California Environmental Protection Agency
Department of Toxic Substances Control

DRAFT HAZARDOUS WASTE FACILITY PERMIT

Facility Name:
Edwards Air Force Base
Edwards AFB, California 93524

Owner Name:
United States Air Force
Edwards Air Force Base
30 South Rosamond Boulevard, Building 3000
Edwards AFB, California 93524

Operator Name:
Edwards Air Force Base
Environmental Quality Branch
12 Laboratory Road, Building 4231
Edwards AFB, California 93524

Facility EPA ID Number: CA1570024504

Effective Date: November 7, 2005

Expiration Date: November 7, 2015

Permit Modification Date:

Pursuant to California Health and Safety Code section 25200, this Resource Conservation and Recovery Act (RCRA)-equivalent Hazardous Waste Facility Permit (Permit) is hereby issued to Edwards Air Force Base. The Issuance of this Permit is subject to the terms and conditions set forth in Attachment A and the Part "B" Applications (Operation Plans) dated December 2004 and May 2012. The Attachment A consists of 39 pages.

_____
Michael Choe, P.E.
Supervising Hazardous Substances Engineer I
Office of Permitting
Department of Toxic Substances Control

Date:

EDWARDS AIR FORCE BASE
~~Hazardous Waste Support Facility~~
~~446 North Rosamond Boulevard, Building 4916~~
Edwards AFB, California 93254
EPA ID. No. CA1570024504

HAZARDOUS WASTE FACILITY PERMIT
ATTACHMENT "A"
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HAZARDOUS WASTE FACILITY PERMIT

EDWARDS AIR FORCE BASE
~~Hazardous Waste Support Facility~~
~~446 North Rosamond Boulevard, Building 4916~~
Edwards AFB, California 93254
EPA ID. No. CA1570024504

PART I. DEFINITIONS

All terms used in this Permit shall have the same meaning as those terms have in the California Health and Safety Code, division 20, chapter 6.5 and California Code of Regulations, title 22, division 4.5, unless expressly provided otherwise by this Permit.

1. **"DTSC"** as used in this Permit means the California Department of Toxic Substances Control.

2. **"Permittee"** as used in this Permit means the Owner and Operator.

3. Unless explicitly stated otherwise, all references to items in this Permit shall refer only to items occurring within the same part.

PART II. DESCRIPTION OF THE FACILITY AND OWNERSHIP

1. OWNER

The facility is owned by the ~~United States Department of Defense (DOD)~~ and the United States Air Force (USAF) ~~Materiel Command~~ (hereafter "owner"). The mailing address and phone number are as follows:

Owner: United States Air Force
Edwards Air Force Base
~~Air Force Flight Test Center~~
~~Attn: 95th Air Base Wing~~
30 South Rosamond Boulevard, Building 3000
Edwards AFB, California 93524
(661) 277-3010

2. OPERATOR

The facility is operated by ~~the 95th Air Base Wing~~ Edwards Air Force Base (hereafter "Operator") as a federal facility. The mailing address and phone number are as follows:

Operator: Edwards Air Force Base
~~Air Force Flight Test Center~~
Attn: Environmental Management Office
Environmental Quality Branch
5 East Popson Avenue, Building 2650A
Edwards AFB, California 93524
(661) 277-1401

3. LOCATION

~~The Hazardous Waste Support Facility (HWSF) is located within the legal boundaries of~~ Edwards Air Force Base (AFB) is located~~,~~ east of Rosamond, approximately 60 miles north-northeast of Los Angeles, California, on the western edge of the Mojave Desert. Edwards AFB occupies approximately 310,000 acres of desert in portions of three counties: Kern, Los Angeles, and San Bernardino.

Edwards AFB Main Base is situated on the western edge of Rogers Dry Lake, which is centrally located on Edwards AFB. The Hazardous Waste Support Facility (HWSF) is located on the north side of the Main Base, approximately 5 miles south of the northern boundary, and contains one (1) hazardous waste management unit (unit) designated as Building 4916. The HWSF address is 446 North Rosamond Boulevard. ~~The legal boundaries of the HWSF, along with the surrounding land uses, are shown on the detailed topographic map and site plan, provided in.Appendix 10b and following, in~~

~~Volume II, of the Part B Application, incorporated by reference. The GPS coordinates are State Plane NAD83 E,N: 6592790, 2165997.~~ The latitude and longitude are N34º 56´ 38.79´´ W117º 53´ 46.13´´.

The Precision Impact Range Area (PIRA) covers a large portion of the eastern part of the base. The Explosive Ordnance Disposal (EOD) Range is located in the southwest corner of the PIRA, approximately one-third (1/3) mile north of the Kern County border with Los Angeles County, and contains two (2) units designated as Open Burn (OB) and Open Detonation (OD). The GPS coordinates of the centerpoint of the EOD Range are Latitude 34º 49.728' N, Longitude 117º 48.063' W.

The legal boundaries of the units are shown on the detailed topographic maps and site plans provided in Appendix C.

4. PERMIT HISTORY

The original storage permit was issued to Edwards AFB on June 30, 1995 and was effective for a period of ten (10) years. It expired on June 30, 2005. ~~This~~ The permit renewal effective on November 7, 2005 authorizes continued operations, for the period specified, based upon the provisions of the current Part A and Part B Applications~~, dated May 2005,~~ and the information and conditions contained in this permit. Modifications to this Permit or the Operation Plans identified in Part III.1. are allowed as per 22 CCR sections 66270.41 or 66271.42. All modifications made to this Permit and/or Operation Plans are listed and described in Attachment C to this Permit. ~~See Attachment C for modifications subsequent to this renewal.~~

5. DESCRIPTION

The Edwards AFB's HWSF is surrounded by a chain-link and barbed-wire fenced area of approximately 2.8 acres (300 ~~340~~ feet x 400 ~~440~~ feet) on Edwards AFB property, outside of which are paved and unpaved areas. This HWSF serves as a central point for the collection of a full range of hazardous wastes (acids, caustics, batteries, oxidizers, solvents, plastics, resins, etc.), generated base-wide. Building 4916 is used for hazardous waste (HW) storage ~~and staging~~ and includes 4000 sq. ft. of enclosed HW storage. South of Building 4916 there are ~~and~~ 3,100 ~~3,150~~ sq. ft. of ~~an open and covered~~ HW ~~staging~~ storage area consisting of three covered bays (4916A, 4916B, and 4916C). Hazardous waste is stored in 55-gallon drums and other Department of Transportation-approved containers. Containers are grouped in two separate storage areas inside Building 4916 according to compatibility. Each is equipped with its own secondary containment with an impervious floor sloped to subsurface collection sumps in each area. There is a third containment area located in the center of the building which is used for drum ~~staging~~ loading and unloading activities. ~~Building 4916~~ The HWSF has a maximum hazardous waste storage capacity of 40,480 gallons, ~~including the staging area. There is a third containment area located in the center of the building which is used for drum staging activities.~~

This hazardous waste management unit also includes the asphalt paved loading and waste consolidation area, the asphalt driveway and pavement area inside the gate, the front secondary containment area in front of Building 4916, ~~and~~ the concrete walkways adjacent to Building 4916, Building 4917, an open shed in the northwest corner of the site (20 feet by 76 feet), a concrete pad on the northern end of the site, and Building 4922. (See Figure BB-1 ~~(Volume 2)~~ of the ~~Part B~~Hazardous Waste Support Facility Permit Application document.) ~~All containers are placed primarily on recessed recyclable poly pallets, and the secondary containment systems for all areas are constructed of concrete and sealed with a chemical-resistant epoxy sealer.~~

Building 4917 is used to store miscellaneous inert supplies, such as empty drums, packing materials, etc. Empty drums are stored in two other areas: ~~an~~ the open shed in the northwest corner ~~of the site (20 feet by 76 feet)~~ and ~~a~~ the concrete pad on the northern end of the site. The outdoor HW storage areas are curbed to provide a barrier from stormwater run-on to HW storage areas and to prevent potential spills from entering stormwater runoff.

Building 4922 is an administrative field office.

All containers are placed primarily on pallets, and the secondary containment systems for all areas are constructed of concrete and sealed with a chemical-resistant epoxy sealer.

The EOD Range is a 700 foot by 1400 foot rectangular area surrounded by 8-foothigh chain-link fences that are topped with three strands of barbed wire. The barbed wire and the chain-link fence together have an effective height of 9 feet. The EOD Range is approached using one of two graded dirt roads that intersect near the EOD Range. Access to and from the EOD Range itself occurs via Photo Resolution Road through a single gate located on the south end of the facility. There is an additional locked gate on the north end that is to be used only as an emergency exit during treatment operations. OB/OD activities are conducted on the ground. There are two large, flat, cleared areas for the OB/OD operations. The cleared areas each have a 300-foot radius and are maintained free of vegetation. The OD Unit is north of the OB Unit and farthest from Photo Resolution Road to provide extra separation distance from the road. The OD Unit is accessed through the OB Unit area. A steel storage building used to store miscellaneous equipment is located at the south end of the EOD Range. An 8-foot tall earth barrier located within the OB Unit provides additional protection to the building and areas immediately south of the OB Unit from any thrown propellant. Five monitoring wells were installed around the perimeter of the EOD Range. There are no other engineering preparations or materials of construction associated with the units. The area surrounding the units, within and outside the fenceline, are empty, open desert land.

A minimum distance from the EOD Range has been established as a "buffer zone" to protect base personnel from potential hazards. This distance varies, but a minimum of

2500 feet for treatment of 500 lbs. of explosives to a minimum of 5,000 feet for a maximum treatment of 2,000 lb. of explosives are required.

OB and OD events are set up by placing the waste items in the approximate center of the OB or OD Unit on the ground. The actual physical arrangement is dictated by the configuration of the items to be treated. Operations are conducted so that they occur only during acceptable meteorological conditions.

6. FACILITY SIZE AND TYPE FOR FEES

The facility is categorized as a small treatment ~~medium-sized storage~~ facility for purposes of California Health and Safety Code section 25205.19.

PART III. GENERAL CONDITIONS

1. PERMIT APPLICATION DOCUMENTS

(a) The Part "A" Application ~~dated December 15, 2004~~signed by Permittee on February 22, 2012, found in Volume III, Addendums to the 2005 Facility Application, of the Part "B" Application (Operation Plan) dated May 2012 for the Explosive Ordnance Disposal Range, and

(b) The Part "B" Application (Operation Plan) dated December 2004, including: RCRA Part B Base-Wide Permit Application Information document, the Hazardous Waste Support Facility Permit Application, the Contingency Plan for the Hazardous Waste Support Facility and the Explosive Ordnance Range, and the Hazardous Waste Support Facility Waste Analysis Plan, and ~~are hereby made a part of this Permit by reference.~~

(c) The Part "B" Application (Operation Plan) dated May 2012, including: RCRA Part B Explosive Ordnance Disposal Range Permit Application Volumes I through III are hereby made a part of this Permit by reference.

2. EFFECT OF PERMIT

(a) The Permittee shall comply with the provisions of the California Health and Safety Code and the California Code of Regulations, title 22, division 4.5. The issuance of this Permit by DTSC does not release the Permittee from any liability or duty imposed by federal or state statutes or regulations, or local ordinances, except the obligation to obtain this Permit. The Permittee shall obtain the permits required by other governmental agencies, including but not limited to, the applicable land use planning, zoning, hazardous waste, air quality, water quality, and solid waste management laws for the construction and/or operation of the Facility.

(b) The Permittee is permitted to treat and store hazardous wastes in accordance with the conditions of this Permit. Any treatment or storage of hazardous wastes not specifically authorized in this Permit is strictly prohibited

(c) Compliance with the terms of this Permit does not constitute a defense to any action brought under any other law governing protection of public health or the environment, including, but not limited to, one brought for any imminent and substantial endangerment to human health or the environment.

(d) DTSC's issuance of this Permit does not prevent DTSC from adopting or amending regulations that impose additional or more stringent requirements than those in existence at the time this Permit is issued and does not prevent the

enforcement of these requirements against the Permittee.

(e) Failure to comply with any term or condition set forth in the Permit in the time or manner specified herein will subject the Permittee to possible enforcement action including but not limited to penalties pursuant to California Health and Safety Code section 25187.

(f) In addition, failure to submit any information required in connection with the Permit, or falsification and/or misrepresentation of any submitted information, is grounds for revocation of this Permit (California Code of Regulations, title 22, section 66270.43).

(g) In case of conflicts between the Operation Plan and the Permit, the Permit conditions take precedence.

(h) This Permit includes and incorporates by reference any conditions of waste discharge requirements issued by the State Water Resources Control Board, or any of the California Regional Water Quality Control Boards, and any conditions imposed pursuant to section 13227 of the Water Code.

3. COMPLIANCE WITH CALIFORNIA ENVIRONMENTAL QUALITY ACT (CEQA)

A Notice of Exemption for the storage unit was ~~has been~~ prepared in ~~the~~ accordance with the requirements of Public Resources Code, section 21000 et seq. and the CEQA Guidelines, section 15070 et seq. of the California Code of Regulations, title 14. An Environmental Impact Report for the treatment units has been prepared in accordance with the requirements of Public Resources Code, section 21000 et seq. and the CEQA Guidelines, section 15070 et seq. of the California Code of Regulations, title 14.

4. ENVIRONMENTAL MONITORING

Not applicable.

5. ANNUAL HAZARDOUS WASTE REDUCTION AND MINIMIZATION CERTIFICATION

The Permittee shall certify annually that it has a hazardous waste reduction and minimization program and method in place and shall keep the annual certification as part of its Operating Record in accordance with California Code of Regulations, title 22, section 66264.73(b)(9).~~Pursuant to California Health and Safety Code section 25202.9 the Permittee shall certify annually, by March 1 for the previous year ending December 31, that:~~

~~(a) The HWSF has a program in place to reduce the volume and toxicity of all hazardous wastes, which are generated by the base-wide operations, to the degree,~~

~~determined by the Permittee, to be economically practicable.~~ This program, the *Source Reduction Evaluation Review and Plan,* dated July 2003, lists targeted waste streams in Section 4.0, and the *Waste Minimization Plan Performance Report,* dated January 2004, lists the effectively-managed waste streams in Section 4.0.

~~(b) The method of storage or treatment is the only practicable method or combination of methods currently available to the facility which minimizes the present and future threat to human health and the environment.~~

~~The Permittee shall make this certification, in accordance with California Code of Regulations, title 22, section 66270.11. The Permittee shall submit the certification to James M. Pappas, P.E., Chief, Northern California Permitting and Corrective Action Branch (NCPCAB) and shall record and maintain onsite such certification in the facility~~ Facility ~~O~~operating ~~Record.~~

~~6. WASTE MINIMIZATION CONDITIONS~~

~~The Permittee shall comply with the Hazardous Waste Source Reduction and Management Review Act (SB 14) requirements that are specified in the California Health and Safety Code sections 25244.19, 25244.20 and 25244.21, and any subsequent applicable statutes or regulations promulgated thereunder, including submittal of SB 14 documents to DTSC upon request.~~

~~DTSC may require the Permittee to submit a more detailed status report explaining any deviation from, or changes to, the approved waste minimization plan.~~

PART IV. PERMITTED UNITS AND ACTIVITIES

This Permit authorizes operation only of the ~~HWSF~~ Facility units and activities listed below. The Permittee shall not treat or store hazardous waste in any unit other than those specified in this Part IV. Any modifications to a unit or activity authorized by this Permit require the written approval of DTSC, in accordance with the permit modification procedures set forth in California Code of Regulations, title 22, division 4.5, chapter 20, and article 4.

1. UNIT NAME:

~~Edwards Air Force Base~~ Hazardous Waste Support Facility (HWSF)

LOCATION:

The HWSF is located in Kern County, on the north side of the Main Base, approximately 5 miles south of the northern boundary and consists of one (1) hazardous waste management unit (unit) ~~designated as Building 4916~~. The address of the HWSF is 446 North Rosamond Boulevard. The legal boundaries of the HWSF, along with the surrounding land uses, are shown on the detailed topographic map and site plan~~,~~ provided in Appendix ~~10b and following, in Volume II, of the Part B Application, incorporated by reference~~C. The latitude and longitude are ~~GPS coordinates are State Plane NAD83 E,N: 6592790, 2165997.~~ N34º 56´ 38.79´´ W117º 53´ 46.13´´.

ACTIVITY TYPE:

Hazardous wastes are stored in containers for up to one (1) year prior to off-site disposal.

ACTIVITY DESCRIPTION:

This unit serves as a central point for the collection of a full range of hazardous wastes (acids, caustics, batteries, oxidizers, solvents, plastics, resins, etc.), generated base-wide. Hazardous waste is stored in 55-gallon drums and other Department of Transportation-approved containers. It is loaded/unloaded and compatible wastes are consolidated. Containers are thus stored prior to off-site disposal.

PHYSICAL DESCRIPTION:

Buildings at the ~~The~~ HWSF include~~s~~: (1) Building 4917 (supply storage); (2) Building 4922 (field office), and (3) Building 4916 (hazardous waste (HW) storage ~~and staging~~). Building 4916 and the adjacent outdoor area includes 400~~0~~ sq. ft. of enclosed HW storage and 3100 ~~3,150~~ sq. ft. of ~~an open and~~ covered HW ~~staging~~ storage area. Containers are grouped in two separate storage areas inside Building 4916 according to compatibility. Each is equipped with its own secondary containment with an impervious floor sloped to subsurface collection sumps in each area. There is a third containment area located in the center of the building which is used for drum ~~staging~~

loading and unloading activities. This hazardous waste management unit also includes the Asphalt Paved Loading and Waste Consolidation Area, the Asphalt Pavement and Driveway Area inside the gate, the Front Secondary Containment Area in front of Building 4916, ~~and~~ the concrete walkways adjacent to Building 4916, and a concrete pad on the northern end of the site. (See ~~Figure BB-1 (Volume 2) of the Part B Application document~~Appendix C.) All containers are placed primarily on ~~recessed recyclable poly~~ pallets, and the secondary containment systems for all areas are constructed of concrete and sealed with a chemical resistant epoxy sealer. Outdoor HW storage areas are covered by a canopy to prevent stormwater from falling directly onto the unit containers.

MAXIMUM CAPACITY:

~~Building 4916, including the staging area~~ The HWSF has a maximum capacity of 40,480 gallons, stored in containers up to 55 gallons in size.

WASTE TYPES:

Waste types are listed in the RCRA Part B Permit Renewal Application, Hazardous Waste Support Facility, December 2004.

RCRA HAZARDOUS WASTE CODES:

RCRA hazardous waste codes are listed in Appendix 11a of the RCRA Part B Permit Renewal Application, Hazardous Waste Support Facility, December 2004, and are included here in Appendix A.

NON-RCRA HAZARDOUS WASTE CODES:

Non-RCRA hazardous waste codes are listed in Appendix 11b of the RCRA Part B Permit Renewal Application, Hazardous Waste Support Facility, December 2004, and are included here in Appendix B.

UNIT SPECIFIC SPECIAL CONDITIONS

~~As an onsite HWSF, Edwards AFB is restricted from storing HW from source(s) within the boundaries of the NASA Dryden Flight Research Center (NASA FRC). DTSC exempts Edwards AFB from this requirement in the event of an unplanned release from a NASA-owned vehicle or air/spacecraft discharged offsite from the NASA FRC. In that event, under existing interagency agreements, combined HW Emergency Response teams, from Edwards AFB and NASA FRC, will respond to such releases, and Edwards AFB will be permitted to store wastes from that cleanup response.~~

AIR EMISSION STANDARDS FOR CONTAINERS, TANKS, AND SURFACE

IMPOUNDMENTS (SUBPART CC):

The facility is subject to, and therefore must comply with, Title 40, Code of Federal Regulations, Part 264, Subpart CC, Air Emissions Standards.

2. UNIT NAME:

Explosive Ordnance Disposal Range Open Detonation (OD) Unit

LOCATION:

The unit is located at the Explosive Ordnance Disposal (EOD) Range within the Precision Impact Range Area. The unit is located near the southern border of Kern County. The EOD Range is located approximately 7 miles east of the Edwards AFB south gate, 11 miles southeast of the west gate, 13 miles south of the north gate, and just north of Photo Resolution Road. The GPS coordinates of the EOD Range are: northeast corner Latitude 34^{o} 49.853' N, Longitude 117^{o} 48.022' W, southeast corner Latitude 34^{o} 49.627' N, Longitude 117^{o} 47.968' W, southwest corner Latitude 34^{o} 49.605' N, Longitude 117^{o} 48.105' W, and northwest corner Latitude 34^{o} 49.832' N, Longitude 117^{o} 48.158' W. The unit is a circle of 300 foot radius with the center at Latitude 34^{o} 49.786' N, Longitude 117^{o} 48.077' W.

ACTIVITY TYPE:

Ignitable and reactive hazardous wastes generated onsite are treated by open detonation.

ACTIVITY DESCRIPTION:

Hazardous waste received for treatment is placed on the ground by hand or forklift. Packaging may be removed. The waste is configured in such a way as to ensure that all material is consumed. Detonation is conducted in accordance with USAF Technical Order 11A-1-42. After each treatment event, the immediate area is inspected for untreated reactive hazardous waste. Hazardous waste that has not been rendered safe is retreated by open detonation. Periodically the unit is graded to level the surface. Metal fragments are collected and processed per the Facility's policies for management of material potentially presenting an explosive hazard.

PHYSICAL DESCRIPTION:

The unit is a graded 300 foot radius circle, on the north portion of the EOD Range. The EOD Range is a level 700 foot by 1400 foot fenced area. Items are detonated on the ground. No pad or liner is used.

MAXIMUM CAPACITY:

For purposes of determining event and annual treatment quantities, the quantity of the hazardous waste treated is defined as the weight of the energetic (propellant, explosive, or pyrotechnic) in the munition item, also known as the Explosive Weight, with the

following exception:

The quantity of energetic-contaminated hazardous waste is the total weight of the waste. Examples of energetic-contaminated hazardous waste are packaging and laboratory-generated waste.

The maximum treatment quantity per event is 2,000 pounds, except that the maximum treatment quantity for an event including mercury-containing wastes is 700 pounds.

Only one OD and one OB event shall be completed per day, unless prior approval is obtained from DTSC. Approval shall be requested two weeks in advance of the scheduled event. DTSC may approve more than one OD and one OB event per day in circumstances in which the Permittee may be otherwise prevented from complying with storage limits or other special circumstances, such as national emergency;

The maximum annual quantity for OD and OB combined shall not exceed 150,000 pounds;

WASTE TYPES:

Ignitable and reactive hazardous waste generated onsite from research, development, test, and evaluation activities.

RCRA HAZARDOUS WASTE CODES:

D001 and D003

NON-RCRA HAZARDOUS WASTE CODES:

None

UNIT SPECIFIC SPECIAL CONDITIONS:

1. The quantity of hazardous waste treated, the date of the treatment events, and the date of grading events shall be recorded in a format designed to document that the maximum event and annual treatment quantity limits have not been exceeded.

2. Per Occupational Safety and Health Administration regulations found in 29 CFR 1910.109(e)(1)(v), no open detonations shall be performed before ½ hour after sunrise and no later than ½ hour before sunset.

3. Only six (6) grading events shall be completed per year, unless prior approval is obtained from DTSC. Approval shall be requested two weeks in advance of the

scheduled event.

4. The Permittee shall implement DTSC-approved environmental monitoring programs, including sampling, analysis, statistical and trend analysis for soil, ecological receptors, groundwater, and other media as specified by DTSC. The plan for the monitoring programs shall include actions that will be taken in the event that monitoring results demonstrate an increase of contamination or risk to any media. This condition shall be met in accordance with Part V. Special Condition 3.

5. Treatment residues in soil shall not exhibit a hazardous waste characteristic as defined by Title 22, Cal. Code Regs. Division 4.5, Chapter 11.

6. Permittee shall inform DTSC within one month of receipt of a complaint attributable to noise from an OD treatment event.

7. One year after the effective date of addition of the OD Unit to the Permit, and every two years thereafter, the Permittee shall submit a report for DTSC's approval on the efforts on the part of the Permittee to identify, evaluate, and test methods of sampling air emissions from OD events. The report shall include a certification that the information is the best and most current information available to the Permittee. This condition shall be met in accordance with Part V. Special Condition 4.

8. One year after the effective date of addition of the OD unit to the Permit, and every two years thereafter, the Permittee shall submit a report for DTSC's approval on the status of alternative technologies to OD that are appropriate for use at the Facility. The report shall include a certification that the information is the best and most current information available to the Permittee. This condition shall be met in accordance with Part V. Special Condition 5.

9. Five years after the effective date of addition of the OD Unit to the Permit, the Permittee and DTSC shall conduct a review of the Permit and all supporting documentation to assure that the Permit continues to comply with the current state of control and measurement technology as well as changes in applicable regulations. The supporting information to be reviewed shall include emission factors, toxicity criteria, air dispersion modeling, the Human Health Risk Assessment, the Ecological Risk Assessment, results of sampling and analysis of all media, noise prediction modeling, and any other information determined to be necessary by DTSC.

10. The Permittee shall implement the terms of the current Biological Opinion for the Precision Impact Range Area issued by the U.S. Fish and Wildlife Service on March 10, 1994 or any future updated or superseding Biological Opinion relevant to the Explosive Ordnance Disposal Range. All personnel working at the Explosive Ordnance Disposal Range facility shall have completed an awareness briefing following the requirements delineated in the Biological Opinion.

11. The Permittee shall have an authorized biologist conduct a visual survey of the Explosive Ordnance Disposal Range facility (within the fenced area and a 300 feet buffer area around the outside of the fenced area) at least 48 hours prior to each OB/OD event. Survey findings shall be documented in the event log and shall include observations of any animal species listed as threatened, endangered, or as a special species of concern by the California Department of Fish and Wildlife and any nests or burrows left by these species.

12. Should desert tortoises be encountered in the area potentially affected by OB/OD operations, measures shall be implemented in accordance with the Biological Opinion and delineated in the required annual report. Desert tortoises noted in any area potentially affected by OB/OD operations shall be relocated by an authorized biologist prior to any event initiation. All such encounters shall be documented in the event log as well as in the annual report.

13. The annual quantity for OD and OB combined shall not cause a carcinogenic risk threshold of 1×10^{-6} (1 in a million) to be exceeded at any offsite location, as calculated in the approved Human Health Risk Assessment.

14. The annual quantity for OD and OB combined shall not cause a noncarcinogenic chronic hazard index of 1.0 to be exceeded at any offsite location, as calculated in the approved Human Health Risk Assessment.

15. The event quantity for OD shall not cause an acute hazard index of 1.0 to be exceeded at any offsite location, as calculated in the approved Human Health Risk Assessment.

16. The annual quantity for OD shall not cause community noise equivalent levels (average noise exposure over a 24-hour period) to exceed 60 dB at any offsite location, as demonstrated by a DTSC-approved noise prediction study or noise measurements collected by methods approved by DTSC.

17. The event quantity for OD shall not cause peak sound levels to exceed 130 dB at any offsite location, as demonstrated by a DTSC-approved noise analysis or noise measurements collected by methods approved by DTSC.

AIR EMISSION STANDARDS FOR CONTAINERS, TANKS, AND SURFACE IMPOUNDMENTS (SUBPART CC):

The Facility is subject to, and therefore must comply with, Title 40, Code of Federal Regulations, Part 264, Subpart CC, Air Emission Standards. These standards do not apply to the OD Unit.

3. UNIT NAME:

Explosive Ordnance Disposal Range Open Burn (OB) Unit

LOCATION:

The unit is located at the Explosive Ordnance Disposal (EOD) Range within the Precision Impact Range Area. The unit is located near the southern border of Kern County. The EOD Range is located approximately 7 miles east of the Edwards AFB south gate, 11 miles southeast of the west gate, 13 miles south of the north gate, and just north of Photo Resolution Road. The GPS coordinates of the EOD Range are: northeast corner Latitude 34° 49.853' N, Longitude 117° 48.022' W, southeast corner Latitude 34° 49.627' N, Longitude 117° 47.968' W, southwest corner Latitude 34° 49.605' N, Longitude 117° 48.105' W, and northwest corner Latitude 34° 49.832' N, Longitude 117° 48.158' W. The unit is a circle of 300 foot radius with the center at Latitude 34° 49.687' N, Longitude 117° 48.053' W.

ACTIVITY TYPE:

Ignitable and reactive hazardous wastes generated onsite are treated by open burning.

ACTIVITY DESCRIPTION:

Hazardous waste received for treatment is placed on the ground by hand or forklift. Burning is conducted in accordance with USAF Technical Order 11A-1-42. Residual ash is removed to a container immediately after the burn is safe to approach. The container with the ash residue is disposed of as either hazardous or non-hazardous waste depending on the results of sampling and analysis.

PHYSICAL DESCRIPTION:

The unit is a graded 300 foot radius circle, on the south portion of the EOD Range. The EOD Range is a relatively level 700 foot by 1400 foot fenced area. Items are burned on the ground. No pad or liner is used.

MAXIMUM CAPACITY:

For purposes of determining event and annual treatment quantities, the quantity of the hazardous waste treated is defined as the weight of the energetic, also known as the Explosive Weight, with the following exception:

The quantity of energetic-contaminated hazardous waste is the total weight of the waste. Examples of energetic-contaminated hazardous waste are packaging and laboratory-generated waste.

The maximum treatment quantity per event is 2,000 pounds.

Only one OD and one OB event shall be completed per day, unless prior approval is obtained from DTSC. Approval shall be requested two weeks in advance of the scheduled event. DTSC may approve more than one OD and one OB event per day in circumstances in which the Permittee may be otherwise prevented from complying with storage limits or other special circumstances, such as national emergency;

The maximum annual quantity for OD and OB combined shall not exceed 150,000 pounds;

WASTE TYPES:

Ignitable and reactive hazardous waste generated onsite from research, development, test, and evaluation activities.

RCRA HAZARDOUS WASTE CODES:

D001 and D003

NON-RCRA HAZARDOUS WASTE CODES:

None

UNIT SPECIFIC SPECIAL CONDITIONS:

1. Wood dunnage and/or diesel fuel shall not be used for initiation of open burning, except for special circumstances. The Facility shall notify DTSC of the special circumstances and await approval before initiating open burn using wood dunnage and/or diesel fuel.

2. The quantity of hazardous waste and the date of the treatment event shall be recorded in a format designed to document that the maximum event and annual treatment quantity limits have not been exceeded.

3. Only six (6) grading events shall be completed per year, unless prior approval is obtained from DTSC. Approval shall be requested two weeks in advance of the scheduled event.

4. Per Occupational Safety and Health Administration regulations found in 29 CFR 1910.109(e)(1)(v), no open burns shall be performed before ½ hour after sunrise, and no later than ½ hour before sunset.

5. The Permittee shall implement DTSC-approved environmental monitoring programs, including sampling, analysis, statistical and trend analysis for soil, ecological receptors, groundwater, and other media as specified by DTSC. The plan for the monitoring programs shall include actions that will be taken in the event that monitoring results demonstrate an increase of contamination or risk to any media. This condition shall be met in accordance with Part V. Special Condition 3.

6. Treatment residues in soil shall not exhibit a hazardous waste characteristic as defined by Title 22, Cal. Code Regs. Division 4.5, Chapter 11.

7. One year after the effective date of addition of the OB Unit to the Permit, and every two years thereafter, the Permittee shall submit a report for DTSC's approval on the efforts on the part of the Permittee to identify, evaluate, and test methods of sampling air emissions from OB events. The report shall include a certification that the information is the best and most current information available to the Permittee. This condition shall be met in accordance with Part V. Special Condition 4.

8. One year after the effective date of addition of the OB unit to the Permit, and every two years thereafter, the Permittee shall submit a report for DTSC's approval on the status of alternative technologies to OB that are appropriate for use at the Facility. The report shall include a certification that the information is the best and most current information available to the Permittee. This condition shall be met in accordance with Part V Special Condition 5.

9. Five years after the effective date of addition of the OB Unit to the Permit, the Permittee and DTSC shall conduct a review of the Permit and all supporting documentation to assure that the Permit continues to comply with the current state of control and measurement technology as well as changes in applicable regulations. The supporting information to be reviewed shall include emission factors, toxicity criteria, air dispersion modeling, the Human Health Risk Assessment, the Ecological Risk Assessment, results of sampling and analysis of all media, noise prediction modeling, and any other information determined to be necessary by DTSC.

10. The Permittee shall implement the terms of the current Biological Opinion for the Precision Impact Range Area issued by the U.S. Fish and Wildlife Service on March 10, 1994 or any future updated or superseding Biological Opinion relevant to the Explosive Ordnance Disposal Range. All personnel working at the Explosive Ordnance Disposal Range facility shall have completed an awareness briefing following the requirements delineated in the Biological Opinion.

11. The Permittee shall have an authorized biologist conduct a visual survey of the Explosive Ordnance Disposal Range facility (within the fenced area and a 300 feet buffer area around the outside of the fenced area) at least 48 hours prior to each OB/OD event. Survey findings shall be documented in the event log and shall include

observations of any animal species listed as threatened, endangered, or as a special species of concern by the California Department of Fish and Wildlife and any nests or burrows left by these species.

12. Should desert tortoises be encountered in the area potentially affected by OB/OD operations, measures shall be implemented in accordance with the Biological Opinion and delineated in the required annual report. Desert tortoises noted in any area potentially affected by OB/OD operations shall be relocated by an authorized biologist prior to any event initiation. All such encounters shall be documented in the event log as well as in the annual report.

13. The annual quantity for OD and OB combined shall not cause a carcinogenic risk threshold of 1×10^{-6} (1 in a million) to be exceeded at any offsite location, as calculated in the approved Human Health Risk Assessment;

14. The annual quantity for OD and OB combined shall not cause a noncarcinogenic chronic hazard index of 1.0 to be exceeded at any offsite location, as calculated in the approved Human Health Risk Assessment; and

15. The event quantity for OB shall not cause an acute hazard index of 1.0 to be exceeded at any offsite location, as calculated in the approved Human Health Risk Assessment.

AIR EMISSION STANDARDS FOR CONTAINERS, TANKS, AND SURFACE IMPOUNDMENTS (SUBPART CC):

The Facility is subject to, and therefore must comply with, Title 40, Code of Federal Regulations, Part 264, Subpart CC, Air Emission Standards. These standards do not apply to the OB Unit.

PART V. SPECIAL CONDITIONS ~~WHICH APPLY TO ALL OF THE FACILITY'S STORAGE AND/OR TREATMENT UNITS~~

~~1. As an onsite HWSF, Edwards AFB is restricted from storing HW from source(s) within the boundaries of the NASA Dryden Flight Research Center (NASA FRC). DTSC exempts Edwards AFB from this requirement in the event of an unplanned release from a NASA-owned vehicle or air/spacecraft discharged offsite from the NASA FRC. In that event, under existing interagency agreements, combined HW Emergency Response teams, from Edwards AFB and NASA FRC, will respond to such releases, and Edwards AFB will be permitted to store wastes from that cleanup response.~~

The Permittee shall comply with the following:

	Tasks	Due Date
1.	Submit revised Standard Operating Procedures if Standard Operating Procedures listed in EOD Operating Instruction 91-4, Appendix 19 of RCRA Part B/Subpart X are modified.	30 days from revision to EOD Operating Instruction 91-4
2.	Submit analyses of the ash/residue from three open burn events.	1 month following first three OB events after effective date of addition of OB/OD Units to Permit
3.	Submit workplans for environmental monitoring as specified in Part IV. Sections 2. and 3. of this Permit.	3 months from effective date of addition of OB/OD Units to Permit
4.	Submit a report on methods of sampling air emissions from OB/OD events.	1 year from effective date of addition of OB/OD Units to Permit
5.	Submit a report on the status of alternative technologies to OB/OD.	1 year from effective date of addition of OB/OD Units to Permit

6. Upon the effective date of the Class III Permit Modification to add the OB/OD units to the Permit, the Stipulation and Order, Docket HWCA 92/93-027 shall be terminated.

PART VI. CORRECTIVE ACTION

1. In the event that the Permittee identifies an immediate or potential threat to human health and/or the environment, discovers new releases of hazardous waste and/or hazardous constituents, or discovers new Solid Waste Management Units (SWMUs) not previously identified, the Permittee shall notify DTSC orally within 24 hours of discovery and notify DTSC in writing within 10 days of such discovery summarizing the findings, including the immediacy and magnitude of any potential threat to human health and/or the environment.

2. DTSC may require the Permittee to investigate, mitigate, and/or take other applicable action to address any immediate or potential threats to human health and/or the environment and newly identified SWMUs or releases of hazardous waste and/or hazardous constituents. ~~For newly identified SWMUs, the Permittee is required to conduct corrective action. Corrective action will be carried out either under the Corrective Action Consent Agreement or Unilateral Corrective Action Order pursuant to California Health and Safety Code section 25187.~~

3. To the extent that work being performed pursuant to Part VI of the Permit must be done on property not owned or controlled by the Permittee, the Permittee shall use its best efforts to obtain access agreements necessary to complete work required by this Part of the Permit from the present owner(s) of such property within 30 days of approval of any workplan for which access is required. "Best efforts" as used in this paragraph shall include, at a minimum, a certified letter from the Permittee to the present owner(s) of such property requesting access agreement(s) to allow the Permittee and DTSC and its authorized representatives access to such property and the payment of reasonable sums of money in consideration of granting access. The Permittee shall provide DTSC with a copy of any access agreement(s). In the event that agreements for the access are not obtained within 30 days of approval of any workplan for which access is required, or of the date that the need for access becomes known to the Permittee, the Permittee shall notify DTSC in writing within 14 days thereafter regarding both efforts undertaken to obtain access and its failure to obtain such agreements. In the event DTSC obtains access, the Permittee shall undertake approved work on such property. If there is any conflict between this permit condition on access and the access requirements in any agreement entered into between DTSC and the Permittee, this permit condition on access shall govern.

4. Nothing in Part VI of the Permit shall be construed to limit or otherwise affect the Permittee's liability and obligation to perform corrective action including corrective action beyond the facility boundary, notwithstanding the lack of access. DTSC may determine that additional on- site measures must be taken to address releases beyond the Facility boundary if access to off-site areas cannot be obtained.

APPENDIX A

(Same as Appendix 11a of the Hazardous Waste Support Facility RCRA Part B Permit Application Edwards Air Force Base)

Listed Wastes Processed and/or Stored at the Edwards AFB Hazardous Waste Support Facility

LISTED CHARACTERISTIC AND TOXICITY CHARACTERISTIC HAZARDOUS WASTE		**HW MANAGEMENT CLASSIFICATION[1]**
D001	Ignitability	F/R
D002	Corrosivity	A/B
D003	Reactivity	R
D004	Arsenic	T/R/A/B/CLASS-9
D005	Barium	T/R/A/B/CLASS-9
D006	Cadmium	T/R/A/B/CLASS-9
D007	Chromium	T/R/A/B/CLASS-9
D008	Lead	T/R/A/B/CLASS-9
D009	Mercury	T/R/A/B/CLASS-9
D010	Selenium	T/R/A/B/CLASS-9
D011	Silver	T/R/A/B/CLASS-9
D012	Endrin	T/R/A/B/CLASS-9
D013	Lindane	T/R/A/B/CLASS-9
D014	Methoxychlor	T/R/A/B/CLASS-9
D015	Toxaphene	T/R/A/B/CLASS-9
D016	2,4-D	T/R/A/B/CLASS-9
D017	2,4,5-TP (Silvex)	T/R/A/B/CLASS-9
D018	Benzene	F/T/CLASS-9
D019	Carbontetrachloride	T/CLASS-9
D020	Chlordane	T/CLASS-9
D021	Chlorobenzene	T/CLASS-9
D022	Chloroform	T/CLASS-9
D023	o-Cresol	T/CLASS-9
D024	m-Cresol	T/CLASS-9
D025	p-Cresol	T/CLASS-9
D026	Cresol	T/CLASS-9
D027	1,4-Dichlorobenzene	T/CLASS-9
D028	1,2-Dichloroethane	T/CLASS-9
D029	1,1-Dichloroethylene	T/CLASS-9
D030	2,4-Dinitrotoluene	T/CLASS-9
D031	Heptachlor (and its epoxide)	T/CLASS-9
D032	Hexachlorobenzene	T/CLASS-9
D033	Hexachlorobutadiene	T/CLASS-9
D034	Hexachloroethane	T/CLASS-9
D035	Methyl ethyl ketone	T/CLASS-9
D036	Nitrobenzene	T/CLASS-9
D037	Pentrachlorophenol	T/CLASS-9
D038	Pyridine	T/CLASS-9
D039	Tetrachloroethylene	T/CLASS-9
D040	Trichloroethylene	T/CLASS-9
D041	2,4,5-Trichlorophenol	T/CLASS-9
D042	2,4,6-Trichlorophenol	T/CLASS-9
D043	Vinyl chloride	F/T/CLASS-9

LISTED HAZARDOUS WASTE FROM NON-SPECIFIC SOURCES		HW MANAGEMENT CLASSIFICATION[1]
F001	The following spent (T) halogenated solvents used in degreasing: Tetrachloroethylene, trichloroethylene, methylene chloride, 1,1,1-trichloroethane, carbon tetrachloride, and chlorinated fluorocarbons; all spent solvent mixtures/blends used in degreasing containing before use, a total of ten percent or more (by volume) of one or more of the above halogenated solvents or those listed in F002, F004, and F005; and still bottoms from the recovery of these spent solvents and solvent mixtures.	T/CLASS-9
F002	The following spent (T) halogenated solvents: Tetrachloroethylene, methylene chloride, trichloroethylene, 1,1,1-trichloroethane, chlorobenzene, 1,1,2-trichloro-1,2,2-trifluoroethane, ortho-dichlorobenzene, trichlorofluoromethane, and 1,1,2-trichloroethane; all spent solvent mixtures/blends containing, before use a total of ten percent or more (by volume) of one or more of the above halogenated solvents or those listed in F001, F004, or F005; and still bottoms from the recovery of thesespent solvents and spent solvent mixtures.	T/CLASS-9
F003	The following spent (I)* nonhalogenated solvents: Xylene, acetone, ethyl acetate, ethyl benzene, ethyl ether, methyl isobutyl ketone, n-butyl alcohol, cyclohexanone, and methanol; all spent solvent mixtures/blends containing, before use, only the above spent nonhalogenated solvents; and all spent solvent mixtures/blends containing, before use one or more of the above nonhalogenated solvents, and a total of ten percent or more (by volume) of one or more of those solvents listed in F001, F002,F004, and F005; and the still bottoms from the recovery of these spent solvents and spent solvent mixtures.	F/CLASS-9
F004	The following spent (T) nonhalogenated solvents: Cresols and cresylic acid, and nitrobenzene; all spent solvent mixtures/blends containing, before use, a total of ten percent or more (by volume) of one or more of the above nonhalogenated solvents or those listed in F001, F002, and F005; and the still bottoms from the recovery of these spent solvents and spent solvent mixtures	T/CLASS-9
F005	The following spent (I,T) nonhalogenated solvents: Toluene, methyl ethyl ketone, carbon disulfide, isobutanol, pyridine, benzene, 2-ethoxyethanol, and 2-nitropropane; all spent solvent mixtures/blends containing, before use, a total of ten percent or more (by volume) of one or more of the above nonhalogenated solvents or those solvents listed in F001, F002, or F004; and the still bottoms from the recovery of these spent solvents and spent solvent mixtures.	F/CLASS-9

LISTED COMMERCIAL PRODUCTS AND RESIDUES THEREOF REGULATED FOR TOXICITY[1]		HW MANAGEMENT CLASSIFICATION[2]
P006	20859-73-8 Aluminum phosphide (R,T)	R/T
P012	1327-53-3 Arsenic oxide As2O3, Arsenic trioxide	T
P013	542-62-1 Barium cyanide	T
P015	7440-41-7 Beryllium powder	T
P021	592-01-8 Calcium cyanide Ca(CN)2	T
P022	75-15-0 Carbon disulfide	T
P028	100-44-7 Benzyl chloride, Benzene, (chloromethyl)-	T
P029	544-92-3 Copper cyanide Cu(CN)	T
P030	Cyanides Cyanides (soluble cyanide salts), not otherwise specified	T
P043	55-91-4 Phosphorofluoridic acid, bis(1- methylethyl) ester,	T

	Diisopropylfluorophosphate (DFP)	
P056	7782-41-4 Fluorine	T
P063	74-90-8 Hydrogen cyanide, Hydrocyanic acid	T
P064	624-83-9 Methyl isocyanate, Methane, isocyanato-	T
P068	60-34-4 Methyl hydrazine, Hydrazine, methyl-	T
P073	13463-39-3 Nickel carbonyl Ni(CO)4, (T-4)-, Nickel carbonyl	T
P074	557-19-7 Nickel cynaide Ni(CN)2, Nickel cyanide	T
P076	10102-43-9 Nitrogen oxide NO, Nitric oxide	T
P078	10102-44-0 Nitrogen oxide NO2, Nitrogen dioxide	T
P092	62-38-4 Phenylmercury acetate, Mercury, (acetato-O)phenyl-	T
P098	151-50-8 Potassium cyanide K(CN), Potassium cyanide	T
P101	107-12-0 Propanenitrile, Ethyl cyanide	T
P102	107-19-7 2-Propyn-1-ol, Propargyl alcohol	T
P104	506-64-9 Silver cyanide Ag(CN), Silver cyanide	T
P105	26628-22-8 Sodium azide	T
P106	143-33-9 Sodium cyanide Na(CN), Sodium cyanide	T
P109	3689-24-5 Thiodiphosphoric acid, tetraethyl ester, Tetraethyldithiopyrophosphate	T
P113	1314-32-5 Thallium oxide Tl2O3	T
P114	12039-52-0 Selenious acid,dithallium(1+) salt, Thallium(I) selenite	T
P115	7446-18-6 Thallium(I) sulfate, Sulfuric acid, dithallium(1+) salt	T
P120	1314-62-1 Vanadium oxide V2O5, Vanadium pentoxide	T

LISTED COMMERCIAL PRODUCTS OR OFF-SPEC CHEMICAL REGULATED FOR TOXICITY		**HW MANAGEMENT CLASSIFICATION[1]**
U001	75-07-0 Ethanal (I), Acetaldehyde (I)	F/CLASS-9
U002	67-64-1 2-Propanone (I) , Acetone (I)	F/CLASS-9
U003	75-05-8 Acetonitrile (I,T)	F/T/CLASS-9
U006	75-36-5 Acetyl chloride (C,R,T)	A/B/R/T/CLASS-9
U007	79-06-1 2-Propenamide, Acrylamide	T/CLASS-9
U008	79-10-7 Acrylic acid (I), 2-Propenoic acid (I)	F/CLASS-9
U009	107-13-1 2-Propenenitrile, Acrylonitrile	T/CLASS-9
U012	62-53-3 Benzenamine (I,T), Aniline (I,T)	F/T/CLASS-9
U017	98-87-3 Benzene,(dichloromethyl)-, Benzal chloride	T/CLASS-9
U019	71-43-2 Benzene (I,T)	F/T/CLASS-9
U025	111-44-4 Dichloroethyl ether, Ethane, 1,1 -oxybis(2-chloro-	T/CLASS-9
U029	74-83-9 Methyl bromide, Methane, bromo-	T/CLASS-9
U031	71-36-3 n-Butyl alcohol (I),1-Butanol (I)	F/CLASS-9
U032	13765-19-0 Chromic acid H2CrO4, calcium salt, Calcium chromate	T/CLASS-9
U037	108-90-7 Chlorobenzene, Benzene, chloro-	T/CLASS-9
U039	59-50-7 Phenol, 4-chloro-3-methyl-, p-Chloro-m-cresol	T/CLASS-9
U041	106-89-8 Oxirane, (chloromethyl)-, Epichlorohydrin	T/CLASS-9
U043	75-01-4 Ethene, chloro-, Vinyl chloride	T/CLASS-9
U044	67-66-3 Chloroform, Methane, trichloro-	T/CLASS-9
U045	74-87-3 Methyl chloride (I,T), Methane, chloro- (I,T)	F/T/CLASS-9
U046	107-30-2 Methane,chloromethoxy-, Chloromethyl methyl ether	T/CLASS-9
U047	91-58-7 beta-Chloronaphthalene, Naphthalene, 2-chloro-	T/CLASS-9

U050	218-01-9 Chrysene	T/CLASS-9
U051	Creosotes	A/B/T/CLASS-9
U052	1319-77-3 Phenol, methyl-, Cresol (Cresylicacid)	T/CLASS-9
U055	98-82-8 Benzene, (1-methylethyl)- (I), Cumene (I)	F/CLASS-9
U056	110-82-7 Benzene, hexahydro- (I), Cyclohexane (I)	F/CLASS-9
U057	108-94-1 Cyclohexanone (I)	F/CLASS-9
U060	72-54-8 DDD, Benzene, 1,1?-(2,2-dichloroethylidene)bis(4-chloro-	T/CLASS-9
U061	50-29-3 Benzene, 1,1?-(2,2,2-trichloroethylidene)bis(4-chloro-, DDT	T/CLASS-9
U067	106-93-4 Ethylene dibromide, Ethane, 1,2-dibromo-	T/CLASS-9
U068	74-95-3 Methylene bromide, Methane, dibromo-	T/CLASS-9
U069	84-74-2 Dibutyl phthalate, 1,2-Benzenedicarboxylicacid, dibutyl ester	T/CLASS-9
U070	95-50-1 Benzene, 1,2-dichloro-, o-Dichlorobenzene	T/CLASS-9
U071	541-73-1 m-Dichlorobenzene, Benzene, 1,3-dichloro-	T/CLASS-9
U072	106-46-7 Benzene, 1,4-dichloro-, p-Dichlorobenzene	T/CLASS-9
U075	75-71-8 Methane, dichlorodifluoro-, Dichlorodifluoromethane	T/CLASS-9
U076	75-34-3 Ethylidene dichloride, Ethane, 1,1-dichloro-	T/CLASS-9
U077	107-06-2 Ethylene dichloride, Ethane, 1,2-dichloro-	T/CLASS-9
U078	75-35-4 Ethene, 1,1-dichloro-, 1,1-Dichloroethylene	T/CLASS-9
U079	156-60-5 1,2-Dichloroethylene, Ethene, 1,2-dichloro-, (E)-	T/CLASS-9
U080	75-09-2 Methylene chloride, Methane, dichloro-	T/CLASS-9
U081	120-83-2 2,4-Dichlorophenol, Phenol, 2,4-dichloro-	T/CLASS-9
LISTED COMMERCIAL PRODUCTS OR OFF-SPEC CHEMICAL REGULATED FOR TOXICITY (Continued)		**HW MANAGEMENT CLASSIFICATION[1]**
U083	78-87-5 Propylene dichloride, Propane, 1,2-dichloro-	T/CLASS-9
U084	542-75-6 1-Propene, 1,3-dichloro-, 1,3-Dichloropropene	T/CLASS-9
U086	1615-80-1 Hydrazine, 1,2-diethyl-, N,N – Diethylhydrazine	T/CLASS-9
U087	3288-58-2 Phosphorodithioic acid, O,O-diethyl S-methyl ester, O, O-Diethyl S-methyl dithiophosphate	T/CLASS-9
U096	80-15-9 Hydroperoxide, 1-methyl-1-phenylethyl-I, alpha, alpha-Dimethylbenzylhydroperoxide I	R/CLASS-9
U098	57-14-7 1,1-Dimethylhydrazine	T/CLASS-9
U099	540-73-8 1,2- Dimethylhydrazine	T/CLASS-9
U101	105-67-9 2,4-Dimethylphenol	T/CLASS-9
U103	77-78-1 Dimethyl sulfate	T/CLASS-9
U105	121-14-2 Benzene, 1-methyl-2,4-dinitro-	T/CLASS-9
U106	606-20-2 Benzene, 2-methyl-1,3-dinitro-	T/CLASS-9
U109	122-66-7 1,2- Diphenylhydrazine	T/CLASS-9
U110	142-84-7 Dipropylamine (I)	F/A/B/CLASS-9
U111	621-64-7 Di-n-propylnitrosamine	T/CLASS-9
U112	141-78-6 Acetic acid ethylester (I)	F/CLASS-9
U113	140-88-5 Ethyl acrylate (I)	F/CLASS-9
U115	75-21-8 Ethylene oxide (I,T)	F/T/CLASS-9
U118	97-63-2 Ethyl methacrylate	F/CLASS-9
U119	62-50-0 Ethyl methanesulfonate	T/CLASS-9
U121	75-69-4 Methane, trichlorofluoro-	T/CLASS-9
U122	50-00-0 Formaldehyde	T/CLASS-9

U123	64-18-6 Formic acid (C,T)	A/B/T/CLASS-9
U124	110-00-9 Furan (I)	F/CLASS-9
U125	98-01-1 2-Furancarboxaldehyde (I)	F/CLASS-9
U127	118-74-1 Benzene, hexachloro-	T/CLASS-9
U128	87-68-3 1,3-Butadiene,1,1,2,3,4,4-hexachloro-	T/CLASS-9
U129	58-89-9 Cyclohexane,1,2,3,4,5,6-hexachloro-(1 alpha, 2 alpha, 3 beta, 4 alpha, 5 alpha, 6 beta)	T/CLASS-9
U131	67-72-1 Ethane, hexachloro-	T/CLASS-9
U132	70-30-4 Hexachlorophene	T/CLASS-9
U133	302-01-2 Hydrazine (R,T)	R/T/CLASS-9
U134	7664-39-3 Hydrofluoric acid (C,T)	A/B/T/CLASS-9
U135	7783-06-4 Hydrogen sulfide	T/CLASS-9
U136	75-60-5 Arsinic acid, dimethyl-	T/CLASS-9
U138	74-88-4 Methane, iodo-	T/CLASS-9
U140	78-83-1 Isobutyl alcohol (I,T)	F/T/CLASS-9
U144	301-04-2 Acetic acid, lead(2+) salt	T/CLASS-9
U145	7446-27-7 Lead phosphate	T/CLASS-9
U146	1335-32-6 Lead, bis(cetate-O)tetrahydroxytri-	T/CLASS-9
U151	7439-97-6 Mercury	A/B/T/CLASS-9
U152	126-98-7 Methacrylonitrile (I, T)	F/T/CLASS-9
U153	74-93-1 Methanethiol (I, T)	F/T/CLASS-9
LISTED COMMERCIAL PRODUCTS OR OFF-SPEC CHEMICAL REGULATED FOR TOXICITY (Continued)		**HW MANAGEMENT CLASSIFICATION[1]**
U154	67-56-1 Methanol (I)	F/T/CLASS-9
U158	101-14-4 Benzenamine, 4,4?-methylenebis(2-chloro-	F/CLASS-9
U159	78-93-3 2-Butanone (I,T)	T/CLASS-9
U160	1338-23-4 2-Butanone, peroxide (R,T)	F/T/CLASS-9
U161	108-10-1 Methyl isobutyl ketone (I)	R/F/T
U162	80-62-6 Methyl methacrylate (I,T)	F/CLASS-9
U163	70-25-7 Guanidine, N-methyl-N -nitro-N-nitroso-	T/CLASS-9
U164	56-04-2 Methylthiouracil	T/CLASS-9
U165	91-20-3 Naphthalene	F/CLASS-9
U166	130-15-4 1,4-Naphthalenedione	T/CLASS-9
U167	134-32-7 1-Naphthalenamine	T/CLASS-9
U168	91-59-8 2-Naphthalenamine	T/CLASS-9
U169	98-95-3 Benzene, nitro-	T/CLASS-9
U170	100-02-7 p-Nitrophenol	T/CLASS-9
U171	79-46-9 2-Nitropropane (I,T)	F/T/CLASS-9
U174	55-18-5 Ethanamine, N-ethyl-N-nitroso-	T/CLASS-9
U183	608-93-5 Benzene, pentachloro-	T/CLASS-9
U184	76-01-7 Ethane, pentachloro-	T/CLASS-9
U185	82-68-8 Benzene, pentachloronitro-	T/CLASS-9
U186	504-60-9 1-Methylbutadiene (I)	T/CLASS-9
U187	62-44-2 Acetamide, N-(4- ethoxyphenyl)-	T/CLASS-9
U188	108-95-2 Phenol	T/CLASS-9
U189	1314-80-3 Phosphorus sulfide (R)	T/CLASS-9
U194	107-10-8 1-Propanamine (I,T)	F/T/CLASS-9

U196	110-86-1 Pyridine	T/CLASS-9
U197	106-51-4 p-Benzoquinone	T/CLASS-9
U204	7783-00-8 Selenious acid	T/CLASS-9
U205	7488-56-4 Selenium sulfide SeS2 (R,T)	R/T/CLASS-9
U207	95-94-3 Benzene, 1,2,4,5-tetrachloro-	T/CLASS-9
U208	630-20-6 Ethane, 1,1,1,2-tetrachloro-	T/CLASS-9
U209	79-34-5 Ethane, 1,1,2,2-tetrachloro-	T/CLASS-9
U210	127-18-4 Ethene, tetrachloro-	T/CLASS-9
U211	56-23-5 Carbon tetrachloride	T/CLASS-9
U213	109-99-9 Furan, tetrahydro-(I)	T/CLASS-9
U214	563-68-8 Acetic acid, thallium(1+) salt	T/CLASS-9
U216	7791-12-0 Thallium(I) chloride	T/CLASS-9
U218	62-55-5 Ethanethioamide	T/CLASS-9
U220	108-88-3 Benzene, methyl-	F/CLASS-9
U223	26471-62-5 Benzene, 1,3-diisocyanatomethyl-(R,T)	R/T/CLASS-9
U225	75-25-2 Bromoform	T/CLASS-9
U226	71-55-6 Ethane, 1,1,1-trichloro-	T/CLASS-9
U227	79-00-5 Ethane, 1,1,2-trichloro-	T/CLASS-9
U228	79-01-6 Ethene, trichloro-	T/CLASS-9
U234	99-35-4 Benzene, 1,3,5-trinitro-	T/CLASS-9
LISTED COMMERCIAL PRODUCTS OR OFF-SPEC CHEMICAL REGULATED FOR TOXICITY (Concluded)		**HW MANAGEMENT CLASSIFICATION[1]**
U238	51-79-6 Carbamic acid, ethylester	T/CLASS-9
U239	1330-20-7 Benzene, dimethyl-(I,T)	F/T/CLASS-9
U240	94-75-7 Acetic acid, (2,4- 7 dichlorophenoxy)-, salts & esters	T/CLASS-9
U243	1888-71-7 Hexachloropropene	T/CLASS-9
U246	506-68-3 Cyanogen bromide (CN)Br	T/CLASS-9
U249	1314-84-7 Zinc phosphide Zn3P2, when present at concentrations of 10% or less	T/CLASS-9
U271	17804-35-2 Benomyl.	T/CLASS-9
U277	95-06-7 Carbamodithioic acid, diethyl-, 2-chloro-2-propenylester.	T/CLASS-9
U278	22781-23-3 Bendiocarb.	T/CLASS-9
U279	63-25-2 Carbaryl.	T/CLASS-9
U328	95-53-4 Benzenamine, 2-methyl-	T/CLASS-9
U353	106-49-0 Benzenamine, 4-methyl-	T/CLASS-9
U359	110-80-5 Ethanol, 2-ethoxy-	T/CLASS-9
U364	22961-82-6 Bendiocarb phenol.	T/CLASS-9
U395	5952-26-1 Diethylene glycol, dicarbamate.	T/CLASS-9
U404	121-44-8 Ethanamine, N,N-diethyl-	T/CLASS-9

NOTES:

1. HW Management Classification: Denotes how the specified waste will be managed in accordance with HWSF process and procedures (e.g., containers, labeling, storage locations, security, protection/prevention measures, etc.). The classifications are as follows:

A = Acids
B = Bases
O = Oxidizers
P = Peroxides
T = Toxics
R = Reactives
Class 9 = Miscellaneous Wastes (e.g., asbestos, soil with metals)
F = Flammables
NF = non-Flammable Gases
C = Combustibles (liquid, solid or gas)
nR = non-RCRA wastes

For example, a D002 (Corrosivity) coded HW is classified for management purposes as either an Acid (A) or Base (B). This HW, which may include other compounds that exhibit inherently corrosive characteristics, would then be managed in accordance with all HWSF processes and procedures applicable to Acids or Bases. HW code determinations are based on the constituent data (i.e., constituent mix and form - solid, liquid, gas) when received at the HWSF. A major portion of the management process is storage (i.e., compatibility) which is based on DOT/NFPA guidelines which are much more stringent than EPA HW codes.

In many cases, a coded HW is listed with multiple management classifications - this reflects the fact the specific characteristics of the HW itself will determine the exact classification. For example, hydrochloric acid (a D002 coded HW) would be classified as an Acid (A) for management purposes, and sodium hydroxide (a D002 coded HW) would be classified as a Base (B) for management purposes. In a few cases, all of the classifications could apply to a coded HW where the specific classification would be determined based on the specific characteristics of the HW itself.

APPENDIX B

(Same as Appendix 11b of the Hazardous Waste Support Facility RCRA Part B Permit Application Edwards Air Force Base)

California Waste Codes Processed and/or Stored at the Edwards AFB Hazardous Waste Support Facility

	INORGANICS	**HW MANAGEMENT CLASSIFICATION[1]**
121	Alkaline solution (pH > 12.5) with metals (antimony, arsenic, barium, beryllium, cadmium, chromium, cobalt, copper, lead, mercury, molybdenum, nickel, selenium, silver, thallium, vanadium, and zinc)	B/T
122	Alkaline solution without metals (pH > 12.5)	B
123	Unspecified alkaline solution	A/B
131	Aqueous solution (2 < pH < 12.5) containing reactive anions (azide, bromate, chlorate, cyanide, fluoride, hypochlorite, nitrite, perchlorate, and sulfide anions)	R
132	Aqueous solution with metals (restricted levels and see waste code 121 for a list of metals)	T
133	Aqueous solution with 10% or more total organic residues	T
134	Aqueous solution with less than 10% total organic residues	T
135	Unspecified aqueous solution	T
141	Off-specification, aged, or surplus inorganics	ALL APPLICABLE
151	Asbestos-containing waste	T
162	Other spent catalyst	ALL APPLICABLE
171	Metal sludge (see 121)	T
172	Metal dust (see 121) and machining waste	T
181	Other inorganic solid waste	T
	ORGANICS	**HW MANAGEMENT CLASSIFICATION[1]**
211	Halogenated solvents (chloroform, methyl chloride, perchloroethylene, etc.)	T
212	Oxygenated solvents (acetone, butanol, ethyl acetate, etc.)	F
213	Hydrocarbon solvents (benzene, hexane, Stoddard, etc.)	F
214	Unspecified solvent mixture	F
221	Waste oil and mixed oil	T
222	Oil/water separation sludge	T
223	Unspecified oil-containing waste	F/T
241	Tank bottom waste	F/T
251	Still bottoms with halogenated organics	T
252	Other still bottom waste	T
261	Polychlorinated biphenyls and material containing PCB's	T
271	Organic monomer waste (includes unreacted resins)	ALL APPLICABLE
272	Polymeric resin waste	ALL APPLICABLE
281	Adhesives	ALL APPLICABLE
291	Latex waste	T
311	Pharmaceutical waste	T
321	Sewage sludge	T
322	Biological waste other than sewage sludge	T
331	Off-specification, aged, or surplus organics	ALL APPLICABLE
341	Organic liquids (nonsolvents) with halogens	T
342	Organic liquids with metals (see 121)	T
343	Unspecified organic liquid mixture	T/F
351	Organic solids with halogens	T
352	Other organic solids	T

	SLUDGES	**HW MANAGEMENT CLASSIFICATION[1]**
451	Degreasing sludge	T
461	Paint sludge	T
491	Unspecified sludge waste	T
	MISCELLANEOUS	**HW MANAGEMENT CLASSIFICATION[1]**
511	Empty pesticide containers 30 gallons or more	T
512	Other empty containers 30 gallons or more	T
513	Empty containers less than 30 gallons	T
541	Photochemicals/photoprocessing waste	A/B/T
551	Laboratory waste chemicals	ALL APPLICABLE
561	Detergent and soap	A/B/T
581	Gas scrubber waste	F/T
611	Contaminated soil from site clean-ups	T
612	Household waste	ALL APPLICABLE
	CALIFORNIA RESTRICTED WASTES	**HW MANAGEMENT CLASSIFICATION[1]**
711	Liquids with cyanides $\geq$ 1000 mg/l	T
721	Liquids with arsenic $\geq$ 500 mg/l	T
722	Liquids with cadmium $\geq$ 100 mg/l	T
723	Liquids with chromium (VI) $\geq$ 500 mg/l	T
724	Liquids with lead $\geq$ 500 mg/l	T
725	Liquids with mercury $\geq$ 20 mg/l	T
726	Liquids with nickel $\geq$ 134 mg/l	T
727	Liquids with selenium $\geq$ 100 mg/l	T
728	Liquids with thallium $\geq$ 130 mg/l	T
731	Liquids with polychlorinated biphenyls $\geq$ 50 mg/l	T
741	Liquids with halogenated organic compounds $\geq$ 1000 mg/l	T
751	Solids or sludges with halogenated organic compounds $\geq$ 1000mg/kg	T
791	Liquids with pH < 2	A
792	Liquids with pH < 2 with metals	A/T
801	Waste potentially containing dioxins	T

NOTES:

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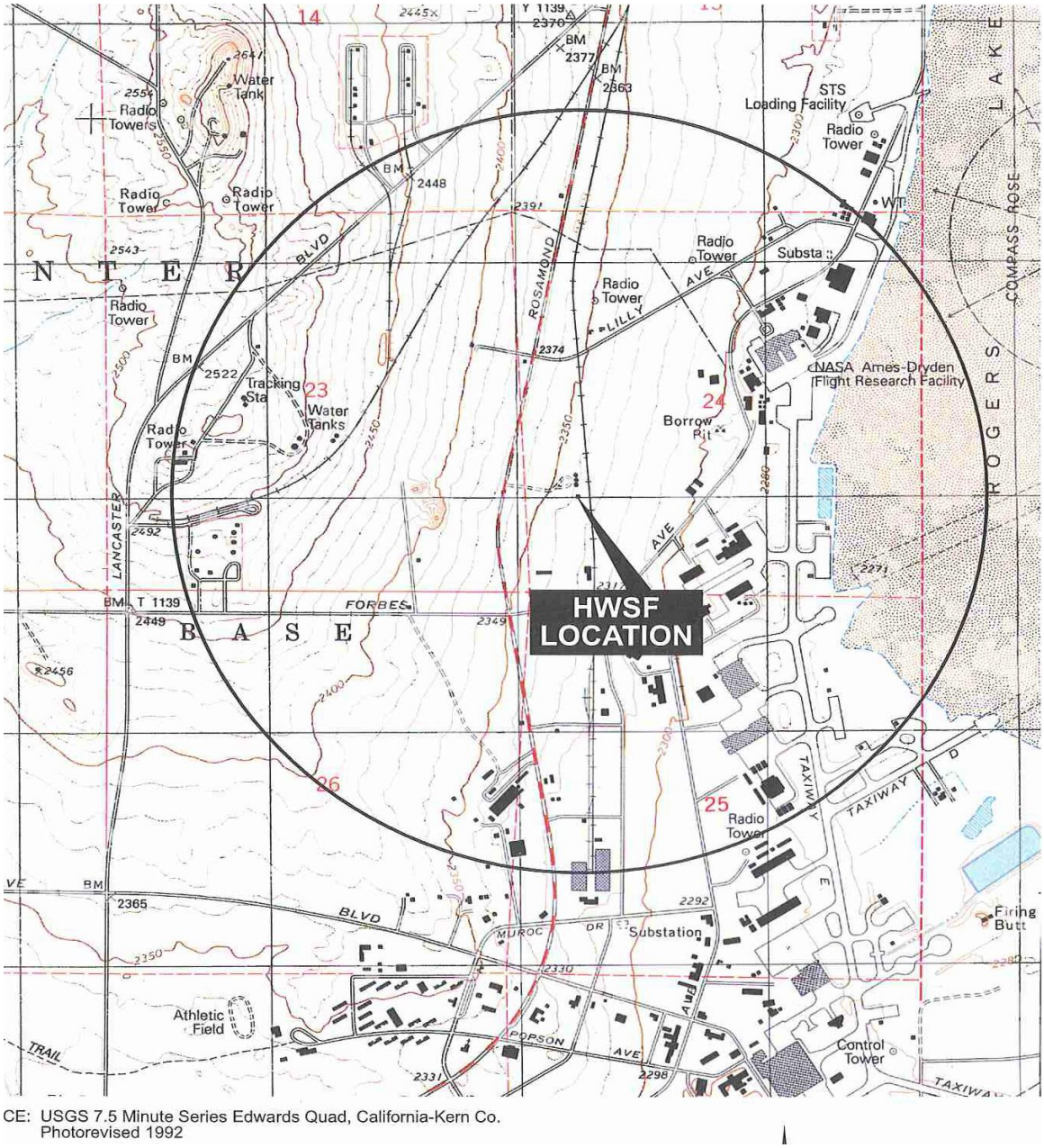
APPENDIX C

Topographic Maps and Site Plans for Hazardous Waste Management Units



CE: USGS 7.5 Minute Series Edwards Quad, California-Kern Co.
Photorevised 1992

Figure 1 – Hazardous Waste Support Facility Topographic Map

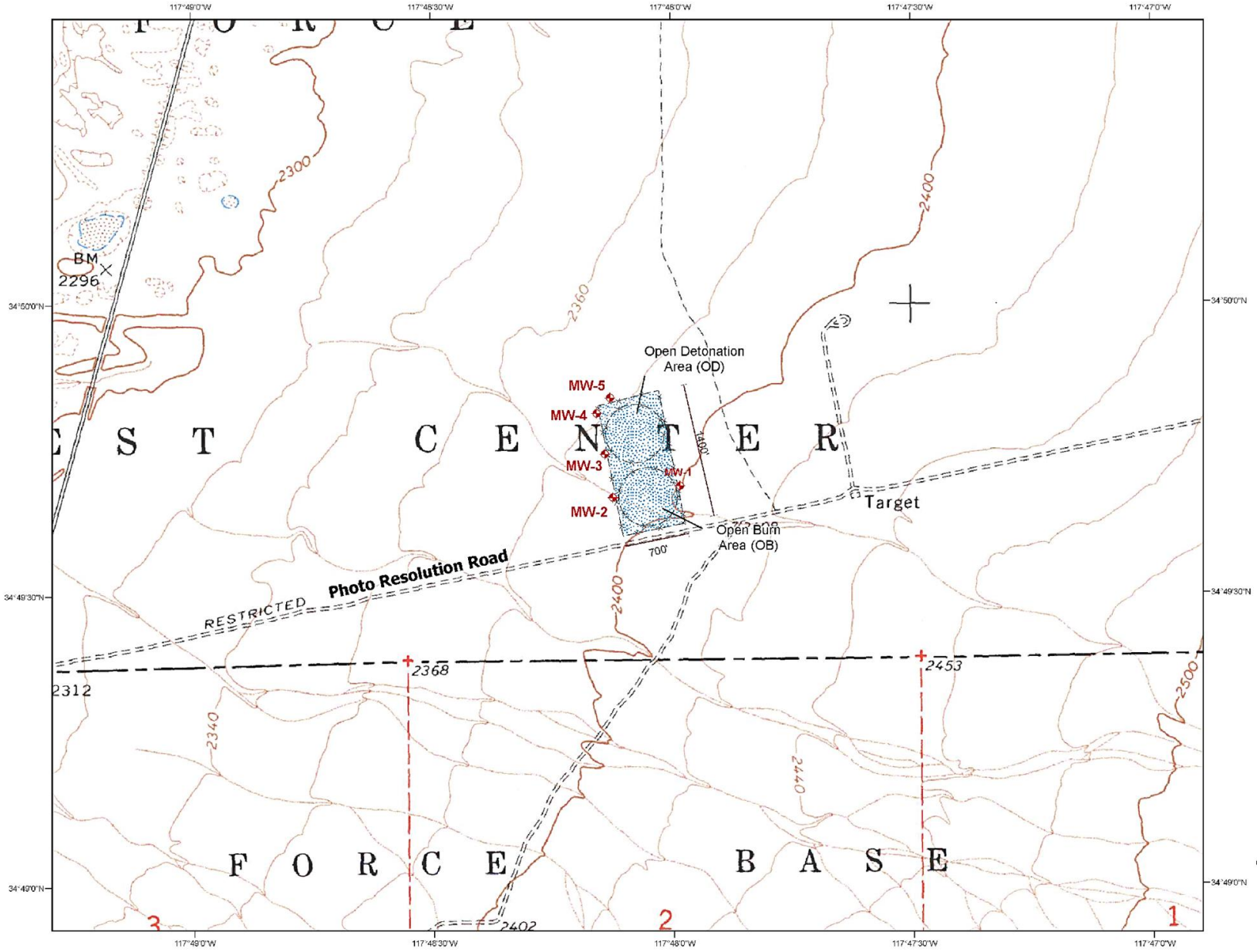


Figure 2 - Explosive Ordnance Disposal Range Topographic Map

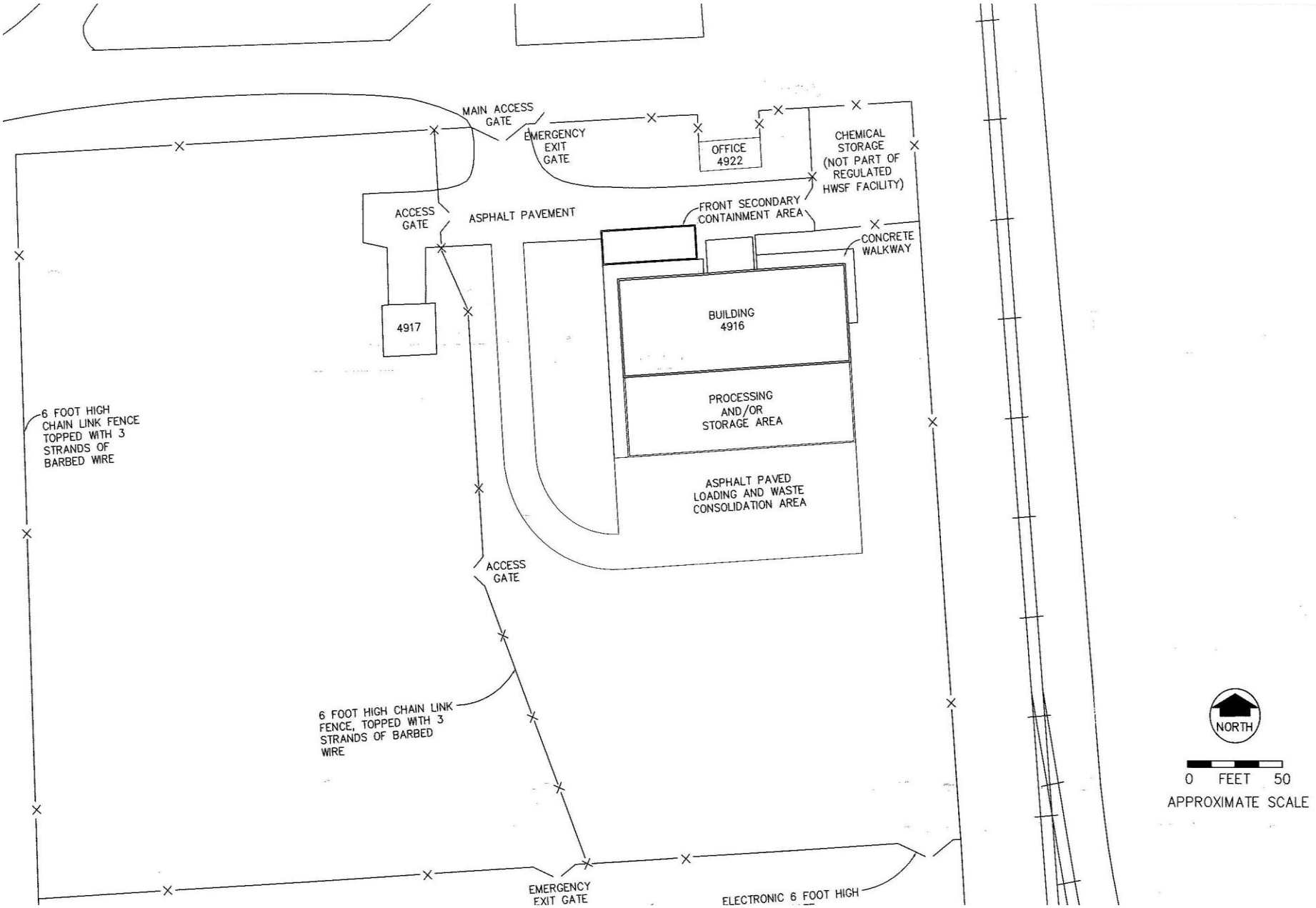


Figure 3 - Hazardous Waste Support Facility Site Plan

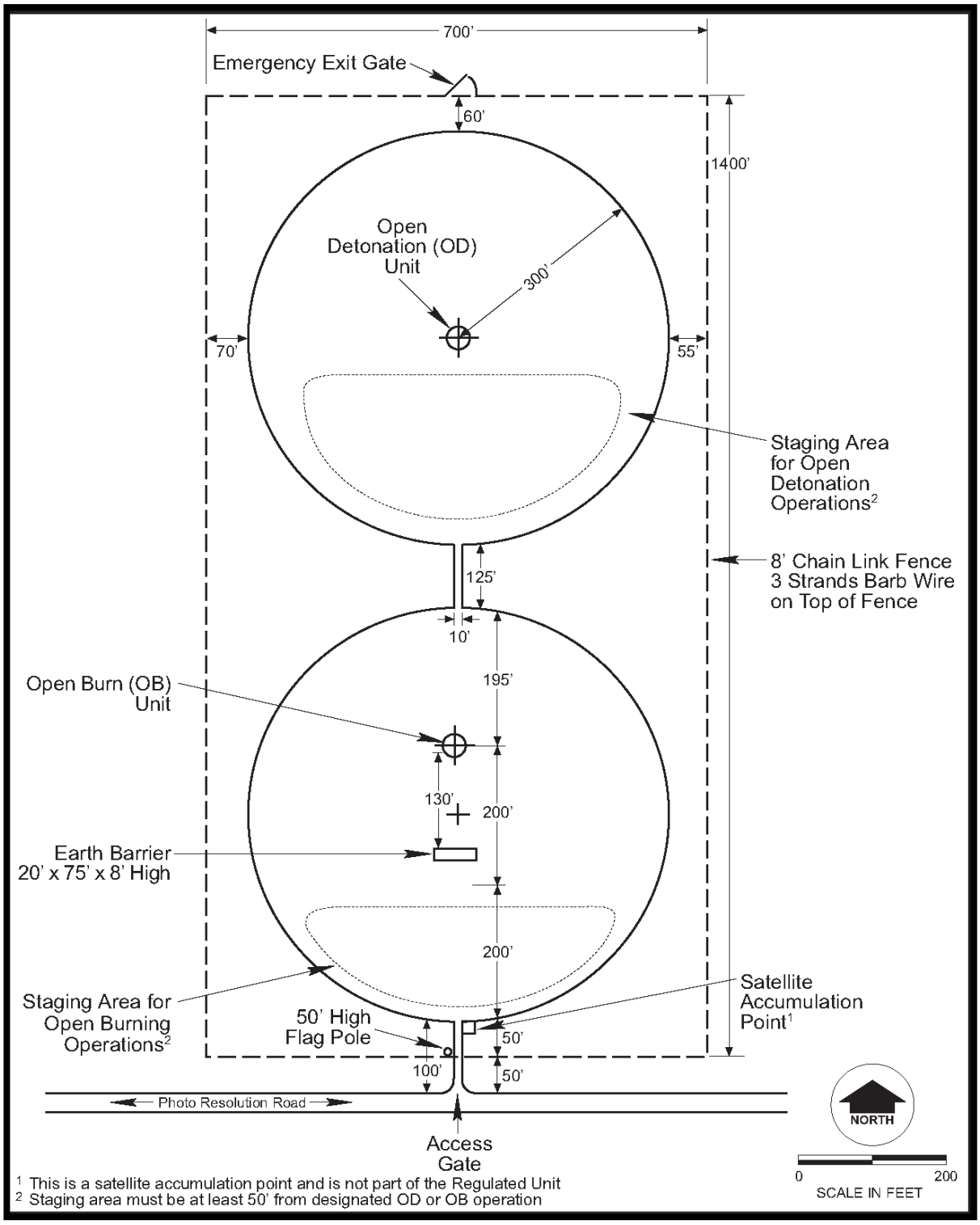


Figure 4 – Explosive Ordnance Disposal Range Site Plan

ATTACHMENT C

Permit Modification History

Permit Modifications

1. September 3, 2008. ~~Facility initiated~~ DTSC approved a Class 2 Modification to update the physical description of the HWSF and to include new operational procedures and container management practices that consolidate several non-RCRA hazardous waste streams. New procedures include the bulking of absorbents and debris wastes that are not over-saturated with liquids. The operational changes reduce the number of containers being stored and managed, reduce disposal and recycling costs, and facilitate the EAFB Drum Return Program.

2. September 17, 2012. Facility initiated a Class 1 Modification to change the owner name. The revisions are contained in the Permit.

3. May 21, 2013. Facility initiated a Class 1 Modification to relocate an electric security gate and a portion of the internal fence that divides the HWSF yard, perform maintenance and repairs to the southern HWSF fence, and install asphalt to improve emergency response, egress procedures and security for the HWSF.

4. July 22, 2014. DTSC public noticed a Class 3 Modification to add the Explosive Ordnance Disposal Range OB/OD Units. The revisions are contained in the Permit and in the Part B dated May 2012.

   The description of the Hazardous Waste Support Facility is modified to reflect the correct area.

   The Permit deletes the requirement that the annual Waste Minimization Certification be submitted, retaining the requirement that the certifications be recorded and maintained onsite in the Operating Record.

   The Permit deletes the unit specific special condition for the HWSF that allowed Edwards to store hazardous waste from within the NASA Dryden Flight Research Center in the event of an unplanned release.

   Appendix C, containing maps and drawings for all units, is added to the Permit.