

California Environmental Protection Agency Department of Toxic Substances Control

HAZARDOUS WASTE FACILITY PERMIT

Facility Name:	Naval Air Weapons Station, China Lake
Owner Name:	U.S. Department of the Navy
Operator Name:	Naval Air Weapons Station, China Lake

Permit Number: 01 - NC - 06

Facility EPA ID Number: CA2170023152 Effective Date: AUGUST 8, 2001 Expiration Date: AUGUST 7, 2011 Permit Modification History: Class 1* MARCH 1, 2002 Class 1 MARCH 1, 2002 Class 1 MARCH 1, 2002 Class 1* MAY 9, 2002 Class 1* NOVEMBER 6, 2002 Class 2 JULY 7, 2003 Class 1 **JANUARY 26, 2004**

 Class 1
 DECEMBER 20, 2006

 Class 3
 AUGUST 4, 2008

 Class 2
 AUGUST 11, 2010

 Class 1*
 NOVEMBER 16, 2010

Pursuant to Section 25270.42 of the California Code of Regulations, the Hazardous Waste Facility Permit issued August 8, 2001, effective August 8, 2001 (Permit), is hereby modified. The modified Part B Permit Applications for the Hazardous Waste Storage and Transfer Facility, the PCB Storage Building, and the Burro Canyon OB/OD Facility dated July 2010, sets forth the conditions to which the Permit is now subject. Appendix C of Attachment A of the Permit is revised to update the Permit modification history. Revised pages, labeled as "Revised November 2010" are hereby incorporated into the approved Permit, replacing the original pages. The revised Attachment A consists of 34 pages and Appendices A, B, and C. The revised Appendix C consists of 2 pages.

Beverly Rikala Office of Permitting Department of Toxic Substances Control

Date: November 16, 2010

NAVAL AIR WEAPONS STATION, CHINA LAKE, CALIFORNIA 93555-6001 HAZARDOUS WASTE FACILITY PERMIT

ATTACHMENT "A"

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HAZARDOUS WASTE FACILITY PERMIT

NAVAL AIR WEAPONS STATION, CHINA LAKE 1 ADMINISTRATION CIRCLE CHINA LAKE, CALIFORNIA 93555-6001 USEPA ID NO.: CA2170023152

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 Title 22, California Code of Regulations 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. **"HSC**" as used in this Permit means the Health and Safety Code.
- 4. **"CCR"** or **"Cal. Code Regs."** as used in this Permit means the California Code of Regulations.
- 5. 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. <u>OWNER</u>

The facility owner is the United States Department of the Navy, hereafter "Owner".

2. <u>OPERATOR</u>

The facility operator is the Naval Air Weapons Station (NAWS), China Lake, hereafter "Operator".

3. LOCATION

NAWS, China Lake facility, hereinafter referred to as the "Facility", is located in the northern Mojave Desert, adjacent to the City of Ridgecrest (population 33,000). The Facility is 150 miles northeast of Los Angeles and 110 miles east of Bakersfield. The Facility operates within three counties; the northeastern portion of Kern, southern portion of Inyo, and the northwest portion of San Bernardino.

4. <u>DESCRIPTION</u>

NAWS, China Lake is the principal Navy research, development, test, and evaluation center for air warfare systems and missile weapons systems. NAWS, China Lake manages and conducts the complete weapon development process, from concept formulation throughout the entire life cycle of a weapon system, including fleet and production support.

The Facility covers 1.1 million acres in two major areas; a North Range (China Lake Complex) and a South Range (Randsburg Wash/Mojave B Complex). The Facility is predominantly surrounded by undeveloped public lands which are federally owned and managed by the U.S. Bureau of Land Management.

The types of activities related to hazardous wastes generated and managed at the Facility include research and industrial operations in support of its mission. These operations generate waste oil, explosive-contaminated wastes and wastewater, waste jet fuel, contaminated soils, photo processing wastes and a number of other smaller waste streams, such as paints, solvents, and laboratory chemicals. Hazardous wastes are accumulated temporarily at satellite accumulation areas located at or near the point of generation, 90-day accumulation areas located at various areas throughout the Facility, and at the permitted storage areas: the Container Storage Unit, Liquid Petroleum Waste Tanks, and the Polychlorinated Biphenyl (PCB) Storage Building.

NAWS, China Lake also operates units at Burro Canyon for treatment of reactive wastes by open burn/open detonation (OB/OD). Reactive wastes treated at the OB/OD units include munitions that are no longer needed for their intended purpose of testing and evaluation, and/or items that are considered obsolete or expired. In addition to standard munitions items, the OB/OD units treat laboratory wastes generated at NAWS, China Lake during the development of new explosives and propellants.

5. FACILITY SIZE AND TYPE FOR FEE PURPOSES

For purposes of HSC Section 25205.19 the Facility is categorized as a Large Treatment and Storage Facility, as defined by HSC Section 25205.1.

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PART III. GENERAL CONDITIONS

1. PERMIT APPLICATION DOCUMENTS

The following documents are hereby made a part of this Permit by reference:

The Part "A" Application, signed by Permittee on December 10, 2007.

- The Part "B" Application PCB Storage Building (PCBSB Operation Plan), dated April 2000, revised July 2010. Approved by DTSC on November 16, 2010.
- The Part "B" Application Hazardous Waste Storage & Transfer Facility (HWSTF Operation Plan), dated April 2000, revised July 2010. Approved by DTSC
- on November 16, 2010. The Part "B" Application - Burro Canyon Open Burn/Open Detonation (OB/OD) Facility (BCTF Operation Plan), dated December 2007, revised July 2010. Approved by DTSC on November 16, 2010.
- Spill Response Plan, revised June 2008 and any subsequent revisions approved by DTSC.
- Naval Air Weapons Station, China Lake, Hazardous Waste Facility Permit Mitigation Monitoring and Reporting Plan, dated June 2008.

2. EFFECT OF PERMIT

- (a) The Permittee shall comply with the provisions of the California Health and Safety Code, and Division 4.5 of Title 22, California Code of Regulations (Title 22, Cal. Code Regs.). 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 HSC 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 (Title 22, Cal. Code Regs., Section 66270.43).
- (g) In case of conflicts between the Operation Plans 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 Negative Declaration for the storage 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 Title 14, California Code of Regulations. 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 Title 14, California Code of Regulations.

4. WASTE MINIMIZATION CERTIFICATION

Pursuant to HSC Section 25202.9, the Permittee shall certify annually, by March 1 for the previous year ending December 31, that:

(a) The Facility has a program in place to reduce the volume and toxicity of all hazardous wastes identified in Section III of the PCBSB Operation Plan,

Section III of the HWSTF Operation Plan, and Section III of the Burro Canyon OB/OD Facility Operation Plan, which are generated by the Facility operations to the degree, determined by the Permittee, to be economically practicable.

(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 Title 22, Cal. Code Regs., Section 66270.11. The Permittee shall record and maintain onsite such certification in the Facility's Operating Record.

5. 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 HSC Sections 25244.19, 25244.20 and 25244.21, and any subsequent applicable statutes or regulations promulgated thereunder.

This would include 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.

6. <u>PERMIT MODIFICATION HISTORY</u>

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.

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PART IV. PERMITTED UNITS AND ACTIVITIES

This Permit authorizes operation only of the 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 Title 22, Cal. Code Regs., Division 4.5.

1. UNIT NAME:

PCB Storage Building

LOCATION:

The unit is located within the fence line of the Public Works Compound, identified as Building 02682 by NAWS, China Lake. It is located 400 feet northwest of the intersection of Knox Road and Forrestal Street and 1200 feet southwest of the intersection of Knox Road and Inyokern Road. The unit is located within Kern County. The Global Positioning Satellite coordinates of the unit are: NW corner - 35 38.90 N, 117 39.74 W; NE corner - 35 38.91 N, 117 39.72 W; SE corner - 35 38.92 N, 117 39.74 W; and SW corner - 35 38.91 N, 117 39.75 W.

ACTIVITY TYPE:

Storage of PCB waste, including fluids in containers, articles, and containerized hazardous waste, for a period of no longer than nine months in the PCB Storage Building.

ACTIVITY DESCRIPTION:

PCB waste received for storage may be loaded/unloaded in the area immediately outside the PCB Storage Building, within the boundary identified for the unit. Only PCB containers and PCB articles generated onsite shall be stored within the unit.

PHYSICAL DESCRIPTION:

The unit consists of a PCB Storage Building, which is a 20 feet wide by 40 feet long secured, enclosed building and an outside staging area. The floor and six-inch berm of the building are made of concrete with an impervious epoxy coating. Outside the building is a 21 feet 4 inches wide by 20 feet long sloped concrete pad

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and a 26 feet wide by 12 feet 8 inches long paved area used for loading/unloading of PCB wastes. The dirt area shall be covered with an impervious surface in accordance with Task 1 of Part V of this Permit.

MAXIMUM CAPACITY:

The maximum capacity at any given time is 32 55-gallon containers and/or equivalent articles or a volume of 1,760 gallons of liquid, whichever is less. The maximum annual quantity of hazardous waste is 101 tons.

WASTE TYPES:

PCB articles and containers generated onsite, which include drummed dielectric fluids; drummed solid wastes (spill cleanup material, fluorescent light ballasts, small capacitors); and small undrained or drained transformers.

RCRA HAZARDOUS WASTE CODES:

None

CALIFORNIA HAZARDOUS WASTE CODES:

261, 731

AIR EMISSION STANDARDS 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.

2. UNIT NAME:

Container Storage Unit

LOCATION:

The unit is located within the fence line of the Hazardous Waste Storage and Transfer Facility (HWSTF). The unit is identified as Building 01389 by NAWS, China Lake. It is located on Iwo Jima Road, between Sandquist Road and Lauritsen Road. The unit is located within Kern County. The Global Positioning Satellite coordinates of the unit are:

West corner - 35 39' 47.0" N, 117 39' 42.6" W; North corner - 35 39' 47.6" N, 117 39' 40.4" W; South corner - 35 39' 46.7" N, 117 39'42.5" W; and East corner - 35 39' 47.5" N, 117 39' 40.4" W.

ACTIVITY TYPE:

Storage of hazardous waste generated onsite prior to final transport to an authorized off-site disposal/treatment facility.

ACTIVITY DESCRIPTION:

Hazardous waste received for storage may be loaded/unloaded only inside the unit. Hazardous waste shall be segregated based on incompatibility and shall not be stored more than one year prior to shipment off-site.

PHYSICAL DESCRIPTION:

The unit consists of a Drum Storage Area, which is a 55 feet wide by 176 feet long, secured, open area, covered with a sun shade. The floor and eight-inch berm on the periphery of the unit are made of concrete with an impervious epoxy coating. There are twelve storage bays, with an eight-inch curb and a 10-foot chain link fence separating the bays. The unit also includes an attached Bin Storage Area with transfer dock, which is 45.3 feet by 37.7 feet. The Bin Storage Area is not covered or fenced.

MAXIMUM CAPACITY:

The maximum capacity at any given time is the equivalent of 720 55-gallon containers with liquid waste totaling no more than 19,800 gallons. The maximum annual quantity of hazardous waste is 1000 tons.

WASTE TYPES:

Hazardous waste generated onsite from research and development laboratories, pilot manufacturing facilities, machine shops, vehicle and aircraft maintenance, and aircraft/weapons testing areas. They include: antifreeze, absorbent, oil, paint thinner, paint, solvents, silver sludge, photo bleach, spent aerosol cans, batteries, and other miscellaneous hazardous wastes.

RCRA HAZARDOUS WASTE CODES:

D001 through D043, F001 through F012, F027, "P" wastes, "U" wastes

CALIFORNIA HAZARDOUS WASTE CODES:

121, 122, 123, 131, 132, 133, 134, 135, 141, 151, 171, 172, 181, 211, 212, 213, 214, 221, 222, 223, 231, 241, 271, 272, 281, 291, 331, 341, 342, 343, 351, 352, 451, 461, 511, 512, 513, 521, 541, 551, 561, 611, 612, 711, 721, 722, 723, 724, 725, 726, 727, 728, 741, 751, 791, 792, and 801

AIR EMISSION STANDARDS 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.

UNIT SPECIFIC SPECIAL CONDITIONS:

The required minimum aisle space is as specified in Table 2.0 of the HWSTF Operation Plan. Containers with free liquid shall not be stacked above another container.

3. UNIT NAME:

Liquid Petroleum Waste Tank No. 1

LOCATION:

The unit is located within the fence line of the Hazardous Waste Storage and Transfer Facility. The unit is in the area identified as Building 02663 by NAWS, China Lake, located on Iwo Jima Road, between Sandquist Road and Lauritsen Road. The unit is located within Kern County. The Global Positioning Satellite coordinates of the unit are: West corner - 35 39.76 N, 117 39.74 W; North corner - 35 39.77 N, 117 39.73 W; South corner - 35 39.76 N, 117 39.73 W; and East corner - 35 39.76 N, 117 39.73 W.

ACTIVITY TYPE:

Storage of liquid petroleum hazardous waste generated onsite prior to final transport to an authorized off-site disposal/treatment facility.

ACTIVITY DESCRIPTION:

Hazardous waste received for storage is loaded/unloaded directly adjacent to the unit. Hazardous waste is transferred to the unit via gravity feed directly from vacuum trucks. Hazardous waste shall not be stored more than one year prior to shipment off-site.

PHYSICAL DESCRIPTION:

The unit is one of four 2,000 gallon aboveground storage tanks. The tank is 8 feet wide and 15 feet long. The tank is constructed of steel with a synthetic liner that serves as secondary containment, and is encased in 6-inches of reinforced concrete. All four tanks are located within a single concrete containment area, 26 feet wide by 34 feet long, with a perimeter 10-inch high concrete berm. The loading and unloading area, on the southeast end of the containment berm, is approximately 16.7 feet wide by 60 feet long.

MAXIMUM CAPACITY:

The maximum capacity of the tank at any given time is 2,000 gallons of liquid. The maximum annual quantity of waste is 41.5 tons.

WASTE TYPES:

Hazardous waste generated onsite from vehicle and aircraft maintenance, and aircraft defueling.

RCRA HAZARDOUS WASTE CODES:

D001, D039, and F001

CALIFORNIA HAZARDOUS WASTE CODES:

221, 222, 223, 331, and 343

AIR EMISSION STANDARDS 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.

4. UNIT NAME:

Liquid Petroleum Waste Tank No. 2

LOCATION:

The unit is located within the fence line of the Hazardous Waste Storage and Transfer Facility. The unit is in the area identified as Building 02663 by NAWS, China Lake, located on Iwo Jima Road, between Sandquist Road and Lauritsen Road. The unit is located within Kern County. The Global Positioning Satellite coordinates of the unit are: West corner - 35 39.76 N, 117 39.74 W; North corner - 35 39.77 N, 117 39.73 W; South corner - 35 39.76 N, 117 39.73 W; and East corner - 35 39.76 N, 117 39.73 W.

ACTIVITY TYPE:

Storage of liquid petroleum hazardous waste generated onsite prior to final transport to an authorized off-site disposal/treatment facility.

ACTIVITY DESCRIPTION:

Hazardous waste received for storage is loaded/unloaded directly adjacent to the unit. Hazardous waste is transferred to the unit via gravity feed directly from vacuum trucks. Hazardous waste shall not be stored more than one year prior to shipment off-site.

PHYSICAL DESCRIPTION:

The unit is one of four 2,000 gallon aboveground storage tanks. The tank is 8 feet wide and 15 feet long. The tank is constructed of steel with a synthetic liner that serves as secondary containment, and is encased in 6-inches of reinforced concrete. All four tanks are located within a single concrete containment area, 26 feet wide by 34 feet long, with a perimeter 10-inch high concrete berm. The loading and unloading area, on the southeast end of the containment berm, is approximately 16.7 feet wide by 60 feet long.

MAXIMUM CAPACITY:

The maximum capacity of the tank at any given time is 2,000 gallons of liquid. The maximum annual quantity of waste is 41.5 tons.

WASTE TYPES:

Hazardous waste generated onsite from vehicle and aircraft maintenance, and aircraft defueling.

RCRA HAZARDOUS WASTE CODES:

D001, D039, and F001

CALIFORNIA HAZARDOUS WASTE CODES:

221, 222, 223, 331, and 343

AIR EMISSION STANDARDS 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.

5. UNIT NAME:

Liquid Petroleum Waste Tank No. 3

LOCATION:

The unit is located within the fence line of the Hazardous Waste Storage and Transfer Facility. The unit is in the area identified as Building 02663 by NAWS, China Lake, located on Iwo Jima Road, between Sandquist Road and Lauritsen Road. The unit is located within Kern County. The Global Positioning Satellite coordinates of the unit are: West corner - 35 39.76 N, 117 39.74 W; North corner - 35 39.77 N, 117 39.73 W; South corner - 35 39.76 N, 117 39.73 W; and East corner - 35 39.76 N, 117 39.73 W.

ACTIVITY TYPE:

Storage of liquid petroleum hazardous waste generated onsite prior to final transport to an authorized off-site disposal/treatment facility.

ACTIVITY DESCRIPTION:

Hazardous waste received for storage is loaded/unloaded directly adjacent to the unit. Hazardous waste is transferred to the unit via gravity feed directly from vacuum trucks. Hazardous waste shall not be stored more than one year prior to shipment off-site.

PHYSICAL DESCRIPTION:

The unit is one of four 2,000 gallon aboveground storage tanks. The tank is 8 feet wide and 15 feet long. The tank is constructed of steel with a synthetic liner that serves as secondary containment, and is encased in 6-inches of reinforced concrete. All four tanks are located within a single concrete containment area, 26 feet wide by 34 feet long, with a perimeter 10-inch high concrete berm. The loading and unloading area, on the southeast end of the containment berm, is approximately 16.7 feet wide by 60 feet long.

MAXIMUM CAPACITY:

The maximum capacity of the tank at any given time is 2,000 gallons of liquid. The maximum annual quantity of waste is 73 tons.

WASTE TYPES:

Hazardous waste generated onsite from oil/water separators.

RCRA HAZARDOUS WASTE CODES:

None

CALIFORNIA HAZARDOUS WASTE CODES:

133, 134, 135, 222, and 343

AIR EMISSION STANDARDS 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.

6. UNIT NAME:

Liquid Petroleum Waste Tank No. 4

LOCATION:

The unit is located within the fence line of the Hazardous Waste Storage and Transfer Facility. The unit is in the area identified as Building 02663 by NAWS, China Lake, located on Iwo Jima Road, between Sandquist Road and Lauritsen Road. The unit is located within Kern County. The Global Positioning Satellite coordinates of the unit are: West corner - 35 39.76 N, 117 39.74 W; North corner - 35 39.77 N, 117 39.73 W; South corner - 35 39.76 N, 117 39.73 W; and East corner - 35 39.76 N, 117 39.73 W.

ACTIVITY TYPE:

Storage of liquid petroleum hazardous waste generated onsite prior to final transport to an authorized off-site disposal/treatment facility.

ACTIVITY DESCRIPTION:

Hazardous waste received for storage is loaded/unloaded directly adjacent to the unit. Hazardous waste is transferred to the unit via gravity feed directly from vacuum trucks. Hazardous waste shall not be stored more than one year prior to shipment off-site.

PHYSICAL DESCRIPTION:

The unit is one of four 2,000 gallon aboveground storage tanks. The tank is 8 feet wide and 15 feet long. The tank is constructed of steel with a synthetic liner that serves as secondary containment, and is encased in 6-inches of reinforced concrete. All four tanks are located within a single concrete containment area, 26 feet wide by 34 feet long, with a perimeter 10-inch high concrete berm. The loading and unloading area, on the southeast end of the containment berm, is approximately 16.7 feet wide by 60 feet long.

MAXIMUM CAPACITY:

The maximum capacity of the tank at any given time is 2,000 gallons of liquid. The maximum annual quantity of waste is 73 tons.

WASTE TYPES:

Hazardous waste generated onsite from oil/water separators.

RCRA HAZARDOUS WASTE CODES:

None

CALIFORNIA HAZARDOUS WASTE CODES:

133, 134, 135, 222, and 343

AIR EMISSION STANDARDS 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.

7. UNIT NAME:

Open Detonation (OD) Unit

LOCATION:

The unit is located at the Burro Canyon OB/OD Facility. The unit is located near the southern border of Inyo County on the North Range. It is approximately 12 miles northeast of the China Lake Mainsite and approximately 3 miles directly east of the G-2 Tower Road. The Global Positioning Satellite coordinates, starting at the northernmost point of the unit, are: Northwest corner - 35°48'17.8" N, 117°32'48.1" W; Northeast corner - 35°48'16.2" N, 117°32'44.7" W; Southeast corner - 35°48'15.4" N, 117°32'45.1" W; and Southwest corner - 35°48'15.8" N, 117°32'48.7" W.

ACTIVITY TYPE:

Treatment by open detonation of reactive hazardous waste and standard small arms ammunition (50 caliber or less) generated onsite.

ACTIVITY DESCRIPTION:

Reactive 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. Explosive charges are then set to initiate the detonation. The detonation is initiated by an igniter which is connected to a time fuze. 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 1.03 acre area in the center of a naturally-occurring bowl-shaped valley, surrounded by rugged terrain. The floor of the unit is the sandy alluvial soil of the canyon. No pad or liner is used.

MAXIMUM CAPACITY:

The Permittee must comply with all of the following:

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 exceptions:

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 quantity for items containing munition components which cannot be removed includes the weight of the components. Examples of munition components are guidance and control systems;

The maximum treatment quantity per event is 15,000 pounds of energetic, with a special limit of 50,000 pounds for treatment of rocket motors under special circumstances, such as security issue, extreme safety hazard, or national defense emergency, and 15,000 pounds of non-energetic (packaging and laboratory-generated waste). The Facility shall notify DTSC and await approval before the special limit shall be in effect.

Only one OD or 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 or 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 5,475,000 pounds;

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 and documented in a format approved by DTSC. See Unit Specific Special Condition 1;

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 documented in a format approved by DTSC. See Unit Specific Special Condition 1;

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 and documented in a format approved by DTSC. See Unit Specific Special Condition 1;

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. Compliance with this provision shall be demonstrated by a DTSC-approved noise prediction study or noise measurements collected by methods approved by DTSC; and

The event quantity for OD shall not cause peak sound levels to exceed 128 dB at any offsite location. Compliance with this provision shall be demonstrated by a DTSC-approved noise analysis or noise measurements collected by methods approved by DTSC.

WASTE TYPES:

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

RCRA HAZARDOUS WASTE CODES:

D001 (50 caliber or less ammunition only), and D003

CALIFORNIA HAZARDOUS WASTE CODES:

181, 212, 281, 291, 343, 352, 551, and 611

UNIT SPECIFIC SPECIAL CONDITIONS

1. All hazardous waste treated shall be characterized with respect to energetic family. The definition of energetic family as used in this Permit means the energetic family used in the Human Health Risk Assessment. The quantity of each family treated, the date of the treatment events, and the date of grading events shall be recorded in a DTSC-approved format. The format shall be 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 $\frac{1}{2}$ hour after sunrise and no later than $\frac{1}{2}$ hour before sunset.

3. Meteorological data needed for air dispersion modeling and noise levels predictions shall be collected from the Greenpoint Monitoring Station with the exceptions listed below and maintained by the Facility. All meteorological data shall be kept for the duration of the Permit. At a minimum, the following data shall be collected:

- a. wind speed;
- b. wind direction;
- c. temperature;
- d. stability class (from Baker Range Monitoring Station); and
- e. upper air data (may be obtained from approved offsite upper air stations).

4. The Baker Range and Greenpoint Monitoring Stations shall be operated, maintained, and calibrated according to an approved Meteorological Monitoring Plan. The Permittee shall conduct site performance audits every six months. The audits shall be conducted in accordance with Quality Assurance Handbook for Air Pollution Measurement Systems (EPA, 1995), Quality Assurance Handbook for Air Pollution Measurement Systems, Volume IV: Meteorological Measurements, Version 1.0 (EPA Draft, October 2006), Meteorological Monitoring Guidance for Regulatory Modeling Applications (EPA, 2000), and Ambient Monitoring Guidelines for Prevention of Significant Deterioration (EPA, 1987), or any revisions to these documents.

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 10.

6. The Permittee shall implement a DTSC-approved maximum event limit for the winter season to mitigate noise impacts, including the dates during which the limit is in effect. This condition shall be met in accordance with Part V. Special Condition 11.

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

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

9. Two years 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 12.

10. Two years 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 13.

11. 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.

12. The Permittee shall implement the terms of the 1995 Biological Opinion for the desert tortoise issued by the U.S. Fish and Wildlife Service and any future Biological Opinion relevant to Burro Canyon. All personnel working at the Burro Canyon facility shall have completed a desert tortoise awareness briefing following the requirements delineated in the Biological Opinion. Explosive Ordnance Disposal personnel shall conduct a visual survey of the OB/OD facility (cleared area and areas visible from the periphery of the cleared area) prior to each use of the facility. Survey findings shall be documented in the event log. 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 approved personnel prior to any event initiation. All such encounters shall be documented in the event log as well as in the annual report.

AIR EMISSION STANDARDS 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.

8. UNIT NAME:

Open Burn (OB) Unit

LOCATION:

The unit is located at the Burro Canyon OB/OD Facility. The unit is located near the southern border of Inyo County on the North Range. It is approximately 12 miles northeast of the China Lake Mainsite and approximately 3 miles directly east of the G-2 Tower Road. The Global Positioning Satellite coordinates, starting at the northernmost point of the unit, are: Northwest corner - 35°48'16.9" N, 117°32'52.0" W; Northeast corner - 35°48'16.9" N, 117°32'51.8" W; Southeast corner - 35°48'16.6" N, 117°32'51.8" W; and Southwest corner - 35°48'16.6" N, 117°32'52.0" W.

ACTIVITY TYPE:

Treatment by open burning of reactive hazardous waste and standard small arms ammunition (50 caliber or less) generated onsite.

ACTIVITY DESCRIPTION:

Hazardous waste received for treatment is loaded into the burn pan by hand. Diesel and/or wood may be added to supplement combustion. The burning is initiated with an igniter connected to a time fuze which is connected to a bag of smokeless powder (or similar material) soaked in diesel fuel. After the burn, residual ash is removed to a container immediately after the burn is safe to approach. After removal of the ash, a dry decontamination of the burn pan is conducted. Personnel wipe the burn pan with rags. The rags are placed in the container along with the ash residue and immediately transported to the Container Storage Unit.

PHYSICAL DESCRIPTION:

The unit is a burn pan approximately 8 feet wide, 20 feet long and 27 inches high. The pan is constructed of one inch steel plates. The pan is raised 1 foot above a 30 foot by 18 foot by 8 inch thick concrete pad. The pad extends 5 feet on all sides of the pan. The concrete pad is lined with a steel liner. The sides of the steel liner are higher than the concrete containment.

MAXIMUM CAPACITY:

The Permittee must comply with all of the following:

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;

The maximum treatment quantity per event is 1,000 pounds of energetic, with a special limit of 50,000 pounds for treatment of rocket motors under special circumstances, such as security issue, extreme safety hazard, or national defense emergency, plus 1,000 pounds of non-energetic (diesel and/or wood). The Facility shall notify DTSC and await approval before the special limit shall be in effect;

Only one OD or 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 or 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 5,475,000 pounds;

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 and documented in a format approved by DTSC. See Unit Specific Special Condition 1;

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 documented in a format approved by DTSC. See Unit Specific Special Condition 1; and

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 and documented in a format approved by DTSC. See Unit Specific Special Condition 1.

WASTE TYPES:

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

RCRA HAZARDOUS WASTE CODES:

D001 (50 caliber or less ammunition only), and D003

CALIFORNIA HAZARDOUS WASTE CODES:

181, 212, 281, 291, 343, 352, 551, and 611

UNIT SPECIFIC SPECIAL CONDITIONS

1. All hazardous waste treated shall be characterized with respect to energetic family. The definition of energetic family as used in this Permit means the energetic family used in the Human Health Risk Assessment. The quantity of each family and the date of the treatment event shall be recorded in a DTSC approved format. The format shall be 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 burns shall be performed before $\frac{1}{2}$ hour after sunrise, and no later than $\frac{1}{2}$ hour before sunset.

3. Meteorological data needed for air dispersion modeling shall be collected from the Greenpoint Monitoring Station with the exceptions listed below and maintained by the Facility. All meteorological data shall be kept for the duration of the Permit. At a minimum, the following data shall be collected:

- a. wind speed;
- b. wind direction;
- c. temperature;
- d. stability class (from Baker Range Monitoring Station); and
- e. upper air data (may be obtained from approved offsite upper air stations).

4. The Baker Range and Greenpoint Monitoring Stations shall be operated, maintained, and calibrated according to an approved Meteorological Monitoring Plan. The Permittee shall conduct site performance audits every six months. The audits shall be conducted in accordance with Quality Assurance Handbook

for Air Pollution Measurement Systems (EPA, 1995), Quality Assurance Handbook for Air Pollution Measurement Systems, Volume IV: Meteorological Measurements, Version 1.0 (EPA Draft, October 2006), Meteorological Monitoring Guidance for Regulatory Modeling Applications (EPA, 2000), and Ambient Monitoring Guidelines for Prevention of Significant Deterioration (EPA, 1987), or any revisions to these documents.

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 10.

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. Two years 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 12.

8. Two years 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 13.

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 1995 Biological Opinion for the desert tortoise issued by the U.S. Fish and Wildlife Service and any future Biological Opinion relevant to Burro Canyon. All personnel working at the Burro Canyon facility shall have completed a desert tortoise awareness briefing following the requirements delineated in the Biological Opinion. Explosive Ordnance Disposal personnel shall conduct a visual survey of the OB/OD facility (cleared area and areas visible from the periphery of the cleared area) prior to each use of the facility. Survey findings shall be documented in the event log. 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 approved personnel prior to any event initiation. All such encounters shall be documented in the event log as well as in the annual report.

AIR EMISSION STANDARDS 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

The Permittee shall comply with the following:

<u>Tasks</u>

Due Date

- 1. Install an impervious pad, to provide for containment of the largest container, for the staging area adjacent to the PCB Storage Building.
- 2. Submit an evaluation from an independent, qualified professional engineer for the secondary containment system of the PCB Storage Building. The evaluation must include certification by the local building code authority, or the functional equivalent, that the structure is constructed to the appropriate seismic code and is engineered to prevent liquefaction induced building failure and/or waste release.
 - 3. Submit an evaluation from an independent, qualified professional engineer for the secondary containment system of the Container Storage Unit. The evaluation must include certification by the local building code authority, or the functional equivalent, that the structure is constructed to the appropriate seismic code and is engineered to prevent liquefaction induced building failure and/or waste release.

6 months from effective date of Permit (per Permit effective August 8, 2001)

6 months from effective date of Permit (per Permit effective August 8, 2001)

60 days from effective date of Permit (per Permit effective August 8, 2001)

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6 months from effective date of Permit 4. Submit an evaluation from an independent, qualified professional (per Permit effective August 8, 2001) engineer for the secondary containment system of the Liquid Petroleum Waste Tanks. The evaluation must include certification by the local building code authority, or the functional equivalent, that the containment is constructed to the appropriate seismic code and is engineered to prevent liquefaction induced failure and/or waste release. Submit an evaluation from an 6 months from effective date of Permit 5. independent, qualified professional (per Permit effective August 8, 2001) engineer for the structural integrity of the Liquid Petroleum Waste Tanks. 6. Install an impervious pad, with 6 months from effective date of Permit containment of a spill, for the (per Permit effective August 8, 2001) staging area adjacent to the Liquid Petroleum Waste Tanks. Enter into a Corrective Action 7. 18 months from effective date of Permit Consent Agreement or other (per Permit effective August 8, 2001) enforceable agreement with DTSC, or comply with order issued by DTSC. 6 months from effective date of Permit 8. Submit a revised Spill Contingency Plan to replace the draft California (per Permit effective August 8, 2001) Consolidated Contingency Plan. 9. Submit two copies of desert 6 weeks from the completion of each tortoise surveys of the OD unit and survey areas potentially affected by OB/OD operations conducted for two consecutive years, including both spring and fall seasons, which provide for 100% coverage of the potentially affected areas.

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- Submit workplans for environmental monitoring as specified in Part IV. Sections 7. and 8. of this Permit.
- 11. Submit a noise analysis report, which shall include:
 - Predicted CNEL for quantities greater than 1.5 million pounds per year by OD based on Net Explosive Weight;
 - The modeled meteorological conditions that cause the peak sound level to exceed 128 dB;
 - The dates during which the meteorological conditions are likely to apply; and
 - The maximum allowable OD treatment event that will not exceed 128 dB offsite for all meteorological conditions, based on Net Explosive Weight.
- 12. Submit a report on methods of sampling air emissions from OB/OD events.
- 13. Submit a report on the status of alternative technologies to OB/OD.
- 14. Submit an analysis of the dioxin/furan content of OB ash.

6 months from effective date of addition of OB/OD Units to Permit

9 months from effective date of addition of OB/OD Units to Permit or before treating more than 1.5 million pounds Net Explosive Weight per year by OD, whichever is sooner

2 years from effective date of addition of OB/OD Units to Permit

2 years from effective date of addition of OB/OD Units to Permit

3 months from first OB event after effective date of addition of OB/OD Units to Permit

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PART VI. CORRECTIVE ACTION

The Permittee shall conduct corrective action at the Facility pursuant to Health and Safety Code, Sections 25187 and 25200.10. Corrective action shall be carried out under the Federal Facility Site Remediation Agreement executed November 7, 2003.

APPENDIX A

SITE LOCATION MAPS



FIGURE 2.0 - HWSTF ACCESS ROADS



City of Ridgecrest

APPENDIX B

UNIT LAYOUT FIGURES

FIGURE 3.0 PCBSB LAYOUT

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ATTACHMENT C

Permit Modification History

Permit Modifications

- 1. All modifications made to this Permit and/or the Operations Plan (Part B) are listed and described in this Attachment.
- 2. March 2002. Facility initiated a Class 1* Permit Modification to extend the due date for completion of Special Condition 7 to nine months. Facility initiated two Class 1 Permit Modifications to change the responsibility for completion of hazardous waste labels and to change the mail code for the Environmental Project Office.

May 2002. Facility initiated a Class 1* Permit Modification to extend the due date for completion of Special Condition 7 to 15 months.

November 2002. Facility initiated a Class 1* Permit Modification to extend the due date for completion of Special Condition 7 to 18 months.

June 2003. Facility initiated a Class 2 Permit Modification in April 2002 to add a Bin Storage Area and loading dock to the Hazardous Waste Storage and Transfer Facility and to add two hazardous waste codes to Liquid Petroleum Waste Tanks 1 and 2. The revisions are contained in the Part B dated May 2003.

December 2003. Facility initiated a Class 1 Permit Modification in December 2003 to change the mailing address of the Environmental Department. The revision is contained in the Part B dated December 2003.

December 2006. Facility initiated a Class 1 Permit Modification in December 2006 to change the format of the Generator Hazardous Waste label and add a provision for future formatting changes. The revision is contained in the Part B dated December 2006.

June 2008. Facility initiated a Class 3 Permit Modification to add the Burro Canyon OB/OD units. The revisions are contained in the Permit and in the Part B dated December 2007. The Spill Response Plan and Naval Air Weapons Station, China Lake, Hazardous Waste Facility Permit Mitigation Monitoring and Reporting Plan are made a part of the Permit by reference. 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 specifies that Corrective Action is carried out under the Federal Facility Site Remediation Agreement.

August 2010. Facility initiated Class 1 and 2 Permit Modifications in May 2008 to make multiple administrative, informational, and typographic changes. The Class 2 modification is to revise the personnel training plan to eliminate the requirement for the High Voltage Shop personnel. The revisions are contained in the Part B Permit Applications for the Hazardous Waste Storage and Transfer Facility and the PCB Storage Building dated May 2008.

November 2010. Facility initiated a Class 1* Permit Modification in October 2010 to clarify the maintenance of a coating for loading/unloading areas, and other informational changes. The revisions are contained in the Part B Permit Applications for the Hazardous Waste Storage and Transfer Facility, the PCB Storage Building, and the Burro Canyon OB/OD Facility dated July 2010.