

MODULE V

SURFACE IMPOUNDMENTS

DRAFT

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Attachment V-1..... Surface Impoundment B Drawings ¹

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MODULE V - SURFACE IMPOUNDMENTS

V.A APPLICABILITY

1. The Clean Harbors Grassy Mountain Facility (CHGM) Permittee is currently authorized to operate Surface Impoundment A and Surface Impoundment B.
2. The maximum operating capacity for Surface Impoundment A is 1,587,759 gallons. The maximum operating capacity for Surface Impoundment B ~~is~~ will be 5,000,000 gallons. CHGM The Permittee shall operate and maintain these surface impoundments as required by Utah Administrative Code (UAC) R315-264-220 through R315-232.
3. Surface Impoundment A is approximately 220 feet on ~~each~~ each side. The primary liner system consists of a 60-mil high density polyethylene (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.
4. Surface Impoundment B ~~is~~ will be approximately 361 feet on ~~each~~ each side. The primary liner system will ~~consists~~ of a 60 mil HDPE geo-membrane liner; and a bottom (secondary) 60 mil HDPE geomembrane liner overlying a compacted clay liner. There will be ~~is~~ one sump ~~which is located~~ on the west side of the surface impoundment. The sump ~~is located~~ will be installed between the primary and secondary liner and ~~is~~ equipped with a leak detection system.
5. CHGM shall ~~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

1. CHGM The Permittee is authorized to store non-hazardous wastewaters received from off-site in Surface Impoundments A and ~~Surface Impoundment B~~ in accordance with ~~Utah Admin. Code R315-264-220 and~~ the conditions of this permit.
2. CHGM The Permittee is authorized to store the following site-generated wastes (excluding PCB-contaminated liquids and sludges) in Surface Impoundments A and ~~Surface Impoundment B~~ in accordance with UAC Utah Admin. Code R315-264- 220 through R315-264-232 and the conditions of this permit:
 - i. Floor drainage
 - ii. Multi-source leachate (F039) from RCRA-only hazardous waste cells.
 - iii. Treated liquids
 - iv. Non-hazardous liquid waste.

- v. Contaminated run-on and runoff waters.

~~The Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) Hazardous Wastes. CHGM~~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

1. ~~CHGM~~The Permittee shall design and construct surface impoundments in accordance with ~~UACUtah Admin. Code~~ R315-264-221.
2. Construction of each surface impoundment shall follow the construction quality assurance (CQA) program identified in ~~UACUtah Admin. Code~~ R315-264-19 and in Attachment VI-2 of this Permit. The construction quality assurance plan shall cover all aspects of design and construction. The Director of Division of Waste Management and Radiation Control (The Director) shall approve the final design with installation procedures ~~shall be approved by the Director of Division of Waste Management and Radiation Control (The Director)~~ prior to commencement of construction.
3. The CQA plan shall remain part of the permit throughout closure and post-closure activities.
4. Field changes to the design or construction details may require a modification to the CQA plan and shall adhere to the "Change Control Procedures" in the CQA Plan. The Director will make the determination whether a modification to the CQA plan is necessary, and construction may only proceed after the Director evaluates the impact of the change and approves the permit modification request. ~~The Permittee CHGM~~ shall document this field change and place a description of this modification in the 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.
5. ~~CHGM may submit a~~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 CHGM~~ 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 in the permit modification.
6. All Class 2 and Class 3 permit modifications affecting the CQA plan, as specified in ~~UACUtah Admin. Code~~ R315-270-42, shall require Director approval after the appropriate public comment period.

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. CHGM shall document and keep 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

1. CHGM shall always maintain a At least three feet of freeboard ~~shall always be maintained~~ in each surface impoundment ~~at all times~~.
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), CHGM shall remove it ~~it shall be removed~~ within 24 hours of discovery and manage ~~it~~ in accordance with this permit. If the separate liquid phase cannot be removed within 24 hours, CHGM the Permittee shall follow the reporting requirements in Module II. G.1 of this Permit.
3. All waste placed into each surface impoundment, or any newly constructed surface impoundments, shall meet the Land Disposal Restriction (LDR) standards ~~in (UAC R315-268)~~ prior to being placed into the impoundment.
4. At least annually, CHGM shall sample the solids and liquids in the impoundment ~~shall be properly sampled using industry standard methods~~ and analyze each separately to determine if, ~~through evaporation of water or other factors,~~ they exhibit hazardous waste codes D004 - D043 (Toxicity Characteristics) as described in UAC 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 solids and liquids~~ in the impoundment no longer exhibit such characteristic. CHGM shall maintain a ~~Analytical results from all sampling of solids and liquids in the surface impoundments shall be maintained in the Operating Record.~~
5. CHGM The Permittee may utilize a typical vacuum container dewatering box to remove solids prior to placement of liquids in the surface impoundment. CHGM shall perform ~~The dewatering activity shall be performed~~ within secondary containment. CHGM shall sample ~~The solids shall be properly sampled using industry standard methods~~ and analyze each solid separately to determine if they exhibit hazardous waste codes D004 - D043 (Toxicity Characteristics) as described in UAC Utah Admin. Code R315-261-24. Solids that are a characteristic hazardous waste will be managed in accordance with ~~the Waste Analysis Plan (Attachment II-RCRA-TSCA WAP)~~. CHGM shall maintain a ~~Analytical results from sampling the solids in the dewatering box shall be maintained in the Operating Record.~~
6. CHGM ~~The management of hazardous waste in surface impoundments~~ shall meet the Land Disposal Restrictions (LDR) ~~sampling and testing~~, residue removal, and recordkeeping requirements of UAC Utah Admin. Code R315-268--4 ~~in the management of hazardous waste in surface impoundments~~.

V.E SPECIAL REQUIREMENTS FOR INCOMPATIBLE WASTES

1. ~~CHGM~~~~The Permittee~~ shall comply with all requirements specified in ~~UAC Utah Admin. Code~~ R315-264-230 governing the management of incompatible wastes in surface impoundments.
2. ~~CHGM~~~~The Permittee~~ shall comply with the incompatible waste requirements of ~~UAC Utah Admin. Code~~ R315-264-17 and document that compliance in the ~~operating record~~Operating Record.

V.F MONITORING AND INSPECTION

1. ~~CHGM~~~~The Permittee~~ shall follow the inspection schedule contained in Attachment II-3 for each surface impoundment.
2. ~~CHGM must have written approval from the Director prior to returning any surface impoundment to service after it has been removed from service for six months or longer~~~~Before being placing If any a Surface Impoundment that has been removed from service for a period of six months or longer, .~~ Written approval will require CHGM the Permittee shall to have the surface impoundment re-certified by obtain a certification from an independent, -Utah certified, -independent professional engineer and to submit the certification report to the Director. The report shall include certification -that the impoundment dike, including any portion of the dike which provides freeboard, has structural integrity as required by UAC Utah Admin. Code R315-264-226(c) and -that the liner The liner shall also be inspected and certified to be is -free of damage or signs of deterioration. CHGM shall incorporate the certification report into the Operating Record.

~~V.A.1. CHGM~~~~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 Ssurface Impoundment to service, CHGM~~~~the Permittee shall have written approval from the Director.~~

V.G ACTION LEAKAGE RATE

1. The action leakage rate (ALR) for Surface Impoundments A and B is 100 gallons per acre per day (gpad). ~~Above 100 gpad CHGM shall,~~ increased daily monitoring and shall notification notify of the Director within 72 hours is required for ALR above 100 gpad.
2. Should volumes ~~in excess of~~greater than 200 gpad be documented, CHGM shall submit 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.

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).
4. ~~CHGM shall make repairs~~ to the liner system ~~shall be done~~ in accordance with the CQA Plan (~~Attachment VI-2~~). ~~CHGM shall submit 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~~ALR.
5. When an exceedance in the leak detection riser occurs, CHGM shall obtain a sample ~~shall be obtained~~ and analyze the sampled for semi-volatile compounds and metals. CHGM shall submit t~~e~~ analytical results ~~will be submitted~~ to the Director within ten days following CHGM's receipt of the data from the laboratory.

V.H REMOVAL FROM SERVICE

1. In accordance with ~~UACUtah Admin. Code~~ R315-264-227, whenever the ~~action-200 gallons per acre per day (gpad)~~ 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, ~~CHGMthe Permittee~~ shall remove the surface impoundment from service and immediately implement the applicable procedures specified in the Contingency Plan, (~~Module II~~ Attachment II-6).
2. Whenever a surface impoundment is removed from service, as specified in ~~UACUtah Admin. Code~~ R315-264-227, ~~CHGMthe Permittee~~ shall either repair and recertify the impoundment in accordance with ~~UACUtah Admin. Code~~ R315-264-227(d) or close the impoundment as required by ~~UACUtah Admin. Code~~ R315-264-227(e).

V.I CLOSURE/POST-CLOSURE

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