

MODULE V
SURFACE IMPOUNDMENTS

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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).