop name.

Table 3-1. Shops Generating Hazardous or Potentially Hazardous Waste Streams

Bldg #	Organization	Shop Name
1	660 AMXS	COMBS/GSE
1	615 AMOG	COMM/AGE
14	60 CMS/MXMCF	Fuel Cell
16	60 CMS/MXMP	TF-39 Jet Shop
21	60 CMS/MXMV	Avionics
31	60 MOS/MXQS	MOS/MXQS
41	60 EMS/MXMG	C5 AGE
80	60 AMW/HOX	Air Museum
83	60 OSS/OSL	Life Support
139	60 LRS/LGRVM	Heavy Vehicle Maintenance
139	60 LRS/LGRVM	Fire Truck Maintenance
143	60 LRS/LGRVM	Allied Trades Paint Booth
144	60 LRS/LGRVM	Allied Trades
155	60 OSS/FSSC	C5 Simulator
170	AAFES Firestone	Car Care Center
179	Boeing Aerospace Ops Inc.	KC-10 Aircrew Maintenance Training
181	6 ARS/DOOL	Life Support
187	660 AMXS/MXAS	Flightline Support
187	9 ARS/DOL	Life Support
226	60 SVS/SRVA	Auto Hobby Shop
377	615 AMOS/SCMT	AMOS Operations
380a	60 SFS/SFTCA	CATM
381	60 CES/CEOFC	HVAC
525	60 EMS/MXMFC	Survival Equipment
549	60 APS/TRTCO	APS/TRTCO
549	60 LRS/LGRMA	Material Handling
551	60 CMS/MXMCF	Fuel Systems
755	60 CMS/MXMCE	Battery Shop
771	60 SVS/SURA	Aero Club
777	60 DS/SGDDS	Oral Surgery
777	60 MDTS/SGQXM	Mammography
777	60 MDTS/SGQHS	Histopathology
777	60 MDSS/SGQC	Microbiology
779	60 MDSS/SGSLF	Power Plant
793	60 MDSS/SGSLF	90-Day Yard Hospital
803	60 EMS/MXMFA	Metals Technology
803	60 EMS/MXMFB	Paint Shop
803	60 EMS/MXMFN	NDI
804	60 CMS/MXMD	PMEL
809	60 EMS/MXMTI	Inspection
811	60 MOS/CC	Hillstrom Industries Washrack
818	60 MOS/MXOD	Lockheed-Martin
819	60 CMS/MXMCP	Hydraulics
819	60 EMS/MXMCE	Electro-Environmental
819	60 EMS/MXMTA	Aero Repair Shop
828	60 SFS/SFTCA	Security Police
833	60 CES/CEX	Readiness Flight
841	60 AMXS/MXAS	Flightline Support
843	60 CMS/MXMP	Stand Maintenance/APU
845	60 EMS/MXMFB	Structural Fiberglass

Table 3-1 continued

Bldg #	Organization	Shop Name
863	60 SVS/SVRO	Outdoor Recreation
872	60 CES/CEOHH	Horizontal Repair
874	60 CES/CEOFA	Structures
879	60 CES/CEOFB	Vertical Repair
904	15 AMOS/XOS	Power Pro/HVAC
908	60 CES/CEOIF	Liquid Fuels System
919	60 LRS/LGRVM	L/MHE Repair
931	60 CES/CEOIP	Power Production
942	60 CES/CEOIE	Electric Shop
977	60 APS/TRKM	Material Handling
981	60 APS/TRKV	Vehicle Operations
1001	60 CMS/MXMP	Jet Engine Test Cell
1171, 1177	VQ-3 NAVY DET	Fleet Air Reconnaissance
1185	60 CS/SCMF	Radar/METNAV
1202	60 LRS/LGRVM	Refuel Maintenance
1205	60 MSS/ OL-E AFCESA	CEMIRT
1212	60 OSS/OSL	Life Support
1365	60 CES/CEV	Storage Facility
5601	60 SVS/SVBG	Golf Course

3.1.2 Waste Accumulation and Storage

The waste streams generated at Travis AFB are initially accumulated at the two HWAPs or at SAPs located in the vicinity of the shops generating the waste. Regulated waste can be accumulated only at SAPs, HWAPs, or the Storage Facility. Daily empty sites must transfer their regulated waste to the HWAPs or the Storage Facility within 24 hours of receiving it (i.e., each day). Table 3-2 contains information regarding the 30 SAPs currently located at Travis AFB. The table of SAPs is for illustration purposes only and could change over time. In addition to information about the location and organization, each SAP has been assigned a unique identifier—e.g., SAP-139FT—according to the following format:

- **SAP:** These letters indicate that a waste is collected at a SAP as opposed to being managed at a daily empty site.
- **139:** These numbers indicate the building in which the SAP is located.
- **FT:** SAPs may or may not have an additional identifier. This is present only when there is more than one SAP located within the same building. In this case, FT indicates Fire Truck Maintenance.

Table 3-2. Satellite Accumulation Point Locations

Bldg #	Organization	Shop Name	SAP ID
14	60 CMS/MXMCF	Fuel Cell	SAP-14
16	60 CMS/MXMP	TF-39 Jet Shop	SAP-16
21	60 CMS/MXMV	Avionics	SAP-21
41	60 EMS/MXMG	C5 AGE	SAP-41
83	60 OSS/OSL	Life Support, Aircrew	SAP 83
139	60 LRS/LGRVM	Fire Truck Maintenance	SAP-139FT
139	60 LRS/LGRVM	Vehicle Maintenance (NEW)	SAP-139HM
143	60 LRS/LGRVM	Allied Trades Paint Booth	SAP-143
144	60 LRS/LGRVM	Allied Trades Paint Shop	SAP-144
187	660 AMXS/MXAS	Flightline Support	SAP-187
226	60 SVS/SVRS	Auto Hobby Shop	SAP-226
525	60 EMS/MXMFC	Survival Equipment	SAP-525
551	60 CMS/MXMCF	Fuel Systems	SAP-551
755	60 CMS/MXMCE	Battery Shop	SAP-755
771	60 SVS/SURA	Aero Club	SAP-771
803	60 EMS/MXMFA	Metals Technology	SAP-803M
803	60 EMS/MXMFB	Paint Shop	SAP-803S
803	60 EMS/MXMFN	NDI	SAP-803NDI
804	60 CMS/MXMD	PMEL	SAP-804
809	60 EMS/MXMTI	C5 ISO Dock	SAP-809
811	60 LG/EM/LGWR	Hillstrom Industries Washrack	SAP-811
819	60 EMS/MXMTA	Aero Repair Shop	SAP-819AR
819	60 EMS/MXMCP	Hydraulics	SAP-819H
819	60 EMS/MXMCE	Electro-Environmental	SAP-819E
841	60 AMXS/MXAS	Flightline Support	SAP-841
843	60 CMS/MXMP	Stand Maintenance/APU	SAP-843
845	60 EMS/MXMFB	Structural Fiberglass	SAP-845
919	60 LRS/LGRVM	L/MHE Repair	SAP-919A
919	60 LRS/LGRMV	L/MHE Repair	SAP-919B
1202	60 LRS/LGRVM	Refuel Maintenance	SAP-1202T
1370	60 SFS/SFTCA	CATM	SAP-1370

Thus, the entire designator (SAP-139FT) is for a SAP for Fire Truck Maintenance located in Building 139. The locations of the SAPs, HWAPs, and the Storage Facility are indicated on the facility map (Figure 2-4).

Most RCRA- and California-regulated wastes generated at Travis AFB are accumulated in drums ranging in capacity from 5 gallons to 55 gallons. Initial accumulation occurs at the daily empty sites, SAPs, and HWAPs. Full drums are transferred to the Storage Facility for longer-term storage and preparation for off-site disposal.

3.2 Off-Site Waste Disposal

Wastes are removed from the HWAPs and the Storage Facility by contract to approved disposal sites. The Defense Reutilization and Marketing Office (DRMO) contracts for waste transportation and disposal off site. A list of the off-site disposal facilities is presented in Table 3-3. In addition, the 60 CES/CEO has an asbestos disposal contract with a local company. The table of off-site disposal facilities is for illustration purposes only and vendors could change over time.

3.3 Processes that Generate Hazardous Wastes

The hazardous and potentially hazardous waste streams generated at Travis AFB primarily consist of, but are not limited to, waste petroleum products, spent solvents, and spilled or outdated chemicals. Primary waste-producing processes include, but are not limited to, aircraft parts cleaning, fluid changes from routine aircraft and vehicle maintenance, aircraft corrosion control, and facility and infrastructure maintenance. The 60th Air Mobility Wing's Maintenance, Operations, and Mission Support Groups produce a large percentage of Travis AFB waste.

Waste is generated in shops and transferred to nearby HWAPs for up to 90 days before being transported to the Storage Facility. For example, oil, one of the largest waste streams at Travis AFB, is generated in many shops before being transferred to a designated accumulation area. The oil is generated at the shops and transported in appropriate containers to a HWAP, where it is poured into drums before final transportation to the Storage Facility. Hazardous waste may also be transported/disposed of by contractors.

Large-volume waste streams are typically accumulated in 55-gallon drums at SAPs or HWAPs, and then stored at the Storage Facility prior to contract disposal. Waste streams are characterized before being transported to the Storage Facility. Instructions for

Table 3-3. Waste Disposal Companies Used by Travis AFB

U.S. EPA ID#	Off-Site TSDF	Telephone Number
CAT000646117	Chemical Waste Management Kettleman City, CA	559-386-9711
UTD981552177	Clean Harbors Aragonite, LLC Clive, UT	801-323-8100
TXD982290140	Clean Harbors LaPorte, L.P. LaPorte, TX	281-476-0645
CAD980675276	Clean Harbors LLC Buttonwillow, CA	661-762-6200
CAD050806850	Clean Harbors Los Angeles, CA	323-277-2500
CAD059494310	Clean Harbors San Jose, CA	408-451-5000
CAD028409019	Crosby and Overton, Inc. Long Beach, CA	562-432-5445
CAT080013352	Demmeno/Kerdoon Compton, CA	310-537-7100
AZ0000337360	Superior Special Services, Inc. 5752 W. Jefferson Street Phoenix, AZ 85043	800-368-9095
CAD982042475	NWS (B&J) Hay Road Landfill Vacaville, CA	707-678-1492
AZ0000337360	Onyx Special Services Phoenix, AZ	602-243-6150
CAT080014079	Onyx Special Services Richmond, CA	602-243-6150
CAD009452657	Romic Chemical East Palo Alto, CA	650-324-1638
TXD077603371	Safety-Kleen Systems, Inc. Denton, TX	940-483-5200
CA0000084517	Safety-Kleen Systems, Inc. Sacramento, CA 95828	916-386-4999

ID = identification
 TSDF = treatment, storage, and disposal facility

characterizing the wastes are contained in the Waste Analysis Plan, which is included as Attachment D to this permit application.

The Storage Facility is permitted to store up to 1,032 55-gallon drums, or the equivalent total volume in various-size containers. The Storage Facility is also permitted to store up to a total of 15,000 gallons of oil or fuel in six 2,500-gallon storage tanks.

Results of chemical and physical analyses are maintained for all wastes disposed by Travis AFB. These results must be submitted to the base's waste disposal contractor prior to

transport. Disposal contractor requirements act as additional checks and balances to Travis AFB's local waste analysis program requirements.

Table 3-4 lists all of the known hazardous, universal, non-RCRA hazardous, and potentially hazardous waste streams generated at Travis AFB.

3.4 Hazardous Wastes Treated

No hazardous wastes are treated at the Storage Facility.

3.5 Physical and Chemical Properties of Hazardous Wastes

In general, the physical and chemical properties of the hazardous wastes stored at the Storage Facility include, but are not limited to, solids, semi-solids, aqueous liquids, organic liquids, phased liquids, acids, bases, oils, solvents, glycols, paints, adhesives, flammables, oxidizers, and reactives. A summary of the analyses that will most likely be required to properly characterize the hazardous wastes stored at the Storage Facility, along with the recommended analyses for common waste streams stored at the Storage Facility, are presented in the Waste Analysis Plan (Attachment E).

Physical and chemical properties that may be relevant in storing and arranging disposal of the wastes are listed in the waste profiles provided for each type of hazardous waste generated. Waste profiles are included in Attachment F to this permit application.

Table 3-4. Hazardous and Potentially Hazardous Waste Streams

Bldg #	Org./Sqdn.	Office Symbol	Shop Name	Waste Stream Name	Profile Number	SAP Number	Est. Annual Amt
1	615 AMOG	XPC	COMM/AGE	Bulk Used Oil From AGE	C010-05-00P1	Empty Daily	55 gal
1	615 AMOG	XPC	COMM/AGE	Waste Antifreeze/ Water Solution	C017-05-00P1	Empty Daily	55 gal
1	615 AMOG	XPC	COMM/AGE	Fuel Filters, Diesel	C027-05-00P1	Empty Daily	25 lbs
1	615 AMOG	XPC	COMM/AGE	Absorbent pads contaminated with Petroleum Hydrocarbons	C031-05-00P1	Empty Daily	50 lbs
1	615 AMOG	XPC	COMM/AGE	Waste Diesel fuel	H062-05-00P1	Empty Daily	20 gal
1	615 AMOG	XPC	COMM/AGE	Oil Filters, Drained	N021-05-00P1	Empty Daily	15 lbs
1	660 AMXS	COMBS	COMBS/GSE	Absorbent pads contaminated with Petroleum Hydrocarbons	C026-05-0P1B	Empty Daily	1000 lbs
1	660 AMXS	COMBS	COMBS/GSE	Empty Containers of Epoxy, Sealant and Adhesive	C031-05-0P1B	Empty Daily	220 lbs
1	660 AMXS	COMBS	COMBS/GSE	Waste Epoxy (Liquid)	H042-05-0P1B	Empty Daily	440 lbs
1	660 AMXS	COMBS	COMBS/GSE	Empty Containers for recycling	N045-05-0P1B	Empty Daily	1000 lbs
14	60 CMS	MXMCF	Fuel Cell	Non-RCRA Solid	C031-05-0P14	SAP 14	500 lbs
14	60 CMS	MXMCF	Fuel Cell	Class 9 Solid	H012-05-0P14	SAP 14	400 lbs
14	60 CMS	MXMCF	Fuel Cell	Adhesives and Resins, Flammable	H029-05-0P14	SAP 14	200 lbs
14	60 CMS	MXMCF	Fuel Cell	Debris saturated with JP8 (liquid)	H038-05-0P14	SAP 14	400 lbs
14	60 CMS	MXMCF	Fuel Cell	Waste Resin Solution (Liquid)	H042-05-0P14	SAP 14	250 lbs
16	60 CMS	MXMP	TF-39 Jet Shop	Used Oil	C010-05-0P16	SAP 16	1000 lbs
16	60 CMS	MXMP	TF-39 Jet Shop	Non RCRA Solids	C031-05-0P16	SAP 16	3500 lbs
16	60 CMS	MXMP	TF-39 Jet Shop	Class 9 Solids	H012-05-0P16	SAP 16	100 lbs
16	60 CMS	MXMP	TF-39 Jet Shop	Parts Washer Sludge from TF-39 Jet Shop (60 CMS MXMP)	H022-05-0P16	SAP 16	150 lbs
16	60 CMS	MXMP	TF-39 Jet Shop	Waste JP-8 w<15% water	H033-05-0P16	SAP 16	1500 lbs
16	60 CMS	MXMP	TF-39 Jet Shop	Waste Resin Solution (Liquid)	H042-05-0P16	SAP 16	250 lbs
16	60 CMS	MXMP	TF-39 Jet Shop	DRAINED USED OIL FILTERS	N021-05-0P16	SAP 16	360 lbs
21	60 CMS	MXMV	Avionics	Non-RCRA Solids	C031-05-0P21	SAP 21	1000 lbs
21	60 CMS	MXMV	Avionics	Class 9 Solid	H012-05-0P21	SAP 21	5 lbs
31	60 MOS	MXQS	MOS/MXQS	Used Oil	C010-05-0P31	Empty Daily	200 lbs
41	60 EMS	MXMG	C5 AGE	Used Oil From AGE	C010-05-0P41	SAP 41	2860 gal
41	60 EMS	MXMG	C5 AGE	Waste Antifreeze/ Water Solution	C017-05-0P41	SAP 41	3520 lbs
41	60 EMS	MXMG	C5 AGE	Debris c/w POL – Non-RCRA Solids	C031-05-0P41	SAP 41	20650 lbs
41	60 EMS	MXMG	C5 AGE	Waste Mixed Fuel (Diesel, Gasoline, JP8)	H062-05-0P41	SAP 41	200 lbs
41	60 EMS	MXMG	C5 AGE	Drained Used Oil Filters	N021-05-0P41	SAP 41	120 lbs

Table 3-4 continued

Bldg #	PrgSqdn	Office Symbol	Shop Name	Waste Stream Name	Profile Number	SAP Number	Est. Annual Amt.
41	60 EMS	MXMG	C5 AGE	Empty Containers for recycling	N045-05-0P41	SAP 41	110 lbs
80	60 AMW	HOX	Hist. Society Museum	Containers, Empty	C026-05-0080	Empty Daily	50 lbs
80	60 AMW	HOX	Hist. Society Museum	Debris contaminated with petroleum hydrocarbons (Solid)	C031-05-0080	Empty Daily	20 lbs
83	60 OSS	OSL	Life Support	Pads contaminated with isopropanol	C031-05-0083	SAP 83	10 lbs
83	60 OSS	OSL	Life Support	Class 9 Solid	H012-05-0083	Empty Daily	100 lbs
139	60 LRS	LGRVM	Fire Truck Maintenance	Bulk used oil from Vehicle Maintenance	C010-05-0139F	SAP 139FT	400 gal
139	60 LRS	LGRVM	Heavy Vehicle Maintenance	Bulk used oil from Vehicle Maintenance	C010-05-0139H	SAP 139HM	400 gal
139	60 LRS	LGRVM	Fire Truck Maintenance	Waste Antifreeze	C017-05-0139F	SAP 139FT	300 lbs
139	60 LRS	LGRVM	Heavy Vehicle Maintenance	Waste Antifreeze	C017-05-0139H	SAP 139HM	300 lbs
139	60 LRS	LGRVM	Fire Truck Maintenance	Absorbent Contaminated w/Petroleum Hydrocarbons	C031-05-0139F	SAP 139FT	160 lbs
139	60 LRS	LGRVM	Heavy Vehicle Maintenance	Absorbent Contaminated w/Petroleum Hydrocarbons	C031-05-0139H	SAP 139HM	160 lbs
139	60 LRS	LGRVM	Fire Truck Maintenance	Waste Mixed Fuel (Diesel, Gasoline)	H062-05-0139F	SAP 139FT	150 gal
139	60 LRS	LGRVM	Heavy Vehicle Maintenance	Waste Mixed Fuel (Diesel, Gasoline)	H062-05-0139H	SAP 139HM	150 gal
139	60 LRS	LGRVM	Heavy Vehicle Maintenance	Gasoline Fuel Filters	H065-05-0139H	SAP 139HM	40 lbs
143	60 LRS	LGRVM	Allied Trades Paint Booth	Solid Paint Debris	C054-05-0143	SAP 143	250 lbs
143	60 LRS	LGRVM	Allied Trades Paint Booth	Paint Sludge	H011-05-0143	SAP 143	60 gal
144	60 LRS	LGRVM	Allied Trades	Absorbent Contaminated w/Petroleum Hydrocarbons	C031-05-0144	SAP 144	80 lbs
144	60 LRS	LGRVM	Allied Trades	Empty Paint and Sealant Cans	C031-05-0144	SAP 144	50 lbs
144	60 LRS	LGRVM	Allied Trades	Solid Paint Debris	C054-05-0144	SAP 144	250 lbs
144	60 LRS	LGRVM	Allied Trades	Waste Bead Blast Paint Dust	H087-05-0144	SAP 144	80 lbs
148	373 TRS	DET 14	DET 14	Absorbant pads contaminated with Petroleum Hydrocarbons	C026-05-0148	Empty Daily	50 lbs
155	60 OSS	FSSC	C5 Simulator	Bulk Used Oil From Equipment Maintenance	C010-05-0155	Empty Daily	300 lbs
155	60 OSS	FSSC	C5 Simulator	Debris Contaminated with Petroleum Hydrocarbons (Solid)	C031-05-0155	Empty Daily	50 lbs
155	60 OSS	FSSC	C5 Simulator	Drained Used Oil Filters	N021-05-0155	Empty Daily	100 lbs
170	Firestone	AAFES	Car Care Center	OUTDATED/OFFSPEC LATEX PAINT	C004-05-0170	Empty Daily	10 lbs
170	Firestone	AAFES	Car Care Center	Waste Antifreeze	C017-05-0170	Empty Daily	7500 lbs

Table 3-4 continued

Bldg #	PrgSqdn	Office Symbol	Shop Name	Waste Stream Name	Profile Number	SAP Number	Est. Annual Amt.
170	Firestone	AAFES	Car Care Center	Absorbents c/w POL (Non-RCRA Solids)	C031-05-0170	Empty Daily	4200 lbs
170	Firestone	AAFES	Car Care Center	Waste Mixed Fuel (Diesel, Gasoline)	H062-05-0170	Empty Daily	10 lbs
170	Firestone	AAFES	Car Care Center	Fuel Filters, Gasoline (drained)	H065-05-0170	Empty Daily	100 lbs
170	Firestone	AAFES	Car Care Center	DRAINED USED OIL FILTERS	N021-05-0170	Empty Daily	6000 lbs
170	Shoppette	AAFES	Shoppette/ Gasoline	Fuel Filters, Gasoline (drained)	H065-05-0170S	Empty Daily	32 lbs
170	Shoppette	AAFES	Shoppette/ Gasoline	Non RCRA Solid	C031-05-0170S	Empty Daily	400 lbs
179	60 OSS	OSTS	KC-10 Aircrew Maintenance Training	Royco 782 Hydraulic Fluid	C010-05-0179	Empty Daily	260 gal
181	6 ARS	DOOL	Life Support	Pads contaminated with isopropanol	C031-05-0181	Empty Daily	75 lbs
181	6 ARS	DOOL	Life Support	Class 9 Solid	H012-05-0181	Empty Daily	50 lbs
187	660 AMXS	MXAS	Flightline Support	Bulk Used Oil	C010-05-0187F	SAP 187	10000 gal
187	660 AMXS	MXAS	Flightline Support	Debris s/w Petroleum Hydrocarbons (liquid)	C018-05-0187F	SAP 187	10000 lbs
187	660 AMXS	MXAS	Flightline Support	Debris c/w POL – (Non-RCRA Solids)	C031-05-0187F	SAP 187	12000 lbs
187	660 AMXS	MXAS	Flightline Support	Waste JP-8 w<15% water	H033-05-0187F	SAP 187	2640 gal
187	660 AMXS	MXAS	Flightline Support	Absorbents s/w JP-8	H038-05-0187F	SAP 187	3300 lbs
187	660 AMXS	MXAS	Flightline Support	Drained Used Oil Filters	N021-05-0187F	SAP 187	2400 lbs
187	660 AMXS	MXAS	Flightline Support	Empty Containers for recycling	N045-05-0187F	SAP 187	2600 lbs
187	660 AMXS	MXAS	Flightline Support	Oxygen Generator, Chemical (expired shelf life)	H099-05-0187F	SAP 187	200 lbs
187	9 ARS	DOL	Life Support	Absorbent Pads c/w Isopropanol	C031-05-0187L	SAP 187	15 lbs
226	60 SVS	SVRS	Auto Hobby Shop	Used Oil	C010-05-0226	SAP 226	5280 gal
226	60 SVS	SVRS	Auto Hobby Shop	Waste Antifreeze/ Water Solution	C017-05-0226	SAP 226	3000 lbs
226	60 SVS	SVRS	Auto Hobby Shop	Absorbant pads contaminated with Petroleum Hydrocarbons	C026-05-0226	SAP 226	220 lbs
226	60 SVS	SVRS	Auto Hobby Shop	Bead Blast, Paint Dust	H051-05-0226	SAP 226	480 lbs
226	60 SVS	SVRS	Auto Hobby Shop	Drained Used Oil Filters	N021-05-0226	SAP 226	3000 lbs
226	60 SVS	SVRS	Auto Hobby Shop	Empty containers for recycling	N045-05-0226	SAP 226	45 lbs
377	15 AMOS	SCMT	AMOS Operations	Waste Diesel Fuel c/w Water	H040-05-0377	Empty Daily	450 gal

Table 3-4 continued

Bldg #	PrgSqd	Office Symbol	Shop Name	Waste Stream Name	Profile Number	SAP Number	Est. Annual Amt.
377	15 AMOS	SCMT	AMOS Operations	Waste Antifreeze/ Water Solution	C017-05-0377	Empty Daily	55 gal
377	15 AMOS	SCMT	AMOS Operations	Fuel Filters, Diesel	C027-05-0377	Empty Daily	25 lbs
377	15 AMOS	SCMT	AMOS Operations	Bulk Used Oil From Equipment Maintenance	C010-05-0377	Empty Daily	55 gal
377	615 AMOS	SCMT	AMOS Operations	DEBRIS C/W PETROLEUM HYDROCARBONS (SOLID)	C031-05-0377	Empty Daily	250 lbs
380a	60 SFS	SFTCA	CATM	Debris c/w POL (Non-RCRA Solids)	C026-05-0380A	Empty Daily	1200 lbs
381	60 CES	CEOFC	HVAC	Used Oil	C010-05-0381	Empty Daily	400 gal
381	60 CES	CEOFC	HVAC	Debris contaminated with petroleum hydrocarbons (Solid)	C031-05-0381	Empty Daily	100 lbs
381	60 CES	CEOFC	HVAC	Drained Used Oil Filters	N021-05-0381	Empty Daily	100 lbs
525	60 EMS	MXMFC	Survival Equipment	Non RCRA Solid – (Debris c/w POL)	C026-05-0525	SAP 525	200 lbs
525	60 EMS	MXMFC	Survival Equipment	Contaminated Debris (empty container last contained Ethyl Acetate & Acetone)	H012-05-0525	SAP 525	200 lbs
549	60 APS	TRTCO	Cargo Movement	Rags Contaminated With Petroleum Hydrocarbons	C031-05-549F	Empty Daily	5 lbs
549	60 LRS	LGRMA	Material Handling	Used Oil Filters, Drained	N021-05-549B	Empty Daily	10 lbs
549	60 LRS	LGRMA	Material Handling	Used oil from Equipment Maintenance	C010-05-549B	Empty Daily	10 gal
549	60 LRS	LGRMA	Material Handling	Empty Containers for recycling	N045-05-549B	Empty Daily	10 lbs
549	60 LRS	LGRMA	Material Handling	Rags c/w Petroleum Hydrocarbons	C031-05-549B	Empty Daily	10 lbs
551	60 CMS	MXMCF	Fuel Systems	Bulk Used Oil	C010-05-0551	SAP 551	1000 lbs
551	60 CMS	MXMCF	Fuel Systems	Debris Contaminated with Petroleum Hydrocarbons (solid)	C031-05-0551	SAP 551	500 lbs
551	60 CMS	MXMCF	Fuel Systems	Class 9 Solid	H019-05-0551	SAP 551	200 lbs
551	60 CMS	MXMCF	Fuel Systems	Jet Fuel (JP-8)	H033-05-0551	SAP 551	1000 lbs
755	60 CMS	MXMCE	Battery Shop	Battery Shop Rinse Water with Oil	C007-05-0755	SAP 755	200 lbs
755	60 CMS	MXMCE	Battery Shop	Used Oil	C010-05-0755	SAP 755	10 gal
755	60 CMS	MXMCE	Battery Shop	Debris c/w POL – (Non-RCRA Solids)	C031-05-0755	SAP 755	100 lbs
755	60 CMS	MXMCE	Battery Shop	Debris Contaminated with Sulfuric acid	C038-05-0755	SAP 755	5 lbs
755	60 CMS	MXMCE	Battery Shop	Debris Contaminated with Potassium Hydroxide	C039-05-0755	SAP 755	100 lbs
755	60 CMS	MXMCE	Battery Shop	Waste Lead Acid Batteries	H026-05-0755	SAP 755	72100 lbs
755	60 CMS	MXMCE	Battery Shop	Waste Battery Fluid – contains Sulfuric Acid	H074-05-0755	SAP 755	2 lbs
771	60 SVS	SURA	Aero Club	Used oil from Air Craft Maintenance	C010-05-0771	SAP-771	400 gal

Table 3-4 continued

Bldg #	PrgSqdn	Office Symbol	Shop Name	Waste Stream Name	Profile Number	SAP Number	Est. Annual Amt.
775	60 DS	SGDL	Dental	X-Ray Fixer Solution	H064-05-0755	Empty Daily	300 lbs
775	60 DS	SGDL	Dental Lab	Silver Tailing Buckets	H092-05-0775	Empty Daily	300 lbs
777	60 DS	SGDDS	Oral Surgery	Silver Tailing Buckets	H092-05-0777O	Empty Daily	300 lbs
777	60 DS	SGDDS	Oral Surgery	X-Ray Fixer Solution	H064-05-0777O	Empty Daily	300 lbs
777	60 MDTS	SGQXM	Mammography	Silver Tailing Buckets	H092-05-0777M	Empty Daily	300 lbs
777	60 MDTS	SGQXM	Mammography	X-Ray Fixer Solution	H064-05-0777M	Empty Daily	300 lbs
777	60 MDTS	SGQHS	Histopathology	Waste Formalin	H095-05-0777H	Empty Daily	1000 lbs
777	60 MDSS	SGQC	Microbiology	Waste Ethyl Acetate/ Formalin Solution	H041-05-0777B	Empty Daily	25 lbs
779	60 MDSS	SGSLF	Power Plant	Waste Antifreeze/ Water Solution	C017-05-0779	Empty Daily	1000 lbs
779	60 MDSS	SGSLF	Power Plant	Bulk used oil from Equipment Maintenance	C010-05-0779	Empty Daily	1000 gal
793	60 MDSS/SGSLF	J & J	90-Day Yard Hospital	Bulk used oil from Equipment Maintenance	C010-05-0793	Empty Daily	100 gal
793	60 MDSS/SGSLF	J & J	90-Day Yard Hospital	Lab Pack, Acidic Organic (solids and liquids)	LPAO-05-0793	90-Day	30 lbs
793	60 MDSS/SGSLF	J & J	90-Day Yard Hospital	Lab Pack, Basic Organic (solids and liquids)	LPBO-05-0793	90-Day	30 lbs
793	60 MDSS/SGSLF	J & J	90-Day Yard Hospital	Lab Pack, Organic Peroxide (solid or liquid)	LPOP-05-0793	90-Day	30 lbs
793	60 MDSS/SGSLF	J & J	90-Day Yard Hospital	Lab Pack, Spontaneous Combustible	LPSC-05-0793	90-Day	30 lbs
793	60 MDSS/SGSLF	J & J	90-Day Yard Hospital	Lab Pack, Toxic (liquid and solid)	LPTP-05-0793	90-Day	150 lbs
793	60 MDSS/SGSLF	J & J	90-Day Yard Hospital	Lab Pack, Toxic (liquid and solid)	LPTU-05-0793	90-Day	150 lbs
793	60 MDSS/SGSLF	J & J	90-Day Yard Hospital	Lab Pack, Acid Inorganic (solids and liquids)	LPAI-05-0793	90-Day	30 lbs
793	60 MDSS/SGSLF	J & J	90-Day Yard Hospital	Lab Pack, Basic Inorganic (solids and liquids)	LPBI-05-0793	90-Day	30 lbs
793	60 MDSS/SGSLF	J & J	90-Day Yard Hospital	Lab Pack, Oxidizer (solid or liquid)	LPOX-05-0793	90-Day	30 lbs
793	60 MDSS/SGSLF	J & J	90-Day Yard Hospital	Lab Pack, Toxic (liquid and solid)	LPTX-05-0793	90-Day	150 lbs
793	60 MDSS/SGSLF	J & J	90-Day Yard Hospital	Lab Pack, Flammable Solids	LPFS-05-0793	90-Day	30 lbs
793	60 MDSS/SGSLF	J & J	90-Day Yard Hospital	Lab Pack, Flammable Liquids	LPFL-05-0793	90-Day	30 lbs
793	60 MDSS/SGSLF	J & J	90-Day Yard Hospital	Lab Pack, Dangerous when Wet (solids or liquids)	LPDW-05-0793	90-Day	30 lbs
803	60 EMS	MXMFA	Metals Technology	Debris c/w POL (Non- RCRA Solid)	C026-05-0803M	SAP 803M	500 lbs
803	60 EMS	MXMFA	Metals Technology	Rags c/w Acetone	C031-05-0803M	SAP 803M	100 lbs
803	60 EMS	MXMFA	Metals Technology	Rags c/w mixed-acid	C051-05-0803M	SAP 803M	8 lbs
803	60 EMS	MXMFA	Metals Technology	Bead Blast, Paint Dust	H012-05-0803M	SAP 803M	1000 lbs
803	60 EMS	MXMFA	Metals Technology	Rags cw Cadmium sulfate/Ethylenediamine	H012-05-0803M	SAP 803M	100 lbs

Table 3-4 continued

Bldg #	PrgSqdn	Office Symbol	Shop Name	Waste Stream Name	Profile Number	SAP Number	Est. Annual Amt.
803	60 EMS	MXMFA	Metals Technology	Waste Cadmium solution	H043-05-0803M	SAP 803M	8 lbs
803	60 EMS	MXMFA	Metals Technology	Mixed Acids	H081-05-0803M	SAP 803M	8 lbs
803	60 EMS	MXMFB	Paint Shop	Non-RCRA Solids	C031-05-0803S	SAP 803S	5000 lbs
803	60 EMS	MXMFB	Paint Shop	Waste Flammable Paints	H011-05-0803S	SAP 803S	100 lbs
803	60 EMS	MXMFB	Paint Shop	Class 9 Solids	H012-05-0803S	SAP 803S	5000 lbs
803	60 EMS	MXMFB	Paint Shop	Waste Alodine Rinse Water	H050-05-0803S	SAP 803S	500 lbs
803	60 EMS	MXMFN	NDI	Waste Magnetic Particle Bath	C009-05-0803N	SAP 803NDI	500 lbs
803	60 EMS	MXMFN	NDI	Used Oil	C010-05-0803N	SAP 803NDI	110 gal
803	60 EMS	MXMFN	NDI	Debris Contaminated With Petroleum Hydrocarbons	C026-05-0803N	SAP 803NDI	1000 lbs
803	60 EMS	MXMFN	NDI	Waste Penetrant ZL-37 (Zylo)	C034-05-0803N	SAP 803NDI	1500 lbs
803	60 EMS	MXMFN	NDI	Waste Rapid Color Developer Part A	H001-05-0803N	SAP 803NDI	2 lbs
803	60 EMS	MXMFN	NDI	Rags c/w Heavy Metals (Class 9 Solid)	H012-05-0803N	SAP 803NDI	1000 lbs
803	60 EMS	MXMFN	NDI	NDI Waste Wash Water	N024-05-0803N	SAP 803NDI	16000 lbs
803	60 EMS	MXMFN	NDI	Penetrant Remover	N040-05-0803N	SAP 803NDI	1000 lbs
804	60 CMS	MXMD	PMEL	Used Oil	C010-05-0804	SAP 804	75 gal
804	60 CMS	MXMD	PMEL	NON RCRA SOLID	C031-05-0804	SAP 804	15 lbs
809	60 EMS	MXMTI	Inspection	Used Oil	C010-05-0809	SAP 809	3600 lbs
809	60 EMS	MXMTI	Inspection	Non-RCRA Solids	C031-05-0809	SAP 809	2720 lbs
809	60 EMS	MXMTI	Inspection	Class 9 Solids	H012-05-0809	SAP 809	1500 lbs
809	60 EMS	MXMTI	Inspection	WASTE JP8 W/ 15% WATER	H033-05-0809	SAP 809	2000 lbs
809	60 EMS	MXMTI	Inspection	Drained Used Oil Filters	N021-05-0809	SAP 809	3600 lbs
811	60 MOS	CC	Hillstrom Industries Washrack	Wash Rack Gravel c/w POL	C030-05-0811	Empty Daily	500 lbs
811	60 MOS	CC	Hillstrom Industries Washrack	Non-RCRA Solids	C031-05-0811	SAP 811	750 lbs
818	60 MOS	MXOD	Lockheed Martin	Waste Alodine Solution	H050-05-0818	Empty Daily	20 lbs
818	60 MOS	MXOD	Lockheed Martin	Class 9 Solid	H012-05-0818	Empty Daily	200 lbs
818	60 MOS	MXOD	Lockheed Martin	Debris c/w POLs (Non RCRA Solid)	C031-05-0818	Empty Daily	200 lbs
819	60 CMS	MXMCP	Hydraulics	Bulk Used Oil	C010-05-0819H	SAP819H	660 gal
819	60 CMS	MXMCP	Hydraulics	Class 9 Solid	H019-05-0819H	SAP819H	600 lbs
819	60 CMS	MXMCP	Hydraulics	Waste Solvent (PD-680)	H056-05-0819H	SAP819H	150 gal
819	60 EMS	MXMCE	Electro-Environmental	Bulk Used Oil	C010-05-0819E	SAP 819E	165 gal
819	60 EMS	MXMCE	Electro-Environmental	Non-RCRA Solids	C031-05-0819E	SAP 819E	500 lbs

Table 3-4 continued

Bldg #	PrgSqdn	Office Symbol	Shop Name	Waste Stream Name	Profile Number	SAP Number	Est. Annual Amt.
819	60 EMS	MXMTA	Aero Repair Shop	Used Formula 724 w/Hydraulic fluid, oil, and grease	C010-05-0819A	SAP 819AR	220 gal
819	60 EMS	MXMTA	Aero Repair Shop	Debris Contaminated With Petroleum Hydrocarbons (Solid)	C031-05-0819A	SAP 819AR	1000 lbs
819	60 EMS	MXMTA	Aero Repair Shop	Rags, plastic gloves c/w Chromium	H012-05-0819A	SAP 819AR	150 lbs
819	60 EMS	MXMTA	Aero Repair Shop	Empty containers for recycling	N045-05-0819A	SAP 819AR	20 lbs
828	60 SFS	SFTCA	Security Police	Absorbant pads contaminated with Petroleum Hydrocarbons	C026-05-0828	Empty Daily	100 lbs
833	60 CES	CEX	Readiness Flight	Gun Cleaner, Break-free Clip (Liquid)	C033-05-0833	Empty Daily	50 lbs
833	60 CES	CEX	Readiness Flight	Drained Used Oil Filters	N021-05-0833	Empty Daily	60 lbs
833	60 CES	CEX	Readiness Flight	Class 9 Solid	H012-05-0833	Empty Daily	50 lbs
833	60 CES	CEX	Readiness Flight	Used oil from Equipment Maintenance	C010-05-0833	Empty Daily	50 lbs
833	60 CES	CEX	Readiness Flight	Waste Antifreeze	C017-05-0833	Empty Daily	10 lbs
841	60 AMXS	MXAS	Flightline Support	Waste Antifreeze	C017-05-0841	SAP 841	3000 lbs
841	60 AMXS	MXAS	Flightline Support	Debris s/w Petroleum Hydrocarbons (liquid)	C018-05-0841	SAP 841	4160 lbs
841	60 AMXS	MXAS	Flightline Support	Non-RCRA Solids	C031-05-0841	SAP 841	7300 lbs
841	60 AMXS	MXAS	Flightline Support	Class 9 Solids	H012-05-0841	SAP 841	300 lbs
841	60 AMXS	MXAS	Flightline Support	Waste Sealants, Flammable	H014-05-0841	SAP 841	20 lbs
841	60 AMXS	MXAS	Flightline Support	Waste JP-8 w<15% water	H033-05-0841	SAP 841	1500 lbs
841	60 AMXS	MXAS	Flightline Support	Debris saturated with JP8 (liquid)	H038-05-0841	SAP 841	2080 lbs
841	60 AMXS	MXAS	Flightline Support	Drained Used Oil Filters	N021-05-0841	SAP 841	100 lbs
841	60 AMXS	MXAS	Flightline Support	Bulk Used Oil From Aircraft	C010-05-0841	SAP 841	10400 lbs
843	60 CMS	MXMP	Stand Maintenance/A PU	Waste Brake Fluid	C010-05-0843	SAP 843	45 lbs
843	60 CMS	MXMP	Stand Maintenance/ APU	Non RCRA Solid	C031-05-0843	SAP 843	350 lbs
845	60 EMS	MXMFB	Structural Fiberglass	Waste Adhesives	H082-05-0845	SAP 845	150 lbs
845	60 EMS	MXMFB	Structural Fiberglass	Non RCRA Solid	C031-05-0845	SAP 845	10500 lbs
845	60 EMS	MXMFB	Structural Fiberglass	Mixed So-Gel solution (AC-130 mixed)	C043-05-0845	SAP 845	50 lbs

Table 3-4 continued

Bldg #	PrgSqdn	Office Symbol	Shop Name	Waste Stream Name	Profile Number	SAP Number	Est. Annual Amt.
845	60 EMS	MXMFB	Structural Fiberglass	Waste Flammable Paints (residuals & Free-liquids)	H011-05-0845	SAP 845	200 lbs
845	60 EMS	MXMFB	Structural Fiberglass	Adhesive, BR 6747-1 (Cured)	H070-05-0845	SAP 845	100 lbs
845	60 EMS	MXMFB	Structural Fiberglass	Class 9 Solids	H012-05-0845	SAP 845	15000 lbs
863	60 SVS	SVRO	Outdoor Recreation	Used oil from Equipment Maintenance	C010-05-0863	Empty Daily	10 gal
863	60 SVS	SVRO	Outdoor Recreation	Debris c/w petroleum hydrocarbons (Solid)	C031-05-0863	Empty Daily	50 lbs
872	60 CES	CEOHH	Horizontal Repair	Absorbant Pads Contaminated with Petroleum Hydrocarbons (Oil, Grease)	C031-05-0872	Empty Daily	5000 lbs
872	60 CES	CEOHH	Horizontal Repair	Debris Saturated With Mixed Fuel (Diesel, Gasoline)	H058-05-0872	Empty Daily	1600 lbs
874	60 CES	CEOFA	Structures	Used hydraulic oil from inoperative hydraulic door closers	C010-05-0874	Empty Daily	2 gal
874	60 CES	CEOFA	Structures	CA Empty Containers	C026-05-0874	Empty Daily	1200 lbs
874	60 CES	CEOFA	Structures	Debris Contaminated With Petroleum Hydrocarbons (Solid)	C031-05-0874	Empty Daily	30 lbs
879	60 CES	CEOFB	Vertical Repair	Used Oil	C010-05-0879	Empty Daily	5 gal
879	60 CES	CEOFB	Vertical Repair	Debris Contaminated With Petroleum Hydrocarbons (Solid)	C026-05-0879	Empty Daily	20 lbs
904	15 AMOS	XOS	Power Pro/HVAC	Used oil from Equipment Maintenance	C010-05-0904	Empty Daily	60 gal
904	15 AMOS	XOS	Power Pro/HVAC	Waste Antifreeze/Water Solution	C017-05-0904	Empty Daily	700 lbs
904	15 AMOS	XOS	Power Pro/HVAC	Absorbant pads contaminated with Petroleum Hydrocarbons	C026-05-0904	Empty Daily	20 lbs
904	15 AMOS	XOS	Power Pro/HVAC	Waste Diesel fuel	H062-05-0904	Empty Daily	30 lbs
904	15 AMOS	XOS	Power Pro/HVAC	Filters, Drained & Used	N021-05-0904	Empty Daily	35 lbs
908	60 CES	CEOIF	Liquid Fuels System	Used Oil	C010-05-0908	Empty Daily	30 gal
908	60 CES	CEOIF	Liquid Fuels System	Absorbent pads contaminated with Petroleum Hydrocarbons	C026-05-0908	Empty Daily	1500 lbs
908	60 CES	CEOIF	Liquid Fuels System	Fuel Filters, JP-8	C027-05-0908	Empty Daily	800 lbs
908	60 CES	CEOIF	Liquid Fuels System	Pads saturated with fuel (JP8, diesel, MOGAS)	H038-05-0908	Empty Daily	200 lbs
908	60 CES	CEOIF	Liquid Fuels System	Waste Mixed Fuel (Diesel, Gasoline, JP8)	H062-05-0908	Empty Daily	100 lbs
919	60 LRS	LGRVM	L/MHE Repair	Bulk used oil from Vehicle Maintenance	C010-05-0919A	SAP 919A	300 gal
919	60 LRS	LGRVM	L/MHE Repair	Bulk used oil from Vehicle Maintenance	C010-05-0919B	SAP 919B	300 gal

Table 3-4 continued

Bldg #	PrgSqdn	Office Symbol	Shop Name	Waste Stream Name	Profile Number	SAP Number	Est. Annual Amt.
919	60 LRS	LGRVM	L/MHE Repair	Waste Antifreeze	C017-05-0919A	SAP 919A	300 lbs
919	60 LRS	LGRVM	L/MHE Repair	Waste Antifreeze	C017-05-0919B	SAP 919B	300 lbs
919	60 LRS	LGRVM	L/MHE Repair	Absorbent Contaminated W/Petroleum Hydrocarbons	C031-05-0919A	SAP 919A	160 lbs
919	60 LRS	LGRVM	L/MHE Repair	Absorbent Contaminated W/Petroleum Hydrocarbons	C031-05-0919B	SAP 919B	160 lbs
919	60 LRS	LGRVM	L/MHE Repair	Waste Mixed Fuel (Diesel, Gasoline)	H062-05-0919A	SAP 919A	150 gal
919	60 LRS	LGRVM	L/MHE Repair	Waste Mixed Fuel (Diesel, Gasoline)	H062-05-0919B	SAP 919B	150 gal
919	60 LRS	LGRVM	L/MHE Repair	Gasoline Fuel Filters	H065-05-0919A	SAP 919A	40 lbs
919	60 LRS	LGRVM	L/MHE Repair	Gasoline Fuel Filters	H065-05-0919B	SAP 919B	20 lbs
931	60 CES	CEOIP	Power Production	Bulk used oil from Equipment Maintenance	C010-05-0931	Empty Daily	1000 gal
931	60 CES	CEOIP	Power Production	Waste Antifreeze/Water Solution	C017-05-0931	Empty Daily	1000 lbs
931	60 CES	CEOIP	Power Production	Absorbent Contaminated W/Petroleum Hydrocarbons	C026-05-0931	Empty Daily	1000 lbs
931	60 CES	CEOIP	Power Production	Drained Used Diesel Fuel Filters	C031-05-0931	Empty Daily	500 lbs
931	60 CES	CEOIP	Power Production	Drained Used Oil Filters	N021-05-0931	Empty Daily	500 lbs
942	60 CES	CEOIE	Electric Shop	Rags c/w Oil	C031-05-0942	Empty Daily	5 lbs
977	60 APS	TRKM	Material Handling	Absorbant pads/pigs contaminated with Petroleum Hydrocarbons, Diesel	C031-05-0977	Empty Daily	50 lbs
981	60 APS	TRKV	Vehicle Operations	Waste Mixed Fuel (Diesel, Gasoline)	H062-05-0981	Empty Daily	500 lbs
981	60 APS	TRKV	Vehicle Operations	Absorbant pads contaminated with Petroleum Hydrocarbons	C031-05-0981	Empty Daily	1200 lbs
1001	60 CMS	MXMP	Jet Engine Test Cell	Non RCRA Solid	C031-05-1001	Empty Daily	250 lbs
1171	VQ-3 NAVY	DET	Fleet Air Reconnaissance	Fuel Filters, JP-8	C0027-05-1171	Empty Daily	150 lbs
1171	VQ-3 NAVY	DET	Fleet Air Reconnaissance	Outdated/Offspec Latex Paint	C004-05-1171	Empty Daily	90 lbs
1171	VQ-3 NAVY	DET	Fleet Air Reconnaissance	Waste Grease	C006-05-1171	Empty Daily	200 lbs
1171	VQ-3 NAVY	DET	Fleet Air Reconnaissance	Used Oil from Equipment Maintenance	C010-05-1171	Empty Daily	3200 lbs
1171	VQ-3 NAVY	DET	Fleet Air Reconnaissance	Waste Antifreeze/Water Solution	C017-05-1171	Empty Daily	100 lbs
1171	VQ-3 NAVY	DET	Fleet Air Reconnaissance	Absorbant Pads Contaminated with Petroleum Hydrocarbons	C031-05-1171	Empty Daily	1200 lbs

Table 3-4 continued

Bldg #	PrgSqdn	Office Symbol	Shop Name	Waste Stream Name	Profile Number	SAP Number	Est. Annual Amt.
1171	VQ-3 NAVY	DET	Fleet Air Reconnaissance	Waste Mixed Fuel (Diesel, Gasoline)	H062-05-1171	Empty Daily	1600 lbs
1171	VQ-3 NAVY	DET	Fleet Air Reconnaissance	Waste JP-8 w<15% water	H033-05-1171	Empty Daily	1200 lbs
1171	VQ-3 NAVY	DET	Fleet Air Reconnaissance	DRAINED USED OIL FILTERS	N021-05-1171	Empty Daily	360 lbs
1177	VQ-3 NAVY	DET	Fleet Air Reconnaissance	FUEL FILTERS, JP-8	C0027-05-1177	Empty Daily	150 lbs
1177	VQ-3 NAVY	DET	Fleet Air Reconnaissance	Waste Grease	C006-05-1177	Empty Daily	200 lbs
1177	VQ-3 NAVY	DET	Fleet Air Reconnaissance	USED OIL FROM EQUIPMENT MAINTENANCE	C010-05-1177	Empty Daily	3200 lbs
1177	VQ-3 NAVY	DET	Fleet Air Reconnaissance	WASTE ANTIFREEZE/WATER SOLUTION	C017-05-1177	Empty Daily	6900 lbs
1177	VQ-3 NAVY	DET	Fleet Air Reconnaissance	Absorbant pads contaminated with Petroleum Hydrocarbons	C031-05-1177	Empty Daily	1200 lbs
1177	VQ-3 NAVY	DET	Fleet Air Reconnaissance	Waste Mixed Fuel (Diesel, Gasoline)	H062-05-1177	Empty Daily	1600 lbs
1177	VQ-3 NAVY	DET	Fleet Air Reconnaissance	Waste JP-8 w<15% water	H033-05-1177	Empty Daily	1200 lbs
1177	VQ-3 NAVY	DET	Fleet Air Reconnaissance	Drained Used Oil Filters	N021-05-1177	Empty Daily	360 lbs
1185	60 CS	SCMF	Radar/METNAV	BULK USED OIL FROM EQUIPMENT MAINTENANCE	C010-05-1185	Empty Daily	10 lbs
1185	60 CS	SCMF	Radar/METNAV	Absorbent Contaminated W/Petroleum Hydrocarbons	C031-05-1185	Empty Daily	500 lbs
1185	60 CS	SCMF	Radar/METNAV	Flammable Paints	H011-05-1185	Empty Daily	1 lbs
1202	60 LRS	LGRF	Fuels Management	Debris Contaminated With Petroleum Hydrocarbons (Solid)	C031-05-1202F	Empty Daily	1500 lbs
1202	60 LRS	LGRVM	Refuel Maintenance	Drained Used Oil Filters	N021-05-1202	SAP 1202 T	50 lbs
1202	60 LRS	LGRVM	Refuel Maintenance	Fuel Filters, JP-8	C027-05-1202	SAP 1202 T	100 lbs
1202	60 LRS	LGRVM	Refuel Maintenance	Used oil from Vehicle Maintenance	C010-05-1202	SAP 1202 T	150 gal
1202	60 LRS	LGRVM	Refuel Maintenance	Non-RCRA Solids	C031-05-1202	SAP 1202 T	200 lbs
1202	60 LRS	LGRVM	Refuel Maintenance	Waste Mixed Fuel (Diesel, JP8)	H062-05-1202	SAP 1202 T	100 lbs
1205	60 MSS	OL-E AFCESA	CEMIRT	Used oil from Equipment Maintenance	C010-05-1205	Empty Daily	200 gal
1205	60 MSS	OL-E AFCESA	CEMIRT	Waste Antifreeze	C017-05-1205	Empty Daily	425 lbs
1205	60 MSS	OL-E AFCESA	CEMIRT	Empty Containers of Paint, Grease, and Acetone	C031-05-1205	Empty Daily	50 lbs
1205	60 MSS	OL-E AFCESA	CEMIRT	Non RCRA Solid (Debris c/w POL's & Paint)	C031-05-1205	Empty Daily	150 lbs

Table 3-4 continued

Bldg #	PrgSqdn	Office Symbol	Shop Name	Waste Stream Name	Profile Number	SAP Number	Est. Annual Amt.
1205	60 MSS	OL-E AFCESA	CEMIRT	Waste Acetone c/w Waste Paint	H011-05-1205	Empty Daily	100 lbs
1205	60 MSS	OL-E AFCESA	CEMIRT	Class 9 Solids	H012-05-1205	Empty Daily	50 lbs
1205	60 MSS	OL-E AFCESA	CEMIRT	Drained Used Filters	N021-05-1205	Empty Daily	170 lbs
1212	60 OSS	OSL	Life Support	Alcohol Pads	C031-05-1212	Empty Daily	150 lbs
Basewide	60 CES	CEV	TSDF	Universal Waste - Fluorescent Tubes	U001-05-1365	Empty Daily	6600 lbs
Basewide	60 CES	CEV	TSDF	Universal Waste - Lithium Batteries (non-rechargeable)	U003-05-1365	Empty Daily	1500 lbs
Basewide	60 CES	CEV	TSDF	Universal Waste - Cathode Ray Tube	U004-05-1365	Empty Daily	200 lbs
Basewide	60 CES	CEV	TSDF	Universal Waste - Lead Acid Battery Non-Spillable (Gel-type)	U005-05-1365	Empty Daily	5000 lbs
Basewide	60 CES	CEV	TSDF	Universal Waste - Nickel Cadmium batteries	U006-05-1365	Empty Daily	4000 lbs
Basewide	60 CES	CEV	TSDF	Universal Waste - Alkaline batteries	U007-05-1365	Empty Daily	9000 lbs
Basewide	60 CES	CEV	TSDF	Universal Waste - Flammable Aerosols	U008-05-1365	Empty Daily	4300 lbs
Basewide	60 CES	CEV	TSDF	Universal Waste - Mercury Batteries	U009-05-1365	Empty Daily	30 lbs
Basewide	60 CES	CEV	TSDF	Universal Waste - Nickel Metal Hydride Batteries (dry)	U010-05-1365	Empty Daily	500 lb
Basewide	60 CES	CEV	TSDF	Universal Waste - Non-Flammable Aerosols	U012-05-1365	Empty Daily	300 lbs
Basewide	60 CES	CEV	TSDF	Universal Waste - Cuprous Iodide/ Magnesium Batteries (water-activated)	U013-05-1365	Empty Daily	45 lbs
1370	60 SFS	SFTCA	CATM	Class 9 Solids (Vacuum System Waste)	H012-05-1370	SAP 1370	2500 lbs
5601	60 SVS	SVBG	Golf Course	Bulk Used Oil from Golf Course Maintenance	C010-05-5601G	Empty Daily	800 lbs
5601	60 SVS	SVBG	Golf Course	Absorbent Contaminated W/Petroleum Hydrocarbons	C031-05-5601G	Empty Daily	500 lbs

4.0 Storage Facility Description

The Storage Facility components and operations are described in this section.

4.1 Building 1365

Building 1365, the Storage Facility, is a former ammunition storage building that is currently used for hazardous and universal waste container storage. A schematic drawing of the building is presented in Figure 4-1. All available construction drawings of Building 1365 are included in Attachment G. The building consists of six double bays on the east side with three double and six single bays on the west side. Additionally, there are concrete aprons on both the east and west sides of the building directly in front of and adjacent to the bays. Each bay has an 8-inch-thick concrete floor, a 3-foot-thick concrete back wall, 1-foot-thick concrete side walls, a 4-3/4-inch concrete roof, and an open doorway to the apron area.

A safety zone of no less than 50 feet to the facility's perimeter is maintained around containers holding flammable wastes (these containers are also properly grounded). Building 1365 is at least 70 feet from the security fence. The facility is enclosed by a security fence with a gate that is kept locked whenever authorized facility workers are not present.

A 3-1/2-inch curb with a vehicle ramp runs along the front of each bay on the east side of the facility to provide a separate containment system for each bay. There is also a 6-inch concrete curb (with ramps at each end) around the entire perimeter of the facility aprons, providing a secondary containment system for the entire facility, as well as a tertiary containment system for waste in the six double bays on the building's east side.

The aprons on both sides of the facility are enclosed with a steel frame and metal siding extending from the roof to the original concrete facility over the aprons, and a metal wall along the outside edge of the aprons down their entire length. Both ends of the apron enclosures are open for easy access to the storage areas and for ventilation. This enclosure prevents run-on from precipitation into the storage bays. Some precipitation may enter the

Figure 4-1

8.5 x 11 B&W

apron enclosures as a result of wind-blown rain and collect along the outside edge of the apron's containment structure. Because the apron areas have a very large containment capacity and are only used to stage the hazardous waste containers for less than 48 hours prior to contractor pick-up for disposal, the intermittent collection of a small amount of precipitation in this area would not lead to deterioration of the containers or cause the containment system to overflow in the event of a spill/leak. The staging of containers on the ramps is required to prepare them for shipment, separating them from containers destined for future shipments. This provides easy access for the transport contractor to inspect and label each container and load them onto a truck. All reactive wastes remain in their respective bays and are not staged with the other wastes.

The double bays on the building's east side provide adequate protection for the storage of incompatible wastes, because they are isolated from the concrete walls and dikes in front of each individual bay. Given that the individual bays on the west side of Building 1365 are not diked across their front doorways leading to the apron, as are the east bays, a separate containment system does not exist for each bay. As such, only waste containers with no free liquid are stored in those bays, while the apron area is used strictly as a staging area for storing containers for no more than 48 hours.

4.1.1 Containment System Capacity

The capacity of the containment structure of a typical double bay at Building 1365 is calculated as follows:

$$V_{eff} = V_s - V_r - V_p$$

where:

$$\begin{aligned}
 V_{eff} &= \text{effective containment volume} \\
 V_s &= \text{volume of structure} &= (17 \text{ ft})(22.67 \text{ ft})(3.5 \text{ in} / 12 \text{ ft}) = 112.4 \text{ ft}^3 \\
 V_r &= \text{volume of ramp} &= 1/2 (3 \text{ ft})(6 \text{ ft})(3.5 \text{ in} / 12 \text{ ft}) = 2.63 \text{ ft}^3 \\
 V_p &= \text{volume of 11 pallets}^a &= 11 [3 (2/12 \text{ ft})(2.5 \text{ in} / 12 \text{ ft})(4 \text{ ft}) + (6 \text{ in} / 12 \text{ ft})(1 \text{ in} / 12 \text{ ft})(4 \text{ ft})] \\
 & &= 11 (0.417 \text{ ft}^3 + 0.833 \text{ ft}^3) = 13.75 \text{ ft}^3
 \end{aligned}$$

$$\begin{aligned}
V_{\text{eff}} &= 112.4 \text{ ft}^3 - 2.63 \text{ ft}^3 - 13.75 \text{ ft}^3 \\
&= 96.0 \text{ ft}^3 \\
&= (96.0 \text{ ft}^3)(7.48 \text{ gal/ft}^3) \\
&= 718 \text{ gal}
\end{aligned}$$

^a To 3.5 inches above floor – height of containment curb.

The maximum effective containment capacity allowed is 10% of the total amount of liquid waste stored within the system. Therefore, storage capacity in a typical double bay at Building 1365 is limited to 7,180 gallons (10 x 718, the effective containment volume in the above calculation), or 143 55-gallon drums (filled with only 50 gallons of waste to accommodate expansion), or a total equivalent volume distributed in containers of different sizes. However, allowing for aisle requirements for inspection and drum accessibility, no more than 88 drums (4 drums per pallet, 22 pallets, double-stacked) of 55-gallon capacity, or the total equivalent volume distributed in containers of different sizes, may be placed in a storage bay at any one time. Double-stacking is accomplished by a licensed forklift operator lifting a pallet of drums on top of existing drums. This configuration translates into a total capacity in the eight bays of 528 55-gallon drums, or 26,400 gallons.

Wastes with no free liquids are stored only in the west bays. The presence of free liquids is determined at the point of generation by ensuring no liquid can be wrung from the material by hand. Waste without free liquid is identified by using the term “contaminated with” or “c/w” as part of the waste description. The storage capacity of the west bays is calculated based on available space and aisle requirements, even though only wastes with no free liquids are stored there. Based on the capacity calculations for the east bays, up to 88 55-gallon drums, or the total equivalent volume distributed in containers of different sizes, may be safely stored in each double bay. Also, 40 55-gallon drums, or their equivalent volume distributed in containers of different sizes, can be safely stored in each single bay. Thus, the storage capacity for all west bays is 504 55-gallon drums, or the total equivalent volume distributed in containers of different sizes.

The aprons are to be used only as a staging area for the hazardous waste containers before they are picked up by the shipping contractor. The containers must be removed from these areas within 48 hours. Although these areas do have a secondary containment system, their capacities are calculated here for information only. These calculations do not

imply that the areas may be used for storage. The capacity of the containment structure of one apron area adjacent to the east side of Building 1365 is calculated below. (Note: Even though there are 6-inch curbs enclosing the ramp, the drums on pallets are only 4 inches off of the ground. Therefore the capacity of the containment structure is calculated to a depth of only 4 inches, because the containers are not to come in contact with any spilled waste.)

$$V_{eff} = V_s - V_r - V_p$$

where:

$$\begin{aligned} V_{eff} &= \text{effective containment volume} \\ V_s &= \text{volume of structure} &= (144 \text{ ft})(24 \text{ ft})(4 \text{ in} / 12 \text{ ft}) = 1,152 \text{ ft}^3 \\ V_r &= \text{volume of ramp} &= 1/2 (4 \text{ ft})(12 \text{ ft})(4 \text{ in} / 12 \text{ ft}) = 8 \text{ ft}^3 \\ V_p &= \text{volume of 60 pallets}^a &= 60 [3 (2 / 12 \text{ ft})(2.5 \text{ in} / 12 \text{ ft})(4 \text{ ft}) + 10 (6 \text{ in} / 12 \text{ ft})(1 \text{ in} / 12 \text{ ft})(4 \text{ ft})] \\ & &= 60 (0.417 \text{ ft}^3 + 1.667 \text{ ft}^3) = 125 \text{ ft}^3 \\ \\ V_{eff} &= 1,152 \text{ ft}^3 - 8 \text{ ft}^3 - 125 \text{ ft}^3 \\ &= 1,019 \text{ ft}^3 \\ &= (1,019 \text{ ft}^3)(7.48 \text{ gal} / \text{ft}^3) \\ &= \mathbf{7,622 \text{ gal}} \end{aligned}$$

^a To 4 inches above floor – height of the bottom of the drum stored on a pallet.

Again, the maximum containment capacity allowed is 10% of total storage capacity. The storage capacity in the enclosed apron space on the east side of Building 1365 is limited to 76,220 gallons (10 x 7,622, the effective containment volume in the above calculation), or 1,524 55-gallon drums (filled with 50 gallons of waste to accommodate expansion), or the total equivalent volume distributed in containers of different sizes. However, allowing for aisle requirements for inspection and drum accessibility (4-foot aisles between pallet rows), no more than 384 drums (4 drums per pallet, two pallets per row double-stacked and 24 rows), or the total equivalent volume distributed in containers of different sizes, may be placed in the apron area at any time. These same calculations apply to the apron on the west side of Building 1365. Thus, total capacity of staging at Building 1365 is 768 55-gallon drums, or the total equivalent volume distributed in containers of different sizes.

The capacity of the entire secondary containment system at Building 1365 is the sum of the individual areas, as calculated above and summarized in Table 4-1.

Table 4-1. Building 1365 Secondary Containment System Capacities

Area	Number of Containers	Container Size	Secondary Containment Volume
East Bays	528	55-gal drums	(26,400 gallons)
West Bays	504	55-gal drums	(25,200 gallons)
Total Storage Area	1,032	55-gal drums	(51,600 gallons)
East Apron	384	55-gal drums	(19,200 gallons)
West Apron	384	55-gal drums	(19,200 gallons)
Total Staging Area	768	55-gal drums	(38,400 gallons)
Total Containment Capacity	1,800	55-gal drums	(90,000 gallons)

4.1.2 Control of Run-On

Because of the construction of this facility and the enclosure over the ramps, precipitation cannot enter the bays where the drums are stored, and thus would not come in contact with them or fill the containment structure causing an overflow if a spill or leak were to occur. Also, all containers are stored on pallets, preventing them from coming in contact with spilled material in the containment structure. The small amount of precipitation which might enter the ramp area due to wind-blown rain is also not a factor due to the large containment capacity, compared to the amount of waste staged there at a given time.

4.1.3 Removal of Liquids from Containment System

Spilled liquids accumulated in the containment structures will be profiled according to the waste in the container from which they were released. If necessary, spilled liquids will be sampled and analyzed by a certified laboratory. Cleanup will be accomplished with the use of absorbents stored at the facility or by pumps, if necessary. This material will be placed in drums and disposed of properly.

The loading and unloading of the containers stored at Building 1365 occur immediately in front of the facility; the containers are moved by forklift directly into the

containment area and the appropriate storage bay. Thus, the time the containers are in an uncontained area is minimal, significantly reducing any chance of a spill outside the containment structure.

4.2 Containers

Containers used for the storage of hazardous, universal, non-RCRA hazardous, or nonhazardous wastes will be selected by Storage Facility personnel based on professional knowledge and applicable regulations, such as the U.S. Department of Transportation (DOT) Hazardous Materials Table presented in 49 CFR 172.101.

The site, DOT packaging code, and type of containers used at the Storage Facility are provided in Table 4-2.

Table 4-2. Containers Used at the Storage Facility

Size	Packaging Code	Type
1 ft	4G	Fiberboard box
15 g	1A1	Steel drum with non-removable head
15 g	1H2	Plastic drum with removable head
2 g	4G	Fiberboard box
20 g	1A2	Steel drum with removable head
3 g	1G2	Fiberboard drum with removable head
3 ft	4G	Fiberboard box
30 g	1A1	Steel drum with non-removable head
30 g	1A2	Steel drum with removable head
30 g	1H1	Plastic drum with non-removable head
30 g	1H2	Plastic drum with removable head
4 ft	4G	Fiberboard box
5 g	1A2	Steel drum with removable head
5 g	1H1	Plastic drum with non-removable head
5 g	1H2	Plastic drum with removable head
55 g	1A1	Steel drum with non-removable head
55 g	1A2	Steel drum with removable head
55 g	1H1	Plastic drum with non-removable head
55 g	1H2	Plastic drum with removable head
55 g	6HA1	Plastic/steel composite packaging with non-removable head
6 ft	4G	Fiberboard box
8 ft	4G	Fiberboard box

g = gallon
ft = foot

The maximum expected number of containers on site at any given time is 300.

The following items must be evaluated prior to the container selection process:

- Nature of the waste being generated, including all hazardous material names; and
- Mode of transportation (i.e., highway, aircraft, rail, or water) that will be used to move the waste to the disposal facility.

Any container used for the accumulation of hazardous waste will be free from defects or deterioration that could reduce the effectiveness of the container (22 CCR 66265.171).

Examples of such defects or deterioration are:

- Visible dents, scrapes, or holes;
- Dents or creases to the chimes (rings around the top and bottom heads of the drum);
- Significant rust;
- Metal fatigue or other material defects; and
- Bulging heads.

If a container used for the accumulation of hazardous waste becomes damaged or deteriorates as specified above, the contents will be transferred to a serviceable container or overpacked in a DOT-approved overpack container. The transfer will take place as soon as possible, but must be completed within 5 days of discovering the defect or deterioration [22 CCR 66265.1087(c)(4)(C)]. The 5-day maximum requirement applies only to containers with capacities greater than 25 gallons.

4.3 Waste Storage Tanks

Six ASTs store liquid hazardous waste at the Storage Facility just east of Building 1365. The tanks are located outdoors within the secured area of the Storage Facility. The capacity of each tank is approximately 2,500 gallons. The tanks have an expected service life of 15 years, which may be extended by maintenance, reconditioning, or both. All available design drawings of the tanks are included in Attachment H. Subpart CC documentation is included in Attachment I.

The diameter of each tank is 76 inches and the length is 11 feet. The dimensions of each entire tank system, including the integral secondary containment dike, are 95 inches wide, 15.5 feet long, and 89 inches high, with a total weight of 8,275 pounds. The containment dike is capable of containing 100% of each tank's capacity. Each tank is constructed of 6-gauge steel, while the dike's floor and walls are 2-gauge steel, and the cowl (or roof) is 6-gauge steel. There is no allowance for corrosion of the tank. The tanks are rated to store fuels (i.e., JP-8 and diesel), hydraulic fluids, and synthetic/mineral oils at atmospheric pressure. There is a manhole access to both the tank and dike through which a person may enter for visual inspections.

Each tank is constructed of supporting steel skids anchored to the concrete slab foundation. Neoprene grommets are used around the anchor bolts.

The tanks have an 8- to 10-millimeter epoxy coating applied to the interior surfaces, and a 6-millimeter vinyl paint coating with primer on all exterior surfaces to protect against corrosion. With these coatings, the tanks are resistant to fuels, hydraulic fluids, and oils. Because the tanks are aboveground and mounted on steel skids anchored to a concrete slab, the tanks will not come into contact with soil or standing water that could corrode the tanks and their appurtenant structures (piping, instrumentation, etc.).

Each tank's foundation consists of 6-inch concrete slab placed on a 6-milliliter polyethylene vapor barrier overlaying a 4-inch gravel base compacted to 95% of the maximum laboratory density. Extreme weather conditions do not occur at Travis AFB; however, the concrete slab was designed with wire mesh reinforcement, contraction joints, a vapor barrier between the soil and concrete, and proper air entrainment to protect it from possible freeze-thaw conditions.

4.3.1 Tank Instrumentation and Process Components

All piping associated with the storage tanks is ASTM A53 black steel, Schedule 40 with threaded joints, with a design pressure rating of 150 pounds per square inch gauge (psig). There is no automatic or electronic instrumentation included as part of the tank system. The instrumentation consists of a float-actuated level gauging system with a polyethylene float

in the tank with an 8-foot aluminum gauge board on the front of each tank visible to the operator. Each tank has been individually calibrated to correlate the level of the tank's contents to the quantity in gallons. The tanks also include dip tubes allowing for manual gauging with a dipstick and sample collection of the tanks' contents.

All tank and dike joints are welded and meet all referenced design specifications and standards including Underwriter's Laboratories (UL) certification requirements. All pipe joints are threaded with the connections to the tank via a bolted flange, which also meets all referenced design specifications and standards.

The feed line used to pump recyclable used oils/fuel from a container to the tank consists of a strainer, pump, check valve, and isolation valves. The discharge line starts at the top of the tank with the same pipe used for both feed and suction, and includes two manual shut-off valves, a check valve and a 2-inch Camlok quick connect/disconnect hose fitting at the end to receive the flexible pump hose. All plumbing components are similar metals to prevent corrosion caused by dissimilar metal connections.

The feed system consists of a 2-horsepower, self-priming centrifugal pump rated at 100 gpm at 30 feet of head. The ball valves and check valves are bronze, resistant to corrosion and high temperatures, and fully compatible with the used oils and fuels to be stored in the tanks. A cutoff system consisting of a manual pump switch and ball valve, along with constant visual monitoring by the operators, is used to stop the waste feed system and prevent any release of the used oils and fuels. The use of check valves and ball valves ensures that the system's valves are in the proper orientation on a continuous basis regardless of the position of other valves or pumps, preventing a possible backflow and release of the material being pumped.

A manual bypass system consisting of valves in the piping is used to divert the pumping of used oils and fuels from one tank to another. This is made possible by one pump serving two tanks in parallel. Strict operating procedures with constant visual monitoring during all pumping operations, along with the system of manual check valves, ball valves, and tank gauging, help to safeguard against accidental releases.

An 18-inch spring-loaded manhole cover is included on top of both the primary tank and dike structures to allow for a release of excess pressure in either structure. A 4-inch pressure/vacuum breather valve in each piping system also provides positive pressure controls. Temperature controls are not required for these tanks and their intended use.

Appropriate National Fire Protection Association (NFPA) placards are affixed to each tank, along with a label on the front of each clearly identifying the contents. Materials stored in the tanks include used oils and fuels prior to off-site disposal or recycling. All waste materials placed in any one tank will be fully compatible with each other and the tank.

Maintaining consistent waste streams through inspections and laboratory analyses, along with proper labeling of the tanks, minimizes the possibility of incompatible wastes being mixed, as mixing could lead to compromise of the tank. Additionally, storing the waste in isolated and grounded tank systems with at least a 50-foot buffer zone will protect the recyclable material from any conditions that may cause it to ignite.

4.3.2 Controls and Practices to Prevent Spills and Overflows

Upon arrival at the Storage Facility, waste is first evaluated to see if it meets the consistent waste stream requirements for recyclable material. If it does, the proper tank is identified for receiving the recyclable material, its remaining capacity verified as sufficient to accept waste without exceeding the predetermined level required for thermal expansion, and the valve positions are checked (open/closed). After proper grounding, a flexible hose attached to the pump is inserted or attached to the container, the ball valves to the hose connection and the tank are opened, and the pump is turned on. Constant visual monitoring of the pump and all pipe connections ensures that no leaks occur during the transfer process. After the transfer is complete, the free end of the hose is placed in a proper receptacle within the containment area to contain any dripping residue. Receipt of the material is logged in the facility's operations log, and the containers are returned to the generating facility's accumulation point for reuse.

After proper grounding, the flexible hose from the contractor's self-contained pump is connected to the Camlok hose fitting on the discharge line, the discharge ball valve and shutoff valve are opened, and the truck's pump is turned on. All personnel involved in this

operation constantly monitor the pump and all pipe connections to ensure no leaks occur during the transfer process.

If any leak or pipe failure should occur, the pump is shut down immediately and the proper valves are closed to prevent additional discharge of the waste. The problem is assessed and corrected, escaped waste is cleaned up, and proper actions are taken to mitigate further leaks.

4.4 Professional Determinations

The contents of this permit application, including the following professional determinations (Attachment J) and the Storage Facility Standard Operating Procedure (SOP) (Attachment K), illustrate that the Travis AFB Storage Facility has been located, designed, constructed, maintained, and operated to minimize the possibility of a fire, explosion, or any unplanned sudden or non-sudden release of hazardous waste or hazardous waste constituent to air, soil, or surface water that could threaten human health or the environment.

4.4.1 Tank Certification

The conditions of the tanks are addressed in the tank certification document contained in Attachment J. A civil engineer registered in the State of California evaluated the design, structural integrity, and product compatibility of the storage tanks and the secondary containment system and found them to meet all applicable requirements.

4.4.2 Fire Protection Evaluation

An evaluation of the fire suppression system is provided in Attachment J. Based on the evaluation, Building 1365 would retain all contaminants during any unplanned sudden or non-sudden emergency event. In addition, there is adequate water volume and pressure to supply water hose streams and automatic sprinklers.

4.4.3 Containment System Assessment

Building 1365 and the tank farm were inspected and the calculations provided in Section 4.1.1 reviewed for compliance with the containment requirements mandated in 22 CCR

§66264.175. The assessment concluded that Building 1365 and the tank farm are suitably designed to achieve the required performance requirements (Attachment J).

4.4.4 Seismic Assessment

Building 1365 has not yet been assessed to determine its performance during and following a maximum credible earthquake. A compliance schedule for this assessment has been included in Attachment B.

5.0 Site Security

Travis AFB is a secure military facility with access granted only to those individuals with business on the Base. Security checkpoints are located at each entrance. Proper identification or a base representative escort is required for entry. The security forces conduct routine patrols of the base.

5.1 Access Control

The Storage Facility and adjacent aboveground tanks are surrounded by a 6-foot-high chain-link security fence with a three barbed-wire outrigger. A swinging vehicle gate of the same construction as the fence spans the only access road and is closed and locked whenever trained site operators are not at the facility. A control building/office is located within the secured area adjacent to the vehicle gate with a personnel gate providing access to it. This gate is also kept closed and locked whenever the site operators are not at the facility. The keys to the locks are kept by the site supervisor and the 60 CES/CEV, Environmental Flight.

5.2 Barriers and Signs

Warning signs for hazardous waste storage areas are clearly posted on the entry gate and perimeter fence. These signs measure 18 inches by 24 inches, are legible from a distance of 25 feet, and are printed with the following words in English and Spanish:

CAUTION
HAZARDOUS WASTE STORAGE AREA
UNAUTHORIZED PERSONS KEEP OUT

6.0 Waste Management Practices

Waste management practices at Travis AFB are designed to comply with RCRA and Title 22 regulations, as administered by the U.S. EPA and DTSC, respectively. The practices ensure safe operation of the Storage Facility, protect the human health of facility workers, and prevent releases of hazardous materials into the environment. The following sections describe waste management practices for the operation of the Storage Facility.

6.1 Storage Facility Operations

The Storage Facility is the primary facility where Travis AFB stores bulk quantities of hazardous wastes. The SOPs for the Storage Facility is included in Attachment K. The Storage Facility is the only facility on the base, other than the HWAPs, that may store more than 55 gallons of any hazardous waste or more than 1 quart of any acute hazardous waste for more than three days. Regulated waste generated on base can only be accumulated at SAPs, HWAPs, or the Storage Facility.

6.1.1 Satellite Accumulation Points

A SAP is an initial accumulation point that is at or near the area where waste is generated and is under the process operator's control [22 CCR 66262.34(e)(1)(A)]. SAPs may accumulate as much as 55 gallons of hazardous waste or 1 quart of acutely or extremely hazardous waste [22 CCR 66262.34(e)(1)]. SAPs may not hold a waste for more than one year from the initial date of accumulation [22 CCR 66262.34(e)(1)(B)]. The accumulation start date must be clearly marked and visible for inspection on each container [22 CCR 66262.34(e)(1)(C)]. When a container becomes full (90% of the capacity of the container), a SAP manager must transfer the filled container to a HWAP *within 3 calendar days* of the fill date [22 CCR 66262.34(e)(3)]. The fill date must be marked on the container. When small containers are used to accumulate hazardous waste, they may need to be transferred to a HWAP prior to accumulating the maximum amounts if insufficient storage space is available or to preclude safety and health concerns.

6.1.2 90-Day Hazardous Waste Accumulation Points

A HWAP is a point near the area where hazardous waste is generated that is used to collect, accumulate, and consolidate waste. A HWAP may accumulate as much as 55 gallons of hazardous waste or 1 quart of acutely or extremely hazardous waste for no more than 90 days from the first day of accumulation. A HWAP may also accept containers of hazardous waste from SAPs. These containers must be transported from the HWAP to the Storage Facility within 90 days. HWAPs must notify the Storage Facility Manager by the sixtieth day of accumulation to make an appointment for hazardous waste transfer to the Storage Facility. The Travis AFB HWAPs are located at Building 831 (Civil Engineering) and Building 793 (Medical Center) and are operated by contractor personnel.

6.1.3 Facility Requirements

RCRA requires that a facility storing hazardous waste “be maintained and operated to minimize the possibility of a fire, explosion, or other unplanned sudden or non-sudden release of hazardous waste” (22 CCR 66265.31). To meet this requirement, the Storage Facility has been constructed with an impermeable base and a containment system that is capable of preventing environmental contamination caused by container overfilling or leaking. Each bay is sloped so that liquids resulting from leaks, spills, or precipitation are contained within, and easily removed from, the bay. Additionally, a perimeter fence has been installed to discourage unauthorized personnel from entering the Storage Facility.

The Storage Facility will conform to the following facility requirements in accordance with U.S. EPA, Air Force, and Travis AFB regulations and policies:

- Adequate aisle space (4 feet) will be maintained between the drums to allow unobstructed movement of personnel, fire protection equipment, spill control equipment, and decontamination equipment to any area of the facility (22 CCR 66265.35).
- Drums will be stacked on pallets to a maximum height of two drums.
- Incompatible wastes will be segregated by using separate containment areas, separately diked areas, or sloped containment to separate sumps [22 CCR 66265.177(c)].

- Spilled waste and accumulated precipitation will be removed from the containment system as soon as it is identified to prevent container corrosion or mixing of wastes (22 CCR 66265.174). When warranted, accumulated precipitation will be tested (see Waste Analysis Plan in Attachment D for testing procedures) prior to discharge to ensure that it does not contain hazardous waste or hazardous waste constituents.
- “No Smoking” signs will be conspicuously placed wherever there is a hazard from ignitable or reactive waste, unless smoking is specifically prohibited in the vicinity of the containers [22 CCR 66265.17(a)].
- The facility will have an operating internal communications system or alarm capable of providing immediate emergency instruction. Telephones or two-way radios also will be available for emergency situations including the transportation of waste within the Storage Facility [22 CCR 66265.32(a) and 22 CCR 66265.32(b)].
- Fire extinguishers, other fire-fighting equipment, and spill cleanup kits will be conveniently located and in good condition [22 CCR 66265.32(c)].
- At least one empty DOT-approved container and one DOT-approved overpack container that are compatible with the wastes stored at the Storage Facility will be available to respond to spills.
- Protective equipment required for handling the various waste materials will be conveniently located and in good condition.
- A copy of the current Storage Facility Site-Specific Spill Plan and the Hazardous Waste Management Plan will be available at the facility. The Storage Facility manager will ensure that all individuals working at the site are familiar with the content and location of each plan.
- An adequate stock of hazardous waste management supplies (e.g., drums, labels, booms) to support base-wide hazardous waste activities will be maintained at the facility.

6.1.4 Accepting Waste from a SAP

Many wastes generated on Travis AFB are initially accumulated at SAPs located throughout the base. HWAP and Storage Facility personnel shall adhere to the following procedures when accepting hazardous, universal, or non-RCRA hazardous wastes from these points:

- Storage Facility personnel will ensure that a current hazardous waste profile sheet (HWPS) is on file before accepting any waste into the Storage Facility [22 CCR 66265.13(a)].
- When accepting custody of hazardous waste, Storage Facility personnel will do the following:

- Physically inspect the containers to ensure they are in good condition (22 CCR 66265.171);
 - Ask the generator to verify the contents of the containers in the presence of Storage Facility personnel to ensure the contents match the information on the waste profile;
 - Wear proper personal protective equipment (e.g., gloves, face shield) when opening a container for verification;
 - Weigh each container and indicate the actual weight on Air Force (AF) Form 3135;
 - Have the SAP manager or the shop hazardous waste point of contact sign the AF Form 3135;
 - Sign the AF Form 3135 accepting physical custody of the waste;
 - Give one copy of the AF Form 3135 to the SAP manager or the shop hazardous waste point of contact;
 - Ensure that all required DOT hazardous warning labels and hazardous waste, universal waste, or non-RCRA hazardous waste markings have been attached to the container;
 - Ensure that the accumulation start date has been entered on the hazardous or non-RCRA hazardous waste marking [22 CCR 66262.34(a)(2)] or universal waste marking [22 CCR 66273.35(c)(1)], as appropriate; and
 - Assign a unique identification number and mark it on each container.
- If any discrepancy arises involving the hazardous waste, Storage Facility personnel will inform the generator of their responsibility to correct it.

6.1.5 Accepting Waste from a Daily Empty Site

Some of the hazardous waste generators on Travis AFB do not operate SAPs; instead, they bring their wastes directly from daily empty sites to the HWAPs. The following requirements will be followed by HWAP personnel for this type of hazardous waste management:

- Incompatible wastes will not be placed in the same container [22 CCR 66265.177(a)]. In addition, hazardous waste will not be placed in a container that previously held an incompatible waste or material [22 CCR 66265.177(b)].
- The date waste is first added to the container will be listed as the accumulation start date [22 CCR 66262.34(a)(2)].
- Ensure there is a profile for the waste. If there is not a profile, reject waste pending analysis.

- Enter information regarding the containers into the container log.
- In addition to this log, maintain a separate running log for each container that will have wastes added to it at the HWAPs. At a minimum, the following information will be included on this log:
 - Every date waste is added to the container;
 - Quantity of waste added to the container;
 - Shop name and the shop representative's name and duty phone;
 - Location, building number, and street address of the shop; and
 - Description of the process that generated the waste.
- HWAP personnel will ensure that the following conditions are met before adding waste to containers:
 - Fuel or oil contaminated absorbents are placed in plastic bags or small drums;
 - Rags and absorbent are segregated by contaminants contained within the material; and
 - Absorbents are free of trash, scrap metals, hardware, seals, and any other materials other than the chemical for which the absorbent was used.

6.1.6 Operating Procedures for the HWSF

Refer to the HWSF Standard Operating Procedures in Attachment K.

6.1.7 Recordkeeping and Reporting

U.S. EPA, DOT, and the Occupational Safety and Health Administration (OSHA) require documentation for some portion of the hazardous waste life cycle. In most cases, records must be kept for a minimum of 3 years. The following list summarizes the documentation that must be generated during the hazardous waste life cycle. The required retention times are summarized in Table 6-1.

- **Turn-in Documents:** The HWAP or Storage Facility manager will retain one signed copy of the form (AF Form 3135) used to turn in hazardous waste to the HWAP or Storage Facility.
- **Container Log:** The HWAP and Storage Facility manager will track each container using a Container Log. Storage Facility personnel will maintain this information for access by Environmental Flight and Fire Department staff.
- **Hazardous Waste Profile Sheets:** The Storage Facility manager will maintain a copy of all HWPSs for review by state and federal regulators and Environmental Flight. Copies of any test results, waste analyses, and waste determinations associated with each HWPS will be maintained in 60 CES/CEV [22 CCR 66262.40(c)]. See Standard Operating Procedures in Attachment K.
- **Training Records:** The Storage Facility manager will maintain the records and files of all personnel receiving hazardous waste training in their areas of responsibility (see Section 7.0).
- **Daily Inspection Records:** The Storage Facility manager will maintain a record of the findings of each daily inspection using the Storage Facility Daily Inspection Checklist form presented in Attachment L.
- **Weekly Inspection Records:** The Storage Facility manager will maintain a record of the findings of each weekly inspection using the Storage Facility Weekly Inspection Checklist form, presented in Attachment L.
- **Storage Tank Records:** The Storage Facility manager will maintain records for the storage and shipment of used JP-8 and used oil in the bulk storage tanks located at the Storage Facility. At a minimum, the records will include the following:
 - Generating organization;
 - Product type (e.g., JP-8, used oil);
 - Quantity received (gallons); and
 - Quantity shipped off base.

Table 6-1. RCRA Records and Corresponding Minimum Retention Periods

Record or File	Retention Time	Citation
Hazardous Waste Determination (Generator)	3 years from the date that the waste was last sent to a TSDF ^a	22 CCR 66262.40(c)
Hazardous Waste Determination (TSDF)	Until closure of the TSDF ^a	22 CCR 66264.73(b)(3)
Biennial Report	3 years from the due date of the report ^a	22 CCR 66262.40(b)
Annual Report	3 years from the due date of the report ^a	22 CCR 66262.40(b)
Hazardous Waste Manifest	3 years from the day the waste was accepted by the initial transporter ^a	22 CCR 66262.40(a)
Accumulation Site Inspection Logs	3 years from the date the inspection was conducted ^a	22 CCR 66265.15(d)
Exception Reports	3 years from the due date of the report ^a	22 CCR 66262.40(b)
Land Disposal Restriction Notice & Certification (Generator)	3 years from the date the waste was last sent to a TSDF ^a	22 CCR 66268.7(a)(8)
Land Disposal Restriction Notice & Certification (TSDF)	Until closure of the TSDF ^a	22 CCR 66264.73(b)(10)
Employee Training Records	Current personnel: until closure of facility Former personnel: 3 years from date the individual last worked at facility	22 CCR 66265.16(e)

^a The periods of retention are extended automatically during the course of any unresolved enforcement action or as requested by U.S. EPA [22 CCR 66262.40(d)].

TSDF = treatment, storage, and disposal facility
CCF = California Code of Regulations

6.2 Inspections

Storage Facility personnel conduct daily and weekly inspections to check the condition of the containers and ensure that the facility is being properly managed (22 CCR 66265.15 and 22 CCR 66265.174). Inspections are documented on the Storage Facility Daily Inspection Checklist and the Storage Facility Weekly Inspection Checklist forms that are included in Attachment K. Immediately upon discovery of any inoperative equipment or other facility deficiencies, the Storage Facility manager will process the proper paperwork to have the deficiencies corrected. All discrepancies and corrective actions will be listed on the inspection checklist. Refer to the Standard Operating Procedures in Attachment K for more information on inspections.

6.3 Continuity Book

Storage Facility personnel maintain a Continuity Book, a working document that contains the following items or a description of their location within the facility (e.g., training records for former employees are located in the top drawer of the file cabinet located in the storage area):

- An emergency response Contingency Plan for the HWSF;
- A job title roster that identifies the individual filling each position at the Storage Facility;
- Job descriptions that identify the hazardous waste duties and responsibilities associated with each position;
- A description of the training requirements associated with each position;
- Training records (e.g., certificates, AF Form 55);
- Container log;
- Daily and Weekly Inspection Checklists;
- Copies of HWPSs;
- Standard operating procedures for the Storage Facility;
- Instructions for completing AF Form 3135 and DD Form 1318-1;
- Storage tank records;
- Information regarding the proper operating procedures for the ASTs; and
- A copy of the Travis AFB Hazardous Waste Management Plan (HWMP).

6.4 Reporting Requirements

Reporting is an integral part of informing regulatory authorities of normal hazardous waste operations as well as recording spills or other emergency events. The types of reports required for hazardous waste management are described in this section. The Environmental Flight is responsible for the generation and distribution of these reports. Retention times for each report are presented in Table 6-2.

6.4.1 Biennial Reports

The U.S. EPA and DTSC require biennial reports from any facility that generates, treats, stores, or disposes of hazardous waste [40 CFR 262.41(a) and 22 CCR 66262.41(b)]. The Biennial Report is due by 1 March of each even-numbered year and must cover all hazardous

Table 6-2. Minimum Report Retention Periods

Report	Retention Time	Citation
Biennial Report	3 years from the due date of the report ^a	22 CCR 66262.40(b)
Annual Report	3 years from the due date of the report ^a	22 CCR 66262.40(b)
Exception Report	3 years from the due date of the report ^a	22 CCR 66262.40(b)
Emergency Report	Until closure of the Storage Facility ^a	22 CCR 66264.73(b)(4)
Incident Report	Until closure of the Storage Facility ^a	22 CCR 66264.73(b)(4)

^a The periods of retention are extended automatically during the course of any unresolved enforcement action or as requested by the U.S. EPA [22 CCR 66262.40(d)].

CCR = California Code of Regulations

waste activities that occurred during the previous calendar year. It must be submitted on U.S. EPA Form 8700-13A/B. Each report must include the following [22 CCR 66262.41(b)]:

- The installation name, address, and U.S. EPA identification number.
- The calendar year covered by the report.
- The name, address, and U.S. EPA identification number of each off-site TSDF that received hazardous waste from the installation during the reporting year.
- The name and U.S. EPA identification number of each transporter that was used during the reporting year.
- A description, U.S. EPA hazardous waste number, California hazardous waste category number, DOT hazard class, and quantity of each hazardous waste shipped off site to a TSDF within the U.S. This information must be listed by the identification number of each such off-site facility to which waste was shipped. Wastes that are classified as non-RCRA hazardous wastes are described by indicating a generic name of the waste and the phrase "Non-RCRA Hazardous Waste, Solid" or "Non-RCRA Hazardous Waste, Liquid," as appropriate. When possible, the generic name will be obtained from 22 CCR Division 4.5, Chapter 11, Appendix X, Subdivision (e). If not listed, the commonly recognized industrial name of the waste will be used.
- A description of efforts undertaken to reduce the volume and toxicity of waste generated.
- A description of changes in volume and toxicity of waste achieved during the reporting year as compared to previous years.
- A certification signed by the Commander, 60th Air Mobility Wing, or authorized representative.

6.4.2 Annual Reports

The State of California requires hazardous waste generators and TSDFs to submit an Annual Report to the DTSC and the appropriate Regional Water Quality Control Board (i.e., San Francisco Bay Region) by 1 March of each year (22 CCR 66264.75). The report covers the previous calendar year's activities. The Annual Report is prepared by 60 CES/CEV on U.S. EPA Form 8700-13A/B and contains the following information:

- The installation name, address, and U.S. EPA identification number.
- The calendar year covered by the report.
- A description, U.S. EPA hazardous waste number, California hazardous waste category number, DOT hazard class, and quantity of each hazardous waste the facility received during the year. For off-site facilities, this information is listed by the identification number of each generator. Wastes that are classified as non-RCRA hazardous wastes are described by indicating a generic name of the waste and the phrase "Non-RCRA Hazardous Waste." When possible, the generic name will be obtained from 22 CCR Division 4.5, Chapter 11, Appendix X, Subdivision (e). If not listed, the commonly recognized industrial name of the waste will be used.
- The method of treatment, storage, or disposal for each hazardous waste.
- The most recent closure cost estimate for each facility.
- A description of the efforts undertaken during the year to reduce the volume and toxicity of waste generated.
- A description of the changes in volume and toxicity of waste actually achieved during the year in comparison to previous years to the extent such information is available.
- A certification of disposal method signed by the Commander, 60th Air Mobility Wing, or designated representative regarding the wastes shipped off site.
- The environmental monitoring data specified in 22 CCR 66264.73.
- A certification of the above information signed by the Commander, 60th Air Mobility Wing, or an authorized representative that includes the following:
 - Whether the hazardous waste shipped off site had a heating value of 3,000 British thermal units per pound (Btus/lb) of waste or less and a volatile organic compound (VOC) content of 1% or less by weight.
 - If the waste had a heating value or VOC content greater than that specified above, that:
 - The waste was incinerated or treated by any method that has been authorized by the DTSC as part of a hazardous waste facility permit issued pursuant to Section 25200 of the California Health and Safety Code;

- The waste is exempted from the incineration requirements of 22 CCR Division 4.5, Chapter 18, Article 12;
- The waste was recycled; or
- The waste was shipped out of California for incineration, treatment, disposal, or recycling.

The 2004 Hazardous Waste Generation Report, as compiled for the Annual Report, is provided in Attachment M.

6.4.3 Exception Reports

If the Environmental Flight does not receive a signed copy of the hazardous waste manifest from the TSDF that received the waste within 35 days after the waste was accepted by the initial transporter (typically, the date the waste was picked up at the Travis AFB Storage Facility), the Environmental Flight will contact the transporter and/or the Storage Facility operator to determine the status of the hazardous waste [22 CCR 66262.42(a)]. If the hazardous waste manifest has not been received within 45 days after the waste was accepted by the initial transporter, an Exception Report will be submitted to the DTSC. The report must include the following information [22 CCR 66262.42(b)]:

- A legible copy of the manifest for which the Environmental Flight does not have confirmation of delivery; and
- A cover letter, signed by the generator, which explains the efforts taken to locate the hazardous waste and the results of those efforts.

6.4.4 Emergency Reports

Releases of hazardous waste, hazardous substances, and hazardous materials that exceed reportable quantities (as defined in Section 25359.4 of the California Health and Safety Code) into the environment must be immediately reported to the DTSC (1-800-852-7550) and the National Response Center (1-800-424-8802) [22 CCR 66264.56(d)]. Additional requirements regarding the reporting of spills, fires, or explosions, are described in the Site-Specific Contingency Plan for the Storage Facility.

6.4.5 Incident Reports

Reports of accidents that could result in a hazard to public health and safety, domestic livestock, or wildlife, or result in a discharge of hazardous waste outside the containment area will be prepared by 60 CES/CEV and submitted to the DTSC within 15 days of the occurrence. Reporting for any hazardous waste incident is mandatory and will be performed in accordance with the HWSF Contingency Plan [22 CCR 66265.56(j)]. The report must include the following:

- The 60th AMW Commander's name, address, and phone number;
- The installation's name, address, and phone number;
- The date, time, and type of incident (e.g., fire, spill, explosion);
- The name and quantity of materials involved;
- The extent of injuries, if any;
- An assessment of actual and potential hazards to human health and the environment; and
- An estimate of the quantity and disposition of recovered material that resulted from the incident.

6.4.6 One-Time Notices

Travis AFB generates some wastes that are normally restricted from land disposal, but have been excluded from the definition of hazardous waste or exempted from hazardous waste regulation under 22 CCR 66261.2 through 66261.6 or under the California Health and Safety Code. Examples of these types of waste are lead-acid batteries, chlorofluoro-carbon refrigerants reclaimed for further use, solvents that are being processed for reuse through a solvent reclamation system, unrinsed empty iron or steel containers processed for metal reclamation, and used or unused petroleum products being reclaimed.

60 CES/CEV will place a one-time notice describing the generation process, the subsequent exclusion from the definition of hazardous waste or exemption from hazardous waste regulation, and the disposition of the waste in the on-site files [22 CCR 66268.7(a)(7)]. A copy of the document will be maintained on-site for at least 5 years from the date the waste was last sent to on-site or off-site treatment, storage, or disposal.

7.0 Training Requirements

Personnel handling hazardous wastes may be exposed to a variety of health and safety hazards. However, proper training can minimize human exposure to these hazards and reduce the potential for physical harm or injury. Furthermore, proper training can minimize the potential for adverse environmental impacts associated with the mishandling of hazardous wastes. Personnel are expected to notify the 60 CES/CEV of any training opportunities they feel could improve hazardous waste management and operations. Training requirements are reviewed at least annually and updated, as necessary.

7.1 Training Coordinator

The Hazardous Waste Program Manager of the 60 CES/CEV is trained in hazardous waste management practices and procedures, and serves as the Training Coordinator. This position requires continuing education in environmental laws, regulations, and technical subjects.

7.2 Personnel Who Require Training

Hazardous waste management training is required for the following Travis AFB personnel who operate or handle hazardous wastes:

- 60 CES/CEV personnel;
- Storage Facility personnel;
- HWAP (90-day site) personnel;
- SAP and Daily Empty Crew Chiefs;
- Supervisors/trainers of hazardous waste generating activities;
- Industrial shop workers;
- Group or Squadron Environmental Representatives;
- Initial emergency response personnel (Fire Department personnel); and
- Base spill cleanup team members.

Air Force policies and state and federal regulations require that all personnel who handle hazardous or universal wastes receive job-specific training for their assigned duties [AFPAM 32-7043 paragraph 8.2, 22 CCR 66265.16(a), and 22 CCR 66273.36]. Typical hazardous waste management tasks include the following:

- Conducting any tasks involving occupational exposure to hazardous waste;
- Adding hazardous wastes to a waste accumulation container;
- Transporting hazardous waste from a generator's location to the Storage Facility or a HWAP;
- Deciding which wastes are hazardous;
- Labeling and marking hazardous waste containers;
- Packaging hazardous waste for off-site shipment;
- Preparing documentation, such as manifests, annual or biennial reports, or emergency or incident reports;
- Responding to spills, fires, or explosions involving hazardous waste;
- Inspecting hazardous waste accumulation, storage, treatment, or disposal facilities; and
- Supervising personnel performing hazardous waste management activities.

It is the responsibility of 60 CES/CEV to identify, in coordination with all base groups and tenant organizations, any individuals requiring training using the criteria listed above.

7.3 Training Frequency

Initial and annual refresher hazardous waste management training is to be completed by all personnel identified using the criteria described above. All personnel are required by Air Force policy to receive initial training in hazardous waste management procedures before unsupervised handling of hazardous waste. In addition, each person who handles hazardous waste must take part in an annual review of the training program.

7.4 Scope of Training

The amount and type of training received by each employee who handles or manages hazardous waste depends on the employee's job duties. Hazardous waste training requirements for Travis AFB personnel are summarized in Table 7-1. Table 7-2 summarizes the training courses, the amount of time required for initial and refresher training, the training frequency, and the regulations that requires the training to be conducted. The following subsections provide additional information regarding each training course.

Table 7-1. Hazardous Waste Training Requirements for Travis AFB Personnel

Personnel	Hazard Communication	Air Force (4-hr) Hazardous Waste Management	RCRA Hazardous Waste Management	DOT Hazardous Material Certification	HAZWOPER	CPR/First Aid
CES/CEV Hazardous Waste Program Manager, Personnel	✓		✓		✓	
Storage Facility Personnel	✓		✓	✓	✓	✓
HWAP Personnel	✓		✓	✓	✓	
SAP Crew Chiefs	✓	✓				
Daily Empty Crew Chiefs	✓	✓				
Industrial Shop Workers	✓					
Supervisors of Hazardous Waste Generating Activities	✓	✓				
Spill Response Personnel ^a	✓	✓			✓	✓
Emergency Response Personnel ^a	✓	✓			✓	✓
Group or Squadron Environmental Representatives	✓	✓				

^a Spill and emergency response personnel require additional training including self-contained breathing apparatus and OSHA first responder courses.

- AFB = Air Force Base
- CPR = cardiopulmonary resuscitation
- DOT = U.S. Department of Transportation
- HAZWOPER = hazardous waste operations and emergency response
- HWAP = hazardous waste accumulation point
- RCRA = Resource Conservation and Recovery Act
- SAP = satellite accumulation point

Table 7-2. Hazardous Waste Training Courses

Training Course	Initial Training	Refresher Training	Training Frequency	Regulatory Citation
HAZCOM	Variable length course ^a	Variable length course ^a	Every year ^b	29 CFR 1910.1200
Air Force (4- Hour) Hazardous Waste Management	4-hour course	4-hour course	Every year	22 CCR 66265.16
RCRA Hazardous Waste Management	16-hour course	8-hour course	Every year	22 CCR 66265.16
DOT Hazardous Material Certification	8-hour course	8-hour course	Every 3 years	49 CFR 172.704
HAZWOPER	40-hour course	8-hour course	Every year	29 CFR 1910.120
CPR and First Aid	4-hour course	4-hour course	Every 2 years	Part B Permit

^a The length of the HAZCOM course depends on the number and type of hazards present in an employee’s work area.

^b Employees shall receive HAZCOM training whenever the hazards present in an employee’s work site change. At a minimum, the training will be provided annually.

- CFR = Code of Federal Regulations
- CPR = cardiopulmonary resuscitation
- DOT = U.S. Department of Transportation
- HAZCOM = hazard communication
- HAZWOPER = hazardous waste operations and emergency response
- RCRA = Resource Conservation and Recovery Act

7.4.1 Hazard Communication Training

All Travis AFB personnel who work with hazardous materials or hazardous wastes receive on-the-job hazard communication (HAZCOM) training. This training includes hazard recognition, basic spill response techniques, and guidance regarding the proper handling and disposition of hazardous waste. The Military Public Health Office (60 MDG/SGPM) and Bioenvironmental Engineering provide general HAZCOM training, which is supplemented with site-specific training reflecting the hazards present in the specific work area. In addition, site-specific contingency plans are excellent resources when conducting training.

7.4.2 Air Force (4-Hour) Hazardous Waste Management Training

Personnel who serve as SAP or daily empty site crew chiefs, supervise shops where hazardous waste is generated, respond to hazardous waste spills or emergencies, or act as Group or squadron environmental representatives receive hazardous waste training that summarizes:

- Regulatory compliance procedures (i.e., how to comply with federal, state, and local hazardous waste regulations);
- Hazardous waste management procedures; and
- Emergency response, including contingency plan implementation.

The Air Force has developed a hazardous waste management training program that Travis AFB personnel use to accomplish these training goals. This 4-hour, computer-based training program contains material to familiarize personnel with federal and Air Force regulations regarding hazardous waste. The Air Force's *Hazardous Waste Management Computer-Based Training Program* is available at 60 CES/CEV and can be signed out to group and tenant organizations.

The hazardous waste management training course includes the following general topics to meet U.S. EPA, OSHA, and Air Force requirements:

- Introduction to RCRA;
- Emergency response and notification procedures and equipment;
- Inspection and replacement of emergency response equipment;
- Personnel safety;
- Hazardous waste characterization;
- Container management;
- Marking and labeling containers;
- Accumulation time and quantity requirements;
- Hazardous waste transportation;
- Hazardous waste disposal;
- Waste minimization; and
- Recordkeeping and reporting requirements.

It is the responsibility of each group, in conjunction with 60 CES/CEV and other pertinent base units, to adapt the training course to cover installation-specific information to ensure that the training program meets state and federal regulatory requirements and fits the specific hazardous waste management training requirements of the attendees.

7.4.3 RCRA Hazardous Waste Management Training

The RCRA hazardous waste management training course is designed to provide a deeper understanding of hazardous waste management than is provided in the Air Force's 4-hour course. It is intended for personnel who manage Travis AFB's hazardous waste program and for personnel who work at the Storage Facility and HWAPs. Additional instruction is provided regarding hazardous waste regulations; waste characterization, containerization, and accumulation; recordkeeping and reporting; and waste transportation. This training is typically provided by an outside contractor.

7.4.4 U.S. Department of Transportation Hazardous Material Certification Training

The DOT hazardous material certification training course is designed to train personnel who prepare hazardous wastes for off-site shipment to choose the appropriate packaging, select proper shipping names, mark and label containers, prepare shipping and manifest documents, load and unload vehicles, and placard vehicles. In addition, the course educates personnel regarding emergency communication, emergency procedures, and emergency notification. This course is required for personnel working at HWAPs and the Storage Facility who are involved with preparing hazardous waste for off-site shipment. The course is typically provided by an outside contractor.

7.4.5 Hazardous Waste Operations and Emergency Response Training

Hazardous waste operations and emergency response (HAZWOPER) training courses are designed to ensure that employees who may be exposed to hazard materials or wastes are aware of the risks involved, and operate in the safest possible manner. The courses are intended for personnel who are involved with extensive management of hazardous wastes (e.g., Storage Facility personnel) or with emergency responses to hazardous waste releases or incidents. HAZWOPER training courses, which are typically provided by an outside contractor, cover the following topics:

- Hazardous materials handling and identification;
- Chemical exposure and personal protective equipment;
- Emergency response;

- Proper safety methods and work practice controls; and
- Labeling of hazardous materials.

7.4.6 Cardiopulmonary Resuscitation and First Aid Training

Cardiopulmonary resuscitation (CPR) and first aid training courses provide personnel with the skills necessary to protect the lives of their coworkers prior to the arrival of trained medical personnel. These classes are required for Storage Facility personnel, spill response personnel, and emergency response personnel.

7.5 Recordkeeping

Records documenting job titles, names of employees, job descriptions, and types and amounts of training are maintained in operational logs to demonstrate compliance with regulatory requirements.

7.5.1 Required Records

Training records must be maintained to document that all appropriate personnel have successfully completed their required training. Training records associated with the Air Force's 4-hour hazardous waste management course are maintained on AF Form 1098. Training records for HAZCOM, RCRA, DOT, HAZWOPER, and CPR/first aid are maintained on AF Form 1098, as well. Personnel also receive training certificates to document the completion of RCRA, DOT, HAZWOPER, and CPR/first aid courses.

In addition to the aforementioned records, the Storage Facility, each HWAP, and each shop that generates hazardous waste must maintain the following training-related records:

- A written description of the type and amount of introductory and continuing hazardous waste training that will be given to each person filling a position in the shop or facility [22 CCR 66265.16(d)(3)].
- A written job description for each position in the shop or facility that describes the job as it relates to the management and handling of hazardous waste [22 CCR 66265.16(d)(2)].
- A job title roster that includes the name of each employee filling a position that involves hazardous waste management [22 CCR 66265.16(d)(1)].

The first two items listed above are documented on AF Form 1098; the third item is documented separately. Training requirements and job descriptions are reviewed annually. The job title roster is updated whenever personnel changes occur.

7.5.2 Location of Records

Copies of the hazardous waste training records for all personnel assigned to a shop or facility are maintained in the shop's Continuity Book. In addition, supervisors maintain a separate copy of the training records for each supervised employee.

7.5.3 Record Retention Period

Records are kept for current employees as long as they work on the installation and for 3 years after the date they leave Travis AFB or stop working at a position related to hazardous waste management (22 CCR 66265.16). Training records may accompany personnel transferred to another installation; however, a copy of the record must be kept at Travis AFB for the 3-year period.

8.0 Contingency Plan and Emergency Procedures

Emergency responses for incidents on Travis AFB involving hazardous substances are conducted in accordance with the 60 AMW Integrated Contingency Plan (ICP). The site-specific Contingency Plan for the Storage Facility is provided at Attachment N. The HWSF Contingency Plan is implemented by Storage Facility staff, and the ICP is implemented by other Travis AFB staff in the event of any leak, spill, or other incident involving the release or potential release of hazardous waste.

9.0 Closure Plan

The closure plan in this section outlines procedures that will be followed to close the Storage Facility and the associated equipment at Travis AFB. Closure activities will be performed in accordance with DTSC requirements in 22 CCR, Division 4.5, Chapter 30, Article 23 and the U.S. EPA requirements in 40 CFR 264 Subpart G or equivalent requirements at the time of closure. Travis AFB personnel will take all actions necessary to completely remove or decontaminate all hazardous waste materials and soil/structures contaminated with hazardous waste from the site using technologies and accepted engineering practices existing at the time of closure.

9.1 Storage Facility Closure Activities

At present, there are no plans to close the Storage Facility. This facility is necessary to the continuing mission of Travis AFB. If total base closure or replacement of this facility were required, closure activities would include removal of the entire hazardous waste inventory from the facility and an investigation of the structure and surrounding soil for possible contamination. Decontamination or removal of that contamination would be accomplished. The site would then be certified as being free of hazardous contamination and transferred to its new function.

Travis AFB is on the U.S. EPA's National Priorities List (NPL). A Federal Facility Agreement (FFA) between the Air Force, U.S. EPA, DTSC, and the RWCQB was signed on 28 September 1990 (Attachment O). All cleanup and related closure requirements at the Storage Facility will be coordinated with the Air Force Remedial Project Manager in 60 CES/CEV Environmental Flight to ensure all actions are consistent with the FFA site remediation activities. A decision will be made at that time as to whether the closure activities will be incorporated with the environmental restoration program remediation activities or be conducted separately.

9.2 Waste Inventory

The maximum total inventory of hazardous waste that would be stored at any one time in the Storage Facility is 56,760 gallons in 55-gallon drums, or a total equivalent volume distributed in different-size containers. The maximum total inventory of used oil in tanks would be 12,500 gallons; for waste fuel, the maximum total inventory in tanks would be 2,500 gallons. The hazardous waste inventory at the Storage Facility will be removed in the same manner as the existing inventory. The removal operation will be conducted by a contractor whose contract is administered by DRMO or the Travis AFB contracting office if DRMO is unable to conduct the removal operation within the established closure schedule.

9.3 Decontamination Procedures

If it is determined that the existing building must be retained for future use, all surface areas will be decontaminated by thoroughly washing all interior and exterior slabs, curbs, and walls with high-pressure hot water or steam. All water will be contained in a temporary collection system and tested for contamination. Based on these tests, the water will be handled and disposed of properly.

Soil samples will be collected as part of the closure activities. The excavation and drilling equipment used for sample collection, including augers, drill rods, and sampling tools, will be thoroughly steam cleaned (high-pressure hot water and non-phosphate detergent) and rinsed at a decontamination area approved by Environmental Flight before the initiation of drilling at each soil boring location. All equipment and materials will be inspected following cleaning to ensure that all residues have been removed. If residues are present, the steam cleaning procedure will be repeated until no residue remains. Water generated during the steam cleaning will be collected, contained, tested for contamination and disposed of properly. All wastes generated during the decontamination process will be contained and properly disposed.

Decontamination procedures will be conducted by trained personnel under contract to Travis AFB. The specific requirements for decontamination will be developed in a work plan prepared by the Air Force or its contractor before the actual start of closure activities. The specific procedures to be addressed in the work plan include the following:

- Preparation of a detailed work plan, including health and safety plan, sampling and analysis plan, and quality assurance/quality control (QA/QC) plan associated with decontamination activities;
- Provision for appropriate personal protective equipment to be worn for all decontamination activities;
- Draining all liquid waste from all storage tanks and pipelines to be decontaminated;
- Adding absorbent material as necessary to storage tanks to facilitate collection of residual waste in tanks—used absorbent materials to be containerized and appropriately disposed of off site;
- Washing of tanks, pipelines, related equipment, and containment area;
- Transportation of wastes off site to an appropriate disposal or treatment facility; and
- Decontamination of other equipment and surfaces, including the concrete pad.

During closure, waste stored in tanks and associated appurtenances will be removed for off-site treatment or disposal. The tanks and associated appurtenances will be decontaminated using an appropriate cleanser as described in a work plan. Verification of adequate decontamination of tanks will occur. All wastes, waste residues, and decontamination waste will be characterized and disposed of properly. Tanks may be returned to service or properly disposed of off site after decontamination occurs.

9.4 Post-Closure Maintenance

Closure of the Storage Facility will include removal of all wastes contained in tanks to an off-site disposal facility, and physical cleaning and sampling of appropriate surfaces.

Because all hazardous wastes and contaminated surface materials will be removed from the Storage Facility and disposed of, post-closure maintenance related to the Storage Facility structures will not be required. Any remaining post-closure activities will be performed as part of the basewide soil and groundwater monitoring and remediation program.

9.5 Closure Schedule

The closure milestones are presented in Table 9-1. These dates will be met or proper extensions will be obtained from DTSC. A request for extension must be made at least 30 days before the expiration of that specific milestone.

Table 9-1. Closure Activities Schedule

Days from Closure	Activity
45 prior	Notify DTSC of planned closure.
0	Closure begins. Receive final volume(s) of hazardous waste.
90 after	Removal of all hazardous waste inventory.
180 after	Final closure.
240 after	Submit certification to DTSC that facility has been closed in accordance with the Closure Plan.

9.6 Estimated Closure Costs

A preliminary initial cost estimate for final closure of the Storage Facility (Building 1365) is provided in Table 9-2. The estimate is based on a worst-case scenario and will require modification once the test results are obtained and the full scope of closure activities is known. The estimate is also based on the closure activities being conducted by a commercial contractor for Travis AFB and the Air Force.

Table 9-2. Storage Facility Cleanup Costs

Activity	Costs (\$)
Remove hazardous waste inventory.	215,000
Sample and test structure/soil.	285,000
Deep test wells (if necessary).	145,000
Demolish/dispose of contaminated structure (if necessary).	425,000
Remove/dispose of contaminated soil (if necessary).	425,000
Restore site.	145,000
Total Cleanup Costs	1,640,000

9.7 Closure Plan Amendments

This closure plan will be revised if there are significant changes in Travis AFB's operations related to RCRA hazardous waste management or Storage Facility operations. A request for modification of the closure plan will be given to the responsible agency within 60 days of the date that the operating change goes into effect. Permit modifications reflecting significant changes in the site operations will be made concurrently with updating the site closure plan. The closure plan will be reviewed annually.

9.8 Procedures to Ensure Agency Notification of Expected Date of Closure

The formal notification of closure of the Storage Facility area at Building 1365 will be submitted by Travis AFB officials to the DTSC. This notification will be made at least 45 days before the expected start of final closure of the facility, which begins with receipt of the final volume of hazardous waste at the facility. The notification of closure will include a final schedule for closure activities, verification of closure procedures, and a final estimated cost for completing the required closure activities.

9.9 Submission of Closure Certification Report

At the conclusion of all closure activities, Travis AFB will submit a closure certification report, which will document the closure process. The report will include a signed certification(s) stamped by an independent State of California-registered professional engineer and will state that the Storage Facility and associated equipment were closed in accordance with the approved closure plan. The report will also include a summary of closure activities, structure and soil sampling records and logs, analytical results, copies of manifests, and photographs.

10.0 Financial Responsibility

Travis AFB is a federal facility owned and operated by the federal government. As such, it is exempt from the financial requirements (i.e., surety bonds, insurance, and other financial mechanisms) as stated in 40 CFR Part 264.140(c) and 22 CCR 66264.1 (c).

11.0 Corrective Action

In 1983, Travis AFB began conducting investigations of past activities on base that may have been detrimental to the environment. Initially, a preliminary assessment was conducted for the Environmental Restoration Program (ERP). Remedial investigations followed from 1985 through 1989 to determine the nature and extent of any contamination from these past activities. Results from these studies indicated that 42 sites in two areas of the base were of sufficient concern to warrant further investigation. The Storage Facility property is located on a portion of one of these two areas—the North, East, and West Industrial Operable Unit (NEWIOU). The Storage Facility is located in the central portion of ERP site LF007.

Based on results from the investigations, Travis AFB was listed on the NPL in 1989. In 1990, a Federal Facility Agreement (FFA) was approved by the Air Force, U.S. EPA, the Department of Toxic Substances Control (DTSC) and the Regional Water Quality Control Board (RWQCB). All RCRA corrective action obligations that were conducted along with the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) response actions, have been integrated into the FFA. This integration eliminates the need for separate RCRA corrective actions. A portion of the FFA that pertains to RCRA corrective actions is provided in Attachment N.

In 1991 and 1992, a RCRA facility assessment and visual site inspection were completed at Travis AFB. These studies identified areas of concern (AOCs); however, none of the AOCs identified were associated with the Storage Facility.

Investigations and remedial actions are occurring throughout Travis AFB to address contamination identified during the initial and subsequent studies. LF007 encompasses the area of the Storage Facility and has been characterized as a 73-acre closed landfill that operated from the 1950s until 1974, when landfill operations ceased. During the former landfill's operation, municipal and industrial wastes were accepted from base operations only. These wastes included wood, glass, construction debris, and small amounts of fuel sludges from tank-cleaning operations. Investigations have identified that the groundwater beneath the former landfill is contaminated with trichloroethene (TCE) and other VOCs. In addition, differential subsidence of the former landfill has created ponding that increased infiltration of

water through the former landfill and resulted in contamination of groundwater by landfilled materials. Remedial actions under CERCLA in 2002 through 2004 included recompaction of the former landfill, recapping and methane gas sampling, and installation of a groundwater extraction system. The cap is further enhanced by the installation of a Corrective Action Management Unit (CAMU) directly above a portion of the former landfill. The CAMU consists in part of an evapotranspiration cap that further reduces the potential for rainwater infiltration.

12.0 Environmental Compliance Activities

In addition to ERP activities and compliance with the FFA pertaining to sites under investigation to assess contamination issues, there are additional environmental regulations applicable to the Storage Facility.

12.1 Air Permits

The Bay Area Air Quality Management District has issued an air permit to Travis AFB that encompasses air emission sources throughout Travis AFB. The six hazardous waste ASTs associated with the Storage Facility are listed on the permit; however, the permit indicates these sources are exempt from permit requirements because of the materials they contain (i.e., used JP-8 and oil). A copy of the Travis AFB air permit is included as Attachment P.

12.2 Community Right-to-Know

Community right-to-know programs oversee the handling of hazardous materials in response to the 1984 Bhopal, India, incident. In 1986, Congress enacted the Superfund Amendments and Reauthorization Act (SARA), Title III: The Emergency Planning and Community Right-to-Know Act (EPCRA). EPCRA requires facilities that store threshold quantities of certain hazardous materials to prepare and submit to U.S. EPA forms called Tier I or Tier II forms that indicate the types and quantities of materials stored. Because hazardous materials are not stored at the Storage Facility, these requirements do not apply to Building 1365 activities.

12.3 Hazardous Waste Facility

Building 1365 was first granted interim status as a TSDF in 1985 by the California Department of Health Services (now DTSC). In 1992, Travis AFB submitted its completed Part A and B Facility Permit. DTSC issued the TSDF permit in 1993. The permit was modified several times since 1993; the most recent modification occurred in 1995. Reasons for permit modifications included facility construction/upgrade projects and plan/procedure and storage updates. The original permit expired on April 3, 2003, but has been extended until final approval of this permit application.

12.4 Hazardous Waste and Pollution Prevention Efforts

Travis AFB is a large-quantity generator of hazardous waste and, as such, is required to establish a program to reduce the amount of hazardous waste produced. Travis AFB is required to certify on manifests for hazardous waste shipments that it has a program in place to reduce the volume and toxicity of its waste to the degree determined to be economically practical. The certification must also state that the proposed method of treatment, storage, and/or disposal is the best method currently available that minimizes the threat to human health and the environment.

To document its efforts at waste minimization, Travis AFB has prepared a Pollution Prevention Management Action Plan that lists its waste reduction requirements, identifies areas with opportunities for reductions in hazardous material/waste volume or toxicity, and presents those opportunities found to be technically and economically feasible. In turn, the opportunities are implemented throughout Travis AFB.

Travis AFB also submits to DTSC a Biennial Report that details the amount and types of hazardous waste generated during the previous calendar year, which transporters and off-site TSDFs were used, and efforts undertaken to reduce the volume and toxicity of waste generated. This report is due by March of each even-numbered year.

The Storage Facility is required to submit to DTSC an Annual Report that documents the same information that is in the Biennial Report, as well as the method of transfer, treatment, storage, or disposal for each hazardous waste and the most recent closure cost estimate for each facility. A copy of the hazardous waste list generated in 2004, as presented in the most recent Annual Report, is provided in Attachment L.

In addition, California regulations include the Hazardous Waste Source Reduction and Management Act of 1989, commonly referred to as SB 14, which requires hazardous waste generators to consider source reduction as the preferred method of managing hazardous waste. To comply with SB 14, facilities are required to submit a Summary Progress Report to DTSC. The Summary Progress Report details past source reduction efforts and planned source reduction activities for the coming four years.

12.5 Wastewater Discharge Permits

Travis AFB maintains a Fairfield-Suisun Sewer District Wastewater Discharge Permit for basewide sewer discharges; however, there are no wastewater discharges from Building 1365.

12.6 Stormwater Permits

Travis AFB has a basewide stormwater program and is covered under a National Pollutant Discharge Elimination System (NPDES) General Industrial Activities Stormwater permit. To comply with permit conditions, a Stormwater Pollution Prevention Plan (SWPPP) has been developed that discusses potential sources of stormwater pollution, best management practices to eliminate non-stormwater discharges, and procedures (including monitoring) to follow to ensure that established methods of stormwater protection are adequate to protect the quality of stormwater runoff. An Annual Report is submitted to the San Francisco Bay RWQCB by July 1 each year to document the results of the visual observations and laboratory analyses of stormwater runoff from the base. A copy of the SWPPP, which is currently being revised, is provided in Attachment Q.

Stormwater runoff from the Storage Facility is funneled into an unlined ditch that surrounds the facility and eventually flows into Travis AFB's stormwater collection system. The ultimate discharge point for the Storage Facility property is identified in the SWPPP as Discharge Point IV, which is included in the basewide visual observations and sampling efforts.

12.7 Aboveground Storage Tanks

As required by the Federal Oil Pollution Act and in compliance with the Oil Pollution Prevention Rule, Travis AFB has incorporated requirements pertaining to petroleum storage tanks throughout Travis AFB into the Integrated Contingency Plan (ICP). This ICP provides information regarding the spill prevention measures instituted at the ASTs, as well as the response actions in case of a spill from the ASTs.

12.8 California Environmental Quality Act

After submittal of the original RCRA Part A and Part B permit application in 1992, Travis AFB completed the California Environmental Quality Act information form. DTSC then prepared a Negative Declaration for the Storage Facility activities. A copy of the Negative Declaration is included in Attachment R.

EW614X07

EW615X07

Industrial

Loading/Unloading

Hazardous
Waste
Storage

1365

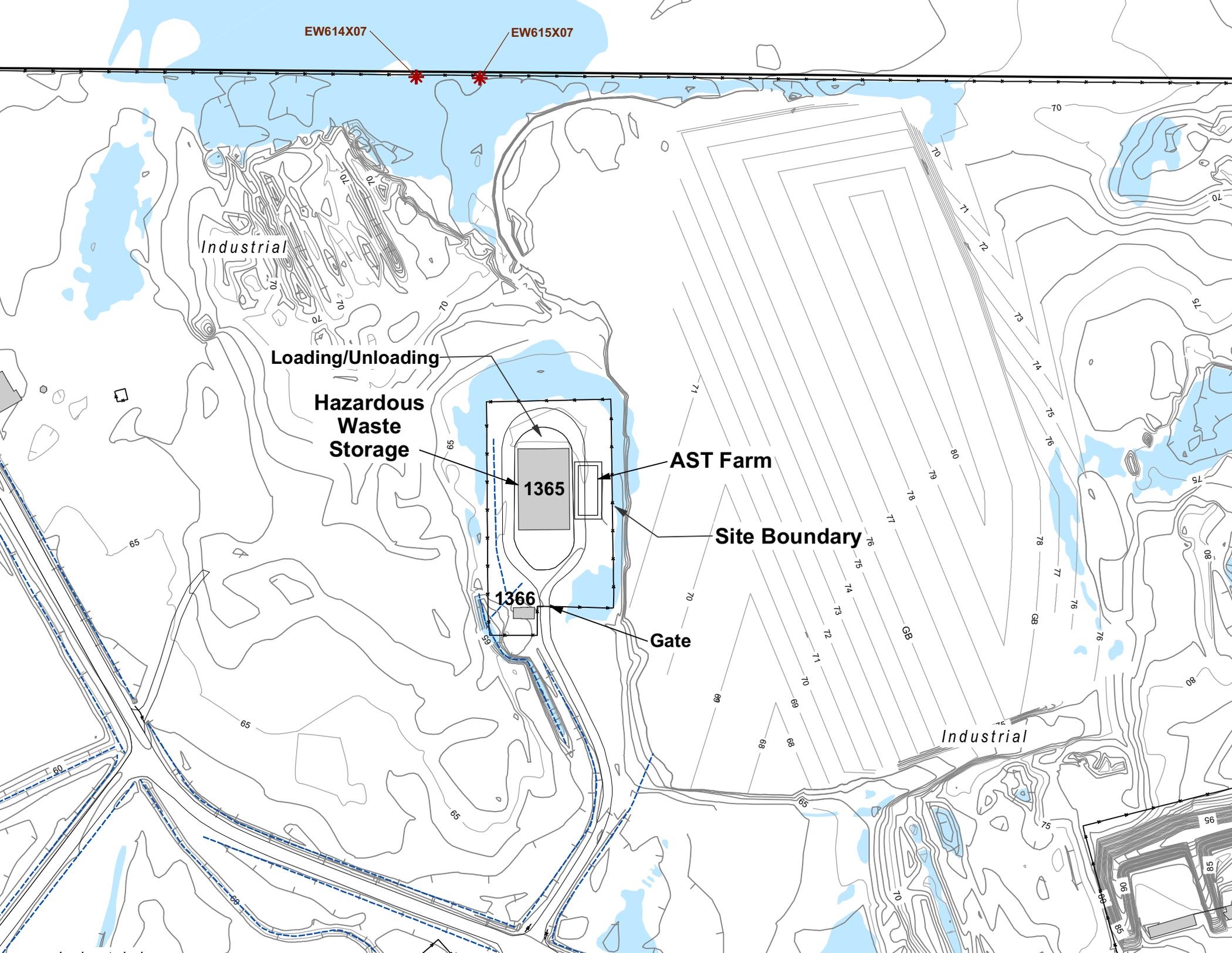
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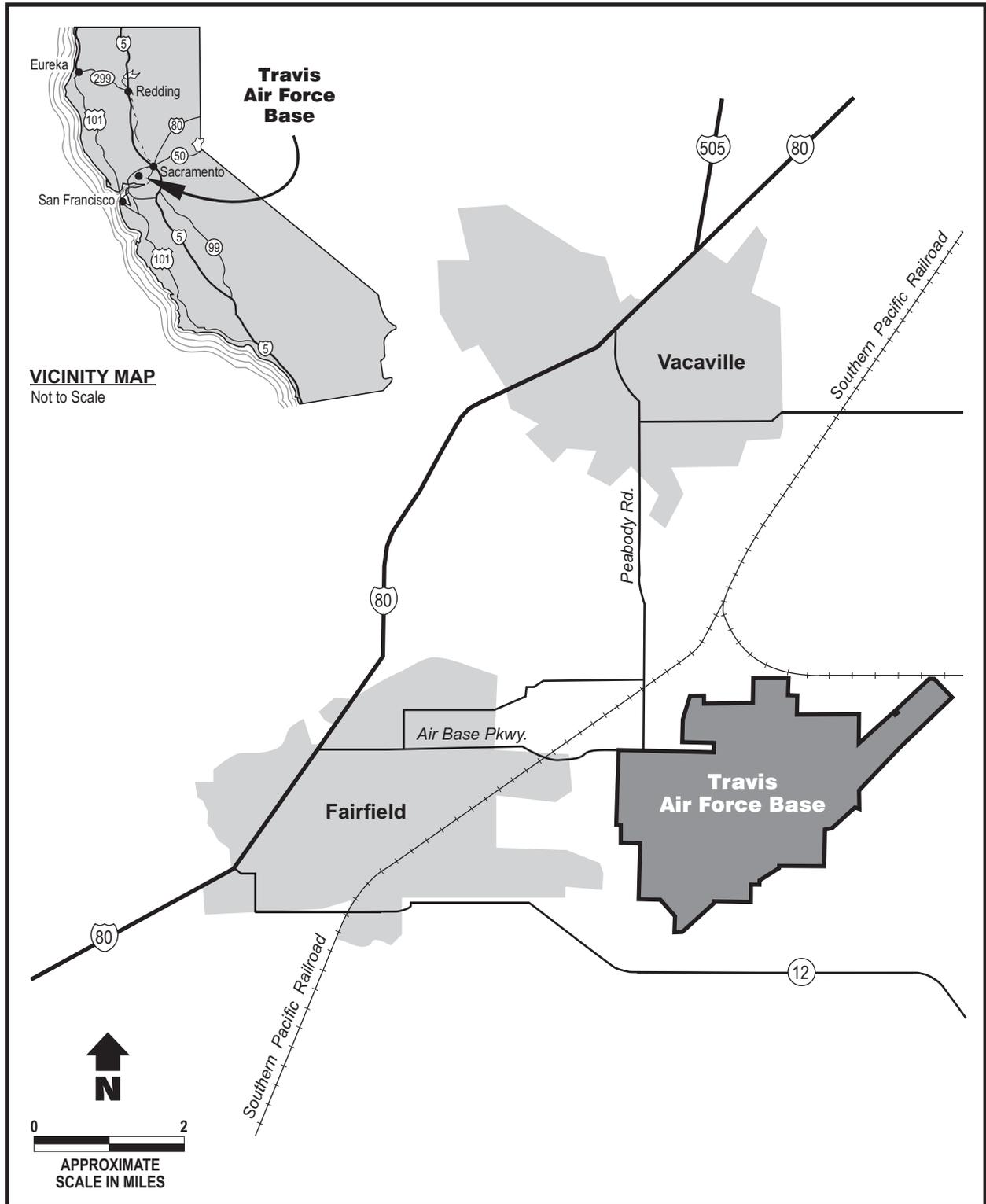
Site Boundary

1366

Gate

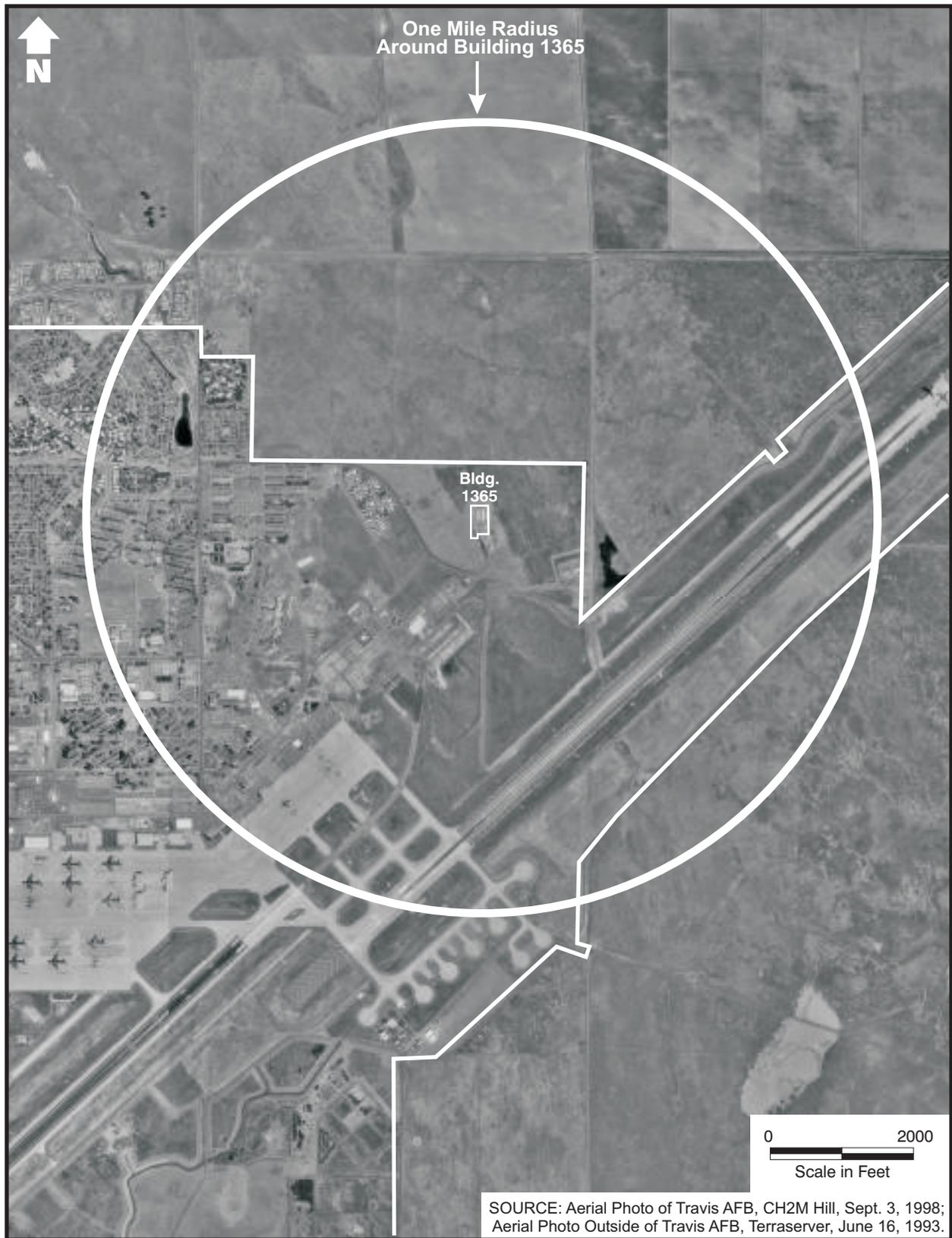
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Figure 2-1. Travis Air Force Base Location Map



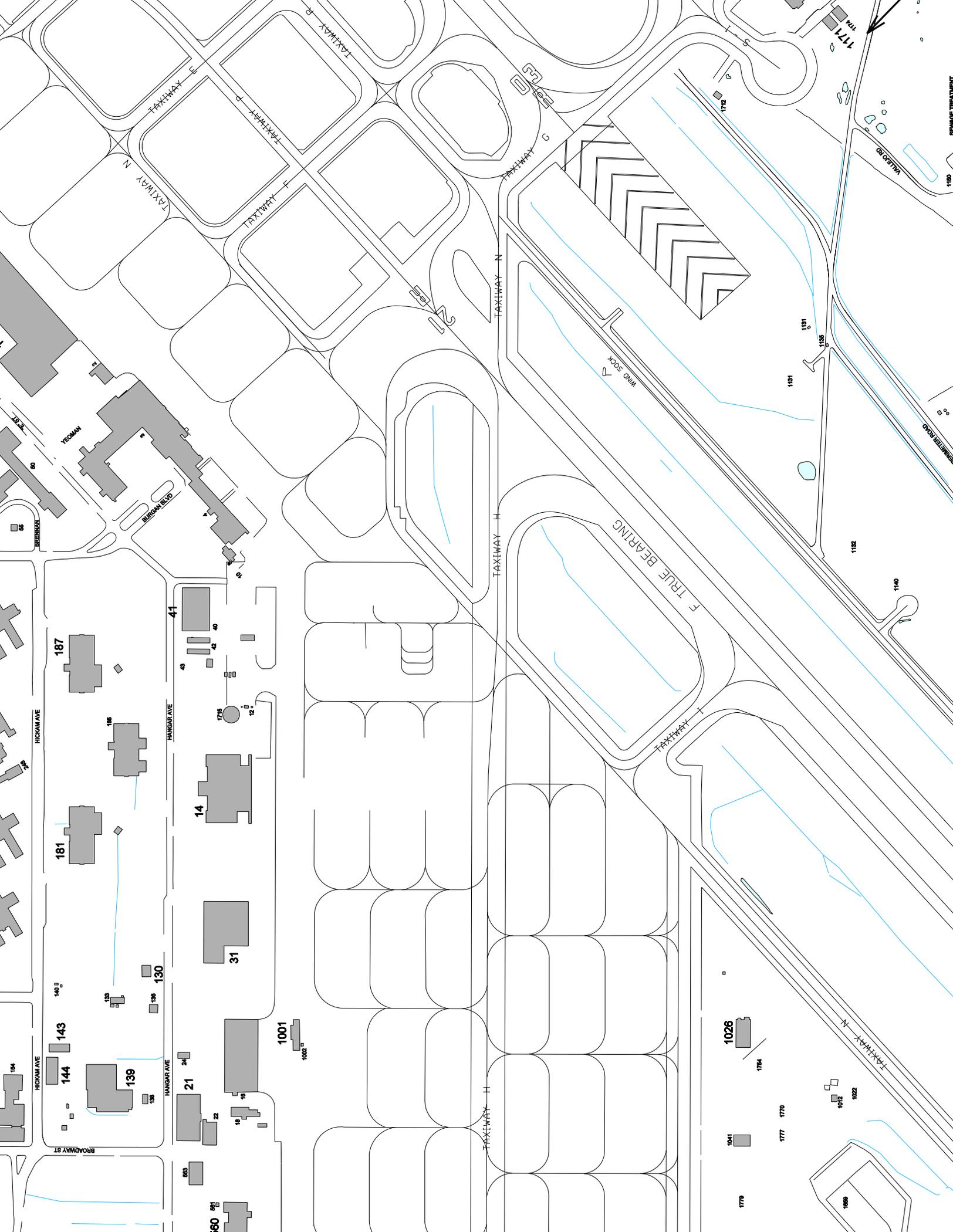
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Figure 2-2. One-Mile Radius Around Building 1365, Travis AFB



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Figure 2-3. Aerial Photograph of Building 1365, Travis AFB



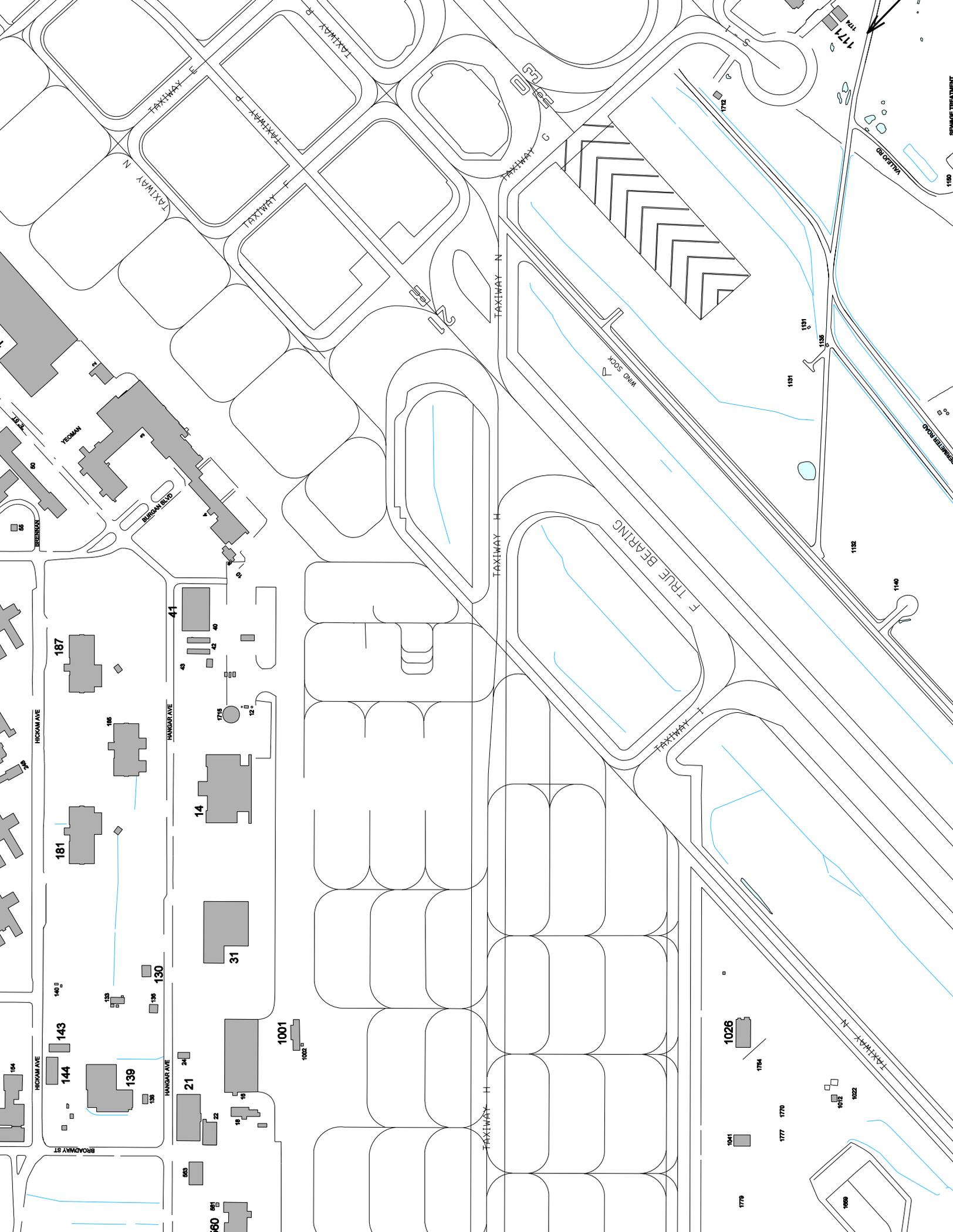
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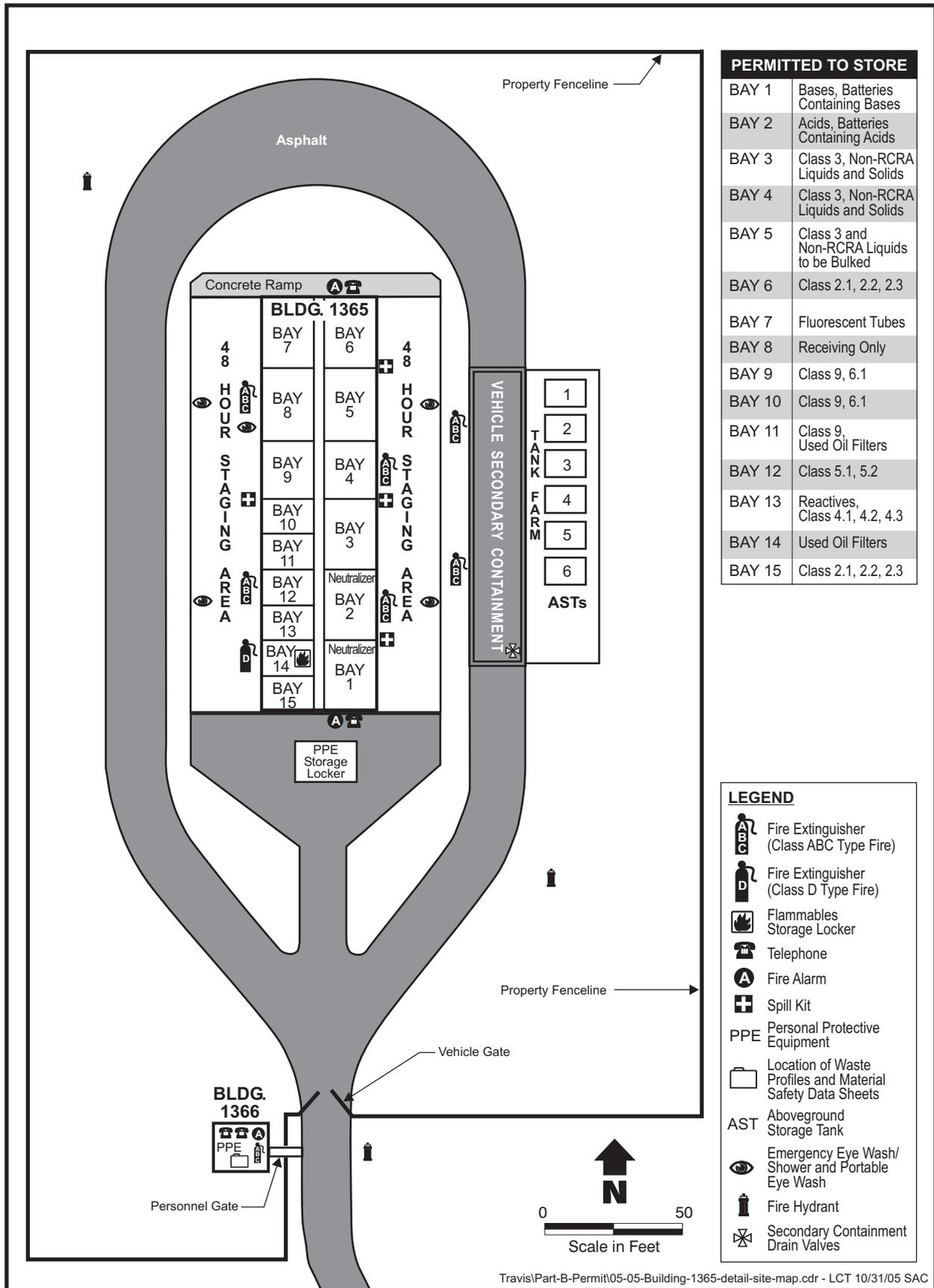


Figure 4-1. Building 1365 Schematic Showing Floor Plan