

**MODULE I**

**STANDARD PERMIT CONDITIONS**



## TABLE OF CONTENTS

MODULE I - STANDARD CONDITIONS	Page
I.A. EFFECT OF PERMIT .....	1
I.B. ENFORCEABILITY.....	1
I.C. NO WAIVER OF AUTHORITY.....	1
I.D. PERMIT ACTIONS.....	2
I.E. SEVERABILITY .....	2
I.F. DUTY TO COMPLY.....	2
I.G. PERMIT EXPIRATION.....	3
I.H. NEED TO HALT OR REDUCE ACTIVITY NOT A DEFENSE .....	3
I.I. DUTY TO MITIGATE .....	3
I.J. PROPER OPERATION AND MAINTENANCE .....	4
I.K. DUTY TO PROVIDE INFORMATION .....	4
I.L. INSPECTION AND ENTRY .....	4
I.M. MONITORING AND RECORDS.....	5
I.N. REPORTING ANTICIPATED NONCOMPLIANCE .....	6
I.O. REPORTING PLANNED CHANGES.....	6
I.P. CERTIFICATION OF CONSTRUCTION OR MODIFICATION .....	7
I.Q. TRANSFER OF PERMIT .....	7
I.R. TWENTY-FOUR HOUR REPORTING.....	7
I.S. OTHER DOCUMENTS .....	9
I.T. COMPLIANCE SCHEDULES.....	9
I.U. MANIFEST DISCREPANCY REPORT.....	9
I.V. UNMANIFESTED WASTE REPORT .....	10
I.W. BIENNIAL REPORT.....	10
I.X. OTHER NONCOMPLIANCE.....	10
I.Y. OTHER INFORMATION .....	10
I.Z. SIGNATORY REQUIREMENT .....	10
I.AA. CONFIDENTIAL INFORMATION.....	11
I.BB. REPORTS, NOTIFICATIONS, AND SUBMISSIONS.....	11
I.CC. DOCUMENTS TO BE MAINTAINED AT THE FACILITY SITE.....	11
I.DD. PROTECTION OF HUMAN HEALTH AND THE ENVIRONMENT .....	12
I.EE. PROPERTY RIGHTS.....	12
I.FF. DEFINITIONS.....	13



## **MODULE I - STANDARD PERMIT CONDITIONS**

### **I.A. EFFECT OF PERMIT**

- I.A.1. The Permittee is allowed to treat and store hazardous waste in tanks and containers, to dispose of hazardous waste in hazardous waste landfill cells, and to store hazardous waste in surface impoundments, in accordance with the conditions of this permit. Any storage, treatment or disposal of hazardous waste not authorized in this permit or other permits is prohibited.
- I.A.2. Compliance with this permit constitutes compliance, for purposes of enforcement, with the Utah Hazardous Waste Management Rules, except for those requirements not included in this permit that become effective by statute. Specifically, compliance with this permit during its term constitutes compliance, for purposes of enforcement, with Utah Admin. Code R315-264 only for those management practices specifically authorized by this permit. The Permittee is also required to comply with Utah Admin. Code R305-7, R315-101, R315-124, R315-260, R315-261, R315-262, R315-263, R315-265, R315-266, R315-268, R315-270, R315-273 and R315-316, as applicable.
- I.A.3. Issuance of this permit does not convey property rights of any sort or any exclusive privilege; nor does it authorize any injury to persons or property, any invasion of other private rights, or any infringement of State or local law or regulations.
- I.A.4. Attachments incorporated by reference are enforceable conditions of this permit, as are documents incorporated by reference in the attachments. Language in the modules of this permit supersedes any conflicting language in the attachments or documents incorporated into the attachments.

### **I.B. ENFORCEABILITY**

Violations duly documented through the enforcement process pursuant to Utah Code Annotated 19-6-112, may result in penalties assessed in accordance with Utah Admin. Code R315-102.

### **I.C. NO WAIVER OF AUTHORITY**

The Director of the Division of Solid and Hazardous Waste (the Director) expressly reserves any right of entry provided by law and any authority to order or perform emergency or other response activities as authorized by law.

**I.D. PERMIT ACTIONS**

- I.D.1. This permit may be modified, revoked and reissued, or terminated for cause, as specified in Utah Admin. Code R315-40, R315-270-41, R315-270-42, R315-270-43 and R315-270-50.
- I.D.2. The filing of a request by the Permittee for a permit modification, revocation and reissuance, or termination, or the notification of planned changes, requiring prior agency approval or anticipated noncompliance on the part of the Permittee does not stay the applicability or enforceability of any permit condition.
- I.D.3. This permit may be modified at the request of the Permittee in accordance with the procedures of Utah Admin. Code R315-270-42. All modification requests involving design drawings, calculations, sketches, etc., shall be reviewed and stamped by a qualified Utah-registered professional engineer. All relevant drawings, calculations, sketches, etc., shall be included with the modification request.
- I.D.4. If a conflict exists between conditions within this permit, the most stringent condition, as determined by the Director, shall be met.
- I.D.5. In accordance with Utah Admin. Code R315-270-50(d), each permit for a land disposal facility shall be reviewed by the Director at least once every five years.

**I.E. SEVERABILITY**

The provisions of this permit are severable and if any provision of this permit, or the application of any provision of this permit to any circumstance, is held invalid, the application of such provision to other circumstances and the remainder of this permit shall not be affected thereby. Invalidation of any State or federal statutory or regulatory provision, which forms the basis for any condition of this permit, does not affect the validity of any other state or federal statutory or regulatory basis for said condition.

**I.F. DUTY TO COMPLY**

- I.F.1. The Permittee shall comply with all conditions of this permit, except to the extent and for the duration an emergency permit issued in accordance with Utah Admin. Code R315-270-61 authorizes such noncompliance. Any permit noncompliance, other than noncompliance authorized by an emergency permit, constitutes a violation of the Utah Solid and Hazardous Waste Act, and may be grounds for enforcement action, for permit modification, revocation and reissuance, termination, denial of a permit renewal application or a combination of enforcement action and any of the other listed remedies.

I.F.2. Compliance with the terms of this permit does not constitute a defense to any order issued or any action brought under Sections 3007, 3008, 3013, or 7003 of RCRA (42 U.S.C. Sections 6927, 6928, 6934 and 6973), Section 106, 104, or 107 of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) of 1980 (42 U.S.C. 9606(a), 9604, and 9607, commonly known as CERCLA) as amended by the Superfund Amendments and Re-authorization Act of 1986 (SARA), or any other state or federal law providing for protection of public health or the environment from any imminent and substantial endangerment to human health or the environment.

**I.G. PERMIT EXPIRATION**

I.G.1 If the Permittee wishes to continue an activity regulated by this permit after the expiration date of this permit, the Permittee must apply for and obtain a new permit, subject to Condition 1.G.2.

I.G.2. This permit shall expire ten years from the date of issuance. However, this permit and all conditions herein shall remain in force until the effective date of a new permit, if the Permittee has submitted a timely (at least 180 days prior to permit expiration or by an alternate date if requested by the Director) and complete application under Utah Admin. Code R315-270-14 and the applicable requirements of Utah Admin. Code R315-270-15 through R315-270-17 and R315-270-21, and through no fault of the Permittee, the Director does not issue a new permit with an effective date on or before the expiration date of the previous permit.

I.G.3. When the permit is reissued, the Director may, at his discretion, extend the post-closure period of cells at the facility. See Module IX.

**I.H. NEED TO HALT OR REDUCE ACTIVITY NOT A DEFENSE**

It shall not be a defense, for the Permittee in an enforcement action, that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

**I.I. DUTY TO MITIGATE**

In the event of noncompliance with the permit, the Permittee shall take all reasonable steps to minimize releases to the environment resulting from the noncompliance, and shall carry out such measures as are reasonable to prevent significant adverse impacts on human health or the environment.

**I.J. PROPER OPERATION AND MAINTENANCE**

The Permittee shall, at all times, properly operate and maintain all facilities, treatment systems and ancillary controls (and related appurtenances) which are installed or used by the Permittee to achieve compliance with the conditions of this permit. Proper operation and maintenance includes effective performance, adequate funding, adequate operator staffing and training, and adequate laboratory and process controls, including appropriate quality assurance procedures. This provision requires the operation of back-up or auxiliary equipment or similar systems when necessary to achieve compliance with the conditions of this permit.

**I.K. DUTY TO PROVIDE INFORMATION**

The Permittee shall furnish to the Director within a reasonable amount of time any relevant information which the Director may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, or to determine compliance with this permit. The Permittee shall also furnish to the Director upon request, copies of records required to be kept by this permit.

**I.L. INSPECTION AND ENTRY**

Pursuant to the Utah Admin. Code R315-260-5, the Permittee shall allow, the Director, or authorized representative, upon the presentation of credentials and other documents, as may be required by law, to:

- I.L.1. Enter at reasonable times upon the Permittee's premises where a regulated unit or activity is located or conducted, or where records must be kept as required by the conditions of this permit;
- I.L.2. Have access to and copy, at reasonable times, any records, including electronic data, that must be kept as required by the conditions of this permit;
- I.L.3. Inspect, at reasonable times, any portion of the facility, equipment (including monitoring and control equipment), practices, or operations regulated or required under this permit;
- I.L.4. Sample or monitor, at reasonable times, for the purposes of assuring permit compliance or as otherwise authorized by the Utah Solid and Hazardous Waste Act, any substances or parameters at any location; and
- I.L.5. Make record of inspection through photographic, electronic, video, or any other reasonable medium. The Permittee will be given duplicate copies of these items should the Permittee make this request by letter.



## **I.M. MONITORING AND RECORDS**

I.M.1. The Permittee shall retain, at the Grassy Mountain Facility, all records of all monitoring, including all calibration and maintenance records and, where applicable, all original strip chart recordings (or equivalent recordings) for continuous monitoring instruments, copies of all reports and records required by this permit, the waste minimization certification required by Utah Admin. Code R315-264-73(b)(9) and records of all data used to complete the application for this permit for a period of at least three years from the date of the sample, measurement, report, certification, or recording unless a longer retention period for certain information is required by other conditions of this permit.

All records that are required to be maintained under this permit may be converted to retrievable electronic media for storage, under a plan and using formats expressly approved by the Director. However, all records, regardless of storage medium, must be available for review when requested by regulatory personnel. Once converted, the electronic media may be retained in place of the hard copy originals of the records. These periods may be extended at the request of the Director at any time by written notification to the Permittee. The retention times are automatically extended during the course of any unresolved enforcement action regarding the facility to three years beyond the conclusion of the enforcement action.

I.M.2. The Permittee shall maintain, at the Grassy Mountain Facility, monitoring well records of all groundwater quality and groundwater elevations for the active life of the facility and all post-closure care periods.

I.M.3. Pursuant to Utah Admin. Code R315-270-30(j)(3) records of monitoring information shall specify at a minimum:

I.M.3.a. The date(s), exact place, and times of sampling or measurements;

I.M.3.b. The name(s), title(s), and affiliation of individual(s) who performed the sampling or measurements;

I.M.3.c. The date(s) analyses were performed;

I.M.3.d. The individual(s) who performed the analyses;

I.M.3.e. The analytical techniques or methods used; and

I.M.3.f. The results of such analyses, including all QA/QC data.

I.M.4. Samples and measurements taken for the purpose of monitoring shall be accurate and representative of the monitored activity. The method used to obtain a

representative sample of the waste to be analyzed shall be the appropriate method from Utah Admin. Code R315-261-1090 Appendix I or an equivalent method approved in writing by the Director. Laboratory methods shall be those specified in Test Methods for Evaluating Solid Waste: Physical/Chemical Methods SW-846 (Third Edition, November 1986; or prevailing edition, hereafter referred to as SW-846), Standard Methods of Examination of Water and Wastewater (17th Edition, 1989; or prevailing edition). The prevailing edition will be determined by the Director. Other alternate methods approved in this permit, or an equivalent method, in accordance with permit Condition I.M.5. of this permit will be allowed if approved in writing by the Director.

I.M.5. When requesting substitute or additional analytical methods, the Permittee shall submit to the Director a permit modification request consistent with the requirements of R315-270-42. The request shall provide information demonstrating that the proposed method requested is equivalent or superior in terms of sensitivity, accuracy, and precision (i.e., reproducibility).

I.M.6. The Permittee shall maintain at the facility a current copy of this permit.

#### **I.N. REPORTING ANTICIPATED NONCOMPLIANCE**

The Permittee shall give advance written notice to the Director of any planned changes in the permitted facility or activity which may result in noncompliance with requirements of this permit (as per Utah Admin. Code R315-270-30(1)(2)). Advance notice shall not constitute a defense for any noncompliance.

#### **I.O. REPORTING PLANNED CHANGES**

The Permittee shall give oral notice to the Director, in advance, of any planned changes (Utah Admin. Code R315-270-30(1)(1)) to a permitted hazardous waste management unit or activity that the Permittee does not consider as requiring a permit modification. The Director will notify the Permittee orally that either it is agreed that no permit modification is required or the proposed changes require a permit modification. The Director may determine that the changes require a permit modification if the proposed changes modify the original design or operation that was represented in the application even though those portions of the application (i.e. design specifications, drawings, calculations, etc.) may not have been incorporated into the permit.

The Permittee shall follow the requirements of Condition I.D. for any physical alterations or additions to hazardous waste management units or systems being modified. Planned physical alterations or additions shall include all changes in any facility hazardous waste equipment. Neither construction nor operation of new or modified hazardous waste units shall begin unless authorization is granted by the Director.

**I.P. CERTIFICATION OF CONSTRUCTION OR MODIFICATION**

The Permittee shall not commence storage, treatment, or disposal of hazardous waste in a new hazardous waste management unit or in a Class 2 or Class 3 modified portion of an existing permitted hazardous waste management unit except as provided in Utah Admin. Code R315-270-42, until:

- I.P.1. The Permittee has submitted to the Director:
  - I.P.1.a. A letter signed by the Permittee and an independent Utah registered professional engineer qualified by experience and education in the appropriate engineering field certifying that the unit(s) has been constructed or modified in compliance with the modification request and with the conditions of this permit;
  - I.P.1.b. As-built engineering drawings and specifications as appropriate; and
- I.P.2. The Director or designated representative has reviewed and inspected the modified or newly constructed unit(s) and has notified the Permittee in writing that the unit(s) was found to be in compliance with permit modification request and the conditions of this permit; or
- I.P.3. If within 15 calendar days of the date of receipt of the letter in permit Condition I.P.1., the Permittee has not received notice from the Director, of the intent to inspect, prior inspection is waived and the Permittee may commence treatment, storage, or disposal of hazardous waste in the permitted unit certified in accordance with permit Condition I.P.

**I.Q. TRANSFER OF PERMIT**

This permit is not transferable to any person except after notice to the Director and in accordance with Utah Admin. Code R315-270-40.

**I.R. TWENTY-FOUR HOUR REPORTING**

- I.R.1. In accordance with Utah Admin. Code R315-270-30(l)(6)(i) the Permittee shall orally report to the Director any noncompliance with this permit which may endanger human health or the environment. Any such information shall be reported as soon as possible, but not later than 24 hours from the time the Permittee becomes aware of the noncompliance.
- I.R.2. In accordance with Utah Admin. Code R315-263, the Permittee shall orally report, within 24 hours, to the Director any spill of any hazardous waste or material which, when spilled becomes a hazardous waste if the spilled quantity:

- I.R.2.a. Exceeds 100 kilograms; or
- I.R.2.b. Exceeds one kilogram of material listed in paragraph Utah Admin. Code R315-261-31, which includes F999 and which is an acute hazardous waste identified with a hazard code of (H), or in Utah Admin. Code R315-261-33(e).
- I.R.2.c. A lesser amount if there is a potential for endangerment to human health or the environment.
- I.R.3. The oral report shall include, but not be limited to, the following:
  - I.R.3.a. Information concerning the release of any hazardous waste which may endanger public drinking water supplies; and
  - I.R.3.b. Any information of a release or discharge of a reportable hazardous waste, or of a fire, or explosion at the facility.
  - I.R.3.c. The description of the occurrence and its cause shall include:
    - I.R.3.c.i. Name, title, and telephone number of individual reporting;
    - I.R.3.c.ii. Name, address, and telephone number of the owner or operator;
    - I.R.3.c.iii. Name, address, and telephone number of the facility;
    - I.R.3.c.iv. Date, time, and type of incident;
    - I.R.3.c.v. Location and cause (if known) of the incident;
    - I.R.3.c.vi. Name and quantity of materials involved;
    - I.R.3.c.vii. The extent of injuries, if any;
    - I.R.3.c.viii. An assessment of actual or potential hazard to the environment and human health, when this is applicable;
    - I.R.3.c.ix. Description of any emergency action taken to minimize threat to human health and the environment;
    - I.R.3.c.x. Estimated quantity and disposition of recovered material that resulted from the incident; and
    - I.R.3.c.xi. Any other information necessary to fully evaluate the situation and to develop an appropriate course of action.

- I.R.4. Within 15 days of the time the Permittee is required to provide the oral report, as specified in Conditions I.R.1. through I.R.3., the Permittee shall provide to the Director a written submission.
- I.R.4.a. The written submission shall include, but not be limited to the following:
- I.R.4.a.i. Name, title, address, and telephone number of the individual reporting;
- I.R.4.a.ii. A description (including cause, location, extent of injuries, if any, and an assessment of actual or potential hazard to the environment and human health on and off the facility, when this is applicable) of the reported incident;
- I.R.4.a.iii. The period(s) in which the incident occurred (including exact dates and times);
- I.R.4.a.iv. Name and quantity of material(s) involved;
- I.R.4.a.v. Estimated quantity of recovered material that resulted from the incident;
- I.R.4.a.vi. Whether the results of the incident remain a threat to human health and the environment (whether the noncompliance has been corrected and the release has been adequately cleaned up); and
- I.R.4.a.vii. If the release or noncompliance has not been adequately corrected or cleaned up, the anticipated time that the noncompliance or cleanup is expected to continue; the steps taken or planned to reduce, eliminate, and prevent recurrence of the noncompliance; and the steps taken or planned to adequately clean up the release.

**I.S. OTHER DOCUMENTS**

Permittee shall keep one current copy, at the Grassy Mountain site, of each environmentally related permit issued to the facility.

**I.T. COMPLIANCE SCHEDULES**

There are no compliances schedules associated with the Permit.

**I.U. MANIFEST DISCREPANCY REPORT**

Manifest discrepancies shall be defined as differences between the quantity or type of hazardous waste designated on the manifest or shipping paper, and the quantity or type of hazardous waste the Permittee actually receives. Significant discrepancies in quantity are: (1) for batch waste (containerized loads), any variation in piece count, such as a discrepancy of one drum in a truckload, and (2) for bulk waste, variations greater than ten percent in weight. Significant discrepancies in type are obvious differences which can be discovered by

inspection or waste analysis, such as waste solvent substituted for waste acid, or toxic constituents not reported on the manifest or shipping paper. If a significant discrepancy is discovered in a manifest, the Permittee shall attempt to reconcile the discrepancy. If not resolved within 15 days after receiving the waste, the Permittee shall submit a written report, including a copy of the manifest, and efforts to reconcile the discrepancy, to the Director. (see Utah Admin. Code R315-264-72)

**I.V. UNMANIFESTED WASTE REPORT**

This report shall be submitted to the Director within 15 days of receipt of unmanifested waste. (See Utah Admin. Code R315-264-76)

**I.W. BIENNIAL REPORT**

A biennial report shall be submitted covering facility activities during odd-numbered calendar years. This report shall be submitted by March 1 of the following even numbered year. (See Utah Admin. Code R315-264-75)

**I.X. OTHER NONCOMPLIANCE**

The Permittee shall report all other instances of noncompliance with this permit not otherwise required to be reported in accordance with Condition I.R., within seven days of discovering the noncompliance. The reports shall contain all applicable information necessary to describe the noncompliance. Reporting shall not constitute a defense for any noncompliance. (See Utah Admin. Code R315-270-30(1)(10)).

**I.Y. OTHER INFORMATION**

Whenever the Permittee becomes aware that it failed to submit any relevant facts in the permit application, or submitted incorrect information in a permit application (except minor deviations as allowed by II.B.2.), or in any report submitted to the Director, the Permittee shall submit such facts or corrected information within the next seven days.

**I.Z. SIGNATORY REQUIREMENT**

All applications, reports, or other information requested by or submitted to the Director shall be signed and certified in accordance with Utah Admin. Code R315-270-30(k).

**I.AA. CONFIDENTIAL INFORMATION**

The Permittee may claim the confidentiality of any information submitted to the Director in accordance with Government Records Access Management Act, Utah Code Ann. § 63G-2-101, *et seq.*, Environmental Quality Code, Utah Code Ann. § 19-1-306, and Utah Admin. Code R305-1, *et seq.* The Director will evaluate claims of confidentiality in accordance with applicable statutes and regulations and will administer those documents accordingly.

**I.BB. REPORTS, NOTIFICATIONS, AND SUBMISSIONS**

All reports, notifications, or other submissions which are required by this permit to be transmitted to the Director should be sent by certified mail or other means of proof of delivery to:

Director  
Division of Waste Management and Radiation Control  
P.O. Box 144880  
Salt Lake City, Utah 84114-4880  
Phone (801) 536-0200

During normal business hours (except Utah State holidays), required oral notifications shall be given only to the Director or an Environmental Manager, Environmental Scientist, or Engineer employed by the Director to assist him in administering the hazardous waste program. Notifications made at other times shall be made to one of the aforementioned persons if the Permittee can contact such person at the facility or at the office of the Division of Waste Management and Radiation Control at **801-536-0200**. Otherwise, notification shall be made to the 24-hour answering service at **801-536-4123**. Notifications made to the 24-hour answering service shall include all applicable information required by this permit. The Permittee shall give oral notification to the Director or an Environmental Manager, Environmental Scientist, or Engineer employed by the Director to assist him in administering the hazardous waste program on the first business day following notification to the 24 hour answering service.

**I.CC. DOCUMENTS TO BE MAINTAINED AT THE FACILITY SITE**

The Permittee shall maintain at the facility, for the periods specified, the following documents and amendments, revisions and modifications to these documents; as stated in Condition I.M., electronically-stored versions may be used with the prior approval of the Director:

- I.CC.1. Waste Analysis Plan, as required by Utah Admin. Code R315-264-13 and this permit until facility closure is certified in accordance with Condition II.O.7.

- I.CC.2. Personnel training documents and records, as required by Utah Admin. Code R315-264-16(d) and this permit until facility closure for current employees, or for a period of three years for former employees in accordance with Utah Admin. Code R315-264-16(e).
- I.CC.3. Contingency Plan as required by Utah Admin. Code R315-264-50 and this permit until facility closure is certified in accordance with Condition II.O.7.
- I.CC.4. Closure Plan as required by Utah Admin. Code R315-264-110(a) and this permit until facility closure is certified in accordance with Condition II.O.7.
- I.CC.5. Cost estimates for the facility closure and post-closure as required Utah Admin. Code R315-264-142.
- I.CC.6. Operating Record as required by Utah Admin. Code R315-264-73 and this permit until facility closure is certified in accordance with Condition II.O.7.
- I.CC.7. Inspection logs, as required by Utah Admin. Code R315-264-15 and this permit for a period of three years in accordance with R315-264-15(d).
- I.CC.8. Manifest copies, as required by Utah Admin. Code R315-264(a)(2)(vi) and this permit for at least three years from the date the waste shipment was accepted at the facility.
- I.CC.9. A copy of the Permittee's waste minimization statement until facility closure is certified in accordance with Condition II.O.7.
- I.CC.10. A complete and current copy of the facility Permit. All modifications shall be placed in the facility's copy of the permit within 30 days from the date the Director approves the permit modifications.
- I.CC.11. All independent tank system assessment, installation, and repair certifications, as required by Utah Admin. Code R315-264-192(b) and R315-264-196(f), until facility closure is certified in accordance with Condition II.O.7.

**I.DD. PROTECTION OF HUMAN HEALTH AND THE ENVIRONMENT**

Pursuant to Utah Admin. Code R315-270-32(b)(2), this permit contains those terms and conditions determined necessary to protect human health and the environment.

**I.EE. COMPLIANCE**

Compliance with the terms of this permit does not constitute a defense to any order issued or any action brought under Section 3013 or Section 7003 of RCRA,



Section 106(a) of the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (42 U.S.C. 9606 (a), commonly known as CERCLA), or any other law providing for protection of human health or, the environment.

## **I.FF. DEFINITIONS**

Regulatory terms used in this permit have the same meaning as those in Utah Admin. Code R315, or as outlined below, unless this permit specifically provides otherwise. Where terms are not defined in the regulations or the permit, a standard dictionary reference or the generally accepted scientific or industrial meaning of the term shall define the meaning associated with such terms. (Note: When words which are also regulatory terms are not used as regulatory terms in this permit, they have the standard-dictionary-reference meaning or the generally accepted meaning as described above, e.g., “debris,” “sump.”)

“Active life of a facility” means the period from the initial receipt of hazardous waste at the facility until the Director receives certification of final closure.

“Active portion” means that portion of a facility where treatment, storage, or disposal operations are being or have been conducted after the effective date of this permit and which is not a closed portion. (See also "closed portion" and "inactive portion".)

“Ancillary equipment” means any device (including, but not limited to, such devices as piping, fittings, flanges, valves, and pumps) in which hazardous waste is handled and which is used to distribute, meter, or control the flow of hazardous waste within a permitted unit or from the point of generation to a storage or treatment tank(s), between hazardous waste storage and treatment tanks to a point of disposal on site, or to a point of shipment for disposal off site.

"Annual" or "Annually" means once every 12 months.

"Approved" means oral or written approval from the Director of the Division of Solid and Hazardous Waste. If oral approval is obtained, written certification of that approval shall follow within 15 days.

“Aquifer” means a geologic formation, group of formations, or part of a formation capable of yielding ground water to wells.

“Arrival” means a waste load present at the gate of the facility.

“CAMU” means Corrective Action Management Unit.

“CAMU-Eligible Waste” is a waste stream that meets the requirements of 40 CFR 264.552(a)(1).

“Certification” means a statement of professional opinion based upon knowledge, observation and belief.

“Closed portion” means that portion of a facility which an owner or operator has closed in accordance with the approved facility Closure Plan and all applicable closure requirements. (See also "active portion" and "inactive portion".)

"Component" means either the tank or ancillary equipment of a tank system, when used in reference to a tank system.

“Confined aquifer means an aquifer bounded above and below by impermeable beds or by beds of distinctly lower permeability than that of the aquifer itself; an aquifer containing confined ground water.

“Container” means any portable device in which a material is stored, transported, treated, disposed of, or otherwise handled.

“Continuous” in the context of data collection, means data is collected at intervals that do not exceed once per minute.

“Corrosion expert” means a person who, by reason of his knowledge of the physical sciences and the principles of engineering and mathematics, acquired by a professional education and related practical experience, is qualified to engage in the practice of corrosion control on buried or submerged metal piping systems and metal tanks. Such a person must be certified as being qualified by the National Association of Corrosion Engineers (NACE) or be a registered professional engineer who has certification or licensing that includes education and experience in corrosion control on buried or submerged metal piping systems and metal tanks.

"Day" means calendar day unless specified otherwise.

“Director” means the Director of the Division of Waste Management and Radiation Control.

“Discharge” or hazardous waste discharge means the accidental or intentional spilling, leaking, pumping, pouring, emitting, emptying, or dumping of hazardous waste into or on any land or water.

“Disposal” means the discharge, deposit, injection, dumping, spilling, leaking, or placing of any solid waste or hazardous waste into or on any land or water so that such solid waste or hazardous waste or any constituent thereof may enter the

environment or be emitted into the air or discharged into any waters, including ground waters.

“Disposal facility” means a facility or part of a facility at which hazardous waste is intentionally placed into or on any land or water, and at which waste will remain after closure.

“EPA hazardous waste number” means the number assigned by EPA or the Director to each hazardous waste listed in Utah Admin. Code R315-261-31, R315-261-32, R315-261-33 and to each characteristic waste identified in Utah Admin. Code R315-261-21 through R315-261-24.

“EPA identification number” means the number assigned by EPA or the Director to each generator, transporter, and treatment, storage, or disposal facility.

“Equivalent method” means any testing or analytical method approved by the Director.

“Existing portion” means that land surface area of an existing waste management unit, included in the original Part A permit application, on which wastes have been placed prior to the issuance of a permit.

“Existing tank system” or “existing component” means a tank system or component that is used for the storage or treatment of hazardous waste and that is in operation as of May 1, 1997, or was in service prior to May 1, 1997, and is currently “inactive.”

“Facility” means all contiguous land, structures, other appurtenances, and/or improvements on the land used for treating, storing, or disposing of hazardous waste. A facility may consist of several treatment, storage, or disposal operational units (e.g., one or more landfills, surface impoundments, or combinations of them).

"Facility Plan Approval" means a written approval (referred to as a permit) to operate a hazardous waste treatment, storage, or disposal facility within the State of Utah.

“Federal agency” means any department, agency, or other instrumentality of the Federal Government, any independent agency or establishment of the Federal Government including any Government corporation, and the Government Printing Office.

“Federal, State and local approvals or permits necessary to begin physical construction” means permits and approvals required under Federal, State or local hazardous waste control statutes, regulations or ordinances.

“Final closure” means the closure of all hazardous waste management units at the facility in accordance with all applicable closure requirements so that hazardous waste management activities in this permit are no longer conducted at the facility.

“Freeboard” means the distance between the top edge of a tank or surface impoundment and the surface of the waste contained therein.

“Generator” means any person, by site, whose act or process produces hazardous waste identified or listed in R315-261 or whose act first causes a hazardous waste to become subject to regulation.

“Groundwater” means water below the land surface in a zone of saturation.

"Hazardous waste" means a hazardous waste as defined in R315-261-3.

"Hazardous waste constituent" means any constituent listed in R315-261 Appendix VIII.

“Hazardous waste management unit” is a contiguous area of land on or in which hazardous waste is placed, or the largest area in which there is significant likelihood of mixing hazardous waste constituents in the same area. A container alone does not constitute a unit; the unit includes containers and the land or pad upon which they are placed.

“Immediately” means within 24 hours unless otherwise specified.

“Inactive portion” means that portion of a facility that is not currently operated and has not under gone closure.

“Infectious waste” means "a solid waste that contains or may reasonably be expected to contain pathogens of sufficient virulence and quantity that exposure to the waste by a susceptible host could result in an infectious disease." This waste includes such materials as used sharps (needles, syringes, blades, pipettes, broken glass, and blood vials), body fluids or materials mixed with body fluids, bandages, or other materials that have come in contact with body fluids.

“Inner liner” means a continuous layer of material placed inside a tank or container that protects the construction materials of the tank or container from the contained waste or treatment reagents.

“International shipment” means the transportation of hazardous waste into or out of the jurisdiction of the United States.

“Landfill cell” means a discrete volume of a hazardous waste landfill, which uses a liner system to provide isolation of wastes from adjacent cells, or wastes, that are constructed in accordance with the Permit.

"Leachate" means any liquid, including any suspended components in the liquid, that has percolated through or drained from hazardous waste or water generated from naturally occurring storm events that has been in contact with waste listed in 40 CFR 261 Subpart D.

"Leak detection system for tanks" means a system capable of detecting the failure of either the primary or secondary containment structure or the presence of a release of hazardous waste or accumulated liquid in the secondary containment structure. Such a system must employ operational controls (e.g., daily visual inspections for releases into the secondary containment system of above ground tanks) or consist of an interstitial monitoring device designed to detect, continuously and automatically, the failure of the primary or secondary containment structure or the presence of a release of hazardous waste into the secondary containment structure.

“Like Wastes” means wastes exhibiting the same general characteristics.

“Liner” means a continuous layer of natural or man-made materials, beneath or on the sides of a surface impoundment, landfill, or landfill cell, which restricts the downward or lateral escape of hazardous waste, hazardous waste constituents, or leachate.

"Liquid" or "Liquid waste" means a material that fails the Paint Filter Liquids Test (PFLT) using EPA Method 9095 as described in *Test Methods for Evaluation of Solid Wastes, Physical/Chemical Methods (EPA Publication No. SW-846)*.

“Management” or “hazardous waste management” means the systematic control of the collection, source separation, storage, transportation, processing, treatment, recovery, and disposal of hazardous waste.

“Manifest” means the shipping document EPA form 8700-22 and, if necessary, EPA form 8700-22A, originated and signed by the generator in accordance with the instructions located in the R315-217.

“Miscellaneous unit” means a hazardous waste management unit where hazardous waste is treated, stored, or disposed of and that is not a container, tank, surface impoundment, pile, land treatment unit, landfill, incinerator, boiler, industrial furnace, underground injection, containment building, or unit eligible for a research, development, and demonstration permit.

“New tank system” or “new tank component” means a tank system or component that will be used for the storage or treatment of hazardous waste and for which installation has commenced after May 1, 1997. A new tank system also means a tank system or component for which construction commences after May 1, 1997.

“On-site” means the same or geographically contiguous property which may be divided by public or private right-of-way, provided the entrance and exit between the properties is at a cross-roads intersection, and access is by crossing as opposed to going along, the right-of-way. Non-contiguous properties owned by the same person but connected by a right-of-way that he controls and to which the public does not have access, is also considered on-site property.

“Partial closure” means the closure of one or more hazardous waste management units in accordance with this permit while other units continue to operate.

“PCB” means Polychlorinated Biphenyls as defined in 40 CFR §761.3.

“Person” means an individual, trust, firm, joint stock company, Federal Agency, corporation (including a government corporation), partnership, association, State, municipality, commission, political subdivision of a State, or any interstate body.

“Personnel” or “facility personnel” means all persons who work, at, or oversee the operations of, a hazardous waste facility, and whose actions or failure to act may result in noncompliance with this permit.

“Precipitation run-off” means water generated from naturally occurring storm events. If water generated from naturally occurring storm events has been in contact with waste listed in R315-261 Appendix VIII , it is considered to be leachate.

"Pyrophoric waste" means a waste that can ignite within five minutes after coming in contact with air when tested according to 49 CFR 173, Appendix E, Paragraphs 3.1.1 - 3.1.3.

"Qualified Utah Registered Professional Engineer" means any individual who is qualified by experience and educated in the appropriate field and is licensed as a Professional Engineer by the Utah Department of Commerce.

“Quarterly” means once every three months.

“RCRA” means the Resource Conservation and Recovery Act of 1976, as amended, 42 U.S.C. section 6901 et seq.

“RCRA/TSCA” refers to the definition listed under TSCA/RCRA Combination Waste Streams.

“Received” refers to the point in time when a load of waste enters the fenced portion of the facility.

"Release" means any spilling, leaking, pouring, emitting, emptying, discharging, injecting, pumping, escaping, leaching, dumping, or disposing of hazardous wastes (including hazardous waste constituents) into the environment (including the abandonment or discarding of barrels, containers, and other receptacles containing hazardous wastes or hazardous waste constituents).

“Run-off” means any rainwater, leachate, or other liquid that drains over land from any part of a facility.

“Run-on means any rainwater, leachate, or other liquid that drains over land onto any part of a facility.

“Saturated zone or zone of saturation means that part of the earth's crust in which all voids are filled with water.

“Semi-Annually” means once every six months.

"Soil cover" means any soil material, other than hazardous waste, that affords protection to a landfill cell liner.

"Solid Waste Management Unit (SWMU)" means any discernible unit at which solid wastes have been placed at any time, irrespective of whether the unit was intended for the management of solid or hazardous waste. Such units include any area at the facility at which solid wastes have been routinely and systematically released.

“Solidify" means to treat a liquid waste by changing the liquid into a solid form by the use of solidification agents, thereby reducing the hazard potential of the waste by decreasing its mobility. Solidification does not necessarily involve a chemical reaction or interaction between the waste constituent(s) and the solidification agent(s).

"Stabilize" or "Stabilization" means to treat, or the process of treating, a waste by adding stabilization reagents that will react with the contaminants to produce a less soluble, toxic or mobile form of the contaminants. The physical form of the waste may or may not change. For purposes of this permit, stabilization will include reactions or processes which neutralize, deactivate, chemically oxidize or chemically reduce, waste contaminants, when they are accomplished in accordance with the applicable provisions herein.

“Storage” means the holding of hazardous waste for a temporary period, at the end of which the hazardous waste is treated, disposed of, stored elsewhere, or shipped off-site to another facility.

"Submit or Submission" means to be received and logged in at the offices of the Utah Division of Solid and Hazardous Waste, having been hand delivered or delivered by certified mail, mail, express mail, facsimile, electronic mail, computer diskette, or any combination thereof. The postmark or equivalent evidence shall be used as the date of submission. When a submission due date falls on a Saturday, Sunday or a Utah or federal holiday, the submission or report is due on the next business day.

"Sump" means any pit or reservoir that meets the R315 definition of a tank and those troughs or trenches connected to it that serve to collect hazardous waste for transport to hazardous waste storage, treatment, or disposal units of facilities.

“Tank” means a stationary device, designed to contain an accumulation of hazardous waste that is constructed primarily of non-earthen materials (e.g., wood, concrete, steel, plastic) that provide structural support.

“Tank system” means a hazardous waste storage or treatment tank and its associated ancillary equipment and containment system.

"Transfer facility" means any transportation related facility including loading docks, parking areas, and other similar areas where shipments of hazardous waste are held during the normal course of transportation.

“Transport vehicle” means a motor vehicle or rail car used for the transportation of cargo by any mode. Each cargo-carrying body (trailer, railroad freight car, etc.) is a separate transport vehicle.

“Transportation” means the movement of hazardous waste by air, rail, highway, or water.

“Transporter” means a person engaged in the off-site transportation of hazardous waste by air, rail, highway, or water.

“Treatability Study” means a study in which a hazardous waste is subjected to a treatment process to determine: (1) Whether the waste is amenable to the treatment process, (2) what pretreatment (if any) is required, (3) the optimal process conditions needed to achieve the desired treatment, (4) the efficiency of a treatment process for a specific waste or wastes, or (5) the characteristics and volumes of residuals from a particular treatment process. Also included in this definition for the purpose of the R315-261-4(e) and R315-261-4(f) exemptions are liner compatibility, corrosion, and other material compatibility studies and



toxicological and health effects studies. A "treatability study" is not a means to commercially treat or dispose of hazardous waste.

“Treatment” means any method, technique, or process, including neutralization, designed to change the physical, chemical, or biological character or composition of any hazardous waste so as to neutralize such waste, or so as to recover energy or material resources from the waste, or so as to render such waste non-hazardous, or less hazardous; safer to transport, store, or dispose of; or amenable for recovery, amenable for storage, or reduced in volume.

“TSCA” means the Toxic Substances Control Act.

“TSCA/RCRA Combination Waste Streams” refers to those PCB-containing waste streams that may be placed in the stabilization unit when the presence of RCRA hazardous constituents in combined RCRA/TSCA waste requires treatment prior to land disposal. The treatment unit is not authorized for management of any combined waste streams in which the PCB component of the waste would not otherwise be authorized for land disposal in a TSCA land disposal unit.

“Utah Admin. Code” means Utah Administrative Code.

“Unsaturated zone” means the zone between the land surface and the water table.

“Uppermost aquifer” means the geologic formation nearest the natural ground surface that is an aquifer, as well as lower aquifers that are hydraulically interconnected with this aquifer within the facility's property boundary.

“USHWA” means Utah Solid and Hazardous Waste Act, Utah Code Annotated 19-6-101 et seq., as amended.

“Waste” means hazardous waste or waste to be managed as hazardous waste in accordance with this permit unless otherwise specified.

## **MODULE II**

### **GENERAL FACILITY CONDITIONS**



## TABLE OF CONTENTS

### MODULE II - GENERAL FACILITY CONDITIONS

II.A.	Applicability .....	1
II.B.	Design and Operation of the Facility .....	1
II.C.	Required Notice .....	1
II.D.	Permitted and Prohibited Waste.....	1
II.E.	General Waste Analysis .....	3
II.F.	Security .....	4
II.G.	General Inspection Requirements .....	4
II.H.	Personnel Training .....	5
II.I.	General Requirements for Ignitable, Reactive, or Incompatible Waste .....	6
II.J.	Location Standards.....	6
II.K.	Preparedness and Prevention .....	6
II.L.	Contingency Plan .....	7
II.M.	Manifest System.....	7
II.N.	Recordkeeping and Reporting.....	8
II.O.	Closure/Post-Closure .....	8
II.P.	Cost Estimates for the Facility Closure/Post-Closure.....	10
II.Q.	Financial Assurance for Facility Closure.....	10
II.R.	Liability Requirements.....	11
II.S.	Incapacity of Owner or Operators, Guarantors, or Financial Institutions.....	11
II.T.	PCB Management .....	11

### ATTACHMENTS

Attachment II-WAP .....	Waste Analysis Plan
Attachment II-PCB WAP .....	PCB Waste Analysis Plan
Attachment II-1 .....	Facility Plan View
Attachment II-2 .....	Security Plan
Attachment II-3 .....	Site Inspection Plan
Attachment II-4 .....	Personnel Training Plan
Attachment II-5 .....	Preparedness and Prevention
Attachment II-6 .....	Contingency Plan
Attachment II-7 .....	Closure/Post Closure Plan
Attachment II-8 .....	Supplemental Waste Management Plan



## **MODULE II - GENERAL FACILITY CONDITIONS**

### **II.A. APPLICABILITY**

The requirements of this permit module pertain to all regulated hazardous waste management units identified within this permit.

### **II.B. DESIGN AND OPERATION OF FACILITY**

- II.B.1. The Permittee shall design, construct, maintain and operate the facility to minimize the possibility of a fire, explosion, or release of hazardous waste to the air, soil, groundwater or surface water which could threaten human health or the environment.
- II.B.2. Any construction changes associated with a permitted waste management unit at the facility shall be documented by as-built drawings, and if a Class 2 or Class 3 modification, professional engineering certifications as required by the Director. After review of the as-built drawings and field verification of the facility's regulated waste management units, the Director will notify the Permittee in writing of any change which he concludes does not satisfy the operating requirements specified in this permit.
- II.B.3. A facility plan view that is applicable to the execution of this permit is located in Attachment II-1.

### **II.C. REQUIRED NOTICE**

- II.C.1. When the Permittee is to receive hazardous waste from an off-site source, the Permittee shall inform the generator in writing that it has the appropriate permits for, and will accept the waste that the generator is shipping. The Permittee shall keep an electronic or physical copy of this written notice as part of the Operating Record as required by Utah Admin. Code R315-264-73.

### **II. D. PERMITTED AND PROHIBITED WASTE**

- II.D.1. The following wastes are acceptable for treatment, storage and/or disposal at the Grassy Mountain Facility, except where noted:
- a. Waste with the codes identified in Appendix 3 of the Waste Analysis Plan.
  - b. Solid waste including household hazardous waste and non-RCRA regulated wastes.
  - c. Hazardous waste regulated under the Resource Conservation and Recovery Act (RCRA).

- d. Hazardous waste regulated under the Hazardous and Solid Waste Amendment (HSWA).
- e. Waste generated from Superfund (CERCLA) cleanups.
- f. PCBs and other wastes as authorized by the Toxic Substances Control Act (TSCA).
- g. RCRA/TSCA combined wastes.
- h. Corrective Action Management Unit-eligible (CAMU-eligible) waste as provided for in 40CFR264.555. CAMU-eligible wastes may be accepted for treatment and/or disposal at the GMF, provided that the conditions of Utah Admin. Code R315-8-21 (40CFR264.555 by reference) have been met, (which includes approval by the Director).
- i. Waste bearing the waste code F999. Wastes bearing a P999 waste code shall only be accepted if they are treatment residues which also bear the F999 waste.
- j. Wastes are accepted in a variety of physical forms, including liquids, sludges and solids. These wastes may not arrive in a 100% homogenous form.
- k. GMF may also temporarily (ten days or less) hold wastes manifested to another facility similar to that allowed in Utah Admin. Code R315-263-12. The first of the ten days will be counted as the first calendar day after the waste has been received at the GMF and end at midnight on the tenth day. This will be referred to as transfer operations. There are no restrictions on waste codes for transfer operations.

#### II.D.2. Prohibited Waste.

Waste Prohibited from Management at the Grassy Mountain Facility include the following and those that exhibit the following characteristics:

- a. Explosive wastes or materials (defined as DOT Forbidden, DOT Division 1.1, 1.2, 1.3, 1.4, 1.5, and 1.6 explosives).
- b. DOT Division 4.1(2) Type A and Type B materials, and in Utah Admin. Code R315-261-23(a)(6) through R315-261-23(a)(8), except for wastes that do not meet the RCRA definition of ignitability (D001) and/or reactivity (D003).
- c. Spontaneously combustible (pyrophoric and self-heating) wastes and materials, DOT Division 4.2 (Except in Lab Pack Quantities for storage only).
- d. Water reactive materials, DOT Division 4.3, (Except in Lab Pack Quantities for storage only or for treatment with prior approval of the Director).

- e. Shock sensitive materials.
- f. Radioactive waste, unless authorized for acceptance by the NRC or Utah Division of Radiation Control, whichever has jurisdiction over the waste.
- g. Infectious waste, as defined in the Utah Code Annotated, Title 19, Section 6, Subsection 102 and Condition I.F.F (Definitions).

## **II.E. GENERAL WASTE ANALYSIS**

- II.E.1. The Permittee shall comply with the procedures of the Waste Analysis Plan (WAP), found in Attachment II-WAP and Attachment II-PCB WAP. In addition, the Permittee shall comply with any other conditions involving waste analysis in Modules II, III, IV, V, VI and VII.
- II.E.2. Any laboratory the Permittee uses to perform analyses, which involve final waste disposal decisions, shall be performed by a suitable laboratory. A suitable laboratory is defined as a laboratory certified by the State of Utah, a laboratory that is NELAP approved, or a laboratory that is approved by the Director in writing to perform those analyses.  
  
The Permittee shall inform all outside contract laboratories performing analyses for the Permittee that it shall analyze waste under the WAP conditions set forth in this permit. For laboratories that do not meet conditions of the Permittee's WAP, the Director may grant an approval to still use that lab at the request of the Permittee. For parameters for which certification is unavailable, the laboratory shall provide quality control/quality assurance data sufficient to assess the validity of the data. The Permittee shall assess the quality of all data to assure that it meets or exceeds the requirements of the WAP.
- II.E.3. A unique number shall tie all analysis or data sheets produced by the Permittee to the profile sheet and the uniform hazardous waste manifest upon which that shipment of waste arrived at the Permittee's facility. Fingerprint analysis of shipments shall be recorded in the Operating Record and compared to tolerance ranges prescribed in the WAP. Tolerance exceeding these ranges (load discrepancy) shall be explained in the Operating Record if the waste in question is accepted. All load discrepancies shall be managed in accordance with the Waste Analysis Plan.
- II.E.4. The Director may reject any data if it is determined to be unreliable for any reason.
- II.E.5. The Permittee shall only use test methods described in the WAP or those equivalent procedures that satisfy Condition I.M.4. Changes in test methods described in the WAP, as a result of an improvement or refinement by the EPA or the State of Utah may be implemented without modification of the permit.



- II.E.7 .II.E.8. The Permittee may accept F020, F021, F022, F023, F026, F027, & F028 wastes for treatment and/or disposal only if the following conditions are met:
- II.E.8.a.. The wastes (F020, F021, F022, F023, F026, F027, & F028) shall be compliant with R315-268-41-, Land Disposal Restrictions (LDR) , or rendered compliant with the LDR, other land disposal requirements, or both, using permitted treatment and management techniques available at the facility prior to disposal.
- II.E.8.b. The wastes (F020, F021, F022, F023, F026, F027, & F028) shall be managed in accordance with the latest approved version of the Supplemental Waste Management Plan, Attachment II-8.
- II.E.8.c. If treated at the facility, the tanks in which the treatment occurred are emptied in order to meet the definition of empty, prior to placing a different waste in the tank, as defined in Utah Admin. Code R315-261-7(b)(1).
- II.E.9. If the facility accepts and treats TSCA/RCRA waste, the tanks in which treatment occurred are emptied by meeting the definition of empty for RCRA purposes and by triple-rinsing with a suitable solvent for TSCA purposes. The third and final rinsate shall be tested and confirmed to be < 50 ppm to be considered clean for TSCA purposes. Alternatively, the surfaces may be wipe sampled and confirmed to be < 10 ug/100 cm<sup>2</sup> to be considered clean.

## **II.F. SECURITY**

The Permittee shall comply with security conditions and procedures contained in Attachment II-2.

## **II.G. GENERAL INSPECTION REQUIREMENTS**

The Permittee shall follow the inspection schedule found in Attachment II-3 and other modules in this permit.

- II.G.1 Any malfunction or deterioration discovered by an inspection shall be corrected within 72 hours. If the remedy requires more time, the Grassy Mountain Facility shall submit to the Director, before the expiration of the 72-hour period, a proposed time schedule for correcting the problem. All corrective actions shall be completed in a timely manner. If a malfunction or deterioration is documented with a piece of equipment or a tank, the equipment/tank will be declared out-of-service. This will be noted on the inspection logs.
- II.G.2. Records of inspections shall be kept as required by Utah Admin. Code R315-264-15(d).

- II.G.3. All tests for tanks, landfill or impoundment leakage, corrosion or foundation integrity shall be certified by an independent, Utah registered, professional engineer qualified by experience and education in the appropriate engineering field.
- II.G.4. The Permittee shall continuously monitor wind speed and direction and daily precipitation. This information shall be kept as part of the Operating Record.
- II.G.5. Problems found during periodic inspections conducted under this module shall be corrected within the time frame stipulated in Condition II.G.1. If, upon determination by the Director or the Permittee, continued operation of the waste management unit involved in the inspection could endanger human health or the environment, the Permittee shall cease operation of the unit until the problem has been corrected. The Permittee shall be allowed to undertake those operations, which are part of corrective activities.
- II.G.6. The Permittee may make the following revisions to the Inspection Procedures (included as Attachment II-3 of this permit); in accordance with the procedures for Class 1 permit modifications, which require pre-approval from the Director, in accordance with Utah Admin. Code R315-270-42:
- II.G.6.a. Upon certification of closure of an individual hazardous waste management unit, any portion of the Inspection Plan specific to that unit, and not subject to post-closure activities, may be deleted from the inspection procedure.
- II.G.6.b. The Permittee may modify inspection requirements in an existing inspection form, table, figure or record in cases where such modifications will result in more comprehensive or detailed inspection procedures.
- II.G.6.c. If necessary, the Permittee shall create additional inspection forms, tables, figures or records to address inspection requirements for equivalent replacement equipment that will be routinely inspected.

## **II.H. PERSONNEL TRAINING**

The Permittee shall conduct personnel training as required by Utah Admin. Code R315-264-16. This training program shall follow the outline found in Attachment II-4. New personnel working with or around hazardous waste shall complete the required personnel training within six months after their hire date or assignment to the facility. Personnel assigned to a different job function shall receive training in their new job function(s) within 30 days of re-assignment. In addition, the Permittee shall comply with the following conditions:

- II.H.1. Facility personnel shall take part in an annual review of their initial training for contingency, radiation control (if applicable) and hazardous waste management procedures relevant to the positions in which they are employed.

II.H.2. The Permittee shall maintain training documents and records as required by Utah Admin. Code R315-264-16(d) and Utah Admin. Code R315-264-16(e), in accordance with the Training Plan in Attachment II-4. These records shall clearly indicate the person being trained, the employee's position, job description, and the type and amount of training received.

II.H.3. The Permittee shall maintain a copy of the Training Plan at the facility until the facility is fully closed and closure is certified.

## **II.I. GENERAL REQUIREMENTS FOR IGNITABLE, REACTIVE, OR INCOMPATIBLE WASTE**

II.I.1. The Permittee shall comply with the requirements of Utah Admin. Code R315-264-17 and the requirements of all applicable National Fire Protection Association (NFPA) codes.

II.I.2. In addition to the requirements of Utah Admin. Code R315-264-17, the Permittee shall comply with the conditions of Modules III, IV, V, VI and VII pertaining to ignitable, reactive or incompatible wastes.

## **II.J. LOCATION STANDARDS**

It has been determined that this facility has met the location standards specified by Utah Admin. Code R315-264-18.

## **II.K. PREPAREDNESS AND PREVENTION**

II.K.1. Required Equipment. At a minimum, the Permittee shall equip and maintain at the facility, the emergency equipment set forth in Attachment II-5 as required by Utah Admin. Code R315-264-32.

II.K.2. Testing and Maintenance of Equipment. The Permittee shall test and maintain the equipment specified in Condition II.K.1. as required by Utah Admin. Code R315-264-33.

II.K.3. The Permittee shall maintain records of these preventative maintenance and repair activities specified in Condition II.K.2. and shall keep schedules, reflecting minimum and planned frequency for the performance of preventative maintenance activities in the Operating Record at the facility in accordance with Condition I.M.

II.K.4. Inspection of Safety and Emergency Equipment. The Permittee shall inspect the safety and emergency equipment as required by Utah Admin. Code R315-264-15(b) and at the frequencies defined in Attachment II-3.

- II.K.5. Access to Communications or Alarm System. The Permittee shall maintain access to the communications or alarm systems as required by Utah Admin. Code R315-264-34.
- II.K.6. Required Aisle Space. At a minimum, the Permittee shall maintain aisle space as specified in Condition III.F.2 as required by Utah Admin. Code R315-264-35.
- II.K.7. Arrangements with Local Authorities. The Permittee shall attempt to make emergency plan arrangements with state and local authorities as required by Utah Admin. Code R315-264-37. If state or local officials refuse to enter into preparedness and prevention arrangements with the Permittee or the arrangements change, the Permittee shall document this refusal or change in the Operating Record. The Director shall be notified in writing within 30 days of any change to local emergency agreements.

## **II.L. CONTINGENCY PLAN**

- II.L.1. Implementation of Plan. The Permittee shall immediately carry out the provisions of the Contingency Plan, Attachment II-6, and follow the emergency procedures described by Utah Admin. Code R315-264-56 whenever there is a fire, explosion or release of a reportable quantity of hazardous waste. The Permittee shall comply with Condition I.R. in reporting releases to the Director.
- II.L.2. Copies of Plan. The Permittee shall comply with the requirements of Utah Admin. Code R315-264-53, by providing copies of the Contingency Plan to emergency agencies who may be called in an emergency, maintaining a copy of the Plan at the facility, and by providing a copy upon request.
- II.L.3. Amendments to Plan. The Permittee shall review the Contingency Plan in accordance with Utah Admin. Code R315-264-54. The Permittee shall modify, if necessary, the Contingency Plan, as specified by Utah Admin. Code R315-270-41 and Utah Admin. Code R315-270-42.
- II.L.4. Emergency Coordinator. A trained emergency coordinator shall be available at all times in case of an emergency, as required by Utah Admin. Code R315-264-55. The names, addresses, and telephone numbers of all persons qualified to act as emergency coordinators shall be supplied to the Director and shall be kept up-to-date.

## **II.M. MANIFEST SYSTEM**

- II.M.1. The Permittee shall comply with the manifest requirements of Utah Admin. Code R315-262-50 and Utah Admin. Code R315-264-70. The manifest number shall be recorded in the Operating Record with each load that arrives at the Permittee's facility.

- II.M.2. Wastes shall not be received that have not completed the pre-acceptance notification outlined in Condition II.C.1.
- II.M.3. Hazardous waste shipments that are received without a hazardous waste manifest shall either be rejected from the site and the refusal documented in the Operating Record, or accepted, and within 15 working days after receipt of the waste, the facility shall file an Unmanifested Waste Report with the Director as required by Condition I.V. and Utah Admin. Code R315-264-76.
- II.M.4. The Director may request copies of manifests or manifest summaries. The request will be submitted by letter and shall stipulate the format and the time frame for the facility's response to this request. The Permittee shall maintain the manifests for a five-year period.

## **II.N. RECORDKEEPING AND REPORTING**

- II.N.1. The Permittee shall maintain an accurate written Operating Record at the facility in accordance with Utah Admin. Code R315-264.73.
- II.N.2. The Permittee shall, by March 1 of each year, submit to the Director a certification pursuant to Utah Admin. Code R315-264-73(b)(9) incorporated by reference, signed by the owner or operator of the facility or his authorized representative that the Permittee has a waste minimization program in place to reduce the volume and toxicity of hazardous waste that he generates to the degree determined by the Permittee to be economically practicable; and that the proposed method of treatment, storage or disposal is the most practicable method currently available to the Permittee which minimizes the present and future threat to human health or the environment.
- II.N.3. The Permittee shall comply with the biennial report requirements of Condition I.W., by March 1 of each even-numbered reporting year. The report shall include wastes generated, treated and stored at the Permittee's facility during the previous odd-numbered year.
- II.N.4. The Permittee shall submit additional reports to the Director in accordance with Utah Admin. Code R315-264-77.
- II.N.5. All reports, notifications, applications, or other materials required to be submitted to the Director shall be submitted at the address shown in Condition I.BB.
- II.N.6. All reporting and activity days are calendar days unless noted otherwise.

## **II.O. CLOSURE/POST-CLOSURE**

- II.O.1. Performance Standard. The Permittee shall close the facility as required by Utah Admin. Code R315-264-110 through R315-264-120 and Attachment II-7. For future management units not included in the Closure and Post Closure Plan in Attachment

II-7, a new Closure Plan shall be submitted as part of the permit modification. Any requests for new hazardous waste management units, expansions or modifications to the operating plan shall be submitted with a revised Closure and Post Closure Plan.

- II.O.2. Amendment to Closure/Post-Closure Plan. The Permittee shall amend the Closure/post-Closure Plan in accordance with Utah Admin. Code R315-264-112 whenever necessary or when required to do so by the Director. The Permittee shall submit the modified plan to the Director within 60 days of the Director's request or within 30 days if the change in facility conditions occurs during partial or final closure.
- II.O.3. Minor Changes. For all hazardous waste management units, minor deviations from the permitted Closure Plan procedures necessary to accommodate proper closure shall be described in narrative form with the closure certification statements. The Permittee shall describe the rationale for implementing minor changes as part of this narrative report. The Permittee shall submit the certification statements and narrative report to the Director within 60 days after completion of closure of each hazardous waste management unit.
- II.O.4. Notification of Closure. The Permittee shall notify the Director in writing at least 90 days prior to the commencement of the final closure of any land disposal, treatment or storage unit or of final closure of the facility in accordance with Utah Admin. Code R315-264-112. The EPA Assistant Regional Administrator for Region 8 shall also be notified when any of the units identified in Attachment II-7 are to be closed.
- II.O.5. Time Allowed for Closure. Within 180 days after receiving the final volume of hazardous waste from an off-site source, the Permittee shall complete partial or final closure of a waste management unit(s) or the facility, unless an alternative schedule has been approved by the Director, in accordance with the conditions and closure techniques specified in Attachment II-7 and Utah Admin. Code R315-264-113. The Director may approve an extension to the closure period if the permit modification complies with the provisions listed in Utah Admin. Code R315-264-113(b).
- II.O.6. Disposal of Contaminated Equipment, Structures and Soil. The Permittee shall decontaminate all facility equipment, structures and soil as outlined in Attachment II-7. Any facility equipment, structure, soil and rinsate which has not been decontaminated and has not been land filled on site, shall be taken to a permitted hazardous waste treatment, storage or disposal facility.
- II.O.7. Certification of Closure. Within 60 days of completion of closure of a waste management unit or the facility the Permittee shall submit, by registered mail or other proof of delivery, certification that the facility has been closed in accordance with the specifications in the approved Closure Plan, Attachment II-7 and Utah Admin. Code R315-264-115. An independent, registered professional engineer qualified by experience and education in the appropriate engineering field shall sign the certification.

II.O.8. Post-Closure. The post-closure period shall commence upon certification of closure as identified in Condition II.O.7 and shall continue for a minimum period of 30 years. Post-closure activities shall follow the requirements of Utah Admin. Code R315-264-117, Module IX and Attachment II-7.

II.O.9. Survey Plat. Along with the certification of closure for either a disposal unit or the entire facility, a survey plat shall be provided to the Director in accordance with Utah Admin. Code R315-264-116. This plat shall be submitted within the same time frame as the certification of closure defined in Condition II.O.7.

## **II.P. COST ESTIMATES FOR THE FACILITY CLOSURE/POST CLOSURE**

II.P.1. The Permittee's closure/post closure cost estimate shall be prepared and maintained in accordance with Utah Admin. Code R315-264-142 and R315-264-144.

II.P.2. The Permittee shall adjust the closure/post-closure cost estimate for inflation as specified by Utah Admin. Code R315-264-142(b) and R315-264-144(b) each year and submit a copy of that adjusted cost estimate to the Division of Solid and Hazardous Waste by May 15th of each year. The latest adjusted closure/post-closure cost estimate shall be documented in the Operating Record. Before each new hazardous waste management unit is placed in operation, an updated closure/post-closure cost estimate including the new unit shall be prepared. This revised cost shall be submitted at least 60 days prior to placing the unit in operation. A revised closure/post-closure cost estimate shall be submitted to the Director 60 days after an unexpected event that affects the Closure Plan,

II.P.3. The Permittee shall revise the closure or post-closure cost estimate within 30 days after the Director has approved the request to modify the facility Closure Plan.

II.P.4. The Permittee shall keep the latest, approved closure cost estimate at the facility.

## **II.Q. FINANCIAL ASSURANCE FOR FACILITY CLOSURE**

II.Q.1. The Permittee shall demonstrate continuous financial assurance compliance by providing a third party financial assurance certification of at least the amount of the closure/post-closure cost estimates established in Condition II.P. The Permittee may substitute other instruments of financial assurance provided the method, funding and wording requirements of Utah Admin. Code R315-8-8 are followed and approved by the Director.

II.Q.2. The financial assurance document shall be updated within 60 days of the annual adjustment for inflation or within 60 days of the approval of a revised closure/post-closure cost estimate in accordance with Utah Admin. Code R315-8-8.

## **II.R. LIABILITY REQUIREMENTS**

- II.R.1. The Permittee shall demonstrate continuous compliance with the liability requirements of Utah Admin. Code R315-264.147. The Permittee shall have and maintain hazardous waste liability coverage for sudden and accidental occurrences in the amount of at least \$1 million U.S. dollars per occurrence with an annual aggregate of at least \$2 million U.S. dollars, exclusive of legal defense costs, and maintain hazardous waste liability coverage for non-sudden and accidental occurrences in the amount of at least \$3 million U.S. dollars per occurrence with an annual aggregate of \$6 million U.S. dollars, exclusive of legal defense costs. A total coverage of \$4 million U.S. dollars with an annual aggregate of \$8 million U.S. dollars shall be maintained for compliance. The Permittee shall submit an approved certificate of hazardous waste liability insurance worded as required by Utah Admin. Code R315-264-151 within 30 days of the receipt of the updated certificate of insurance.
- II.R.2. Changes in liability coverage mechanisms shall be approved by the Director 60 days prior to such a change.

## **II.S. INCAPACITY OF OWNER OR OPERATORS, GUARANTORS, OR FINANCIAL INSTITUTIONS**

The Permittee shall comply with the notification and financial requirements of Utah Admin. Code R315-264-148.

## **II.T. PCB MANAGEMENT**

The Permittee shall comply with the polychlorinated biphenyl (PCB) management procedures found in Module X, Attachment II-PCB WAP and the Attachments X-1 through X-6.



## **MODULE III**

### **STORAGE AND TREATMENT IN CONTAINERS**



**TABLE OF CONTENTS**

MODULE III - STORAGE AND TREATMENT IN CONTAINERS	Page
III.A. APPLICABILITY .....	1
III.B. WASTE IDENTIFICATION .....	1
III.C. CONDITION OF CONTAINERS .....	1
III.D. COMPATIBILITY OF WASTE WITH CONTAINERS .....	2
III.E. MANAGEMENT OF CONTAINERS .....	2
III.F. CONTAINER MANAGEMENT BUILDING CONTAINMENT AREAS AND CAPACITIES ...	3
III.G. BULK SOLID STORAGE AREA .....	4
III.H. LEACHATE BUILDING.....	4
III.I. SPECIAL REQUIREMENTS, IGNITABLE OR REACTIVE WASTES.....	5
III.J. SPECIAL REQUIREMENTS FOR INCOMPATIBLE WASTE.....	5
III.K. IDENTIFICATION OF LOCATION OF CONTAINERS IN OPERATING RECORD .....	5
III.M. CONSTRUCTION OF NEW UNITS.....	6
III.N. CLOSURE/POST CLOSURE .....	6

ATTACHMENT III-1:           CONTAINER MANAGEMENT BUILDING AND  
  STORAGE AREA DRAWINGS

ATTACHMENT III-2:           POLICY AND PROCEDURES FOR MANAGING HIGH VOC WASTES  
  UNDER SUBPART CC



## **MODULE III - STORAGE AND TREATMENT IN CONTAINERS**

### **III.A. APPLICABILITY**

- III.A.1. The requirements of this permit module pertain to the operation of hazardous waste container storage areas at the Grassy Mountain facility. The Permittee shall comply with Utah Admin. Code R315-264-170 and all conditions of this permit. For the purposes of this permit, the Container Management Building, the Bulk Solid Storage Areas (BSSA), and the Leachate Building are designated hazardous waste storage areas.
- III.A.2. All containers of hazardous waste shall be managed in accordance with this module.
- III.A.3. PCBs in containers shall be managed in accordance with Module X, the Waste Management Plan for Polychlorinated Biphenyls.
- III.A.4. When PCB wastes are stored in the Container Management Building, the conditions of this module are applicable.
- III.A.5. Containers of RCRA/TSCA waste may be stored in the permitted storage areas. Such containers are subject to the conditions of this module.
- III.A.6. Containers with the EPA waste code D001 (for ignitability) shall not be profiled to the Grassy Mountain Facility.

### **III.B. WASTE IDENTIFICATION**

- III.B.1. The Permittee may store the wastes listed in Attachment II-WAP Appendix 3 column 2,"containers", subject to the terms of this permit.
- III.B.2. Waste or material identified in Condition II.D.1 may be stored and/or treated in containers at the Grassy Mountain Facility.

### **III.C. CONDITION OF CONTAINERS**

- III.C.1. If a container holding hazardous waste is not in good condition (e.g., severe rusting, bulging, apparent structural defects) or it begins to leak, the Permittee shall transfer the hazardous waste from such container, or the container of hazardous waste itself, into a container that is in good condition or manage the waste in some other way that complies with the requirements of Utah Admin. Code R315-264-171. This shall be completed as soon as possible, but no later than 24 hours from the time the problem was first discovered and noted in the Operating Record.

- III.C.2. Facility personnel shall ensure that the replacement containers referenced in Condition III.C.1. are sufficiently labeled to allow identification and tracking of the waste while it is managed at the facility.
- III.C.3. Contents of leaking or damaged containers may be emptied directly into treatment processes providing all appropriate fingerprint analyses, and additional analysis (if necessary) have been performed.

#### **III.D. COMPATIBILITY OF WASTE WITH CONTAINERS**

The Permittee shall assure that the waste is compatible with the containers as required by Utah Admin. Code R315-264-172.

#### **III.E. MANAGEMENT OF CONTAINERS**

- III.E.1. Containers shall always remain closed except when the Permittee is adding or removing material from containers as allowed by Utah Admin. Code R315-264-173. The Permittee shall not store or move containers in a way that may cause the containers to leak.
- III.E.2. The Permittee shall place the hazardous waste from the transport vehicle into storage or onto another transport vehicle for shipment to another facility within ten days from arrival at the site. Arrival, for purposes of this permit, will be the day the transport vehicle comes through the gate of the Grassy Mountain Facility.
- III.E.3. Containers may be off-loaded directly into treatment or disposal processes without first being placed in storage providing all inspection, analytical and treatment requirements of this permit have been satisfied.
- III.E.4. The Permittee may store LDR wastes for a period of one year for the purpose of accumulation to facilitate proper treatment or disposal. Justification for storage of these prohibited wastes beyond one year shall be included in the Operating Record as required by Utah Admin. Code R315-268-50 and a letter with the justification provided to the Director of the Division of Solid and Hazardous Waste.
- III.E.5. Containers with waste codes F999 or F999/P999 are not required to be opened for a visual inspection and sampling provided the generator certifies that the container is at least 90% full, contains no free liquids and requires no treatment. This certification statement shall be incorporated into the operating record.
- III.E.6. Should, upon arrival, a container tests positive for ignitability (D001), the Grassy Mountain Facility shall reject the container or obtain a new profile for continued management of the container, including shipment to another facility. Containers that have the EPA waste code D001 for ignitability shall be segregated on Top Dock 1, not exceed 50 in number, and not remain at the Grassy Mountain Facility for longer than 30 days.

### **III.F. CONTAINER MANAGEMENT BUILDING CONTAINMENT AREAS AND CAPACITIES**

- III.F.1. The Permittee shall manage the container management facilities in accordance with the Utah Admin. Code R315-264-175. For purposes of this section, a container shall be considered full when calculating the number of gallons stored. The Permittee may store the following quantities of hazardous wastes and/or RCRA/TSCA wastes:
- III.F.1.a. Dock 1 - maximum capacity 18,850 gallons of liquid waste in containers; (This area is also named as "Top Dock 1" or "TD01" in facility records.)
- III.F.1.b. Pad 2 - maximum capacity 66,000 gallons of waste in containers; (This area is subdivided into two container management sub-areas known as the "North Pad" or "NP01" and the "South Pad" or "SP01" in facility records.) Each "Pad" has sufficient containment capacity to store the maximum capacity permitted.
- III.F.1.c. Pad 3A - maximum capacity 20,900 gallons of waste in containers. (This area is also referred to as "Top Dock 2" or "TD02" in facility records.)
- III.F.1.d. Pad 3B - maximum capacity 20,900 gallons of waste in containers. (This area is also referred to as the "Sample Pad" or "SPAD" in facility records.)
- III.F.1.e. Dock 1, Pad 2 and Pads 3A and 3B shall not be for 90-day storage or satellite storage areas.
- III.F.2. The minimum allowable aisle space shall be two feet six inches except along building walls that may be one foot six inches.
- III.F.2.a. Containers may not be stored more than eight feet high as measured from the floor to the top of the uppermost container.
- III.F.3. All containers of non-hazardous waste stored on Dock 1, Pad 2 or Pad 3 will be considered full of liquid hazardous waste for the purposes of determining compliance with containment standards.
- III.F.4. Container management area sumps shall be inspected in accordance with, Attachment II-3 for presence of liquids. If liquids are discovered in the sump, the Permittee shall determine the source and note this in the inspection log. Any liquids discovered in the sump shall be removed within 24 hours and managed as hazardous waste in accordance with all applicable requirements of this permit.
- III.F.5. All run-off from container storage and management areas identified in Condition III.F.1. shall be collected, analyzed for hazardous wastes characteristics and constituents and disposed of according the applicable portions of the permit.

III.F.6. Any time the facility plans to increase storage capacities, the Permittee shall submit secondary containment calculations to demonstrate compliance with the secondary containment requirements specified in Utah Admin. Code R315-264-175. Any changes to storage capacities shall be subject to the permit modification requirements specified in Utah Admin. Code R315-270-42. and Section I.D of Module I of this permit.

### **III.G. BULK SOLID STORAGE AREA**

III.G.1. The Bulk Solid Storage Area (BSSA) is permitted to store only non-liquid waste in bulk transport containers, such as gondolas, end dumps, and roll-off containers. The BSSA consists of the east (BSSA-E) and west (BSSA-W) areas and both heat tents (HT-L and HT-S), as indicated in the facility plan view located in Attachment II-1. Information concerning the configuration of the BSSA is shown in Attachment III-1.

III.G.1.a. For purposes of determining compliance with storage capacities, all containers shall be considered full of hazardous waste.

III.G.2. Non-liquid waste received in bulk transport containers shall not be stored for a period that exceeds one year.

III.G.3. All containers located in the BSSA shall be inspected daily in accordance with Utah Admin. Code R315-264-174 and managed in accordance with Utah Admin. Code R315-264-173.

III.G.4. Each of the four storage areas that make up the BSSA may store up to the following quantities:

III.G.4.a. Bulk Solid Storage Area - East (BSSA-E) may store up to 600 cubic yards.

III.G.4.b. Bulk Solid Storage Area - West (BSSA-W) may store up to 1,600 cubic yards.

III.G.4.c. Heat Tent - Large (HT-L) may store up to 280 cubic yards.

III.G.4.e. Total bulk solid storage shall not exceed 2, 640 cubic yards, including the volume of waste identified in Condition III.E.3.

### **III.H. LEACHATE BUILDING**

The Leachate Building is the location where leachate is transferred to and from the Leachate Tanks. The leachate collected is accumulated in the tanks, until it is shipped off site for disposal.

In addition to providing containment for leachate transfers, the Leachate Building is permitted to store hazardous and PCB waste. The building is approved to store one



road tanker, not to exceed 6,000 gallons, or one roll-off box (or gondola) not to exceed 30 cubic yard in capacity.

Location of waste stored in the Leachate Building shall be documented in the operating record, as described in Section III.K. below.

### **III.I. SPECIAL REQUIREMENTS, IGNITABLE OR REACTIVE WASTES**

- III.I.1. The Permittee shall not locate containers holding ignitable or reactive waste within 50 feet of the facility's property line. The Permittee shall comply with Utah Admin. Code R315-264-176.
- III.I.2. The Permittee shall electrically ground all containers holding ignitable liquid wastes whenever wastes are added to or removed from those containers (except for sampling).

### **III.J. SPECIAL REQUIREMENTS FOR INCOMPATIBLE WASTE**

- III.J.1. The Permittee shall not place incompatible wastes in the same container. The Permittee shall comply with Utah Admin. Code R315-264-177(a).
- III.J.2. The Permittee shall not place hazardous waste in an unwashed container that previously held an incompatible waste or material in accordance with R315-264-177(b) nor store incompatible waste in containers separated from each other with a berm, wall or other means in accordance with R315-264-177(c).

### **III.K. IDENTIFICATION OF LOCATION OF CONTAINERS IN OPERATING RECORD**

During the receiving process, and prior to placement into storage, a Grassy Mountain Facility barcode label is affixed to each container. Each label has a unique number used for tracking the container from receipt to disposal. The Permittee shall record and maintain the location of all hazardous waste containers when they are placed in storage or relocated in the container management building or relocated elsewhere at the facility. The location record of all containers shall show the specific location with coordinates showing pad area and row for each container in the management area. Location records shall be updated each day the storage area is operational. Records shall be maintained for all containers removed from storage showing the status of the container regarding treatment, disposal or disposition. For bulk transport containers the inventory record shall show the area in which each is stored (i.e. BSSA-E, BSSA-W, HT-L, or Leachate Building).

### **III.L. INSPECTIONS**

- III.L.1 The Permittee shall conduct daily inspections (when storage areas are staffed) of the container storage areas identified in Condition III.A. of this permit in accordance with the schedule outlined in Attachment II-3. Inspection requirements, as specified in Condition II.G and Utah Admin. Code R315-264-174, shall be followed.
- III.L.2 Special Inspections of Containers of High VOC Wastes; Containers of high VOC wastes shall be inspected in accordance with Attachment III-2, “Policy and Procedures for Managing High VOC Wastes under R315-264-1080 through R315-264-1091”, for proper fit and tightness of covers unless it is emptied within 24 hours of receipt and if not, no later than the day the manifest is signed.

### **III.M. CONSTRUCTION OF NEW UNITS**

The Permittee shall comply with Conditions I.O, covering planned changes, and I.P, certification of new construction and modifications. All new container management systems and modification to existing systems shall also meet containment and leak detection requirements specified in Utah Admin. Code R315-264-175.

### **III.N. CLOSURE/POST CLOSURE**

The Permittee shall close the container storage areas in accordance with Utah Admin. Code R315-264-110 through R315-264-114 and Utah Admin Code R315-264-178 and Condition II.O.

## **MODULE IV**

### **STORAGE AND TREATMENT IN TANKS**



**TABLE OF CONTENTS**

**MODULE IV**

**TABLE OF CONTENTS**

**IV.A. APPLICABILITY..... 1**  
**IV.B. WASTE IDENTIFICATION AND TANK USAGE ..... 1**  
**IV.C. GENERAL OPERATING REQUIREMENTS..... 3**  
**IV.D. SPECIFIC OPERATING REQUIREMENTS..... 4**  
**IV.E. SPECIAL REQUIREMENTS FOR IGNITABLE OR REACTIVE WASTES ..... 4**  
**IV.F. SPECIAL REQUIREMENTS FOR INCOMPATIBLE WASTES ..... 4**  
**IV.G. INSPECTION REQUIREMENTS..... 5**  
**IV.H. NEW AND MODIFIED TANK SYSTEMS ..... 6**  
**IV.I. RESPONSE TO LEAKS OR SPILLS ..... 6**  
**IV.J. CLOSURE AND POST-CLOSURE CARE ..... 7**

**(All Attachments Referenced in Module IV of the Permit are located in Volume-2)**

**Attachment IV-1.....Tank System Designs, Assessments, Drawings and Specifications**  
**Attachment IV-2..... Stabilization Reagent List**



## MODULE IV - STORAGE AND TREATMENT IN TANKS

### IV.A. APPLICABILITY

The requirements of this module pertain to the storage and treatment of hazardous waste in the tank systems identified in Condition IV.B. The Permittee shall comply with Utah Admin. Code R315-264-190 through R315-264-200 and the conditions of this permit for all tank systems. Management of PCB in tanks shall be accordance with Module X of this permit.

### IV.B. WASTE IDENTIFICATION AND TANK USAGE

- IV.B.1. CERCLA Hazardous Wastes. The Permittee may receive wastes that arrive without ~~E-P-A~~ waste code numbers, provided that these wastes are from remediation sites regulated under CERCLA and they comply with all CERCLA off-site management policies. These wastes shall be managed as hazardous wastes and are subject to the terms of this permit.
- IV.B.2. RCRA/TSCA Wastes. The Permittee may receive wastes that arrive with EPA waste codes and are also regulated by TSCA. These wastes are subject to the terms of this permit.
- IV.B.3. The Permittee shall only treat or store hazardous wastes or RCRA/TSCA wastes in the tanks specified in Conditions IV.B.6 and IV.B.7, subject to the terms of this permit and the Land Disposal Restriction (LDR) treatment standards specified in Utah Admin. Code R315-268.
- IV.B.4. Waste that has an average volatile organic compound concentration of greater than or equal to 500 ppmw shall not be treated or stored in tanks.
- IV.B.5. Waste shall not be stored in a tank unless the material of construction of the tank is compatible with the waste.
- IV.B.6. Waste Stabilization Tanks 122-TN-001, -002 and -003
- IV.B.6.a. Each tank is twenty feet long by twenty feet wide by eight feet high (23,936 gallons capacity) and is constructed of carbon steel.
- IV.B.6.b. The Permittee shall only treat the hazardous wastes listed in Attachment II-WAP Appendix 3 in Waste Stabilization Tanks 122-TN-001, 122-TN-002 and 122-TN-003.
- IV.B.6.c. All waste shall be removed from the stabilization tanks following the treatment process, utilizing the normal method of waste removal. Treatment of hazardous waste shall commence before the end of the shift during which the waste is placed

in a tank. The treatment process shall not exceed 72 hours. If there is waste remaining in the tank that cannot be removed by the normal method of waste removal, the Permittee shall apply the EPA waste codes of the batch of waste not entirely removed, to the subsequent load(s) processed in the tank.

If there is RCRA/TSCA waste remaining in the tank that cannot be removed by the normal method of waste removal, then the Permittee shall consider all subsequent load(s) processed in the tank as PCB.

- IV.B.6.d. The waste management practices specified in the Special Waste Management Plan in Attachment II-8 shall apply to wastes F020, F021, F022, F023, F026, F027 and F028.
- IV.B.6.e. The maximum level of reagent and waste to be treated in the stabilization tanks shall be no more than five feet or 15,000 gallons. The five-foot level shall be marked on the inside of each stabilization tank. No waste shall splash over the sides of the tank.
- IV.B.7.f. For restabilization, an increased volume of waste and reagent may be placed into a tank as long as 4,150 gallons of freeboard (one foot five inches) is maintained (19,697 gallons of waste/reagent). This will accommodate the precipitation from a 25-year, 24-hour storm event and leave enough space to prevent the waste from splashing over the sides of the tanks.
- IV.B.7. Leachate Storage Tank 119-TN-002
- IV.B.7.a. Design – Tanks 119-TN-002 is twelve feet in diameter and twenty feet high (maximum allowable capacity 17,000 gallons per tank). The tanks is constructed of carbon steel.
- IV.B.7.b. The Permittee shall only store run-off containment waters from secondary containment, non-hazardous wastewaters, multi-source leachate (F039), and TSCA\RCRA leachate (combination multi-source leachate from Cell B/6) in Storage Tank 119-TN-002. Treatment is not allowed in this tank.
- IV.B.8. Wheel Wash Tanks
- IV.B.8.a. There are wheel wash facilities located at the exit of Cells B\6, 7 and 8. The tanks. have the following capacities:
  - Cell B/6 – 4,000 gallons
  - Cell 7 – 3,000 gallons
  - Cell 8 – 3,000 gallons



## **IV.C. GENERAL OPERATING REQUIREMENTS**

- IV.C.1. The Permittee shall place waste in the Stabilization Tanks for the purpose of treatment or storage as specified in the conditions of Section IV.B. of this module.
- IV.C.2. The treatment of hazardous wastes in the tanks identified in the conditions of Section IV.B. of this module, shall meet all treatment standards specified in Utah Admin. Code R315-268.
- IV.C.3. The Permittee shall use the controls and good practices to prevent spills and overflows from each tank system, as specified in Attachment II-5, "Preparedness and Prevention."
- IV.C.4. In the event of an equipment or power failure, the Permittee shall stop adding waste to the affected tank system.
- IV.C.5. The Permittee shall comply with the requirements specified in Utah Admin. Code R315-264-193 when there has been a leak or spill from a tank or tank system that is unfit for use.
- IV.C.6. The Permittee shall comply with the requirements specified in the facility Contingency Plan, Attachment II-6, when there has been a release from a tank system that threatens human health or the environment.
- IV.C.7. The Permittee shall notify the Director as soon as possible, but no later than 24 hours after detection of a release of a reportable quantity, as defined in Utah Admin. Code R315-263-30, from a tank system to the environment.
- IV.C.8. The Permittee shall submit a report identifying details of the release, to the Director within 15 days of detection of a release to the environment.
- IV.C.9. The Permittee shall repair a tank system from which there has been a leak or spill or close the tank, if it is unfit for use, as specified in Utah Admin. Code R315-264-196.
- IV.C.10. In accordance with R315-264-196, before a repaired tank or ancillary piping system is returned to service, it shall be certified by a qualified, independent Utah registered professional engineer, that the repaired equipment is capable of safely managing hazardous waste without release. The Permittee shall submit the tank certification report to the Director within seven days of returning the repaired system to service.
- IV.C.11. A qualified, independent Utah registered professional engineer shall certify any tank that has been out of service for 360 days. The certification shall state the tank system is capable of safely managing hazardous waste without release. The Permittee shall have this certification performed before the tank is put back into

service. , The Permittee shall submit the certification report to the Director within seven days of returning the tank system to service.

#### **IV.D. SPECIFIC OPERATING REQUIREMENTS**

- IV.D.1. All F039 leachate shall meet the LDR treatment standards specified in Utah Admin. Code R315-268 before final disposal at the facility.
- IV.D.2. RCRA/TSCA waste that has PCB as an Underlying Hazardous Constituent (UHC) shall meet the LDR treatment standards specified in Utah Admin. Code R315-268-48, Table UTS-Universal Treatment Standards before final disposal at the facility. In the event the PCB concentration does not meet the LDR treatment standard (when present as an UHC) the Grassy Mountain Facility will follow the site-specific treatment variance procedures in Utah Admin. Code R315-268-44.
- IV.D.3. All hazardous waste residues from incineration and thermal treatment that are stored or treated in the tank system identified in Condition IV.B. shall meet land disposal restrictions prior to final disposal at the facility.
- IV.D.4. Waste code tracking in the stabilization tanks and tank decontamination of the tanks following the treatment of RCRA or RCRA/TSCA waste streams shall be done in accordance with Section 8 of the Waste Analysis Plan.
- IV.D.5. Non-hazardous waste water can be used as makeup water for the stabilization process provided that all applicable portions of the permit are followed. If the water is stored, it can be stored in one double-walled frac tank located adjacent to the east stabilization tank.

#### **IV.E. SPECIAL REQUIREMENTS FOR IGNITABLE OR REACTIVE WASTES**

- IV.E.1. Ignitable or reactive waste shall not be placed in a tank system unless the provisions of Utah Admin. Code R315-264-17 and Utah Admin. Code R315-264-198 are met.
- IV.E.2. The Permittee shall record compliance with Condition IV.E.1., as required by Utah Admin. Code R315-264-17 and place this documentation in the facility Operating Record.
- IV.E.3. The Permittee shall maintain the safety separation distance around tank systems as specified in the most recent version of the Uniform Building Code.
- IV.E.4. The Permittee shall ground all rail cars (applicable to rail unloading areas) and truck tankers during the unloading of ignitable waste, to an effective and secure earth ground by means of a heavy clamp and cable prior to and during unloading.

#### **IV.F. SPECIAL REQUIREMENTS FOR INCOMPATIBLE WASTES**

- IV.F.1. Incompatible waste shall not be placed in a tank system unless the provisions of Utah Admin. Code R315-264-17 and Utah Admin. Code R315-264-199 are met.
- IV.F.2. Wastes or other material may be stored in a tank or tank system only if it is compatible with the wastes already stored or placed in the tank, and compatible with the tank or tank system construction material.
- IV.F.2.a. The Permittee shall not store acids or oxidizing halides in any carbon steel tank systems.
- IV.F.3. The Permittee shall not store hazardous wastes, treatment reagents, or other materials in any of the tank systems if they could cause the tank, its ancillary equipment, or a containment system to rupture, leak, corrode, or otherwise fail.
- IV.F.4. The Permittee shall not place hazardous waste in a tank system that has not been decontaminated and that previously held an incompatible material. Decontamination solutions generated from cleaning tank systems shall be considered a hazardous waste and shall be managed appropriately. The requirements for incompatible wastes identified in Utah Admin. Code R315-264-17 shall apply.
- IV.F.5. The Permittee shall record compliance with Condition IV.F.4. as required by Utah Admin. Code R315-267-17 and place this documentation in the facility Operating Record.

#### **IV.G. INSPECTION REQUIREMENTS**

- IV.G.1. The Permittee shall comply with the inspection requirements specified in Utah Admin. Code R315-264-195, Condition II.G. and the Tank Inspection Schedules as shown in Attachment II-3; except that only active tanks need to be inspected and the tank heating coils need only be inspected on an annual basis.
- IV.G.2. The Waste Stabilization Tank Systems, Tanks 122-TN-001, 122-TN-002 and 122-TN-003, shall be inspected for leaks at least once during each operating day. Any liquids accumulated in the annulus between the inner and outer shells shall be removed, analyzed, and managed in accordance with this permit.
- IV.G.3. All active tank systems identified in Condition IV.B., shall be certified by a qualified, independent Utah registered, professional engineer, at least once every September. The certification shall state the tank system is capable of handling hazardous waste without release and can safely manage hazardous waste. The certification report shall be incorporated into the Operating Record and submitted to the Director within 60 days of the inspection.

IV.G.4. For each tank system found unfit for use as a result of the inspections, required in Condition IV.G.3, the Permittee shall comply with the repair and notification requirements specified in Conditions IV.C.9, IV.C.10 and IV.C.11.

IV.G.5. All tank inspection logs and certification reports shall be made part of the Operating Record and shall be maintained at the facility until closure of the facility.

#### **IV.H. NEW AND MODIFIED TANK SYSTEMS**

The Permittee shall comply with Conditions I.O, covering planned changes, and I.P, certification of new construction and modifications. All new tanks systems and modification to existing systems shall also meet secondary containment and leak detection requirements specified in Utah Admin. Code R315-264-193.

#### **IV.I. RESPONSE TO LEAKS OR SPILLS**

IV.I.1. In the event of a leak or a spill from a tank system or if the tank system becomes unfit for continued use, the Permittee shall remove the system from service immediately and complete the following actions:

- a. Stop the flow of hazardous waste into the tank system and inspect the system to determine the cause of the release.
- b. Remove waste and accumulated precipitation from the tank system and containment system within 24 hours of detection of the leak or spill to prevent further release and allow inspection and repair of the system. If the Permittee finds that it will be impossible to meet this time period, the Permittee shall orally notify the Director and demonstrate that a longer time period is required.
- c. Manage the collected material as a hazardous waste in accordance with all applicable requirements of Utah Admin. Code R315-262.
- d. The Permittee shall make any necessary repairs to fully restore the integrity of the tank system before returning the system to service.
- e. For all major repairs to eliminate leaks or restore the integrity of the tank system, the Permittee shall obtain a certification by an independent, qualified Utah registered professional engineer that the repaired system is capable of handling hazardous wastes without release for the intended life of the system before returning the system to service. Examples of major repairs are: installation of an internal liner, repair of a ruptured tank, or repair or replacement of a secondary containment vault.

IV.I.2. In the event that a leak or spill from a tank system escapes the secondary containment system, the Permittee shall complete the following actions in addition to those specified in Condition IV.I.1.:

The Permittee shall immediately conduct a visual inspection of all releases to the environment and based on that inspection shall (1) prevent further migration of the leak or spill to soils or the surface water and (2) remove and properly dispose of all contamination of the soil or surface water.

IV.I.3. If the Permittee replaces a component of a tank system to eliminate a leak, that component must satisfy the requirements for new tank systems or components in Utah Admin. Code R315-264-192 and R315-264-193.

IV.I.4. If a tank system cannot be repaired or is otherwise unfit for continued use, the Permittee shall close that tank system in accordance with the Closure Plan in Attachment 7.

IV.I.5. Records of releases from a tank system that are contained within a secondary containment system shall be maintained in the operating record. These records shall include information on the cause of the release, the volume and type of material released, any injuries or damage caused by the release, and corrective measures taken.

#### **IV.J. CLOSURE AND POST-CLOSURE CARE**

IV.J.1. To close a tank system, the Permittee shall remove all waste residues and decontaminate the system as specified in Utah Admin. Code R315-264-110 through R315-264-120 and Utah Admin. Code R315-264-197, and Condition II.O.

IV.J.2. If a current cost estimate to close a tank system and provide post closure care is greater than the cost estimates specified in Attachment II-7, the Permittee shall notify the Director as specified in Utah Admin. Code R315-264-112 and provide updated documentation for financial assurance based on the revised closure plan and post closure care within 90 days of the initiation of closure.

IV.J.3. The Permittee shall maintain funding to close all tanks and tank systems.

IV.J.4. Post-closure care of all tank systems shall meet the requirements of Utah Admin. Code, R315-264-197 and Condition II.O of the Permit.

**MODULE V**  
**SURFACE IMPOUNDMENTS**



## TABLE OF CONTENTS

	Page
MODULE V - SURFACE IMPOUNDMENTS	
V.A. APPLICABILITY.....	1
V.B. WASTE IDENTIFICATION.....	1
V.C. GENERAL DESIGN AND CONSTRUCTION OF SURFACE IMPOUNDMENTS .....	2
V.D. SPECIAL OPERATING REQUIREMENTS.....	3
V.E. SPECIAL REQUIREMENTS FOR INCOMPATIBLE WASTES.....	3
V.F. MONITORING AND INSPECTION.....	4
V.G. REMOVAL FROM SERVICE.....	5
V.H. CLOSURE/POST-CLOSURE.....	5





## **MODULE V - SURFACE IMPOUNDMENTS**

### **V.A. APPLICABILITY**

- V.A.1. The Permittee is currently authorized to operate Surface Impoundment A and Surface Impoundment B.
- V.A.2. The maximum operating capacity for Surface Impoundment A is 1,587,759 gallons. The maximum operating capacity for Surface Impoundment B is 5,000,000 gallons. The Permittee shall operate and maintain these surface impoundments as required by Utah Admin. Code R315-264-220.
- V.A.3.1 Surface Impoundment A is approximately 220 feet on a side. The primary liner system consists of a 60-mil HDPE geo-membrane liner, beneath which is a Geonet. There is one sump which is located on the west side of the surface impoundment. Beneath the sump and the Geonet is a second 60-mil HDPE geo-membrane. The geomembrane liner system is installed on a three-foot thick clay liner.
- V.A.3.2 Surface Impoundment B is approximately 361 feet on a side. The primary liner system consists of a 60 mil HDPE geo-membrane liner, and a bottom (secondary) 60 mil HDPE geomembrane liner overlying a compacted clay liner. There is one sump which is located on the west side of the surface impoundment, The sump is located between the primary and secondary liner and is equipped with a leak detection system.
- V.A.4. Construction of additional surface impoundments and repair of Surface Impoundment A or other surface impoundments shall be done in accordance with Attachment VI-2, the Construction Quality Assurance Plan for Landfill Cell Construction and Closure.

### **V.B. WASTE IDENTIFICATION**

- V.B.1. The Permittee is authorized to store non-hazardous wastewaters received from off-site in Surface Impoundment A and Surface Impoundment B in accordance with Utah Admin. Code R315-264-220 and the conditions of this permit.
- V.B.2. The Permittee is authorized to store the following site-generated wastes (excluding PCB-contaminated liquids and sludges) in Surface Impoundment A and Surface Impoundment B in accordance with Utah Admin. Code R315-264-220 and the conditions of this permit:
- a. Floor drainage
  - b. Multi-Source Leachate (F039) from RCRA-only hazardous waste cells.
  - c. Treated liquids
  - d. Non-hazardous liquid waste.

e. Contaminated run-on and runoff waters.

V.B.3. CERCLA Hazardous Wastes. The Permittee may receive wastes that arrive without EPA waste code numbers, provided that these wastes are from remediation sites regulated under CERCLA. These wastes shall be managed as hazardous wastes and are subject to the terms of this permit.

V.C. **GENERAL DESIGN AND CONSTRUCTION OF SURFACE IMPOUNDMENTS**

V.C.1. The Permittee shall design and construct surface impoundments in accordance with Utah Admin. Code R315-264.221.

V.C.2. Construction of each surface impoundment shall follow the construction quality assurance (CQA) program identified in Utah Admin. Code R315-264.19 and in Attachment VI-2, Appendix A of this Permit. The construction quality assurance plan shall cover all aspects of design and construction. The final design with installation procedures shall be approved by the Director prior to commencement of construction.

V.C.3. The CQA plan shall remain part of the permit throughout closure and post-closure activities.

V.C.4. Field changes to the design or construction details may require a modification to the CQA plan. The "Change Control Procedures" in the CQA Plan shall be adhered to. If a modification to the CQA plan is necessary, as determined by the Director, construction may only proceed after the Director evaluates the impact of the change and approves the permit modification request. The Permittee shall document this field change and place a description of this modification in the facility's CQA plan and mail a copy to the Director within seven calendar days of the field change. All field change orders shall become a permanent record and be kept with the CQA document.

V.C.5. All Class 1 field modifications, affecting the CQA plan after construction has started, may be submitted to the Director in one Class 1 permit modification after completion of construction. This shall include all "as built" drawings and any changes of materials used for construction and any changes to the procedures used to construct the surface impoundment.

V.C.6. All Class 2 and Class 3 permit modifications affecting the CQA plan, as specified in Utah Admin. Code R315-270-42, shall require Director approval after the appropriate public comment period.

V.C.7. Subsequent modifications to the surface impoundment, after completion of the initial construction period, shall be considered either a Class 1, 2 or 3 permit modifications. All approved modifications to the CQA plan shall be documented

and kept with the CQA plan so future changes; corrective action or closures can be evaluated with correct information.

**V.D. SPECIAL OPERATING REQUIREMENTS**

- V.D.1. At least three feet of freeboard shall be maintained in each Surface Impoundment at all times.
- V.D.2. If a separate liquid phase (i.e., an oil layer) should develop on the surface of the liquid in the impoundment (other than a sheen), it shall be removed within 24 hours of discovery and managed in accordance with this permit. If the separate liquid phase cannot be removed within 24 hours, the Permittee shall follow the reporting requirements in Module II. G.1 of this Permit.
- V.D.3. All waste placed into each surface impoundment, or any newly constructed surface impoundments, shall meet the LDR standards prior to being placed into the impoundment.
- V.D.4. At least annually, the solids and liquids in the impoundment shall be properly sampled and analyzed separately to determine if, through evaporation of water or other factors, they exhibit hazardous waste codes D004 - D043 (Toxicity Characteristics) as described in Utah Admin. Code R315-261-24. Should either component exhibit such a characteristic, the provisions of Section V.D.6, below, shall apply until it can be demonstrated that the waters in the impoundment no longer exhibit such characteristic.
- V.D.5. The Permittee may utilize a typical vac container dewatering box to remove solids prior to placement of liquids in the surface impoundment. The dewatering activity shall be performed within secondary containment. The solids shall be properly sampled and analyzed separately to determine if they exhibit hazardous waste codes D004 - D043 (Toxicity Characteristics) as described in Utah Admin. Code R315-261-24. Solids that are a characteristic hazardous waste will be managed in accordance with the Waste Analysis Plan.
- V.D.6. The management of hazardous waste in surface impoundments shall meet the LDR sampling, residue removal and recordkeeping requirements of Utah Admin. Code R315-268.4).

**V.E. SPECIAL REQUIREMENTS FOR INCOMPATIBLE WASTES**

- V.E.1. The Permittee shall comply with all requirements specified in Utah Admin. Code R315-264-230 governing the management of incompatible wastes in surface impoundments.

V.E.2. The Permittee shall comply with the incompatible waste requirements of Utah Admin. Code R315-264-17 and document that compliance in the operating record.

**V.F. MONITORING AND INSPECTION**

V.F.1. The Permittee shall follow the inspection schedule contained in Attachment II-3 for each Surface Impoundment.

V.F.2. If any Surface Impoundment has been removed from service for a period of six months or longer, the Permittee shall obtain a certification from a Utah certified independent professional engineer that the impoundment dike, including any portion of the dike which provides freeboard, has structural integrity as required by Utah Admin. Code R315-264-226(c). The liner shall also be inspected and certified to be free of damage or signs of deterioration. The Permittee shall have this certification performed before a Surface Impoundment is put back into service. This certification report shall then be incorporated into the operating record and submitted to the Director. Prior to returning the surface impoundment to service, the Permittee shall have written approval from the Director.

**V.G. ACTION LEAKAGE RATE**

V.G.1. The action leakage rate (ALR) for Surface Impoundments A and B is 100 gallons per acre per day (gpad). Above 100 gpad, increased daily monitoring and notification of the Director within 72 hours is required.

V.G.2. Should volumes in excess of 200 gpad be documented, a written action plan shall be submitted to the Director. The written action plan shall describe efforts to identify the location of the leak(s) and the schedule to identify the location of and the repair of the liner system.

V.G.3. No liquid shall be added to a Surface Impoundment after 200 gpad is recovered from the leak detection system and shall not resume until repairs in the liner have been made (see V.G.4).

V.G.4. Repairs to the liner system shall be done in accordance with the CQA Plan. A report, including the CQA documentation, shall be submitted to the Director. Written approval from the Director is required prior to placing a Surface Impoundment back into service following an exceedance of the ARL.

V.G.5. When an exceedance in the leak detection riser occurs, a sample shall be obtained and analyzed for semi-volatile compounds and metals. The analytical results will be submitted to the Director within ten days following the facility's receipt of the data from the laboratory.

**V.H. REMOVAL FROM SERVICE**

V.H.1. In accordance with Utah Admin. Code R315-264-227, whenever the action leakage rate is exceeded or the level of liquids in a Surface Impoundment drops (and the drop is not known to be caused by changes in flows into or out of the impoundment) or the dike leaks or shows signs of failure, the Permittee shall remove the surface impoundment from service and immediately implement the applicable procedures specified in the Contingency Plan, Attachment II-6.

V.H.2. Whenever a surface impoundment is removed from service, as specified in Utah Admin. Code R315-264-227, the Permittee shall either repair and recertify the impoundment in accordance with Utah Admin. Code R315-264-227(d) or close the impoundment as required by Utah Admin. Code R315-264-227(e).

**V.I. CLOSURE/POST-CLOSURE**

The Permittee shall close a surface impoundment as required by Utah Admin. Code R315-264-110 and Utah Admin. Code R315-264-228, Condition II.O. and Section 5.3 of the Closure Plan (Attachment II-7).

**MODULE VI**

**HAZARDOUS WASTE LANDFILLS**

## TABLE OF CONTENTS

MODULE VI - HAZARDOUS WASTE LANDFILLS	Page
VI.A. APPLICABILITY.....	1
VI.B. WASTE IDENTIFICATION.....	3
VI.C. GENERAL DESIGN AND CONSTRUCTION OF LANDFILL CELLS.....	4
VI.D. GENERAL OPERATING REQUIREMENTS .....	5
VI.E. MANAGEMENT OF RUN-ON/RUNOFF CONTROL FACILITIES.....	6
VI.F. INSPECTIONS.....	6
VI.G. PROCEDURES TO CONTROL WIND DISPERSAL OF WASTES.....	6
VI.H. LEACHATE FOR DUST SUPPRESSION.....	7
VI.I. SURVEYING AND RECORDKEEPING .....	9
VI.K. SPECIAL REQUIREMENTS FOR IGNITABLE/REACTIVE WASTE.....	9
VI.L. ENCAPSULATION OF REACTIVE WASTES.....	9
VI.M. RESTRICTIONS ON LIQUIDS IN LANDFILLS .....	9
VI.N. SPECIFIC REQUIREMENTS FOR CONTAINERS .....	10
VI.O. CLOSURE/POST-CLOSURE.....	10
Attachment VI-1 .....	Landfill Drawings and Specifications
Attachment VI-2 .....	Final Closure Plan for Cells 4 and 5
Appendix A.....	Construction Quality Assurance Plan for Landfill Cell Construction and Closure
Appendix B.....	Closure Drawings for Cells 4 and 5
Appendix C.....	Closure Construction Design Report Cells 4 and 5
Attachment VI-3 .....	Design Engineering Report For Cells B/6 and 7
Attachment VI-4 .....	Run-on/Run-off System Requirements



## MODULE VI- HAZARDOUS WASTE LANDFILLS

### VI.A. APPLICABILITY

VI.A.1. The Permittee shall only dispose of hazardous wastes in the following landfill cells and the rated capacities shall not exceed the following nominal volumes shown below, except as allowed in Condition VI.D.2. In addition, measuring from the top of the berm, the average height of waste will be less than or equal to the maximum allowed height of waste in the cell at closure as shown below. The Director has the authority to require the Permittee to conduct a survey of the cell to verify compliance with this condition.

Cell Number	Capacity (Cubic Yards) <sup>1</sup>	Max shoulder height of waste above the berm at closure, feet above avg. berm height	Maximum height of waste above the berm at closure, feet above avg. berm height
B/6	1,125,000	27.72	45.97
7	1,106,000	28.87	61.07
8	785,300	20.69	36.16
9	793,800	20.42	36.16
10	793,800	20.42	36.16
11	793,800	20.42	36.16
12	793,800	20.42	36.16
13	793,800	20.42	36.16

VI.A.2. The Permittee shall build and use Cells 8 through 13 in the following sequence: Cell 8, Cell 10, Cell 12, Cell 9, Cell 11 and Cell 13. In so doing, this will allow the use of monitoring wells MW-83, MW-84, MW-87, MW-88, MW-91 and MW-92 to function as shared points of compliance for the six

<sup>1</sup> Volumes are approximate. The point of compliance is the height above the berm. The berm height is calculated by averaging elevations measured every 50 linear feet around the perimeter (berm) of the cell.

cells. These wells be located on a common berm between the north three cells and the south three cells. See Drawing G-3 in the Landfill 8 through 13 Design Engineering Report and Section VII.A.5 and Condition VII.D.7.e of Module VII - Groundwater Monitoring Protection.

VI.A.3. Landfill Cells 1, 2, 3, 4 and 5 have been closed and no additional wastes may be placed in these landfill cells.

VI.A.4 Industrial Waste Cells 1 and 2 (IWC-1 and IWC-2) are included in this permit solely for the purposes of post-closure. These cells were originally designed and permitted for the disposal of non-hazardous waste, but have received small quantities of hazardous waste and as such are now regulated by this permit. These cells were closed in 1998.

**VI.B. WASTE IDENTIFICATION**

- VI.B.1. The Permittee shall dispose of the hazardous wastes listed in Attachment II - WAP Appendix 2 that meet LDR standards or approved variances in landfill cells 7, B/6 and 8. Cells B/6 and 8 are RCRA/TSCA disposal cells that may be used for disposal of the hazardous wastes listed in Attachment II – WAP Appendix 2 that meet LDR standards or approved variances, for RCRA/TSCA combined wastes, and/or for TSCA only wastes as approved.
- VI.B.2. The waste management practices specified in the Supplemental Waste Management Plan in Attachment II-8 shall apply to wastes F020, F021, F022, F023, F026, F027 and F028. On-site generated wastes derived from the handling of these residues shall also be managed according to the Attachment II-8.
- VI.B.3. The Permittee may dispose in Landfill Cells B/6, 7 and 8, the following wastes not specified by EPA waste code numbers providing that all free liquids are stabilized or removed and documented in the Operating Record:
- VI.B.3.a. Floor drain, wheel wash and sump residues.
- VI.B.3.b. Non hazardous waste. Non hazardous waste shall not be mixed with hazardous waste such that impermissible dilution occurs, as specified under Utah Admin. Code R315-268-3.
- VI.B.3.c. CERCLA Hazardous Wastes. The Permittee is authorized to receive wastes that arrive without EPA waste code numbers, provided that these wastes are from remediation sites regulated under CERCLA or are defined as hazardous waste by this permit. These wastes shall be managed as hazardous wastes and are subject to the terms of this permit.
- VI.B.4. Free liquids shall not be disposed in any of the landfill cells, except as provided by Condition VI.L.
- VI.B.5. RCRA/TSCA Wastes. The Permittee may receive wastes that arrive with EPA waste codes and are also regulated by TSCA. These wastes are subject to the terms of this permit.
- VI.B.6. The Permittee may accept CAMU-eligible waste, as defined in Utah Admin. Code R315-264.552(a)(1) and (2) pursuant to R315-264.555 provided that:
- VI.B.7.a. The Permittee shall notify the Director and all persons on the public mailing list of the Permittee’s intent to receive each CAMU-eligible waste stream pursuant to R315-264-555(e)(1) and (2).

VI.B.7.b. The Permittee shall not place CAMU-eligible waste in a landfill cell until the Director notifies the Permittee that he/she does not object to its placement in a cell at the facility (R315-264-555(e)(4).

VI.B.8.c The Permittee follow all additional applicable conditions of R315-264-555.

**VI.C. GENERAL DESIGN AND CONSTRUCTION OF LANDFILL CELLS**

VI.C.1. The Permittee shall design and construct landfill cells to meet the current (as of the date of the Permit) state and federal regulations for hazardous waste landfills.

VI.C.2. Construction of each landfill cell shall follow the construction quality assurance (CQA) program as outlined in R315-264-19 and in Attachment VI-2, Appendix A of this Permit. The construction quality assurance plan shall cover all aspects of design and construction. The final design with installation procedures shall be approved by the Director prior to commencement of construction.

VI.C.3. The CQA plan shall remain part of the permit throughout closure and post-closure activities. This CQA Plan is Appendix A of Attachment VI-2.

VI.C.4. Field changes to the design or construction details may require a modification to the CQA plan. The "Change Control Procedures" in the CQA Plan shall be adhered to. If a modification to the CQA plan is necessary, as determined by the Director, construction may only proceed after the Director evaluates the impact of the change and approves the permit modification request. The Permittee shall document this field change and place a description of this modification in the facility's CQA plan and mail a copy to the Director within seven calendar days of the field change. All field change orders shall become a permanent record and be kept with the CQA document.

VI.C.5. All Class 1 field modifications, affecting the CQA plan after construction has started, may be submitted to the Director in one Class 1 permit modification after completion of construction. This shall include all "as built" drawings and any changes of materials used for construction and any changes to the procedures used to construct the landfill cell.

VI.C.6. All Class 2 and Class 3 permit modifications affecting the CQA plan, as specified in Utah Admin. Code R315-270-42, shall require Director approval after the appropriate public comment period.

VI.C.7. Subsequent modifications to the landfill cell, after completion of the initial construction period, shall be considered either a Class 1, 2 or 3 permit modification. All approved modifications to the CQA plan shall be

documented and kept with the CQA plan so future changes, corrective action or closures can be evaluated with correct information.

**VI.D. GENERAL OPERATING REQUIREMENTS**

VI.D.1. The Permittee shall operate all landfill cells as required by Utah Admin. Code R315-264-300 and as specified in this permit.

VI.D.2. The Permittee shall not exceed the rated capacity of a landfill cell, except by a margin of five percent, nor shall the average waste elevation exceed the permitted final waste elevation except by a margin of one foot without written approval by the Director. These deviations shall be allowed for periods up to 24 hours and only after notification of closure as required by Condition II.O.4. and only for the purposes of grading with power equipment to gain final contours. In addition, waste elevations are allowed to be exceeded for a period up to 24 hours to facilitate the proper placement of wastes and cover during normal day-to-day operations.

VI.D.3. The Permittee shall repair any damage to the liner, including damage caused during landfill operations, by repairing the liner according to the liner repair procedures contained in the specific CQA Plan for the facility at the time the damage occurs. Documentation of repairs shall be submitted to the Director. The Director will review the documentation to verify that the repair was done in accordance with the CQA Plan.

VI.D.4. In accordance with Utah Admin. Code R315-264-301(a)(2) the leachate collection and removal system shall be operated in such a manner as to assure that the leachate depth over the primary liner does not exceed one foot.

VI.D.5. The Permittee shall submit to the Director on a quarterly basis (no later than 20 days following the end of the quarter), daily leachate collection/removal volumes for each applicable collection and detection sump. If the Permittee discovers the presence of liquid in the upper leak detection system (“B” risers) in quantities greater than 15 gallons per acre per day or if the Permittee discovers the presence of liquid in the lower leak detection system (“C” risers) in quantities greater than ten gallons per acre per day, the Permittee shall notify the Director within 72 hours of discovery.

VI.D.5.a. When an exceedance in the B or C risers occurs, a sample shall be obtained and analyzed for semi-volatile compounds. The analysis will be submitted to the Director within ten days following the facility’s receipt of the data from the laboratory. The Permittee shall provide other information deemed necessary by the Director. Along with the analysis submittal, the Permittee shall submit a remediation plan to the Director outlining the steps to be taken to correct the problem (i.e., repair of liner, closure of landfill cell). Upon

approval, the Permittee shall implement the plan within the time frame specified by the Director.

- VI.D.6. Vehicles (e.g. trucks, backhoes, cranes, etc.) exiting restricted areas shall have their wheels/ tracks washed at the wheel wash facility located at the exit of the restricted area(s). Restricted areas are identified on the site drawing found in Attachment II-1.
- VI.D.7. The Permittee shall follow the waste analysis requirements contained in Condition II.E.
- VI.D.8. Treated wastes may be temporarily "put" onto a liner or in a container (put-pile) within a hazardous waste landfill cell while awaiting laboratory (verification) analyses. The liner shall be visible on all sides of the waste so as to prevent commingling with the waste in the landfill and other put-piles. "Temporarily" shall mean six months or less. Such wastes shall be labeled with a tracking number and located in such a manner that allows complete retrieval of the waste should the waste analyses subsequently determine that the waste does not meet the treatment standards of Utah Admin. Code R315-268. No more than 250 put-piles may exist at any one time and wastes making up a put-pile shall be disposed within one year of receipt at GMF.

**VI.E. MANAGEMENT OF RUN-ON/RUNOFF CONTROL FACILITIES**

The Permittee shall manage all landfill cells with run-on and runoff control systems as required by Utah Admin. Code R315-264-301(h) and (i) in order to not exceed required design capacity specified in Attachment VI-4

**VI.F. INSPECTIONS**

The Permittee shall conduct inspections of all active and closed landfill cells in accordance with Condition II.G.

**VI.G. PROCEDURES TO CONTROL WIND DISPERSAL OF WASTES**

- VI.G.1. The Permittee shall comply with the requirements of Utah Admin. Code R315-264-301(j) by covering material subject to wind dispersal within 24 hours of placement in the cell. The cover shall be maintained until additional wastes are applied to that portion of the cell. The cover shall consist of one of the following:

- a. Heavier bulk material (greater density);
- b. Mechanically-sprayed water;
- c. Dust-suppressing foam;
- d. Other suitable material as approved by the Director.

- VI.G.2. Water shall not be sprayed to the extent that ponding occurs in the landfill.
- VI.G.3. The Permittee shall cease operation of the landfill cell(s) (i.e. transporting waste into the cell and heavy vehicle movement within the cell, except for equipment utilized to control wind dispersal) when windy conditions exist that cause dust and any other waste to leave the cell(s).
- VI.G.4. For purposes of compliance with Condition VI.G., all material within the berm of the operational hazardous waste landfill cells is considered to be hazardous waste.
- VI.G.5. Leachate may be used for dust suppression in controlling wind dispersal, as provided in Section VI.H. of this module.

**VI.H. LEACHATE FOR DUST SUPPRESSION**

- VI.H.1. Leachate can be used for dust suppression in Cells B/6 and 7.
- VI.H.2. Leachate used for dust suppression shall not leave the cell where it is generated.
- VI.H.3. Leachate used for dust suppression shall not be stored and must be distributed the same day it is collected. Should the cell not require dust suppression, or weather conditions prohibit its immediate use, the leachate shall be managed as multi-source leachate (F039).
- VI.H.4. A pump and sprinkler system may be used to distribute leachate within the cell.
- VI.H.5. Leachate used for dust suppression shall be held in the vehicle or portable tank from which it will be distributed. If a pump is used to distribute the leachate, it must be pumped directly from the vehicle or portable tank in which it was collected.
- VI.H.6. Leachate used for dust suppression shall not be applied to the extent that ponding occurs.
- VI.H.7. Leachate used for dust suppression shall not leave the lined portion of the cell.
- VI.H.8. Leachate used for dust suppression shall be analyzed twice annually for the constituents listed in the table below. Should a maximum concentration as identified in the table be exceeded, the leachate shall no longer be used for dust suppression, but shall be managed as multi-source leachate (F039):

Constituent	Maximum Concentration
Total HOC <sup>1</sup>	100 ppm
Arsenic	5.0 mg/l
Barium	100.0 mg/l
Cadmium	1.0 mg/l
Chromium	5.0 mg/l
Mercury	0.2 mg/l
Lead	5.0 mg/l
Selenium	1.0 mg/l
Silver	5.0 mg/l
<sup>1</sup> The total of the constituents found in Appendix 4 of the Waste Analysis Plan.	

- VI.H.8.a. The Halogenated Organic Compounds (HOCs), identified in Appendix 4 of the Waste Analysis Plan (WAP), shall be analyzed utilizing SW-846 methods 8260 and 8270, as modified. In the event of an exceedance, discreet samples will be obtained and analyzed from each sump of the cell.
- VI.H.8.b. Prior to using leachate for dust suppression, a composite sample shall be collected from each cell where leachate will be used. The sample shall be taken from the collection tank or vehicle the first time the leachate is used in an approved cell. The sample shall be analyzed for the HOCs, identified in Appendix 4 of the WAP and the metals listed in the table above, a copy of the analytical results shall be provided to the Director within 30 days of receipt by Grassy Mountain.
- VI.H.8.c. After the initial sample, a composite sample of leachate shall be collected and analyzed twice per year from each cell where leachate is used. The first sample shall be taken within five days of September 1 and the second sample within five days of March 1. The samples shall be analyzed for the HOCs, identified in Appendix 4 of the WAP and the metals listed in the table above, a copy of the analytical results shall be provided to the Director within 30 days of receipt by Grassy Mountain.
- VI.H.8.d. In the event a maximum concentration, as identified in the table above, is exceeded the Permittee may sample and analyze the individual leachate collection risers of the landfill cell. The analysis shall consist of the parameters listed in the table. Leachate from the individual collection risers that exceed the established limits shall be managed as multisource leachate (F039) and prohibited for use as dust suppression.
- VI.H.8.e. All constituents listed in Appendix 4 of the of the WAP shall be analyzed for, with the exception of 3- Chloropropionitrile, which is not detected with Method 8260 or Method 8270.



**VI.I. SURVEYING AND RECORDKEEPING**

The Permittee shall comply with the surveying and recordkeeping requirements of Utah Admin. Code R315-264-309 for all landfill cells.

- VI.I.1. The Permittee shall maintain a three-dimensional grid disposal system in the operating record for recording the approximate location of the specific waste disposed of in each cell, as required by Utah Admin. Code R315-264-309(b).
- VI.I.2. Clean Harbors maintains the information required by the above citation in the company's web-based data system (currently known as Win Web), in the Grassy Mountain Facility's waste information management system, and in hard copy. Within 60 days following notification of transfer of ownership or final closure, all data required in Utah Admin. Code R315-264.309(b) shall be provided to the Director in a media format determined at that time.

**VI.J LEACHATE SAMPLING AND ANALYSIS**

The leachate from landfill cells that contain both RCRA and TSCA waste streams (currently Cells B/6 and 7) shall have the leachate from the sumps individually sampled and analyzed at a minimum for PCBs, pH, specific conductance and chlorinated organics (Class 1 volatile and semi-volatile compounds) annually.

Annual reports shall be submitted within 60 days after sampling has been completed.

**VI.K. SPECIAL REQUIREMENTS for IGNITABLE/REACTIVE WASTE**

The Permittee shall comply with all management provisions pertaining to ignitable and reactive wastes as required by Utah Admin. Code R315-264-312.

**VI.L. ENCAPSULATION OF REACTIVE WASTES**

The Permittee shall not encapsulate and dispose of reactive wastes in landfill cells.

**VI.M. RESTRICTIONS ON LIQUIDS IN LANDFILLS**

- VI.M.1. The Permittee shall comply with all provisions of R315-264-314 pertaining to free liquid wastes. Containerized, solidified, or treated waste shall not contain free liquids as determined by the Paint Filter Liquids Test (SW-846, Method 9095) before being placed in a landfill cell as required by R315-264-314(b).

VI.M.2. The Permittee shall stabilize all bulk and containerized liquids (except small lab. vials) prior to placement into a landfill unit. Materials used to stabilize waste shall not be biodegradable in accordance with Utah Admin. Code R315-264-314(c).

**VI.N. SPECIFIC REQUIREMENTS FOR CONTAINERS**

VI.N.1. The Permittee shall comply with Utah Admin. Code R315-264-315 concerning the burial of containers in landfill units.

VI.2. The Permittee shall comply with Utah Admin. Code R315-264-316 concerning the disposal of small containers of hazardous waste in overpack drums and lab packs.

**VI.O. CLOSURE/POST-CLOSURE**

VI.O.1. The Permittee shall close all landfill cells and provide post-closure care as required by Condition II.O, Utah Admin. Code R315-264-110, Utah Admin. Code R315-264-310, the applicable portions of Attachment II-7 (Closure Plan) and Attachment VI-2, Appendix A (CQA Plan).

**MODULE VII**

**GROUNDWATER MONITORING PROTECTION**



## TABLE OF CONTENTS

MODULE VII - GROUNDWATER MONITORING / PROTECTION Page

- VII.A. APPLICABILITY ERROR! BOOKMARK NOT DEFINED.
- VII.B. REQUIRED PROGRAMS ERROR! BOOKMARK NOT DEFINED.
- VII.C. GROUNDWATER PROTECTION STANDARD **vi**
- VII.D. GENERAL GROUNDWATER MONITORING REQUIREMENTS ERROR! BOOKMARK NOT DEFINED.
- VII.E. DETECTION MONITORING PROGRAM AND DATA EVALUATION ERROR! BOOKMARK NOT DEFINED.
- VII.F. COMPLIANCE MONITORING REQUIREMENTS **xvii**
- VII.G. CORRECTIVE ACTION REQUIREMENTS ERROR! BOOKMARK NOT DEFINED.

- Attachment VII-1 Potentiometric/Velocity Map Showing the WMAs and with Coordinates and Elevations of the Monitoring Wells
- Attachment VII-2 Groundwater Sampling and Field Standard Operating Procedure
- Attachment VII-3 Class 1, 2 and 3 Groundwater Monitoring Parameters for GMF and Method Requirements Sample Table
- Attachment VII-4 Detection/Compliance Monitoring Protocol

*Module VII – Groundwater Monitoring Protection*

S

September 28, 2012

Clean Harbors Grassy Mountain, LLC.

Page i

UTD991301748

Attachment VII-5	Technical Enforcement Guidance Document
Attachment VII-6	Existing Groundwater Well and Pump Specifications
Attachment VII-7	Statistical Methods for Groundwater Monitoring at the Grassy Mountain Facility
Attachment VII-8	Annual Measurement of Groundwater Levels (Typical Format Used)

## **MODULE VII - GROUNDWATER MONITORING / PROTECTION**

### **VII.A. APPLICABILITY**

#### **VII.A.1. HAZARDOUS WASTE LAND DISPOSAL UNITS**

The requirements of this module pertain to the following units:

- Surface Impoundment A
- Surface Impoundment B
- Landfill Cell 1
- Landfill Cell 2
- Landfill Cell 3
- Landfill Cell 4
- Landfill Cell 5
- Landfill Cell B/6 (Permitted as a RCRA/TSCA Landfill from Cell B)
- Landfill Cell 7
- Landfill Cell 8
- Landfill Cell 9
- Landfill Cell 10
- Landfill Cell 11
- Landfill Cell 12
- Landfill Cell 13
- Industrial Waste Landfill Cell 1
- Industrial Waste Landfill Cell 2

Note: Landfill Cell B/6 was previously clean-closed as Landfill Cell 6 and re-permitted as TSCA Landfill Cell B. On August 31, 2005, it was permitted as TSCA/RCRA Landfill Cell B/6.

#### **VII.A.2. SOLID WASTE LAND DISPOSAL UNITS**

In addition, the following units shall also be subject to certain provisions of this module:

- TSCA Landfill Cell X

TSCA Landfill Cell Y  
TSCA Landfill Cell Z  
TSCA Landfill Cell A (not permitted or used for disposal)  
Industrial Waste Landfill Cell 3 A (not permitted or used for disposal)

- VII.A.3. New land disposal units constructed at the facility shall also be subject to this Module. Permit modification provisions under Condition VII.E.5. shall be followed for the specific well placement and other groundwater monitoring requirements.
- VII.A.4. Where there are conflicts with conditions of this permit and TSCA, the requirements under TSCA shall take precedent at designated TSCA landfill cells and the PCB treatment area; whereas the requirements under this permit shall take precedent at all other areas.
- VII.A.4.a. In addition to required monitoring at the PCB landfill cells under TSCA, the Permittee shall monitor for the same compounds in detection monitoring as for regulated units defined in Condition VII.A.6. These data shall be submitted to the Director at the same time as those semi-annual or other submissions required herein, except that sampling and reporting may be adjusted to meet any required timetables under TSCA.
- VII.A.5. The Permittee shall follow all of the provisions under Utah Admin. Code R315-264-92, Groundwater Protection, and as defined by these permit conditions. For purposes of this permit, Utah Admin. Code R315-264-92 regulations for Groundwater Protection applies to all land disposal units; however, provisions for detection and compliance monitoring are defined in VII.A.5.a through VII.A.5.t for specific unit waste management compliance points under Utah Admin. Code R315-264-95, except as determined by the Director. Compliance points are all groundwater monitoring wells listed for the Waste Management Areas (WMAs) as defined in Conditions VII.A.5.b through VII.A.5.i. Due to the particular nature of the groundwater piezometric surface at the facility, downgradient conditions may occur in any direction from the WMA units. The present WMAs and compliance points defined below are shown in Attachment VII-1.
- VII.A.5.a. There shall be a common well system serving as background for all of the individual waste management units. Monitoring wells MW-1, PZ-06, PZ-07, and PZ-08 shall serve as the background well system.
- VII.A.5.b. WMA 1 shall include Surface Impoundment A. The points of compliance are a line encircling this unit at the toe of the outer dike. Wells MW-10, MW-11, and MW-12 shall serve as downgradient monitoring wells for WMA 1.
- VII.A.5.c. The land treatment units have been clean closed. There is no requirement to maintain the wells for WMA 2, which defined the land treatment unit monitoring



system. However, at the discretion of the Permittee, Wells MW-8, MW-5, MW-18A, and MW-19 which served as downgradient monitoring wells for the WMA 2, may be maintained or closed. If the Permittee wishes to abandon these wells, a well abandonment plan shall be submitted to the Director for approval.

- VII.A.5.d. WMA 3 shall include Landfill Cells 1, 2, 3, and 4. The points of compliance are a line encircling these cells at the toe of the outer berm on all sides (north, south, east, and west). Wells MW-24, WM-25, MW-27A, MW-28, MW-29A, MW-30A, MW-2, MW-43, MW-44, MW-45, MW-46, MW-58A, and MW-59 shall serve as initial downgradient monitoring wells for WMA 3.
- VII.A.5.e. WMA 4 shall include TSCA Landfill Cells X, Y and Z. The points of compliance are a line encircling these cells on all sides at the toe of the outer berm. Wells MW-2, MW-21, MW-22, MW-23, MW-36, MW-40A MW-41, MW-53, MW-54, MW-55, MW-56, MW-57 shall serve as initial downgradient monitoring wells for WMA 4.
- VII.A.5.f. WMA 5 shall include Industrial Landfill Cell 1. The points of compliance are a line encircling this unit at the toe of the outer berm. Wells 32A, MW-75, and MW-33 shall serve as initial downgradient monitoring wells for WMA 5. The Director may specify any additional downgradient wells that may be required for WMA 5.
- VII.A.5.g. WMA 6 shall include Industrial Landfill Cell 2. The points of compliance are a line encircling this unit at the toe of the outer berm on the southern, western and eastern sides and the center of the common dike with Industrial Landfill Cell 1 on the northern side. Wells MW-18A, MW-34, and MW-35 shall serve as initial downgradient monitoring wells for WMA 6.
- VII.A.5.h. WMA 7 shall include Landfill Cell 5. The points of compliance are a line encircling this unit at the toe of the outer berm on the northern, eastern, and southern sides and the center of the common dike with Landfill Cells 4 and 1 on the western side. Wells MW-50, MW-51, MW-52 and MW-60 shall serve as initial downgradient monitoring wells for WMA 7.
- VII.A.5.i. WMA 8 shall include Industrial Landfill Cell 3. The points of compliance are a line encircling this unit at the toe of the outer berm on the eastern, western, and southern sides and the center of the common dike with Industrial Landfill Cell 2 on the northern side. Wells MW-47, MW-48, and MW-49 shall serve as initial downgradient monitoring wells for WMA 8.
- VII.A.5.j. WMA 9 shall include RCRA/TSCA Landfill Cell B/6. The points of compliance are a line encircling this unit at the toe of the outer berm on the northern, eastern, and southern sides and the center of the common dike Landfill Cell 5 on the western side. Wells MW-67, MW-68, MW-69, MW-70, MW-71, MW-72, MW-

73, MW-74, and MW-9 shall serve as initial downgradient monitoring wells for WMA 9.

- VII.A.5.k. WMA 10 shall include TSCA Landfill Cell A. The points of compliance are a line encircling this unit at the toe of the outer berm on the northern, western, and eastern sides and the center of the common dike with Industrial Landfill Cell 1 on the southern side. Wells MW-61, MW-62, MW-63, MW-64, MW-65, and MW-66 shall serve as initial downgradient monitoring wells for WMA 10.
- VII.A.5.l. WMA 11 shall include Landfill Cell 7. The points of compliance are a line encircling these cells on all sides at the toe of the outer berm. Wells MW-76, MW-77, MW-78A and MW-79A shall serve as initial downgradient monitoring wells for WMA 11.
- VII.A.5.m. WMA 12 shall include Surface Impoundment B. The points of compliance are a line encircling this unit at the toe of the outer dike. Wells MW-80, MW-81 and MW-82 shall serve as downgradient monitoring wells for WMA 12.
- VII.A.5.n. WMA 13 shall include Landfill Cell 8. The points of compliance are a line encircling this unit at the toe of the outer dike. Wells MW-45, MW-46, MW-50, MW-83 and MW-84 shall serve as downgradient monitoring wells for WMA 13, **unless groundwater flow and transport modeling shows that wells MW-45, 46, and 50 are not able to efficiently detect leakage of contaminants from underneath the cell (see permit condition VII.D.7.e).**
- VII.A.5.o. WMA 14 shall include Landfill Cell 9. The points of compliance are a line encircling this unit at the toe of the outer dike. Wells MW-83, MW-84, MW-85 and MW-86 shall serve as downgradient monitoring wells for WMA 14.
- VII.A.5.p. WMA 15 shall include Landfill Cell 10. The points of compliance are a line encircling this unit at the toe of the outer dike. Wells MW-51, MW-67, MW-87 and MW-88 shall serve as downgradient monitoring wells for WMA 15, unless groundwater flow and transport modeling shows that wells MW-51 and 67 are not able to efficiently detect leakage of contaminants from underneath the cell (see permit condition VII.D.7.e).
- VII.A.5.q. WMA 16 shall include Landfill Cell 11. The points of compliance are a line encircling this unit at the toe of the outer dike. Wells MW-87, MW-88, MW-89 and MW-90 shall serve as downgradient monitoring wells for WMA 16.
- VII.A.5.r. WMA 17 shall include Landfill Cell 12. The points of compliance are a line encircling this unit at the toe of the outer dike. Wells MW-68, MW-69 MW-70, MW-91 and MW-92 shall serve as downgradient monitoring wells for WMA 17, unless groundwater flow and transport modeling shows that wells MW-68, 69 and 70 are not able to efficiently detect leakage of contaminants from underneath the cell (see permit condition VII.D.7.e).

- VII.A.5.s. WMA 18 shall include Landfill Cell 13. The points of compliance are a line encircling this unit at the toe of the outer dike. Wells MW-91, MW-92, MW-93 and MW-94 shall serve as downgradient monitoring wells for WMA 18.
- VII.A.5.t. Addition of new WMAs subject to this module shall follow the modifications procedures of Condition I.D.
- VII.A.6. The regulations and conditions of this permit for groundwater monitoring apply during the active life of the regulated unit including the closure period, and as defined in Utah Admin. Code R315-264-90(c) during compliance monitoring and post-closure periods. These regulations shall also apply for the life of SWMUs.

## **VII.B. REQUIRED PROGRAMS**

- VII.B.1. The Permittee shall conduct a monitoring and response program as follows for all units subject to these provisions:
  - VII.B.1.a. Whenever hazardous constituents under Utah Admin. Code R315-264-93 (Class 1 compounds selected for the detection monitoring program (Attachment VII-3, Table 1)) from a regulated unit or SWMU are detected at the compliance point(s), the Permittee shall institute a compliance monitoring program as specified in Condition VII.F. and Utah Admin. Code R315-264-95. The compliance monitoring program will be in force for the affected WMA(s), initially including the full list of constituents found in Utah Admin. Code R315-261 Appendix VIII, in addition to the hazardous constituent(s) detected. The compliance monitoring program supersedes the detection monitoring program for the affected WMA(s) and detected hazardous constituent(s). For Class 1 parameters, “detected” shall mean exceeding the critical level as defined in Attachment VII-3, Table 1.
  - VII.B.1.b. Hazardous constituents defined in Utah Admin. Code R315-264-93 (Class 3 compounds) shall be evaluated according to Attachment VII-7.
  - VII.B.1.c. Whenever the groundwater protection standard under Utah Admin. Code R315-264-92 and Section VII.C is exceeded, the Permittee shall institute a corrective action program under Utah Admin. Code R315-264-100 and Section VII.G.
  - VII.B.1.d. Whenever hazardous constituents under Utah Admin. Code R315-264-93 exceed concentration limits under Condition VII.C of this permit in groundwater between the compliance point defined in Condition VII.A.5 above and the facility property boundary, the Permittee shall institute a corrective action program under Utah Admin. Code R315-264-100, and section VII.G of this permit.
  - VII.B.1.e. In all other cases, the Permittee shall institute and maintain a detection monitoring program under Utah Admin. Code R315-264-98 and section VII.E of this permit.

**VII.C. GROUNDWATER PROTECTION STANDARD**

VII.C.1. The Director may specify groundwater protection standards for each hazardous constituent that has entered groundwater at the time the detection monitoring program or other evidence indicates that hazardous constituents have entered groundwater beneath a WMA. The Director may also determine at such time the hazardous constituents to which the protection standard applies as defined in Utah Admin. Code R315-264-93, the concentration limits as defined in Utah Admin. Code R315-264-94, the point(s) of compliance under R315-264.95 and the compliance period under Utah Admin. Code R315-264.96.

**VII.D. GENERAL GROUNDWATER MONITORING REQUIREMENTS**

VII.D.1. The Permittee shall comply with the following requirements for groundwater monitoring:

VII.D.1.a. The groundwater monitoring system shall consist of a sufficient number of wells, installed at appropriate locations and depths to yield groundwater samples from the uppermost aquifer that:

VII.D.1.a.i Represent the quality of background water that has not been affected by leakage from a regulated unit; and

VII.D.1.a.ii Represent the quality of groundwater passing the point of compliance.

VII.D.1.b. Separate groundwater monitoring systems shall be required for each present and any new unit (and solid waste management unit as appropriate).

VII.D.1.c. The minimum number of wells for any unit shall be proposed by the Permittee and installed subject to the written approval of the Director.

VII.D.1.d. All monitoring wells shall be constructed in accordance with the provisions in Utah Admin. Code R315-264-97(c) and Condition VII.D.2.

VII.D.1.e. The groundwater monitoring program shall include sampling and analysis procedures defined in Utah Admin. Code R315-264-97(d) and (e) and Condition VII.D.3.

VII.D.1.f. The Permittee shall follow requirements for measurement of the groundwater surface elevation in Utah Admin. Code R315-264-97(f) and Condition VII.D.4.

VII.D.1.g. The Permittee shall follow the requirements for establishing background water quality for specified hazardous constituents and monitoring parameters as defined in Utah Admin. Code R315-264-97(g) and Condition VII.D.5.

- VII.D.1.h. The Permittee shall follow the procedures for statistical evaluation in determining whether background values of concentration limits have been exceeded as defined in Utah Admin. Code R315-264-97(h) and Condition VII.D.6.
- VII.D.2. The following guidelines shall apply to well location and construction:
- VII.D.2.a. Well construction shall follow the techniques described in the Technical Enforcement Guidance Document A(TEGD), OSWER-9950.1, September 1986, and the 1992 TEGD addendum, both incorporated in Attachment 7-5. All monitoring wells shall be cased in a manner that maintains the integrity of the borehole. This casing shall be screened or perforated, and packed with gravel or sand where necessary (i.e., the space between the borehole and well casing). Above the sampling depth the annulus shall be sealed to prevent contamination of samples and the groundwater. All wells shall be developed until the turbidity of groundwater being withdrawn from the well is less than five Nephelometric Turbidity Units (NTUs). If the Permittee cannot reach this standard, submission of the documentation and development procedure to the Director is required. The Director may accept the well development or require further development, if proper demonstration of well development is inadequate.
- VII.D.2.b. The Permittee shall construct and maintain new monitoring wells in accordance with plans and specifications to be submitted to the Director for approval at the time of permit modification under Condition VII.E.5. Prior to the installation of all new wells, the Permittee must have approval of the Director for the following: number of wells, construction details and locations of all new wells.
- VII.D.2.c. Additional saturated zone monitoring wells shall be installed to maintain compliance if subsurface conditions change after permit issuance. Such changes may include, but are not limited to, water level elevation or apparent flow direction changes, detection of saturated conditions below a leak detection sump, or detection of organic constituents in a well. The Director may require the Permittee to install and sample additional wells at any time during the active life, closure, or post-closure or compliance periods, if new information or unforeseen circumstances reveal a need for additional monitoring to protect human health and the environment.
- VII.D.2.d. The Permittee shall submit within 90 days of the completion of a new monitoring well the completion reports (schematics) which shall include boring logs with lithological descriptions, sieve analyses (grain size), water levels, and well development results including recharge rates. New cross sections or fence diagrams shall also be submitted which incorporate the new data.
- VII.D.2.e. Existing monitoring wells shall be maintained in a fully operating condition for the duration of this permit. The Permittee shall notify the Director within 72 hours when a well is no longer properly functioning (including a marked change in pumping rate, presence of sandy or silty materials, and cracked or broken

casings), and if the cause of the malfunction cannot be repaired within two weeks, or if a well is out of service during a sampling episode and cannot be sampled within two weeks of schedule. Any time a well is found to be unfit for monitoring, a notation shall be made in the Operating Record, with a similar notation made when the well is returned to service. The Director shall also be notified prior to the event when the Permittee intends to close one or more wells associated with a regulated unit or solid waste management unit. The Director shall approve the conditions for replacement or correction of improperly operating wells.

- VII.D.2.f. The Permittee shall determine the depth to the bottom of all groundwater monitoring wells once every two years, or within two weeks of final development of any new well, or when a given well does not function properly. All total depth information shall be recorded, with the date, on the field data sheets and reported to the Director within 30 days of completion of the survey. If a problem is observed, the Permittee shall follow the procedures described above in Condition VII.D.2.e regarding notification and corrective procedures.
- VII.D.3. The following guidelines shall apply to sampling and analysis procedures:
  - VII.D.3.a. The Permittee shall include and maintain consistent sampling and analysis procedures in the groundwater monitoring program that are designed to ensure reliable monitoring results of groundwater quality downgradient of a WMA. At a minimum, the program shall include procedures and techniques for:
    - VII.D.3.a.i. Sample collection;
    - VII.D.3.a.ii. Sample preservation and shipment;
    - VII.D.3.a.iii. Analytical procedures; and
    - VII.D.3.a.iv. Chain-of-custody control.
  - VII.D.3.b. The sampling and analytical methods shall be appropriate for groundwater sampling and accurately measure hazardous constituents in groundwater samples.
  - VII.D.3.c. The Permittee shall use the following techniques and procedures when obtaining samples and analyzing samples from the groundwater monitoring wells:
    - VII.D.3.c.i. Samples shall be collected by the technique described in Attachment VII-2.
    - VII.D.3.c.ii. Samples shall be preserved and transported in accordance with the procedures specified in Attachment VII-2.
    - VII.D.3.c.iii. Samples shall be analyzed according to the methods and/or procedures specified in Attachment VII-3, Tables 1 through 4, in addition to the following:

- VII.D.3.c.iii.A. The use of quality control sample data shall be explained in full detail. The Permittee shall provide field blanks for analysis at each annual sampling interval under the detection monitoring program as specified in Attachment VII-2. Any field, trip, or laboratory blanks exceeding three times the critical level for any organic parameter, shall result in evaluation of the data for that parameter for the samples collected during the day the QA/QC samples were collected, or for the samples that are associated with the QA/QC sample laboratory lot number. Detections in field, trip, bottle or equipment blank samples shall be evaluated with respect to the results of analyses performed on samples collected from the related monitoring wells. Qualifiers shall be indicated on all organic laboratory reports when blanks indicate contamination above the method detection level. If laboratory data indicate that the data should be rejected, re-sampling of the affected wells shall be performed within three weeks. If the Permittee determines that the contamination does not invalidate the environmental sample results, the Permittee may petition the Director to use those results and not have to resample. This consultation must take place within two weeks of receiving the data from the laboratory. Re-sampling will be performed in accordance with Section V.E and Attachment VII-2.
- VII.D.3.c.iii.B. The Director may request at any time all laboratory QA/QC documentation and supporting data on any sampling episode. The Permittee shall retain either at the laboratory or the facility for organic compounds being analyzed, the raw information for required sampling and analysis, including gas chromatographic printouts, mass spectral analyses, QA/QC surrogate and spiking results, etc. These data shall be retained for a period of not less than three years.
- VII.D.3.c.iv. Samples shall be tracked and controlled using the chain-of-custody procedures specified in Attachment VII-2.
- VII.D.3.d. In the case of sample container breakage (i.e., during shipping), missed holding times, or any other unforeseen event, resampling shall be initiated within two weeks of the facility being notified of such an event.
- VII.D.4. The following guidelines shall apply to measurement of groundwater elevation:
- VII.D.4.a. The Permittee shall determine the groundwater surface elevation in all monitoring wells and piezometers on an annual basis, unless otherwise instructed by the Director. Well casing elevations will be resurveyed every three years commencing in 2009 and upon request of the Director.
- VII.D.4.b. The Permittee shall determine the groundwater flow rate and direction in the uppermost aquifer based on the most current surveyed well elevations and submit

an updated groundwater contour (potentiometric) map to the Director no later than May 15<sup>th</sup> of each year.

- VII.D.5. The following guidelines shall apply to monitoring of background groundwater quality and groundwater chemical parameters:
- VII.D.5.a. For purposes of the detection monitoring program as specified in Section VII.E, the three classes of parameters for measurement and analysis are:
- VII.D.5.a.i. Class 1- Class 1 parameters consist of a set of organic hazardous constituents or indicator compounds measurable by gas chromatography/mass spectrometry (GC/MS), and are listed in Attachment VII-3, Table 1. Attachment VII- 3 lists a set of numerical standards for each Class 1 Detection Monitoring parameter considered to be the concentration equal to or above which a given parameter value exceeds the critical level.
- VII.D.5.a.ii. Class 2- Class 2 parameters consist of a set of compounds considered analyzable by available methods specified in SW-846, 3rd Edition and referred to in Attachment VII-3, Table 2.
- VII.D.5.a.iii. Class 3- Class 3 parameters are identified as "Background Groundwater Quality Parameters" in Attachment VII-3, Table 3.
- VII.D.5.b. The Class 1 GC/MS detection monitoring parameters shall be used as the principal hazardous constituents and indicators. They shall be monitored and analyzed for annually, and shall be subjected to statistical evaluation as defined in Condition VII.E.1. Class 2 parameters shall be sampled as required under Condition VII.E.1.k, when the detection monitoring program indicates a statistically significant difference in detection monitoring. Class 3 parameters shall be monitored annually during required detection monitoring events and shall be subjected to statistical evaluation as defined in Condition VII.E.2.
- VII.D.5.c. A tentative value is defined as any measured concentration for an analyte less than the laboratory PQL/LOQ and above the laboratory MDL, but otherwise meeting criteria for identification using GC/MS techniques. These values shall be reported to the Director as values identified by the letter J, but shall not be used as indications of detection.
- VII.D.5.d A tentatively identified compound is a non-target compound that is detected using GC/MS technology. The mass spectrum is compared to standard reference spectra for potential identification. Manual interpretation may be necessary. Identification and quantitation may vary significantly when compared to authentic standards. These values shall be reported to the Director as values identified by the letter A.



- VII.D.5.e. A reportable value is defined as any measured concentration for an analyte in Attachment VII- 3, Table 1 that equals or exceeds the laboratory PQL/LOQ as determined by the analytical laboratory.
- VII.D.5.f. A critical value for a given compound is any measured concentration that equals or exceeds the .01 level of significance as listed in Attachment VII-3.
- VII.D.5.g. The Permittee may petition the Director to modify the background data, based on future detection monitoring results obtained during the term of this permit.
- VII.D.5.h. The Permittee has conducted groundwater monitoring at all monitoring wells identified in Condition VII.A.5.a for the background water quality parameters listed in Attachment VII-3, Table 1. The Permittee shall provide information on past and required monitoring events as described in Section VII.E.
- VII.D.6. Other Conditions:
- VII.D.6.a. The Permittee shall monitor all wells covered by this permit annually at a minimum, in either the detection or compliance monitoring program, and notify the Director at least 14 days prior to a regularly scheduled groundwater sampling event. This notice requirement does not include any re-sampling or other testing performed to follow-up a regularly scheduled monitoring event. The Permittee shall also notify the Director at least 72 hours prior to any re-sampling activities.
- VII.D.6.b. All newly constructed monitoring wells shall require two years of quarterly sampling for all Class 3 parameters listed in Attachment VII-3. The Permittee shall conduct at least one evaluation of Class 1 parameters immediately following completion of the wells. If no hazardous constituents are found, then detection monitoring for Class 1 parameters shall begin in the next semi-annual period following installation of the wells. However, if hazardous organic constituents are detected above the critical levels, the Permittee shall also conduct quarterly sampling at those wells for a one-year period for Class 2 parameters. The Director may or may not determine that the wells can be used at any time in this period for detection monitoring.
- VII.D.6.c. The Director may modify parameters or methods analysis, including statistical analysis, for any samples upon written notice to the Permittee. Conditions requiring modification may include maintaining or upgrading the quality or type of data produced by the Permittee to account for background conditions, future conditions such as availability of improved analytical methods, the presence of better indicators, or more easily detectable parameters in leachate. The Director will also prescribe in writing additional sampling and analysis for wastes contained in a unit or leachate deemed appropriate to determine whether a hazardous constituent may have originated from a unit, to establish appropriate monitoring parameters, or for other reasons. The Director may request at any

time all laboratory QA/QC documentation and GC/MS data pertaining to data generated as a result of the additional sampling and analysis.

- VII.D.6.d. The Permittee shall collect and record measurements for WMA 8 (Industrial Landfill Cell 3):
  - VII.D.6.d.i. The Permittee shall collect water level measurements annually in accordance with Condition VII.D.4.a.
  - VII.D.6.d.ii. The Permittee shall collect Total Depth measurements and maintain the well pump once every two years in accordance with Condition VII.D.2.f.
  - VII.D.6.d.iii. The Permittee shall inspect the wells in accordance with the RCRA Permit Module II, Attachment II-3.
- VII.D.6.e. Prior to activation of WMA 8, the Permittee shall sample these wells for Class 1 and Class 3 parameters and these wells shall be reinstated through a permit modification to the Detection Monitoring Program Schedule.
- VII.D.7. Development and Calibration of a Groundwater Flow and Solute Transport Model:
  - VII.D.7.a. The Permittee shall develop a numerical, finite difference or finite element-based groundwater flow model for the Facility. The conceptual portion of the model and grid design shall be submitted by October 31, 2002; a calibrated model run shall be submitted by February 28, 2003.
  - VII.D.7.b. The Permittee shall develop a numerical, advective-dispersive-reactive, solute transport model for WMA 5 and any other areas where releases of hazardous constituents to the groundwater have been detected. The transport model shall be based on the calibrated groundwater flow model and be contaminant(s)-specific (for the WMA release). The conceptual portion of the model and grid design shall be submitted by June 30, 2003; a calibrated model run shall be submitted by October 31, 2003.
  - VII.D.7.c. The Permittee shall refine and recalibrate the groundwater flow and groundwater solute transport models annually. A report describing annual model recalibration runs for both groundwater flow and contaminant transport models shall be submitted by August 31<sup>st</sup> of every year, utilizing the previous spring and fall groundwater monitoring data.
  - VII.D.7.d. The Permittee shall perform a one-time Monte Carlo-type uncertainty analysis of predictive simulations for contaminants 1,1-DCE and 1,1,1-TCA at WMA 5, based on the transient calibration of the groundwater flow model, by September 30, 2023. A work plan outlining the scope and methods to be employed shall be submitted by October 30, 2022.

VII.D7.e. Based on the most current calibration of the groundwater flow and transport model, the Permittee shall, starting in 2018, evaluate if groundwater monitoring wells MW-45, MW-46, and MW-50 are placed at locations which can unambiguously detect potential leaks of contaminants emanating from cell 8. This evaluation shall be repeated every 5 years. If it is determined that the existing wells cannot detect potential leaks, dedicated groundwater monitoring wells shall be drilled north of the sumps of Cells 8, 10 and 12.

## **VII.E. DETECTION MONITORING PROGRAM AND DATA EVALUATION**

VII.E.1. The detection monitoring program for Class 1 parameters listed in Attachment VII-3, Table 1, shall follow the protocol given in Attachment VII-2 and as specified by the following conditions:

VII.E.1.a. The Permittee shall analyze for Class 1 parameters listed in Attachment VII-3 annually for all monitoring wells covered in this module. Results from all replicates, all field blanks, all trip blanks, and all laboratory blanks shall be reported annually. All dilutions made shall be specified on laboratory reports.

VII.E.1.b. The Permittee shall provide the Director, within 60 days after analysis, a list of compounds analyzed, reportable and tentative values for each compound found in a well sample, the critical level for each compound, a determination whether any reportable values have exceeded critical values in Attachment VII-3, and any additional relevant analyses.

VII.E.1.c. The Permittee shall provide an organized table of the reportable Class 1 compound information. All reportable, flagged values, tentatively identified compounds, and critical values shall be shown for each well and for each of the last three analyses (including repeat analyses). Wells shall be grouped as background and for each of the WMA well sets defined in Condition VII.A.1. A summary cover sheet shall be submitted which shows all values that are at or above the critical values identified for all wells.

VII.E.1.d. The Permittee shall determine whether a given compound concentration value has equaled or exceeded the critical value by simple comparison with the table values in Attachment VII-3.

VII.E.1.e. The Permittee shall provide to the Director information regarding observed patterns of any compound in wells, concentrations found in well samples similar to current or past QA/QC data, and as otherwise provided in Attachment VII-4, to explain statistical trends of compounds.

- VII.E.1.f. For any well where one or more Class 1 parameters are found at or above critical levels, the well shall be re-sampled within one month of notification to the Facility, unless the Director has determined that re-sampling is unnecessary or the compound is already being tracked in the compliance monitoring program. The Permittee may choose to re-sample immediately upon receipt of initial data results, where values at or slightly above the critical levels are indicated. A copy of the initial data will be provided along with the re-sampling data to the Director within 30 days of completion of the re-sample. Re-sampling need only take place for those compounds and at those wells where values at or above the critical levels are indicated.
- VII.E.1.g. Once the monitoring data has been submitted to the Director, the Permittee shall continue to develop evidence that could indicate a source of contamination other than in groundwater. If repeat sampling, as indicated in Condition VII.E.1.f, indicates exceedances of the critical level for at least one compound in a well, the data shall be considered a statistically significant indication of well contamination, subject to one further monitoring analysis as described in Condition VII.E.1.h.
- VII.E.1.h. For a well or wells which have indicated potential contamination by twice exceeding the critical level for the annual sampling event, the Permittee shall obtain a third sample no later than 45 days from the second re-sampling event. The results from the third re-sampling event shall be provided to the Director within 60 days of the third re-sampling event. The Permittee shall analyze for all Class 1 parameters at the well(s) detected in the two previous sampling events (Conditions VII.E.g and VII.E.f) which are not already being tracked in the compliance monitoring program.
- VII.E.1.i. If the third sampling event (Condition VII.E.h) shows Class 1 parameter concentrations at or above the critical levels actions under Condition VII.E.1.k and Section VII.F, compliance monitoring shall be required.
- VII.E.1.j. The Director may consider a number of factors identified in Attachment VII-3, Table 3, regarding the likelihood and potential severity of contamination in determining the appropriate course of action. However, unless informed otherwise, the Permittee shall follow the prescribed courses of action in Condition VII.E.1.k and Section VII.F.
- VII.E.1.k. If, pursuant to Conditions VII.E.1.h and VII.E.1.i, there is a statistically significant increase in any Class 1 parameters, the Permittee shall notify the Director in writing within seven days. The notification shall indicate the affected parameter(s) and well(s). The Permittee may demonstrate under Utah Admin. Code R315-264-98(g)(6) that a source other than a regulated unit caused the increase, or that the increase resulted from an error in sampling, analysis, or evaluation. In making this demonstration the Permittee shall:

- VII.E.1.k.i. Within 90 days submit a report to the Director which demonstrates that a source other than a regulated unit caused the contamination, or that the contamination resulted from an error in sampling, analysis, or evaluation;
- VII.E.1.k.ii. Within 90 days submit to the Director a permit modification request to make any appropriate changes to the detection monitoring program at the facility;
- VII.E.1.k.iii. Continue to monitor according to the detection monitoring program outlined in this permit; and
- VII.E.1.k.iv. The Permittee shall submit a permit modification request under Condition VII.E.5.a unless the demonstration successfully shows that a source other than a regulated unit caused the increase or that the increase resulted from error in sampling, analysis, or evaluation.
- VII.E.1.l. For a WMA in which one or more of the downgradient monitoring wells have shown statistically significant levels of Class 1 parameter contamination (Condition VII.E.1.k), the Permittee shall immediately sample the groundwater in all monitoring wells associated with that WMA. This sampling event will occur no later than 45 days of third sampling date. These wells will be sampled and analyzed to identify and quantify any Class 2 parameters identified in Attachment VII-3, Table 2.
- VII.E.1.m. The Permittee shall establish a background value for each Class 2 parameter that has been detected at the compliance point(s).
- VII.E.1.n. Within 90 days of the notification that the results of three analysis showed levels at or above the critical value of any Class 1 parameter, the Permittee shall submit to the Director a permit modification to establish a compliance monitoring program for the affected WMAs:
  - VII.E.1.n.i. An identification of the concentration of any Class 2 parameter found in the groundwater at each monitoring well in the affected WMA;
  - VII.E.1.n.ii. Any proposed modification to the groundwater monitoring system at the facility necessary to meet the requirements of the facility's compliance monitoring program, as detailed in Section VII.F. and Utah Admin. Code R315-264-99;
  - VII.E.1.n.iii. Any proposed modification to change the monitoring frequency, sampling and analysis procedures used at the facility necessary to meet the requirements of the facility's compliance monitoring program, Section VII.F and Utah Admin. Code R315-264-99; and
  - VII.E.1.n.iv. For each hazardous constituent found at the compliance point, a proposed concentration limit or a notice of intent to seek an alternate concentration limit under Utah Admin. Code R315-264-94(b).

- VII.E.1.o. The Permittee shall submit to the Director within 180 days of the notification that any Class 1 compound was found to be at or above the critical value in three consecutive samples, all data necessary to justify any alternate concentration limit sought under Utah Admin. Code R315-264-94(b) and an engineering feasibility plan for a corrective action program necessary to meet the requirements of Section VII.G and Utah Admin. Code R315-264-100, unless:
- VII.E.1.o.i. All hazardous constituents identified under this section are listed in Table 1 of Utah Admin. Code R315-264-94 and their concentrations do not exceed the respective values given in that Table, or
- VII.E.1.o.ii. The Permittee has sought an alternate concentration limit under Utah Admin. Code R315-264-94(b) for each hazardous constituent identified in Utah Admin. Code R315-264-1107, which incorporates 40 CFR §264 Appendix IX by reference.
- VII.E.1.p. If the detection monitoring program for a WMA no longer satisfies the requirements of this section, the Permittee shall, within 90 days, submit an application for a permit modification to make appropriate changes to the program.
- VII.E.1.q. The Permittee shall assure that monitoring and corrective action measures necessary to achieve compliance with the groundwater protection standard under Utah Admin. Code R315-264-92 and Section VII.C of this module are taken during the term of permit modification.
- VII.E.1.r. The Permittee shall maintain and upon request, provide to the Director, historical data series of total depth, water levels, general water quality parameters, Class 3 parameters and detected Class 1 parameters for any well in the detection monitoring program.
- VII.E.2. Class 3 Detection Monitoring Background Water Quality Parameters
- VII.E.2.a. The Permittee shall monitor all Class 3 parameters listed in Attachment VII-3, Table 3 at each annual sampling interval for all wells covered under this section. In addition, field measurements shall be conducted for pH, specific conductance, turbidity, and sample temperature. The results of all measurements shall be reported to the Director. The field measurements shall be used as a qualitative measure of Class 3 water quality unless the Permittee or the Director has reason to believe the field data is inaccurate, in which case pH, specific conductance, turbidity, and sample temperature will need to be analyzed quantitatively by a Utah-certified, analytical laboratory.
- VII.E.2.b. The Permittee shall provide with each report of the annual sampling event, an analysis by WMA of each of the Class 3 parameters as defined in Attachment

VII-3, Table 3 with Attachment VII-7 and a summary of the gross cation/anion balance.

- VII.E.2.c. The Director shall utilize these data and information in assessing the weight of evidence regarding potential statistical significance of Class 1 parameters, as described in Attachment VII-3, Table 1.
- VII.E.3. The Permittee shall report quality control and quality assurance data, including required method blanks annually, in conjunction with the submission of annual groundwater sampling reports.
- VII.E.4. The Permittee shall enter all monitoring, testing and analytical data into the Operating Record as required by Utah Admin. Code R315-264-73(a)(6) and this permit.
- VII.E.5. Permit Modification
- VII.E.5.a. If the detection, compliance monitoring or corrective action program required by this permit no longer satisfies the requirements of the regulations, the Permittee shall, within 90 days of this determination, submit an application for a permit modification to make any appropriate changes to the program which will satisfy the regulations.
- VII.E.5.b. The Permittee shall ensure that monitoring and corrective action measures, necessary to achieve compliance with the groundwater protection standard under Utah Admin. Code R315-264-92 and Module VII are being implemented.
- VII.F. COMPLIANCE MONITORING REQUIREMENTS** Error! Bookmark not defined.
- VII.F.1. The compliance monitoring program and assessment shall begin for wells within a WMA at the time the third consecutive sample shows positive indication of contamination as described in Condition VII.E.1, and shall extend until the Permittee demonstrates satisfactorily that the groundwater protection standard in Section VII.C has not been exceeded at the compliance point(s) for three consecutive years. The compliance monitoring program shall consist of a semi-annual monitoring program, in which a full Class 2 (Attachment VII-3, Table 2) parameter analysis is conducted every fall and a Class 1 and 3 parameter analysis is conducted every spring for all compliance point wells within an affected WMA.
- VII.F.1.a. Only those parameters showing statistically significant contamination shall be included in the compliance monitoring program;
- VII.F.1.b. The rest of the class 1 parameters, including the annual Class 2 parameters, are monitored in the detection monitoring program;

- VII.F.1.c. The procedures for sampling and analysis defined in the detection monitoring program shall be used in the compliance monitoring program;
- VII.F.1.d. The Director may modify, change, add, or delete any specific parameters, in order to meet the criteria of Utah Admin. Code R315-264-92.
- VII.F.2. The Director may require monitoring of hazardous constituents in wastes, leachate or suspected sources of contamination to determine whether contaminants entering groundwater are reasonably expected to be derived from the unit in question.
- VII.F.3. The Director may require additional field tests, groundwater monitoring or soil vapor well installation, or further analytical tests necessary to adequately assess the horizontal and vertical rate and extent of migration of the contaminants, including the unsaturated zone routes of migration.
- VII.F.4. If any regulated or solid waste management unit within the WMAs defined in Condition VII.A.1 is determined to be the source of hazardous constituents in groundwater, the Corrective Action Plan developed pursuant to Module VIII shall include actions to contain or stop the release from that unit.
- VII.F.5. The Permittee shall, if appropriate, request a permit modification to comply with Utah Admin. Code R315-264-98(h) and Condition VII.E.5.
- VII.F.6. The Permittee shall submit to the Director within 90 days from initiation of the compliance monitoring program, an interim information report of all information collected or proposed to be collected to identify the source of contaminants and extent of release in groundwater, and any proposed alternate concentration limits. This interim information report is not intended to be a petition for an alternative concentration limit.
  - VII.F.6.a. The Director may accept, reject, or modify any part of the proposed information collection procedures, based on the technical adequacy of the proposals, in complying with the requirements of Utah Admin. Code R315-264-99.
  - VII.F.6.b. The Permittee shall ensure that monitoring and corrective action measures necessary to achieve compliance with the groundwater protection standard are taken during the compliance monitoring period.
- VII.F.7. The Director may modify statistical testing procedures, as outlined in Attachment VII-7, as necessary.
- VII.F.8. The Permittee shall determine whether there is a statistically significant increase over concentration limits established for each hazardous constituent under the groundwater protection standard, each time the concentration of hazardous constituents is determined at the compliance point(s).



- VII.F.9. If the groundwater protection standard is being exceeded at any monitoring well for any parameters, other than those already in the compliance monitoring program, within the point(s) of compliance, the Permittee shall:
- VII.F.9.a. Notify the Director of this finding in writing within seven days. The notification shall include identifying the compound(s) that exceeded the concentration limits and their respective concentrations;
- VII.F.9.b. Submit to the Director an application for a modification to the corrective action program developed for the preexisting contaminants within 180 days, or within 90 days if a corrective action program has already been approved under Module VIII. The application shall include, at a minimum, a detailed description of corrective actions that will achieve compliance with the groundwater protection standard specified in the permit, and a plan for a groundwater monitoring program that will demonstrate the effectiveness of corrective action.
- VII.F.10. If the compliance monitoring program no longer is needed or no longer satisfies the requirements of this section, the Permittee shall, within 90 days, request a permit modification to make any appropriate changes to the program.

**VII.G. CORRECTIVE ACTION REQUIREMENTS**

- VII.G.1. If the Permittee is required to establish a corrective action program under this section, he or she shall establish it pursuant to Module VIII meeting the following requirements:
- VII.G.1.a. Take corrective action to ensure that regulated and solid waste units under these requirements are in compliance with the groundwater protection standard under Utah Admin. Code R315-264-92 and Module VII. The Director may specify the groundwater protection standard requirements in the facility permit modification, including but not limited to:
- VII.G.1.a.i. A list of hazardous constituents identified under Utah Admin. Code R315-264-93;
- VII.G.1.a.ii. Concentration limits under Utah Admin. Code R315-264-94 for each of those hazardous constituents;
- VII.G.1.a.iii. The compliance point(s) under Utah Admin. Code R315-264-95; and
- VII.G.1.a.iv. The compliance period under Utah Admin. Code R315-264-96.
- VII.G.2. The Permittee shall implement a corrective action program that prevents hazardous constituents from exceeding their respective concentration limits at the compliance point(s) by removing the hazardous constituents or treating them in

place. The Permittee shall submit to the Director a permit modification request, which will list the specific measures to be taken.

- VII.G.3. The Permittee shall begin corrective action as soon as the groundwater standard has been reported to have been exceeded. The Director will specify the time period in the permit modification. If the facility intends to include a corrective action program in addition to a compliance monitoring program, the permit modification shall specify when the corrective action will begin and such a requirement shall operate in lieu of Utah Admin. Code R315-264-99(i)(2).
- VII.G.4. In conjunction with a corrective action program, the Permittee shall establish and implement a groundwater monitoring program to demonstrate the effectiveness of the corrective action program. Such a monitoring program shall be based on the requirements for a compliance monitoring program under Utah Admin. Code R315-264-99 and Section VII.F.
- VII.G.5. Corrective action measures under this permit shall be terminated once the concentration of hazardous constituents identified in Utah Admin. Code R315-264-93 and Section VII.F meet the criteria of Module VII for a period of three consecutive years.
- VII.G.6. The Permittee shall continue corrective action measures during and beyond the compliance period for as long as necessary to achieve compliance with the groundwater protection standard.
- VII.G.7. The Permittee shall report semi-annually in writing to the Director on the effectiveness of the corrective action program.
- VII.G.8. If corrective action is no longer needed or no longer satisfies the requirements of this section, the Permittee shall, within 90 days, request a permit modification.
- VII.G.9. The Permittee shall initiate corrective action as necessary to protect human health and the environment for all releases of hazardous waste or constituents from any solid waste management unit at the facility, regardless of the time at which the waste was applied in such unit. This requirement shall remain in effect for the life of the permit and through the closure/post-closure period for all SWMUs at the facility.

**MODULE VIII**

**CORRECTIVE ACTION PLAN DEVELOPMENT PROCEDURES  
FOR  
GROUNDWATER CONTAMINATION AND/OR SOLID WASTE  
MANAGEMENT UNITS  
AND SCHEDULE OF COMPLIANCE**



MODULE VIII  
CORRECTIVE ACTION PLAN DEVELOPMENT PROCEDURES  
FOR  
GROUNDWATER CONTAMINATION AND/OR SOLID WASTE MANAGEMENT UNITS  
AND SCHEDULE OF COMPLIANCE

**TABLE OF CONTENTS**

VIII.A.	Solid Waste Management Units.....	1
VIII.B.	Standard Conditions.....	1
VIII.C.	RCRA Facility Investigation .....	2
VIII.D.	Interim Measures and Voluntary Clean Up Actions.....	4
VIII.E.	Notification Requirements For and Assessment of Newly-Identified Solid Waste Management Units.....	5
VIII.F	Determination of No Further Action.....	7
VIII.G.	Corrective Action Plan.....	8
VIII.H.	Reporting Requirements .....	8
Table 1	List of Solid Waste Management Units (SWMU)	
Table 2	List of SWMU which shall be addressed in a RFI Work Plan as directed by the Director	
Table 3	RCRA Facility Investigation Compliance Schedule	
Table 4	Corrective Action Compliance Schedule	



**MODULE VIII -CORRECTIVE ACTION PLAN DEVELOPMENT  
PROCEDURESFORGROUNDWATER CONTAMINATION AND/OR SOLID WASTE  
MANAGEMENT UNITSAND SCHEDULE OF COMPLIANCE**

**VIII.A. SOLID WASTE MANAGEMENT UNITS**

The Permittee shall conduct a corrective action investigation, in accordance with Module VIII, for each Solid Waste Management Unit (SWMU) specified in Table 1.

- VIII.A.1 The Director may add SWMUs to those in Tables VIII-1 and VIII-2, in accordance with Utah Admin. Code R315-270-41, based on additional information received by the Permittee, the Director, the Administrator, or any other knowledgeable source.

**VIII.B. STANDARD CONDITIONS**

- VIII.B.1 Failure to submit the information required by Module VIII or falsification of any submitted information is grounds for termination of this permit in accordance with Utah Admin. Code R315-270-43.

- VIII.B.2 The Permittee shall sign and certify all plans, reports, notifications, and other submissions to the Director and the Assistant Region Administrator, in accordance with Conditions I.BB. and I.DD.

- VIII.B.3 The Permittee shall submit a minimum of two copies of each plan, report, notification, or other submissions within Module VIII, to the Director and the Assistant Regional Administrator when applicable.

- VIII.B.2 If the submission addresses Cell B\6, the PCB Tank Farm or Storage Building, or the Surface Impoundment if managing F039 from Cell B\6, or the Leachate or Stabilization Tanks while managing PCBs, both the Director and the Assistant Regional Administrator shall receive the submissions.

- VIII.B.3 Upon written approval by the Director, all plans and schedules required by the conditions of this module shall be incorporated into Module VIII upon completion of an appropriate comment period. Any noncompliance with such approved plans and schedules may be subject to enforcement action.

- VIII.B.3.a The Permittee shall submit all final reports to the Director and the Assistant Regional Administrator in the time frames specified. The final reports shall incorporate all comments from the reviews of previous drafts.

- VIII.B.4 Upon written approval from the Director, the Permittee may receive extensions of the specified compliance schedule due dates for the submittals required by

Module VIII.

VIII.B.5 If the Director determines that further actions beyond those provided by Module VIII, or changes to that which are stated herein, are warranted, the Permittee shall petition the Director to modify Module VIII.

VIII.B.6 All raw data, such as laboratory reports, drilling logs, bench-scale or pilot-scale data, and other supporting information gathered or generated during activities undertaken pursuant to conditions in Module VIII shall be maintained by the Facility for the effective term of this permit, including any post-closure care period. These records must be accessible to the Director and the Assistant Regional Administrator within one working day from the date of request.

**VIII.C. RCRA FACILITY INVESTIGATION**

VIII.C.1 As required by the Director, the Permittee shall conduct a RCRA Facility Investigation (RFI) to determine the nature and extent of known and suspected releases of hazardous waste or hazardous constituents in groundwater, originating from any location at the Facility, including from a SWMU, as identified in Table VIII-2, and to gather data to support the Corrective Action Plan (CAP). The Permittee shall conduct the RFI in accordance with the schedule specified in Table VIII-3.

VIII.C.2 The Permittee shall prepare and submit the RFI Work Plan (designated as Task II) to be reviewed and approved by the Director. The Permittee shall then perform the RFI activities as specified in the approved work plan.

VIII.C.3 The RFI work plan shall include:

VIII.C.3.a A Project Management Plan detailing a discussion of the technical approach to the investigation, schedules, milestone reports and personnel;

VIII.C.3.b A Data Collection Quality Assurance Plan to establish and document all monitoring procedures;

VIII.C.3.c A Data Management Plan to track investigation data and results;

VIII.C.3.d A Health and Safety Plan for safe conduct of corrective action activities; and

VIII.C.3.e A Community Relations Plan for public dissemination of information.

VIII.C.4 Along with the RFI Work Plan, the Permittee shall prepare and submit a Description of Current Conditions (designated as Task I) in accordance with the schedule in Table VIII- 3. The report shall include:

VIII.C.4.a Background information gathered during previous investigations or inspections



and other relevant data;

- VIII.C.4.b Nature, extent, and rate of migration of contamination, if known; and
- VIII.C.4.c Past or current activities at the Facility.
- VIII.C.5 The Permittee shall implement (Task III) the approved RFI Work Plan. The Permittee shall present data of adequate technical quality to support the contention that no further action is required or the development and evaluation of corrective measures alternatives presented in the CAP. Task III shall consist of:
  - VIII.C.5.a Characterization of the environmental setting at the Facility, including the hydrogeology, soils, surface water, sediment, and air;
  - VIII.C.5.b Source characterization of all waste management areas at the Facility, including the nature of the unit and the type of waste place in the unit as described by chemical and physical characteristics;
  - VIII.C.5.c Contamination characterization, including analysis of hazardous waste or hazardous constituents from SWMUs and the effects of such hazardous waste or hazardous constituents on groundwater, soils, surface water, sediment, air, subsurface gases; and
  - VIII.C.5.d Potential receptor identification describing the potential for human and environmental impact from contaminant exposure from the Facility;
- VIII.C.6 The Permittee shall prepare an analysis and summary of the RFI(s) including results. This task, Investigation Analysis, shall be designated as Task IV. The objective of Task IV shall be to ensure that the investigation data are sufficient in quality and quantity to describe the nature and extent of contamination, potential threat to human health and the environment, and to produce the CAP. Task IV shall consist of:
  - VIII.C.6.a Data analysis of the type and extent of contamination at each SWMU including sources and migration pathways;
  - VIII.C.6.b Protection standards for groundwater, soil, or other relevant protection standard;
- VIII.C.7 The Permittee shall submit a schedule of activities and reports, to the Director as required by Table 3 of this module.

#### **VIII.D. INTERIM MEASURES AND VOLUNTARY CLEAN UP ACTIONS**

- VIII.D.1 If, during the course of any activity initiated in compliance with the conditions of Module VIII of this permit, the Director or the Permittee determines that a release or potential release of hazardous waste or hazardous constituents from a SWMU

poses a threat to human health and the environment, the Permittee shall be required to perform specific interim measures.

- VIII.D.1.a If any release or potential release of hazardous waste or hazardous waste constituents poses an immediate danger to human health or the environment, the Permittee shall inform the Director at once. The Director may then require corrective action to be implemented without delay.
- VIII.D.2 The Director shall notify the Permittee in writing of the requirement to perform the interim measures specified in the Interim Measures Plan, in accordance with Condition VIII.D.3.
- VIII.D.3 Within 30 calendar days of receiving the written notification requiring the Interim Measures Plan as specified in Condition VIII.D.2., the Permittee shall provide the Interim Measures Plan to the Director for approval. The Interim Measures Plan shall include the following:
  - VIII.D.3.a Mitigation of potential threats to human health and the environment that is consistent with and integrated into any long term solution at the Facility;
  - VIII.D.3.b Data collection quality assurance and data management information;
  - VIII.D.3.c Design plans and specifications, construction requirements, operation and maintenance requirements, project schedules, and final design documents;
  - VIII.D.3.d Construction quality assurance objectives, inspection activities, sampling requirements, and documentation; and
  - VIII.D.3.e Schedule for submittal of the following reports; progress reports, interim measures work plan, final design documents, draft interim measures report, and final interim measures report.
- VIII.D.4 The Permittee shall perform the requirements of the Interim Measures Plan.
- VIII.D.5 The Permittee may propose to initiate voluntary interim measures in accordance with Condition VIII.D.6.
- VIII.D.6 In determining whether an interim measure may be considered voluntary, the Permittee shall evaluate the following:
  - VIII.D.6.a Time required to develop and implement a final remedy;
  - VIII.D.6.b Actual and potential exposure of human and environmental receptors;
  - VIII.D.6.c Actual and potential contamination of drinking water supplies and sensitive ecosystems;

- VIII.D.6.d The potential for further degradation of the medium absent interim measures;
- VIII.D.6.e Presence of hazardous constituent(s) in containers that may pose a threat of release;
- VIII.D.6.f Presence and concentration of hazardous constituent(s) in soils that have the potential to migrate to groundwater or surface water;
- VIII.D.6.g Weather conditions that may affect the current levels of contamination;
- VIII.D.6.h Risks of fire, explosion, or accident; and
- VIII.D.6.i Other situations that may pose threats to human health and the environment.
- VIII.D.7 If the Director disagrees with the Permittee proposed voluntary interim measures, the Permittee shall follow the requirements of Condition VIII.D.3.

**VIII.E. NOTIFICATION REQUIREMENTS FOR AND ASSESSMENT OF NEWLY IDENTIFIED SOLID WASTE MANAGEMENT UNITS**

- VIII.E.1 The Permittee shall notify the Director in writing, of any newly identified SWMU(s) not identified in Section VIII.A., within 30 calendar days of discovering the SWMU(s). The notification shall include the location of the new SWMU(s) and information on the suspected or known wastes at the site.
- VIII.E.2 Within 150 calendar days following a request from the Director for a SWMU Assessment Plan for any newly discovered SWMU, the Permittee shall submit a SWMU Assessment Plan to the Director.
- VIII.E.3 The SWMU Assessment Plan shall include:
  - VIII.E.3.a A description of past and present operations at the unit(s); and
  - VIII.E.3.b Any groundwater, surface water, soil (surface or subsurface strata), or air sampling and analysis data needed to determine whether a release of hazardous constituent(s) from such unit(s) is likely to occur. The SWMU Assessment Plan shall demonstrate that the sampling and analysis program, if applicable, is capable of yielding representative samples and shall include parameters sufficient to identify migration of hazardous constituent(s) from the newly discovered SWMUs to the environment.
- VIII.E.4 The SWMU Assessment Plan shall be evaluated by the Director and;
  - VIII.E.4.a The Permittee shall receive written approval from the Director for the SWMU Assessment Plan; or

- VIII.E.4.b The Permittee shall receive written notice from the Director of the SWMU Assessment Plan's deficiencies and the written notice will specify a due date for submittal of a revised assessment plan; or
- VIII.E.4.c The Permittee shall receive written notice from the Director of the revisions incorporated by the Director in the SWMU Assessment Plan. The revised assessment plan shall become the approved SWMU Assessment Plan.
- VIII.E.5 The SWMU Assessment Plan, as approved by the Director specified in Condition VIII.E.4., shall be incorporated within Module VIII.
- VIII.E.6 The Permittee shall implement the approved SWMU Assessment Plan within 30 calendar days of receiving written notice of the approval by the Director. The assessment shall be completed within 180 days of approval.
- VIII.E.7 Within 30 days of completion of the assessment, the Permittee shall submit a SWMU Assessment Report to the Director.
- VIII.E.8 The SWMU Assessment Report shall provide all results obtained from the implementation of the approved SWMU Assessment Plan, including:
- VIII.E.8.a The SWMU location, identified on a map;
- VIII.E.8.b The type and function of the unit, including general dimensions and a structural description;
- VIII.E.8.c The period during which the unit was operated; and
- VIII.E.8.d A list of all wastes managed at the SWMU and results of all sampling and analysis used to determine whether releases of hazardous waste or hazardous constituents has occurred, are occurring, or are likely to occur from the unit.
- VIII.E.9 Based on the results of the SWMU Assessment Report, the Director shall determine the need for further investigations at specific SWMUs included in the SWMU Assessment Report. If the Director determines that such investigations are needed, the Director shall require the Permittee to prepare a RCRA Facility Investigation Work Plan under Section VIII.C.

#### **VIII.F. DETERMINATION OF NO FURTHER ACTIONS**

- VIII.F.1 At any time during an investigation of a SWMU, the Permittee may petition the Director for a determination of no further action (NFA).
- VIII.F.2 The NFA petition shall contain information based on the SWMU Assessment Report, the RFI or any other information that demonstrates that:

- VIII.F.2.a Hazardous waste or hazardous constituents are not detected; or
- VIII.F.2.b Hazardous waste or hazardous constituents have been detected, but are below background concentrations; or
- VIII.F.2.c Hazardous waste or hazardous constituents have been detected, but do not pose a threat to human health or the environment;
- VIII.F.3 A determination of NFA, in accordance with Condition VIII.F.1., shall not preclude the Director from requiring further investigations, studies, or remediation at a later date if new information or subsequent analysis indicates a release or potential of a release from a SWMU at the Facility. In such a case, the Permittee shall modify the Corrective Action Schedule of Compliance of Module VIII.

### **VIII.G. CORRECTIVE ACTION PLAN**

- VIII.G.1 Based on the results of the RFI, the Permittee shall submit to the Director for review and approval a Corrective Action Plan (CAP) for all SWMUs that have been identified to have a release of hazardous waste or hazardous constituents, in accordance with the schedule specified in Table VIII- 4 of Module VIII. The CAP shall include:
  - VIII.G.1.a Target cleanup objectives;
  - VIII.G.1.b Corrective action(s) that shall satisfy target cleanup objectives;
  - VIII.G.1.c Summary of all corrective measure alternatives examined for the CAP; and
  - VIII.G.1.d Schedule for implementation of the corrective action(s) according to the timeframe and schedule contained in Module VIII.
- VIII.G.2 If the CAP addresses Cell B/6 or any new RCRA/TSCA cells, the PCB Tank Farm or Storage Building, or the Surface Impoundment if managing F039 from RCRA/TSCA cells, or the Leachate or Stabilization Tanks while managing PCBs, the Assistant Regional Administrator shall also receive the submissions identified in VIII.G.1.a through VIII.G.1.d.
- VIII.G.3 Within 30 days upon receipt of comments of the Director (and the Assistant Regional Administrator if applicable) the Permittee shall modify the CAP or submit a new CAP for the Director's approval.
- VIII.G.4 The Director (and the Assistant Regional Administrator if applicable) shall consider performance, reliability, implementability, safety, human health, and the environmental impact of the measure(s) in approving the CAP.

VIII.G.5 Upon approval of the CAP, the Permittee shall implement the corrective action(s) according to the schedule as approved in the CAP. The approved schedule for the CAP shall be incorporated in Table VIII- 4, Corrective Action Compliance Schedule.

VIII.G.6 The Permittee shall furnish or retain all personnel, materials, and services necessary for the implementation of the CAP.

## **VIII.H. REPORTING REQUIREMENTS**

VIII.H.1 The Permittee shall submit to the Director and the Assistant Regional Administrator when applicable, written quarterly progress reports of all activities conducted after the effective date of the approved CAP. The Permittee shall submit the first quarterly progress reports no later than 90 calendar days after the effective date of the approved CAP.

VIII.H.2 The quarterly progress reports shall contain:

VIII.H.2.a A description of the work completed;

VIII.H.2.b Summaries of all findings and all raw data;

VIII.H.2.c Summaries of all problems encountered during the reporting period and actions taken or to be taken to rectify problems; and

VIII.H.2.d Projected work for the next reporting period.

VIII.H.3 The Permittee shall maintain copies of the reports, drilling logs, and data at the Facility during the effective period of this permit.

**TABLE 1 : LIST OF SOLID WASTE MANAGEMENT UNITS (SWMUs)**

<b>NUMBER</b>	<b>SWMU DESCRIPTION</b>
1	Landfill Cell 1 <sup>1</sup>
2	Landfill Cell 2 <sup>1</sup>
3	Landfill Cell 3 <sup>1</sup>
4	Landfill Cell 4 <sup>1</sup>
5	Landfill Cell 5 <sup>1</sup>
6	Landfill Cell 7 <sup>1</sup>
7	Industrial Waste Cell 1 <sup>1</sup>
8	Industrial Waste Cell 2 <sup>1</sup>
9	Reserved
10	Leachate Area and Tank <sup>1</sup>
11	Waste Stabilization Area and Tanks <sup>1</sup>
12	RCRA storage Area <sup>1</sup>
13	Reserved (formally Solvent Storage Tank)
14	RCRA Surface Impoundment A <sup>1</sup>
15	Reserved <sup>1</sup>
16	Old Operations Area (lab, septic system, etc.)
17	Heat Tent <sup>1</sup>
18	Wheel Wash Stations (including TSCA X, Y, Z Station, Cell B/6 Station, Cell 7 Station and Cell 8 Station)
19	90-Day Areas, 90-Day Accumulation Tanks, and associated piping <sup>1</sup>
20	Runoff control Ponds
21	Maintenance Buildings
22	Solvent Recovery Tanks (removed) and caustic pipe <sup>1</sup>
23	Scrap Yard
24	Container Holding Areas Prior to disposal and Empty Roll-off Box Area
25	Closed AST Fuel tanks south and active AST north of Surface Impoundment
26	TSCA Landfill Cells X, Y, and Z <sup>2</sup>
27	RCRA/TSCA Landfill Cell B/6 <sup>1</sup>
28	RCRA Landfill Cell 8
29	RCRA Surface Impoundment B

This list of SWMUs was compiled in June of 1993 and kept current with permit modifications.

---

<sup>1</sup> Addressed in Facility Closure Plan.

<sup>2</sup> Addressed in TSCA Facility Closure Plan.

**TABLE 2: LIST OF SOLID WASTE MANAGEMENT UNITS (SWMU) THAT SHALL BE ADDRESSED IN A RFI WORK PLAN**

<b>NUMBER</b>	<b>SWMU DESCRIPTION</b>
16	Old Operations Area (lab, septic system, etc.)
17	Heat Tent
18	Truck Wash Stations (including X,Y,Z station) and RCRA empty container wash
19	90-Day Areas, 90-Day Accumulation Tanks, and associated piping
20	Runoff control Ponds
21	Maintenance Buildings
22	Solvent Recovery Tanks (removed) and caustic pipe
23	Scrap Yard
24	Container Holding Areas Prior to disposal and Empty Roll-off Box Area
25	Closed AST Fuel tanks south and active AST north of Surface Impoundment

This list of SWMUs was compiled in June of 1993 and kept current with permit modifications. This list of solid waste management units was initially compiled in June of 1993 by inspection of the waste management units located at the Facility.



**TABLE 3: RCRA Facility Investigation Compliance Schedule**

<u>Activity</u>	<u>Due Date</u>
1. Submit Task I - Current Conditions Report	Within 180 days of the detection of contamination or directive from the Director
2. Submit Task II - Draft RFI work plan and schedule	Within 90 days from submission of Task I Current Conditions Report.
3. Begin Task III - Facility Investigation according to the approved Task II RFI work plan and schedule	Within 60 days of Director's approved Task II RFI Work Plan and schedule.
4. Submit Task IV - Investigation Analysis	As indicated in the Director's approved Task II RFI Work Plan and schedule.
5. Submit Tasks III and IV Summary and Final reports	As indicated in the Director's approved Task II RFI Work Plan and schedule.

**TABLE 4: Corrective Action Compliance Schedule**

<u>Facility Submission</u>	<u>Due Date</u>
1. Draft CAP.	Within 180 days of the Director's approval of the final RFI Report.
2. Final CAP.	Within 60 days of receiving the Director's comments on the Draft CAP.
3. CAP Construction and Implementation reports.	As specified in CAP as approved of by the Director.
4. Draft CQA (Construction Quality Assurance) program plan.	Prior to construction
5. Final CQA (Construction Quality Assurance) program plan.	Within 60 days of the Director's approval of draft CQA plan.
6. Construction of corrective measures.	As approved in final CAP
7. Construction certification inspection	As approved in the final CQA plan
8. Corrective measure construction report	90 days following completion of construction.
9. Progress Reports.	Quarterly, within 90 days after the CAP is approved.

**MODULE IX**  
**POST-CLOSURE CARE**



## TABLE OF CONTENTS

### MODULE IX - POST-CLOSURE CARE

IX.A.	Applicability .....	1
IX.B.	General Landfill Post-Closure Care Conditions.....	1
IX.C.	Security .....	2
IX.D.	Inspections .....	2
IX.E.	Documents to be Maintained at the Facility .....	3
IX.F.	Recordkeeping and Reporting .....	4
IX.G.	Required Submissions Under This Module.....	4
Table IX-1	Post-Closure Start Dates.....	5
Table IX-2	Required Submissions .....	5
Attachment IX	Post-Closure Inspection Plan .....	Volume 2



## **MODULE IX**

### **POST-CLOSURE CARE**

#### **IX.A. APPLICABILITY**

- IX.A.1. The Permittee shall monitor the closed hazardous waste management units in accordance with the conditions of this module. This module shall remain in effect for all landfill cells after closure of the Facility. Upon closure, any further disposal of hazardous waste in any closed unit is prohibited.
- IX.A.2. The post-closure period shall include monitoring, reporting and maintenance of waste containment systems in accordance with the requirements of Utah Admin. Code R315-264-117 and this permit.
- IX.A.3. This module shall not apply to the surface impoundment if the unit is clean closed in accordance with Utah Admin. Code R315-264-110.
- IX.A.4. The Permittee shall provide post-closure care of:  
Hazardous Waste Landfill Cells 1, 2, 3, 4 and 5, which have been closed;  
Industrial Waste Landfill Cells 1 & 2, which have been closed to RCRA standards;  
Hazardous Waste Landfill Cells 7;  
RCRA/TSCA Cell B/6  
Cells 8, 9, 10, 11, 12, and 13 and any future hazardous waste landfill cells constructed and used to dispose of hazardous TSCA waste streams.
- IX.A.5. The Director shall extend the post-closure period applicable to a hazardous waste management unit, or the facility, if he finds that the extended period is necessary to protect human health and the environment.
- IX.A.6. The post-closure permit will consist of the applicable sections of Modules I, II, IV, VI, VII, VIII and Module IX in its entirety. Upon final closure of the facility, a Class 3 permit modification request shall be submitted to the Director that shall include the applicable portions of the permit for the post-closure period.
- IX.A.7. When the permit is reissued in accordance with I.G of Module 1, the Director may, at his discretion, extend the post-closure period.

#### **IX.B. GENERAL LANDFILL POST-CLOSURE CARE CONDITIONS**

- IX.B.1. The Permittee shall conduct all post-closure care activities in accordance with the Closure Plan (Attachment II-7) and this permit.
- IX.B.2. The Permittee shall provide post-closure care for each landfill cell for a period of at least 30 years following final closure of the facility. Table IX-1 lists the dates that

the closed cells were certified closed by the Division.

- IX.B.3. Closed landfill cells shall have a final cover that:
  - IX.B.3.a. Minimizes the migration of liquids through the landfill cell;
  - IX.B.3.b. Functions with minimum maintenance;
  - IX.B.3.c. Minimizes the intrusion by burrowing animals.
  - IX.B.3.d. Promotes drainage and minimizes erosion or abrasion of the cover;
  - IX.B.3.e. Accommodates settling and subsidence so that the cover's integrity is maintained;  
and
  - IX.B.3.f. Has a permeability less than or equal to the permeability of the landfill cell's bottom liner system.
- IX.B.4. The Permittee shall:
  - IX.B.4.a. Maintain the integrity and effectiveness of the final cover;
  - IX.B.4.b. Continue to operate the leachate collection and removal system until leachate is no longer detected for four consecutive sampling events;
  - IX.B.4.c. Maintain and monitor the groundwater monitoring system as described in Module VII and its attachments.
  - IX.B.4.d. Prevent run-on and run-off from damaging the final cover; and
  - IX.B.4.e. Protect and maintain surveyed benchmarks.

### **IX.C. SECURITY**

- IX.C.1. The Permittee shall comply with the following security conditions:
  - IX.C.1.a. The fence with locking gates surrounding the closed facility on all sides, which prevents unauthorized entry, shall be maintained throughout the post-closure care period.
  - IX.C.1.b. Signs written in English which read "DANGER, UNAUTHORIZED PERSONNEL KEEP OUT" shall be posted on the gates and the fence line of the facility perimeter at intervals of no more than 120 feet between signs. These shall be maintained throughout the post-closure care period. The signs shall be legible from a distance of at least 25 feet.



IX.C.1.c. All security equipment shall be routinely inspected throughout the post-closure care period. These inspections (e.g.: fence, signs of vandalism, etc.) are included in Attachment IX-1.

#### **IX.D. INSPECTIONS**

IX.C.1.d. Damaged security equipment shall be noted in the inspection record. Any problem shall be corrected as soon as possible after the problem is discovered.

IX.D.1. Inspections shall be conducted during the post-closure care period in accordance with Attachment IX-1. All records of inspections and remedial actions shall be retained in the Operating Record.

IX.D.2. Permittee shall maintain an inspection checklist that follows the outline, narrative, and schedule found in the inspection procedures of Attachment IX-1.

IX.D.3. Permittee shall comply with Condition II.F.1.

IX.D.4. The Permittee shall report any spill of hazardous waste, contaminated media, or material which, when spilled, becomes waste, to the Director in accordance with Utah Admin.Code R315-263-30.

IX.D.5. The Permittee shall inspect the closed portions of the facility within 24 hours after a storm event, and document such in the inspection log as a storm event inspection. For the purposes of inspections, a storm event shall be defined as precipitation in excess of 0.5 inches per 24 hours.

IX.D.6. The Permittee shall install and maintain, on their premises, equipment appropriate to measure rainfall for the purpose of determining storm events.

IX.D.7. The Permittee shall inspect and incorporate as part of the inspection checklist, required by Condition IX.D.2., all groundwater monitoring wells as outlined in Attachment IX-1 on a quarterly basis, as specified below:

IX.D.7.a. Inspect for damage to the casing and cover security;

IX.D.7.b. Inspect for tampering of lock or monitoring well cap; and

IX.D.7.c. Insure that the wells are accessible and visible to all appropriate personnel.

#### **IX.E. LEACHATE MANAGEMENT**

IX.E.1. Leachate and leak detection pumps and piping shall be maintained throughout the post-closure period.

- IX.E.2. Leachate shall be managed as a hazardous waste (F039).
- IX.E.3. Leachate shall be pumped according to the following schedule, which is progressive in nature. For example, prior to implementation of IX.E.3.c, the requirements of both Conditions IX.E.3.a and IX.E.3.b must have been fulfilled in sequence. The pumping frequency for a cell shall be based on the leachate riser which has the highest pumping rate.
- IX.E.3.a. Leachate shall be pumped weekly during the first year of post-closure for each cell covered by this permit. If, during this period, no leachate is recovered for eight consecutive weeks, the pumping may be conducted every other week.
- IX.E.3.b. Leachate shall continue to be pumped on a bi-weekly basis until no leachate is recovered for eight consecutive pumping events. The leachate pumping may then be conducted monthly.
- IX.E.3.c. Leachate shall continue to be pumped on a monthly basis until no leachate is recovered for three consecutive months. The leachate pumping may then be conducted every other month.
- IX.E.3.d. Leachate shall continue to be pumped every other month until no leachate is recovered for three consecutive pumping events. The leachate pumping schedule may then be conducted quarterly.
- IX.E.3.e. Leachate shall continue to be pumped on a quarterly basis until no leachate is recovered for four consecutive pumping events. The leachate pumping schedule may then be conducted on a semi-annual basis.
- IX.E.3.f. Leachate shall be pumped semi-annually until no leachate is recovered for four consecutive pumping events. The leachate pumping may then be conducted on an annual basis and continue annually until the termination of the post-closure period.
- IX.E.4. Should leachate generation rates increase, the Permittee shall return to the previous pumping frequency. For example, if while pumping on a quarterly basis leachate production rises, the leachate risers for the cell shall be pumped monthly.
- IX.E.5. Leachate Collection/Removal Volume reports shall be submitted to the Director 15 days after the end of the second and fourth quarters of each calendar year until all cells are being pumped annually, after which they will be submitted within 15 days after the end of the fourth quarter. They shall be provided more frequently when requested by the Director.
- IX.E.6. The leachate from landfill cells that contain both RCRA and TSCA waste streams shall have the leachate from the sumps individually sampled and analyzed for PCBs, pH, specific conductance and chlorinated organics (Class 1 volatile and semi-volatile

compounds).

#### **IX.F. DOCUMENTS TO BE MAINTAINED AT THE FACILITY**

- IX.F.1. The Permittee shall maintain at the Facility for the duration of the post-closure care period, the following documents and amendments, revisions, and modifications to these documents. The documents may be maintained in an electronic format compatible with the Division's software capabilities.
- IX.F.2. The permit that contains post-closure care requirements for the landfill cells;
- IX.F.3. The closure plans for the container storage area and landfill cells;
- IX.F.4. Certification of closure for the container storage area and landfill cells;
- IX.F.5. Completed inspection checklists as required by Utah Admin. Code R315-264-15(d);
- IX.F.6. Post-closure monitoring records, to include groundwater monitoring records and analytical results; and,
- IX.F.7. All applicable portions of the Operating Record requirements of Utah Admin. Code R315-264-73.
- IX.F.8. The records identified in IX.F.5 through IX.F.7 shall be provided to the Director, or his representative, upon request.

#### **IX.G. RECORDKEEPING AND REPORTING**

- IX.G.1. The Permittee shall submit reports as required by Module VII, to the Director documenting post-closure monitoring activities and results from analyses of samples collected in compliance with post-closure monitoring requirements.

#### **IX.H. POST-CLOSURE NOTICES**

The Permittee shall provide the submissions and notifications identified in Utah Admin. Code R315-264-119.

#### **IX.I. REQUIRED SUBMISSIONS UNDER THIS MODULE**

- IX.I.1. The Permittee shall submit to the Director the documents specified in Table IX-2.

## **IX.J. FINANCIAL ASSURANCE**

The Permittee shall maintain throughout the post closure period:

1. Financial assurance as identified Condition II.Q; and
2. Continuous compliance with the liability requirements, as described in Condition II.R t.

## **IX.K. TERMINATION OF POST-CLOSURE**

The requirements of Module IX shall remain in effect until the provisions of Utah Admin. Code R315-264-120 have been fulfilled. No later than 60 days after completion of the established post-closure care period for each hazardous waste disposal unit, the owner or operator must submit to the Director, by registered mail, a certification that the post-closure care period for the hazardous waste disposal unit was performed in accordance with the specifications in the approved post-closure plan. The certification must be signed by the owner or operator and a qualified Professional Engineer. Documentation supporting the Professional Engineer's certification must be furnished to the Director upon request until he releases the owner or operator from the financial assurance requirements for post-closure care under Utah Admin. Code R315-264-145(i).

**TABLE IX-1**

Post-Closure Start Dates, by Cell Number

<b>Landfill cell number</b>	<b>Date landfill cell began post-closure care</b>
Hazardous Waste Landfill Cell 1	August 21, 1991
Hazardous Waste Landfill Cell 2	August 21, 1991
Hazardous Waste Landfill Cell 3	March 21, 1996
Hazardous Waste Landfill Cell 4	June 3, 2015
Hazardous Waste Landfill Cell 5	June 3, 2015
Hazardous Waste Landfill Cell 7	
RCRA/TSCA Landfill Cell B/6	
Hazardous Waste Landfill Cell 8	
Hazardous Waste Landfill Cell 9	
Hazardous Waste Landfill Cell 10	
Hazardous Waste Landfill Cell 11	
Hazardous Waste Landfill Cell 12	
Hazardous Waste Landfill Cell 13	
Industrial Waste Landfill Cell 1	January 14, 1998
Industrial Waste Landfill Cell 2	January 14, 1998

**TABLE IX-2**

Required Submissions

<b>Required Submission</b>	<b>Date or event</b>
Post-closure Inspection Log Checklist	Within 30 days following certified closure of a hazardous waste landfill cells.
Subsidence survey measurements	15 days after completion of measurements
Certification of closure	60 days following completion of closure
Survey plat indicating dimensions and location	60 days following completion of closure
Monitoring well completion reports	90 days after well completion
Well plugging and abandonment methods	30 days prior to plugging and abandonment
Analytical results	60 days after completion of analysis
Certification of Completion of Post-Closure Care	60 days, or less, after completion of the established post-closure care
Leachate Collection/Removal Volume Reports	Quarterly or Semi-Annually, as required

**MODULE X**

**WASTE MANAGEMENT PLAN  
FOR  
POLYCHLORINATED BIPHENYLS**



WASTE MANAGEMENT PLAN FOR POLYCHLORINATED BIPHENYLS

TABLE OF CONTENTS

X.A. OVERVIEW ..... 1  
X.B. PCB WASTE MANAGEMENT CONDITIONS ..... 3  
X.C. STORAGE OF PCBs ..... 5  
X.D. COMPLY ..... 5  
X.E. WORKER PROTECTION ..... 6  
X.F. NON-PROCESSING SURFACE AREAS ..... 6  
X.G. PCB SPILL CLEANUP ..... 6  
X.H. DECONTAMINATION ..... 6  
X.I. CONTINGENCY PLAN AND EMERGENCY PROCEDURES ..... 6  
X.J. FACILITY INSPECTIONS ..... 9  
X.K. RECORDKEEPING AND REPORTING ..... 10  
X.L. CLOSURE AND FINANCIAL REQUIREMENTS ..... 11

Attachment X-1 COORDINATED APPROVALS  
Attachment X-2 COORDINATED APPROVAL MODIFICATION 2011  
Attachment X-3 PCB COMMERCIAL STORAGE APPROVAL TRAINING MANUAL  
Attachment X-4 SPILL PREVENTION CONTROL AND COUNTERMEASURE (SPCC)  
PLAN  
Attachment X-5 PCB TANK MANAGEMENT PRACTICES  
Attachment X-6 INSPECTION FORMS





## X.A. OVERVIEW

Module X addresses the operating requirements specific to the drain and flush, storage, and disposal of PCBs at the Clean Harbors Grassy Mountain facility. The State-issued Part B Permit and EPA Region 8 authorizes disposal of RCRA and TSCA waste respectively in Cells B/6 and 8. Authorization for disposal in Cell Z is provided by EPA Region 8. In order to provide the Director of the Division of Waste Management and Radiation Control oversight for the operations identified in the table below, EPA issued a TSCA PCB Coordinated Approval (C.A.), which was effective September 2005, pursuant to 40 CFR §761.77 that requires compliance with this module and other affected portions of the permit. Should any conflicts arise between this attachment and the other sections of this permit, the more stringent provision shall be in effect. The following table identifies the portions of the facility affected by the C.A..

Affected Part of Facility	Modules/Attachments Modified as a result of C.A.
Cell B/6	Module VI; Hazardous Waste Landfills Attachment II-7; Closure Plan Miscellaneous references to Cell B changed to Cell B/6 in modules
Stabilization Tanks (Tanks 122-TN-001, 002, and 003)	Module IV Attachment II-7; Closure Plan
Leachate Tanks (Tanks 119-TN-002)	Module IV Attachment II-7; Closure Plan
TSCA Storage Building (and assoc. tanks and pipeline)	Module X; PCB Management Plan Attachment II-7; Closure Plan
TSCA Tank Farm	Attachment II-7; Closure Plan
Container Management Building	Attachment II-7; Closure Plan

Grassy Mountain is authorized by this Permit and 40 CFR §761.65 (d) to commercially store PCBs and PCB items designated for disposal in accordance with this permit, issued under the authorization contained in Section 3006, RCRA. Spills of PCBs must be cleaned up in accordance with both documents.

PCBs that can be disposed of in Cell B/6 consist of PCB-only waste and mixtures of PCB/RCRA hazardous waste. In addition, this Permit authorizes the disposal of RCRA-only waste streams for disposal in Cell B/6

### X.A.1 TECHNICAL REQUIREMENTS

In the event that PCBs are an Underlying Hazardous Constituent (UHC) for a RCRA waste, the concentrations for the PCBs must meet the treatment standard for PCBs prior to disposal in Cell B/6. If the concentration of the PCBs as a UHC does not meet the treatment standard, the Grassy Mountain Facility shall petition the Director, and must receive the approval, for a site specific treatment variance (R315-268-44) for the waste stream prior to treating and/or disposing at the

Grassy Mountain Facility. A variance would not be required for trans-shipping such wastes at the facility. PCB containers (non-bulk waste streams) can be stored in the PCB Storage Building and the Drum Dock. One bulk solid storage container can be stored in the Leachate Management Building.

## **X.A.2 DEFINITIONS**

- i. All the terms and abbreviations used in this Module shall have the same meanings as defined in 40 CFR §761.3 unless the context clearly indicates otherwise or unless another term is defined below, or in Module I, for the purposes of this Approval.
- ii. “Application” means the August 2, 1990 TSCA Commercial Storage application and its revisions submitted by USPCI, Inc. to EPA Headquarters to commercially store PCBs and subsequently reissued by EPA Region VIII.
- iii. “Approval” means the approval by the EPA of the application.
- iv. “ARA” means the Assistant Regional Administrator, Office of Partnerships and Regulatory Assistance, EPA Region VIII Office, or his/her designee.
- v. “Clean Harbors Grassy Mountain, LLC Application” means the Application of November 25, 2002 and revision dated January 14, 2003 submitted to EPA for PCB Commercial Storage.
- vi. “Division” means the Division of Waste Management and Radiation Control.
- vii. “Director” means the Director of the Division of Waste Management and Radiation Control, or his/her representative.
- viii. “Facility” refers to the Clean Harbors Grassy Mountain, LLC. Facility.
- ix. “Grassy Mountain” refers to the Clean Harbors Grassy Mountain, LLC. Facility.
- x. “EPA” means the United States Environmental Protection Agency, Region VIII Office, located in Denver, Colorado.
- xi. “Clean Harbors Grassy Mountain, LLC.” Means the company which owns and operates a facility located at Exit 41 Off I-80, 3 Miles East and 7 Miles North of Knolls, Utah.
- xii. “Clean Harbors Grassy Mountain Facility” or “Facility” means the site located at Exit 41 Off I-80, 3 Miles East and 7 Miles North of Knolls, Utah, where the Clean Harbors Grassy Mountain, LLC. PCB Commercial Storage Facility is located.
- xiii. “PCB” means Polychlorinated Biphenyls as defined in 40 CFR §761.3.
- xiv. “PCB Spill” has the same meaning as “spill”, defined in the PCB Spill

Cleanup Policy in 40 CFR §761.123 and “disposal”, defined in 40 CFR §761.3.

- xv. “SPCC” means Spill Prevention Control and Countermeasure Plan.
- xvi. “TSCA” means the Toxic Substances Control Act.
- xvii. All definitions contained in 40 CFR §761.3 (Reference also 63FR35384) §761.123 are incorporated by reference into this attachment. Terms not defined in the regulations or in the attachment shall be defined as in Module I or a generally accepted scientific or industrial meaning or a standard dictionary meaning.

## **X.B PCB WASTE MANAGEMENT CONDITIONS**

### **X.B.1 General Conditions**

#### **X.B.1 Departure from Conditions**

Grassy Mountain shall comply with and operate in accordance with provisions of the PCB regulations (40 CFR Part 761), the Permit and with the requirements of the a Coordinated Approval. Any departure from conditions or modifications of conditions must receive prior written authorization from the Director and the ARA. Departure from these conditions without prior written approval shall subject the approval to revocation, suspension, or termination, and shall subject Grassy Mountain to an enforcement action. If Grassy Mountain becomes aware of any departure from the conditions, modification of conditions, Grassy Mountain shall notify the Director and the ARA within one business day and shall submit a written report describing the departure within five (5) business days.

#### **X.B.2 The Right to Modify**

The Director reserves the right to add or modify conditions to the approval. The Director may withdraw or modify this approval if he has reason to believe that the continued operation of the storage facility presents an unreasonable risk to public health or the environment. The Director may also modify the approval based upon new regulations or standards or due to noncompliance with conditions or the PCB regulations. Grassy Mountain shall provide upon request, any information the Director deems necessary to determine whether cause exists for modification, revocation, suspension, or termination of this approval. Failure to provide information within five (5) business days of its request shall be deemed a violation of the conditions of approval.

#### **X.B.3 Responsibility**

Grassy Mountain is responsible for the actions of all employees, agents and contractors involved in the operation of the facility. Compliance with the PCB regulations, the conditions of approval, and modifications of this approval, written

notifications, and the permit issued by the Director does not relieve Grassy Mountain of the responsibility to comply with all other applicable federal, state, and local laws and regulations.

#### **X.B.4 Inspections**

Grassy Mountain shall allow inspection of the site, storage facility, and records relating to the facility by authorized State or Federal employees, agents, or contractors at reasonable times to determine compliance with applicable statutes, regulations, approvals and conditions of approval. Any refusal by Grassy Mountain to allow access at reasonable times to the site and process, or refusal to provide copies of records shall be deemed a violation of the conditions of approval.

#### **X.B.5 Notification**

Grassy Mountain shall notify the ARA and the Director at least thirty (30) calendar days before transferring ownership of the Facility. Grassy Mountain shall also submit to the ARA and the Director at least thirty (30) days before such transfer, a notarized affidavit, signed by the transferee, which states that the transferee will abide by all provisions of this approval. In addition, the transferee will submit a background document on their employees and past violations, similar to the document required of Grassy Mountain. After receiving such notification and affidavit, the Director and EPA may issue an amended approval substituting the transferee's name for the Grassy Mountain name, or the Director and EPA may require the transferee to apply for a new PCB commercial storage approval. The transferee shall not operate under this approval until the Director and ARA issues an approval in the transferee's name or provides written approval to continue to operate under the existing approval until such time that the Director and ARA issues an approval in the transferee's name.

#### **X.B.6 Information**

Grassy Mountain shall submit to the Director and EPA upon request, any documents regarding the Grassy Mountain application, conditions, approval or records required to be maintained as required by 40 CFR Part 761 and this permit. Refusal to provide information shall be deemed a violation of the conditions of approval.

#### **X.B.7 Approval Binding**

This Approval and Permit is binding upon Grassy Mountain and may be revoked for any environmental civil violations (including failure to comply with the requirements of this Approval, Permit or criminal convictions by officers, principals or key employees of Grassy Mountain according to the standard set forth at 40 CFR §761.65(d)(2)(vii).

**X.C STORAGE OF PCBS**

Grassy Mountain shall meet the following work practice, operation, and other standards at all times during the operation of its facility. All such standards are Conditions of this Approval.

**X.C.1 Maximum storage capacity at any time:**

**X.C.1.a** PCB Tank Farm - 63,982 Gallons PCB Liquids

**X.C.1.b** PCB Warehouse – PCB Waste Not In Tanks

The PCB Warehouse may store 19,250 gallons of waste PCB items (e.g., transformers, circuit breakers, voltage regulators, switches, bushings, small PCB capacitors, light ballasts, PCB Articles, PCB Article Containers, etc.), debris, PCB Containers, large PCB capacitors, PCB liquids, etc.

Of the permitted 19,250 gallons, the maximum quantity of PCB Large Capacitors is 3,575 gallons.

Of the permitted 19,250 gallons, the maximum quantity of PCB Liquids is 8,190 gallons minus the volume of PCB Large Capacitors in storage at the same time.

**X.C.1.c** PCB Warehouse - PCB Liquid Waste in Tanks - 6,000 gallons.

**X.C.1.d** PCBs in containers shall be managed in accordance with Attachment X-3, PCB Commercial Storage Approval Training Manual. PCBs in tanks shall be managed in accordance with Attachment X-5, PCB Tank Management Practices.

**X.D COMPLY**

Grassy Mountain shall comply with all PCB regulations under 40 CFR Part 761, including:

**X.D.1** Containment, berm dimensions, containers, and maximum volume as described in the application and clarified in the approval;

**X.D.2** PCB markings and other labeling as required by the permit.;

**X.D.3** Access restrictions to storage areas;

**X.D.4** Shipping documentation and tracking for chain-of-custody requirements within the storage site.

## **X.E WORKER PROTECTION**

**X.E.1** Grassy Mountain shall comply with the Safety and Hygiene provisions of the approved application.

**X.E.2** Within thirty (30) days of the approval date or modification, Grassy Mountain shall develop and submit to the Director and EPA a training plan for workers in the form of a training manual. The Director and EPA shall have the right to review the training plan and require correction of deficiencies identified. Within sixty (60) days of the approval date or modification date, Grassy Mountain shall train employees as specified in the training manual. New employees shall be trained as specified in the manual prior to entering the storage areas. The manual shall address the regulatory requirements of 40 CFR Part 761 with emphasis on the requirements of the PCB Spill Cleanup Policy (40 CFR Part 761 Subpart G). The training plan shall include specifics of the Safety Plan, Contingency Plan, and Emergency Procedures as well as the Spill Prevention Control and Countermeasure (SPCC) Plan. All required training will be documented in the employee's training record.

A signature sheet shall be included as part of the training, plan to verify personnel participation.

## **X.F NON-PROCESSING SURFACE AREAS**

Non-processing surface areas of the facility shall not exceed those allowed in 40 CFR 761 Subpart G.

## **X.G PCB SPILL CLEANUP**

Cleanup of PCB spills shall be in accordance with 40 CFR 761 Subpart G.

## **X.H DECONTAMINATION**

In the unlikely event PCB contamination occurs in excess of the limits set forth at 40 CFR 761 Subpart G, Grassy Mountain shall decontaminate the affected area in accordance with the PCB regulations. Grassy Mountain shall not encapsulate any PCB contaminated areas resulting from spills regardless of PCB concentration levels without prior written approval from the Director and EPA.

## **X.I CONTINGENCY PLAN AND EMERGENCY PROCEDURES**

**X.I.1** Grassy Mountain shall follow the facility SPCC Plan (Attachment X-4) in the approved application and the Contingency Plan

(Attachment II-6) when there is a fire, explosion or release of PCBs or hazardous constituents.

- X.I.2** A copy of the Contingency Plan and revisions shall be maintained at the Grassy Mountain site. A copy of the Training Manual (Attachment X-3), SPCC Plan (Attachment X-4), and the approval (Attachment X-1 and X-2) shall also be maintained on-site. Lists of emergency contacts and telephone numbers shall be posted in the PCB Commercial Storage Facility.
- X.I.3** Grassy Mountain shall inspect, test and maintain emergency equipment as recommended by the manufacturer or in accordance with other regulatory agency requirements for safety equipment to ensure its proper operation in time of emergency. Equipment manufactured by Grassy Mountain shall follow a testing and maintenance plan for those manufactured items established by Grassy Mountain. At a minimum, the facility shall be equipped with the following emergency equipment:
- X.I.3.a** An internal communications or alarm system capable of providing immediate emergency notification (voice or signal) to facility personnel;
  - X.I.3.b** Devices, such as a telephone or two-way radio, which is immediately available at the scene of operations, capable of summoning emergency assistance from other site personnel and to direct others to contact local police departments, fire departments, and State or local emergency response teams;
  - X.I.3.c** Portable fire extinguisher, fire control equipment, spill control equipment, and decontamination equipment at the PCB Commercial Storage Facility; and
  - X.I.3.d** Water at adequate volume and pressure to supply fire hose streams or foam equipment to the PCB Commercial Storage Facility.
- X.I.4** When PCBs are being poured, mixed, or otherwise handled, Grassy Mountain shall ensure all personnel involved in the operation have immediate access to an internal alarm or emergency communication device, either directly or through visual or voice contact with another employee.
- X.I.5** At all times, there shall be at least one (1) employee, either present at the Grassy Mountain facility or on call, with the responsibility for coordinating all emergency response measures. This employee shall have immediate access to the entire facility and to a device such as a telephone immediately available that is capable of



summoning external emergency assistance. This employee must have the authority to commit resources needed to carry out the Contingency Plan.

- X.I.6** Adequate aisle space shall be maintained to allow for unobstructed access by personnel, fire protection equipment, and decontamination equipment to all PCB items stored on-site.
- X.I.7** All emergency equipment inspection and maintenance records must be maintained at the facility and made available upon request.
- X.I.8** Within thirty (30) days of modification, Grassy Mountain shall provide copies of the Spill Prevention Control and Countermeasures Plan and Contingency Plan and Emergency Procedures to all local police departments, fire departments, and state and local emergency response teams that may be called upon to provide emergency services.
- X.I.9** In the event an authorized facility operator of Grassy Mountain believes, or has reason to believe, that any detectable quantities of PCBs have been released to the environment, as a result of storage, handling or other activity, the activity shall be terminated immediately. The facility operator shall report the release in accordance with facility procedures and spill clean-up shall begin immediately. The facility shall report the release in accordance with all applicable federal, state and local reporting requirements.
- X.I.10** Grassy Mountain shall immediately report to the Director and the ARA if unauthorized entry occurred at the facility which caused PCBs to be discharged, the nature of any problem that may have resulted from this unauthorized entry and corrective actions taken by the facility to prevent recurrence. Problems to be reported shall include, but not be limited to, any tampering, destruction, or loss that caused the release of PCBs.
- X.I.11** Grassy Mountain shall review and amend the SPCC Plan and Contingency Plan whenever:
  - X.I.11.a** Either plan fails in an emergency;
  - X.I.11.b** The facility changes its design, construction, operation, maintenance or other circumstances that materially increases the potential for fires, explosions, or releases of PCBs or hazardous constituents, changes to emergency response policies or practices;
  - X.I.11.c** When a revision is warranted to prevent a risk of injury to health and the environment; and

**X.I.11.d** When the Director or EPA determines that a plan revision is necessary.

**X.I.12** Grassy Mountain shall review the SPCC plan every five (5) years. Grassy Mountain shall implement any amendment as soon as possible, but not later than six months following preparation of any amendment. Documentation of the five (5) year review shall be in the form of a statement as to whether the plan was amended or in a log or an appendix to the Plan. The following words will suffice, "I have completed review and evaluation of the SPCC Plan for the Grassy Mountain Facility on (date), and will (will not) amend the Plan as a result."

## **X.J FACILITY INSPECTIONS**

Grassy Mountain shall inspect the PCB management facilities in accordance with the requirements of Attachment X-6, which include the PCB (TSCA) inspection forms. The following inspection procedures shall be followed:

1. Fill in all of the appropriate blanks on the form (e.g., date, time, etc.).
2. Print and sign your name if in written hardcopy format. Electronic forms will be identified by computer user login identifications.
3. Inspect the items as indicated by the frequency as outlined in the schedule.
4. If inspection item is "OK" indicate by marking next to the item in the appropriate column.
5. If inspection item is "NOT OK" indicate by marking next to the item in the appropriate column and describe the problem in the adjacent column.
6. For items that are corrected within 24 hours, the person verifying that the item was corrected will write on the inspection form the date it was corrected and his/her initials.
7. For items that cannot be promptly corrected (e.g., within 24 hours), complete a Remedial Work Order (RWO) and submit to management and indicate on the inspection form that a RWO was written and the number of the RWO.
8. When a RWO problem is resolved, describe the solution on the RWO form, initial and note the date that remedial action was taken.
9. Inspection records shall be maintained at the fa

## **X.K RECORDKEEPING AND REPORTING**

- X.K.1** Grassy Mountain shall comply with all recordkeeping requirements outlined in the PCB regulations, 40 CFR Part 761.
- X.K.2** Grassy Mountain shall maintain an inventory of all PCBs and PCB items received and/or transferred. Grassy Mountain shall provide copies of inventories of PCBs and PCB items currently in storage to an authorized representative of the Director and EPA within 24 hours of the request.
- X.K.3** All PCB records, documents, and reports shall be maintained at the Grassy Mountain facility and shall be made available for inspection by authorized Director and EPA representatives. When Grassy Mountain ceases operations, all records, documents, and reports or certified copies thereof, shall be made available to the Director and EPA at the facility for a period of at least three (3) years following cessation of operations. If Grassy Mountain is unable to comply with this condition because it is no longer in control of the site, it shall comply by making the records, documents, and reports available at an alternative location proposed by Grassy Mountain and acceptable to the Director and EPA.
- X.K.4** All hand written records required by 40 CFR §761.180 and the approval shall be written in ink or typed. Photocopies, facsimiles and electronic files or printouts are also acceptable. Any modification or correction of the records must be initialed and dated by the person making the correction. Grassy Mountain shall report any significant discrepancy to the Director or ARA within the time frame required by 40 CFR §761.210(b).
- X.K.5** All records, documentation, and information relating to sampling, analysis, and quality assurance as required by the approval shall be retained at the facility or an alternative location acceptable to the Director and EPA, for a minimum of three (3) years following cessation of operation, or longer if requested by the Director or ARA. The records, documentation, and information shall include the following:
- X.K.5.a** Exact date, place, and time of each sample collected;
  - X.K.5.b** Volume of each sample collected;
  - X.K.5.c** Name of person collecting each sample;
  - X.K.5.d** Name of analyst;

- X.K.5.e** Date and time of analysis;
- X.K.5.f** Analytical techniques or methods used for each sample;
- X.K.5.g** Analytical results; and
- X.K.5.h** Records of Quality Assurance activities.
- X.K.6** At the completion of a cleanup required by Section X.G of this module, Grassy Mountain shall develop and maintain records of the cleanup including at a minimum:
  - X.K.6.a** Identification of the source of the -contamination;
  - X.K.6.b** Date and time contamination was discovered;
  - X.K.6.c** Date and time cleanup was completed;
  - X.K.6.d** Brief description of contaminated area;
  - X.K.6.e** Pre-cleanup and post-cleanup sampling data, if required by 40 CFR 761 Subpart G, used to define boundaries of contamination and a brief description of the methodology used to establish contaminated boundaries;
  - X.K.6.f** Amount of waste cleanup material generated; and
  - X.K.6.g** Certification statement signed by Grassy Mountain stating that the decontamination levels referenced in 40 CFR 761 Subpart G have been achieved and that the information contained in the record is true to the best of his knowledge.
- X.K.7** Grassy Mountain shall maintain manifest copies and Certificates of Disposal for all PCBs and PCB items stored at the Facility. Copies of Certificates of Disposal shall be provided to the generator within thirty (30) days of receipt by Grassy Mountain of documentation of final disposal of all materials resulting from the commercial storage of PCBs and PCB items.

## **X.L CLOSURE AND FINANCIAL REQUIREMENTS**

- X.L.1** Grassy Mountain shall comply with the current closure plan and closure cost estimate submitted as part of the application process and approved by the Director and EPA. The plan shall be modified as required by regulation.

- X.L.2** Grassy Mountain shall notify the Director and ARA at least 90 days prior to the date it expects to begin closure. The closure plan shall meet the requirements of 40 CFR 761. Upon termination of operations, the provisions of the closure plan shall be followed. The termination of operations includes cessation of operations required by expiration, termination, or revocation of this approval.
- X.L.3** Financial assurance for closure shall meet the requirements of 40 CFR §761.6,5(g) and 40 CFR Part 264, Subpart H. Grassy Mountain shall submit documentation of continued financial assurance with annual cost estimate adjustments for inflation to the Director and EPA. The closure cost estimate shall be based on maximum inventory conditions.
- X.L.4** The closure plan shall be amended when changes in operating plans or facility design affect the terms of the closure plan and submit to the Director and EPA at least thirty (30) days prior to the modification.

**CLEAN HARBORS GRASSY MOUNTAIN, LLC**  
**Grassy Mountain Facility**  
**Inspection Record**

TYPE: **Annual**  
 FORM: **RA01**

Date of Inspection: \_\_\_\_\_ Time: \_\_\_\_\_ AM/PM

**SITE MONITORING SYSTEM**

EQUIPMENT / STRUCTURE/ ITEM	INSPECTION ELEMENT		STATUS		IF "NOT OK" STATE REASON	DATE & TIME CORRECTED & INITIALS	
			OK	NOT OK			
MONITORING WELLS	Check for proper operation of the pumps when sampled						
	Check for insect infestation of casing on all wells below.						
1	15	28	41		54	74	P1
2	16	29A	42		55	75	P3
4	17	30A	43		56	76	P3A,B,C
5	18A	31	44		57	77	P4
6	19A	32A	45		58A	78A	PXY
7	20	33	46		59	79A	P4A,B,C
8	21	34	47		60	80	P5
9	22	35	48		67	81	P6
10	23	36	49		68	82	P7
11	24	37A	50		70	83	P8
12	25	38A	51		71	84	
13	26	39	52		72	85	
14	27A	40A	53		73	86	

Inspector's Name: \_\_\_\_\_ Inspector's Signature: \_\_\_\_\_

**CLEAN HARBORS GRASSY MOUNTAIN, LLC**  
**Grassy Mountain Facility**  
**Inspection Record**

Date of Inspection: \_\_\_\_\_ Time: \_\_\_\_\_ AM/PM PAGE \_\_ OF \_\_

**SURFACE IMPOUNDMENT SYSTEM**

EQUIPMENT / STRUCTURE/ ITEM	INSPECTION ELEMENT	STATUS		IF "NOT OK" STATE REASON	DATE & TIME CORRECTED & INITIALS
		OK	NOT OK		
SURFACE IMPOUNDMENT A:	Check for three feet (3') freeboard				
	Check loading / unloading areas for evidence of spills				
SURFACE IMPOUNDMENT B:	Check for three feet (3') freeboard				
	Check loading / unloading areas for evidence of spills				

Inspector's Name: \_\_\_\_\_ Inspector's Signature: \_\_\_\_\_

COMMENTS (IF NEEDED, EXPLAIN THE CORRECTIVE ACTIONS TAKEN):

IF STATUS NOT OK, MARK THE FOLLOWING

ENVIRONMENTAL DEPARTMENT CONTACTED: ( ) YES ( ) NO

REMEDIAL WORK ORDER ISSUED: ( ) YES WORK ORDER # \_\_\_\_\_ ( ) NO

**CLEAN HARBORS GRASSY MOUNTAIN, LLC**

TYPE: **Weekly**

**Grassy Mountain Facility**

FORM: **RW03**

**Inspection Record**

Date of Inspection: \_\_\_\_\_ Time: \_\_\_\_\_ AM/PM PAGE 1 OF 1

**SURFACE IMPOUNDMENT SYSTEM**

EQUIPMENT / STRUCTURE / ITEM	INSPECTION ELEMENT	STATUS		IF "NOT OK" STATE REASON	DATE & TIME CORRECTED & INITIALS
SURFACE IMPOUNDMENTS:	Visually check synthetic liner, where exposed, for cracks, tears and signs of deterioration.				
	Check leak detection riser for secure caps				
SURFACE IMPOUNDMENT DIKES:	Visually check for vegetation that could be damaging				
	Visually Check for burrowing animals				
	Visually check for evidence of erosion, leaks and deterioration				
	Visually check run-on / run-off ditches and drains for deterioration, improper operation or erosion				
SURFACE IMPOUNDMENTS:	Check for the presence of leachate in and the proper functioning of the detection system				

Inspector's Name: \_\_\_\_\_ Inspector's Signature: \_\_\_\_\_

COMMENTS (IF NEEDED, EXPLAIN THE CORRECTIVE ACTIONS TAKEN):

  
  
  
  
  

IF STATUS NOT OK, MARK THE FOLLOWING

ENVIRONMENTAL DEPARTMENT CONTACTED: ( ) YES ( ) NO

REMEDIAL WORK ORDER ISSUED: ( ) YES WORK ORDER # \_\_\_\_\_ ( ) NO



**CLEAN HARBORS GRASSY MOUNTAIN, LLC**  
**Grassy Mountain Facility**  
**Inspection Record**

Record the water column height for each 'A' leachate riser as required.

<b>CELL 8</b>	<b>Date:</b>
<b>Location</b>	<b>" H2O</b>
NEA	
NWA	
SWA	
SEA	

<b>CELL 9</b>	<b>Date:</b>
<b>Location</b>	<b>" H2O</b>
NEA	
NWA	
SWA	
SEA	

<b>CELL 10</b>	<b>Date:</b>
<b>Location</b>	<b>" H2O</b>
NEA	
NWA	
SWA	
SEA	

<b>CELL 11</b>	<b>Date:</b>
<b>Location</b>	<b>" H2O</b>
NEA	
NWA	
SWA	
SEA	

<b>CELL 12</b>	<b>Date:</b>
<b>Location</b>	<b>" H2O</b>
NEA	
NWA	
SWA	
SEA	

<b>CELL 13</b>	<b>Date:</b>
<b>Location</b>	<b>" H2O</b>
NEA	
NWA	
SWA	
SEA	

Inspector: \_\_\_\_\_

Signature \_\_\_\_\_

Date: \_\_\_\_\_

**CLEAN HARBORS GRASSY MOUNTAIN, LLC**  
**Grassy Mountain Facility**  
**Inspection Record**

TYPE: **Weekly**  
 FORM: **RW09**

Date of Inspection: \_\_\_\_\_ Time: \_\_\_\_\_ AM/PM

**SITE MONITORING SYSTEM**

EQUIPMENT / STRUCTURE/ ITEM	INSPECTION ELEMENT		STATUS		IF "NOT OK" STATE REASON	DATE & TIME CORRECTED & INITIALS	
			OK	NOT OK			
MONITORING WELLS:	Check wells for damage to casing and security of the covers.						
	Check for evidence of tampering with the lock or cap.						
	Check for well visibility and accessibility to personnel.						
1	15	28	41		54	74	P1
2	16	29A	42		55	75	P3
4	17	30A	43		56	76	P3A,B,C
5	18A	31	44		57	77	P4
6	19A	32A	45		58A	78	PXY
7	20	33	46		59	79	P4A,B,C
8	21	34	47		60	80	P5
9	22	35	48		67	81	P6
10	23	36	49		68	82	P7
11	24	37A	50		70	83	P8
12	25	38A	51		71	84	
13	26	39	52		72	85	
14	27A	40A	53		73	86	

Inspector's Name: \_\_\_\_\_ Inspector's Signature: \_\_\_\_\_

COMMENTS (IF NEEDED, EXPLAIN THE CORRECTIVE ACTIONS TAKEN):

  
  
  

IF STATUS NOT OK, MARK THE FOLLOWING

ENVIRONMENTAL DEPARTMENT CONTACTED: ( ) YES ( ) NO

REMEDIAL WORK ORDER ISSUED: ( ) YES WORK ORDER # \_\_\_\_\_ ( ) NO