

ATTACHMENT 2

WASTE ANALYSIS PLAN

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1.0 Scope

- 1.1** This document describes the hazardous wastes that may be stored at the Hill Air Force Base (Hill AFB) hazardous waste storage facility (HWSF). Also, this document describes the procedures used so that sufficient information is available for safe handling and storage of wastes. The following information is submitted in accordance with the requirements of Utah regulation R315-3-2.5(b)(2) and (3).
- 1.2** The HWSF primarily receives hazardous waste from Hill AFB. Other United States Air Force facilities may also send hazardous waste to the HWSF. Due to the variability of the activities conducted at Hill AFB and other hazardous waste generators that transfer waste to the HWSF, this facility has the potential for receiving most types of waste classified as a hazardous waste by the U.S. Environmental Protection Agency (EPA) and the State of Utah. The HWSF does not treat wastes to meet the Land Disposal Restrictions (LDR) standards.
- 1.3** This document lists hazardous wastes that are permitted to be stored at the HWSF. The hazardous wastes are based upon the known characteristics of the waste, such as ignitability, reactivity, corrosivity, and toxicity. For listed wastes (F-, K-, P-, or U-listed) the hazard designation is based upon the criteria established in R315-3-2.5(b)(2) (40 Code of Federal Regulations (CFR) 261.31, 261.33(e) or 261.33(f)).

2.0 Waste Analysis Plan [R315-8-2.4 (40 CFR 264.13(b))]

- 2.1** As required by R315-8-2.3(b), HWSF management shall inform each off-site generator in writing that the facility holds the appropriate permits for, and will accept, the waste the generator is shipping. This notice is not required for hazardous wastes generated at Hill AFB or Hill AFB-managed facilities, including the Little Mountain Test Annex (Little Mountain) and the Utah Test and Training Range (UTTR).
- 2.2** The HWSF shall only accept hazardous wastes for which it is permitted. [UAC 15-8-9]
- 2.3** All containers smaller than 2 cubic yards that contain hazardous waste, regardless of whether or not they contain free liquids, are stored in an area that is equipped with a secondary containment system as described in Attachment 9. Waste containers with volumes greater than 2 cubic yards that do not contain free liquids may be stored outside of buildings 888 and 898 within the fenced area of the HWSF in compliance with R315-8-9.6(c).
- 2.4** The Operating Record for the HWSF shall include the following records:
- 2.4.1** The Waste Information Tracking System (WITS) database
 - 2.4.2** Manifests and Shipping Documents

- 2.4.3 Training Records
- 2.4.4 Inspection Records
- 2.4.5 Daily Inventory Logs
- 2.4.6 Compliance Records
- 2.4.7 Orders, Directives, and Authorizations by the Permittee (Hill AFB Commander)
- 2.4.8 Other pertinent records

- 3.0 Tracking Movement of Hazardous Waste [R315-13 (40 CFR 268)]**
 - 3.1 Once the waste is received at the HWSF, each container shall be assigned a specific location and shall be recorded in the Operating Record prior to the end of the regularly scheduled work day.
 - 3.2 A Waste Information and Tracking System (WITS) electronic copy, hard copy, or digital archive of the inventory log shall be prepared daily on days of facility operation and maintained in an accessible format.
 - 3.3 The inventory log shall identify the items on hand, the quantity, the date placed into storage, and the storage location used by the HWSF in processing waste.
 - 3.4 Whenever a container is moved, its new location is entered into the Operating Record by the end of the business day.
 - 3.5 Tracking numbers of waste containers that are consolidated into larger containers will be recorded in the Operating Record and identified with the tracking number of the new container.

- 4.0 General Provisions and Requirements [R315-2-9(d) through (g), R315-2-10, and R315-2-11]**
 - 4.1 Containers used to store waste shall be managed in such a way as to not cause the container(s) to release their contents. Hazardous wastes that are permitted to be stored at the facility are listed in Table 1. Material Safety Data Sheets (MSDSs) can be used for waste characterization in instances where processes do not significantly alter the hazardous characteristics of the original material. This plan provides guidelines for onsite generators and HWSF staff to use in identifying and verifying hazardous wastes.
 - 4.2 A copy of this WAP shall be kept at the HWSF in accordance with R315-8-2.4.
 - 4.3 The HWSF staff shall only accept and use analytical results from:
 - 4.3.1 A Utah Department of Health certified laboratory (Utah Certified Laboratory).

4.3.2 Other suitable laboratories with approval from the Executive Secretary

5.0 Onsite Generator

5.1 The HWSF may receive Hill AFB generated waste held in containers for evaluation prior to acceptance into storage. The following information shall be recorded in the operating record for waste held in the waste-receiving area of the HWSF:

5.1.1 Container WITS control number,

5.1.2 Container label information,

5.1.3 Count of container and type,

5.1.4 Damaged, leaking, or open containers,

5.1.5 Waste outside of the container,

5.1.6 Compatibility of container with waste,

5.1.7 Compatibility of container and waste with other containers of waste,

5.1.8 Conditions posing an imminent threat to human health or the environment,

5.1.9 Incompatible wastes are properly segregated and separated by a minimum of 10 feet.

5.2 The HWSF staff shall document into the Operating Record the visual inspection of the received waste and the waste-container label information against the WITS waste description records and the fingerprint parameters listed in Table 2. These parameters are detailed in the Standard Operating Procedures in the HWSF Operating Record.

5.3 The HWSF shall document in the Operating Record the acceptance of a waste container from the onsite generator for storage at the HWSF.

5.3.1 The HWSF shall not accept for storage onsite-generated waste if there are any discrepancies between the Operating Record information of Section 5.2 of this attachment and the WITS waste description records.

5.3.2 The HWSF shall hold containers identified in 5.4.1 in the building 888 staging area while the following conditions are met;

5.3.2.1 The schedule defined in section 5.6

5.3.2.2 Daily inspection of the waste container

5.3.2.3 Signage (with start date) indicating waste receiving status

5.3.2.4 Waste status resolution is documented in the Operating Record

5.4 Discrepancies of manifest completeness as described in Condition I.X.1. shall be resolved by making corrections as information becomes available and documented in the Operating Record.

- 5.5** The Permittee shall complete waste acceptance including sampling and analysis within 10 days upon arrival at the HWSF or reject the waste for management at the HWSF. The Permittee may request, in writing to the Executive Secretary, an extension up to an additional 20 days, when requested prior to the 10 day limit.
- 5.6** The Permittee shall notify the Executive Secretary in writing within 72 hours of any waste container or shipment that has been rejected for management at the HWSF.
- 6.0 Offsite Generators**
- 6.1** The HWSF can receive for storage, hazardous wastes:
- 6.1.1** Generated from activities at Little Mountain or UTTR and managed according to Section 3.0 and Section 5.0,
- 6.1.2** Generated from Hill AFB OU remediation activities and managed according to Section 3.0, and Section 5.0,
- 6.1.3** Generated from other US Air Force Base activities that meet the characterization requirements of this Attachment.
- 6.2** The Permittee shall not receive at the HWSF, hazardous waste:
- 6.2.1** From any other federal, state, or local government agency;
- 6.2.2** From any other US Armed Forces Department; or
- 6.2.3** That is identified by a waste code that is not listed in Table 1 or is otherwise prohibited by conditions of this Permit.
- 6.3** Other US Air Force Base generated waste streams that are from the same process shall be managed and documented in the Operating Record as follows:
- 6.3.1** The Permittee shall only receive hazardous waste at the HWSF when preceded by a Waste Profile Record (WPR) and a Notice to Transport has been sent to an offsite generator.
- 6.3.1.1** The Permittee shall assign a unique WPR number for each offsite generator waste stream.
- 6.3.1.2** The Permittee shall assign a unique tracking number for each offsite generator waste container.
- 6.3.1.3** The Permittee shall cross reference the Notice to Transport number with the approved WPR number.
- 6.3.1.4** The Permittee shall complete waste acceptance including sampling and analysis within 10 days upon arrival at the Hill AFB or reject the waste for management at the HWSF. The Permittee may request, in writing to the Executive Secretary, an extension up to an additional 20 days, when requested prior to the 10 day limit.

- 6.3.1.5** The Permittee shall notify the Executive Secretary in writing within 72 hours of any waste container or shipment that has been rejected for management at the HWSF.
- 6.3.2** For each waste stream received at the HWSF, the Permittee shall evaluate the associated WPR and applicable notification / certification of the LDR to ensure the waste is acceptable for management at the storage facility prior to signing a hazardous waste manifest for that waste stream. WPR requirements are outlined in Section 6.4 of this WAP.
- 6.3.3** Each shipment shall be inspected in accordance with the following requirements. This inspection shall include checking for Manifest Discrepancies and Appearance Discrepancies as described in Section 5.2 of this WAP.
- 6.3.3.1** Container WITS number
 - 6.3.3.2** Container label information
 - 6.3.3.3** Count of container and type
 - 6.3.3.4** Damaged, leaking, or open containers
 - 6.3.3.5** Waste outside of the container
 - 6.3.3.6** Compatibility of container with waste
 - 6.3.3.7** Compatibility of container and waste with other containers of waste
 - 6.3.3.8** Conditions posing an imminent threat to human health or the environment
 - 6.3.3.9** Incompatible wastes are properly segregated and separated by a minimum of 10 feet.
 - 6.3.3.10** The Waste Codes listed on the manifest match the applicable Waste Codes listed on the LDR notice and certification and the WPR from the Operating Record.
- 6.3.4** Shipment Receipt and Manifest Requirements:
- 6.3.4.1** The manifest shall be signed, and an original copy of the manifest shall be provided to the transporter.
 - 6.3.4.2** The Permittee's Tracking Number shall be recorded on the offsite generator's original copy of the manifest.
 - 6.3.4.3** The Permittee shall keep on file signed original manifests and an original manifest copy sent to the offsite generator within 30 days of signing the manifest.
- 6.3.5** The Permittee shall sample and analyze each waste container in accordance with the following:
- 6.3.5.1** The Permittee shall document in the Operating Record the visual inspection of the received waste and the waste-container label information against the WPR and the fingerprint parameters listed in Table 2.
 - 6.3.5.2** The Permittee shall sample each phase of multi-phase wastes and analyze each phase individually in accordance with this Attachment.
 - 6.3.5.3** The Permittee shall evaluate subsequent shipments of the same waste stream from offsite generators to determine if the waste stream is the same as that described in the WPR by reviewing the annual chemical analysis and the process that generated the waste. If a generator's chemical analysis for the waste stream has not been performed within the last 12 months, the Permittee shall sample

each container and document in the Operating Record, its acceptability for management.

6.3.5.4. If an analytical discrepancy cannot be resolved, the shipment shall be rejected. Rejected waste shipments shall be returned to the generator or forwarded to an appropriate treatment, storage or disposal facility, based on the generator's instructions. Rejected shipments shall be documented in the Operating Record.

6.3.5.5 The Permittee shall document in the Operating Record the acceptance of a waste container from the offsite generator for storage at the HWSF.

6.3.5.6 Fingerprint screening apparatus used for purposes of this section shall be calibrated: annually, using manufacturer's calibration procedures, daily calibration prior to the first use, and again every 3 hours or 10 analyses, whichever is more frequent.

6.3.5.7 Standards used in calibration shall be used prior to their expiration dates and shall be appropriate for expected analytes and concentration ranges.

6.3.5.8 Documentation related to sample collection or waste analysis shall be kept in the Operating Record for three years.

6.4 Waste Profile Record Requirements

6.4.1 The Permittee shall require and maintain a WPR from an offsite generator to provide the necessary information for management of a waste. At a minimum, the following information shall be provided in the WPR:

6.4.1.1 A description of the generator, including the generator's:

6.4.1.1.1 Name,

6.4.1.1.2 EPA identification number,

6.4.1.1.3 Generator number and waste stream number assigned by the Permittee,

6.4.1.1.4 Mailing address,

6.4.1.1.5 Business telephone number, a 24-hour emergency telephone number, or both, and

6.4.1.1.6 WPR contact person

6.4.1.2 A description of the waste, including:

6.4.1.2.1 Applicable EPA waste numbers or codes,

6.4.1.2.2 Whether the waste includes liquids,

6.4.1.2.3 A general indication of the waste's density,

6.4.1.2.4 Any distinguishing color or odor,

6.4.1.2.5 Applicable LDR treatment standards or variances, exclusions, etc.,

6.4.1.2.6 A statement that the sample used for characterization was representative of the waste,

- 6.4.1.2.7** If sorbents are used, a statement that the sorbents are not biodegradable and what type were used, and
- 6.4.1.2.8** Other additional information necessary for determining appropriate management of the waste stream such as:
 - 6.4.1.2.9** Chemical, physical, and general characteristics and properties
 - 6.4.1.2.10** Information relating to the waste's generation and history
 - 6.4.1.2.11** An indication of the possible presence of hazardous constituents such as herbicides, pesticides, infectious wastes, PCBs, etc.
 - 6.4.1.2.12** A statement that the waste is not air reactive, water reactive, shock sensitive or pyrophoric.
 - 6.4.1.2.13** Information indicating whether the waste exhibits the characteristics of ignitability, corrosivity, reactivity, or toxicity as defined in UAC R315-2-9.

TABLE 1

Wastes Permitted for Storage at the HWSF (listed by waste code, see 40 CFR 261.24-261.34 for alphabetical listing)

Characteristic Wastes

D001, D002, D003, D004, D005, D006, D007, D008, D009, D010, D011, D012, D013, D014, D015, D016, D017, D018, D019, D020, D021, D022, D023, D024, D025, D026, D027, D028, D029, D030, D031, D032, D033, D034, D035, D036, D037, D038, D039, D040, D041, D042, D043

F Listed Wastes

F001, F002, F003, F004, F005, F006, F007, F008, F009, F012, F019, F027, F034, F035

P Listed Wastes

P001, P004, P006, P012, P015, P020, P021, P029, P031, P037, P042, P050, P108, P113, P121, P122, P059, P098, P104, P106

U Listed Wastes

U001, U002, U003, U004, U005, U006, U007, U008, U009, U010, U011, U012, U014, U015, U016, U017, U018, U019, U020, U021, U022, U023, U024, U025, U026, U027, U028, U029, U030, U031, U032, U033, U034, U035, U036, U037, U038, U039, U041, U042, U043, U044, U045, U046, U047, U048, U049, U050, U051, U052, U053, U055, U056, U057, U058, U059, U060, U061, U062, U063, U064, U066, U067, U068, U069, U070, U071, U072, U073, U074, U075, U076, U077, U078, U079, U080, U081, U082, U083, U084, U085, U086, U087, U088, U089, U090, U091, U092, U093, U094, U095, U096, U097, U098, U099, U101, U102, U103, U105, U106, U107, U108, U109, U110, U111, U112, U113, U114, U115, U116, U117, U118, U119, U120, U121, U122, U123, U124, U125, U126, U127, U128, U129, U130, U131, U132, U133, U134, U135, U136, U137, U138, U140, U141, U142, U143, U144, U145, U146, U147, U148, U149, U150, U151, U152, U153, U154, U155, U156, U157, U158, U159, U160, U161, U162, U163, U164, U165, U166, U167, U168, U169, U170, U171, U172, U173, U174, U176, U177, U178, U179, U180, U181, U182, U183, U184, U185, U186, U187, U188, U189, U190, U191, U192, U193, U194, U196, U197, U200, U201, U202, U203, U204, U205, U206, U207, U208, U209, U210, U211, U213, U214, U215, U216, U217, U218, U219, U220, U221, U222, U223, U225, U226, U227, U228, U234, U235, U236, U237, U238, U239, U240, U243, U244, U246, U247, U248, U249, U271, U278, U279, U280, U328, U353, U359, U364, U367, U372, U373, U387, U389, U394, U395, U404, U409, U410, U411

TABLE 2
Fingerprint Parameters

Parameter	Requirement	Method
Color	Specify main and secondary colors	Visual Observation
Free Liquids	Determine whether present (yes/no)	Visual Observation or Paint Filter Liquids Test 9095A
Multi-phase	Determine solid-liquid layers	Visual Observation
pH	Determine aqueous pH	pH meter measurement
PID Sniffer	Determination of volatiles	PID measurement