

Attachment 2
Closure and Post-Closure Plans

Site Closure And Post-Closure Plan (R315-310-3(1)(h))

Closure Plan (R315-310-3(1)(h))

Closure Schedule (R315-310-4(2)(d)(I))

The closure schedule of the Washington County Landfill Facility will be as cited in section Anticipated facility life and the basis for calculating the facility's life (R315-310-4(2)(c)(ii)) of this permit application.

Design Of Final Cover (R315-310-4(2)(c)(iii))

The cell design including liner design, cover design, fill methods, elevation of final cover including plans and drawings are contained in Master Plan Report, Appendix A, in Attachment O of this permit application. Detailed landfill final closure construction drawings will be submitted prior to any future closure construction to the Director for approval.

Capacity Of Site In Volume And Tonnage (R315-310-4(2)(d)(ii))

The capacity of the site in volume and tonnage has been calculated using latest topographic maps of the facility and the Master Plan fill plans (Attachment O). The total capacity of the site (including consumed airspace) is approximately 79,908,200 cy. Assuming an average operational density of 1,824 lbs/cy, this equates to approximately 72,876,200 tons of waste including daily soil cover. Based on the most recent aerial topographical survey date of March 9, 2021, the total remaining volume and tonnage capacity of the site (including the remaining available airspace in Phase 4 and future Phases 5-12) is approximately 74,683,700 cy and 68,111,500 tons, respectively.

Final Inspection By Regulatory Agencies (R315-310-4(2)(d)(iii))

All items of closure work performed by the contractor will be subject to inspection by the District, its representatives or representatives of regulatory agencies having jurisdiction over the operation of the landfill. To ensure compliance with all rules and regulations that apply to the landfill, a final closure plan will be submitted prior to any closure construction to the Director for approval.

Prior to the existing landfill unit closure construction, the District will notify the regulatory agency responsible for the operations of the landfill facility in order that inspection trips may be planned.

All test results for all phases of closure construction will be kept on file as part of the landfill record.

Post-Closure Care Plan (R315-310-3(1)(h))

Site Monitoring Of Landfill Gases, Ground Water, And Surface Water, If Required (R315-310-4(2)(e)(i))

Ground water monitoring will continue during the post-closure care period as it is apparent that there is a perched water aquifer requiring the installation of ground water monitoring equipment. Maintenance of water monitoring equipment during this period consists of protection and maintaining of the monitoring well heads.

As there are no surface water sources on the landfill property, it will not be required of the District to conduct surface water monitoring as part of the post-closure care activities.

Upon closure of the landfill facility, leachate will be collected and treated as needed. During the years of operation prior to closure, a de-watering/run-off system has been and will be constructed to collect and remove all contaminated water from unclosed units and deposit the water in a total containment evaporation pond. After all units are covered with a protective cap system, the de-watering systems will remain in-place and continue to drain any moisture within the units. Post-closure maintenance of this system will consist of maintaining the integrity of the evaporation pond membrane lining system through weed and erosion control. It is expected that the facility will be entirely capped. There will be little, if any, leachate collected in the evaporation pond during the actual post-closure care period.

Gas monitoring will continue after closure of the landfill facility during the post-closure care period. Maintenance of gas monitoring equipment during this period consists of regular calibrations, and occasional repair or replacement of the actual gas equipment as per manufactures recommendations.

Withdrawals from the selected financial assurance instrument for the costs incurred by the District for performing the regularly scheduled quarterly inspections and methane gas

monitoring will be requested at the end of each quarter that the inspections are made. Withdrawals for any required additional inspection trips and maintenance work performed will also be made at the as needed in which it was performed.

Changes To Record Of Title, Land Use, And Zoning Restrictions (R315-310-4(2)(e)(ii))

Change of ownership of the property has occurred. On January 21, 1994, the United States of America gave and granted the property that contains the original 500-acre footprint of the Washington County Landfill Facility to Washington County. On October 5, 2018 an additional 55 acres of adjacent property was acquired by Washington County from the BLM. Washington County leases the property to the Washington County Solid Waste Special Service District #1. Washington County Landfill Inc. operates the landfill facility. A copy of the deed and the lease agreement are contained in Attachments A and B of this permit application.

Maintenance Activities To Maintain Cover And Run-On/Run-Off Control Systems (R315-310-4(2)(e)(iii))

There are no surface water sources on the landfill property, other than normal stormwater runoff. As a result, Washington County Landfill will not conduct surface water monitoring as part of the post-closure care activities.

The water balance indicates that, upon closure of the landfill facility, there will be no leachate collection or associated treatment. A leachate collection and extraction system has been provided however in the new cells, where leachate is extracted from sumps and recirculated back to the landfill. A run-off control system has been constructed to collect and remove all contaminated water from unclosed units and deposit the water in a Total Containment Evaporation Pond. After all units are covered with a protective cap system, the leachate collection system and run-off control systems will remain in-place and continue to drain any moisture within the units. Post-closure maintenance of this system will consist of maintaining the integrity of the evaporation pond membrane lining system through weed and erosion control. It is expected that the facility will be entirely capped, there will be little, if any, leachate collected in the evaporation pond during the actual post-closure care period.

Maintenance of the leachate evaporation pond as discussed previously will consist of weed and erosion control to ensure that any collected leachate is contained. Regular inspection will be made to determine the integrity of the pond and volume of collected leachates if any.

The run-off water channels along the perimeter of the closed landfill unit will require routine inspection and cleaning to ensure that obstructions do not occur. In conjunction with the routine inspection of the run-off water channels, inspection of the protective cap system will be performed to ensure that the vegetation continues to protect the cover soil from erosion.

Regular inspections will be made to ensure the integrity of the protective cap system and the run-on/run-off systems. It is understood that erosion can have an adverse effect upon the landfill facility, and, if left unchecked or not maintained, could become a public health hazard. It is Washington County Landfill, Inc.'s intention to implement a maintenance program to ensure the integrity of the landfill facility and remaining structures during the post-closure period, thus protecting the public and the environment.

It is anticipated that weed control in the run-off water channels and evaporation pond will require maintenance annually. This post-closure maintenance should be performed mid to late winter prior to the germination of the seeds in the spring.

List The Name, Address, And Telephone Number Of The Person Or Office To Contact About The Facility During The Post-Closure Care Period (R315-310-4(2)(e)(vi))

The names, address, and telephone number of the person or office to contact about the facility during the post-closure care period is as follows:

Name: Washington County Special Services District #1
Kevin Kunz, District Manager

Address: 325 North Landfill Road
Washington, Utah 84780

Phone #: (435) 673-2813