Attachment 2

Closure and Post-Closure Plans

CLOSURE / POST CLOSURE PLAN

CLOSURE/POST CLOSURE PLAN

Closure of active portions of the Long Valley Sanitary Landfill contemplates controlling, minimizing, and eliminating threats to human health and the environment from post closure escape of solid waste constituents. contaminated runoff. or waste composition products to the ground, groundwater. surface water. and the atmosphere. When an area of the landfill exceeding 10,000 square yards reaches final elevation. it will be covered within 60 days with 12 inches of intermediate cover and graded to promote drainage. The surface shall be free from ponding and shall minimize infiltration. Not more than 6 months after completion of the intermediate cover. the area will be covered with a minimum of 18 inches of material having a hydraulic conductivity of less. than 1 x 10" cm/sec or an alternate final cover approved by the Executive Secretary. The impermeable barrier will be covered with 6 inches of native soil or 6 inches of material capable of supporting vegetative growth.

Post closure care of inactive sections of the landfill will consist of maintaining the' integrity of the final and vegetative covers. Any areas subject to erosion will also be corrected; and appropriate measures will be implemented to identify and eliminate the source. Groundwater monitoring, leachate collection. and gas collection are not proposed for the Long Valley Sanitary Landfill. Therefore, closure and post closure activities associated with these functions will not be performed.

CLOSURE SCHEDULE

Closure operations at the Long valley Sanitary Landfill will be performed on an ongoing basis. Adequate capacity exists at the landfill to continue operation for many years. A final closing date cannot be determined at this time. Ongoing closure operations will generally be performed from May through October. the normal frost free construction period, or as weather permits. No area larger than 2 acres that has achieved final elevation will remain open longer than 6 months. Water balance calculations in the area indicate the lowest moisture content of the waste occurs during the late summer/early fall months.

FINAL COVER. SEEDING. CONTOURING

Closure operations will consist of leveling. contouring. placement of appropriate covers and seeding as necessary to reduce infiltration and preserve the integrity of the completed areas of the landfill. Areas of the landfill reaching final elevation will be closed within 6 months. Closure

operations will include leveling and contouring using intermediate cover to reduce infiltration and ponding. Excess material may be stripped and utilized in other operations or left in place. After grading operations promoting drainage are complete, a geosynthetic clay liner or 18 inches of material with a permeability of 1×10^{-5} cm/sec or less will be installed. Geosynthetic clay liners and other compatible covering systems may be used when permeability characteristics are equal to or better than earthen materials. Alternate designs meeting the performance standard of impermeable material may be used if approved by the Executive Secretary prior to placement. Upon completion of the impermeable cover, closed areas will be seeded. The seed mixture shall be developed after consultation with range specialists and verifying availability of local seed markets. Recently closed sections of the landfill will be evaluated as part of the quarterly inspection process during the first year and then placed on post closure status.

SITE CAPACITY

Site capacity for the entire Long valley Sanitary Landfill cannot be accurately estimated. Assuming a 40-acre parcel, trench style operation (40 ft. bottom width, 3:1 side slopes, 30 ft. depth), three 8.5-foot lifts of waste with 1.5-foot intermediate cover, and an average density of 900 lbs. per cubic yard, waste volumes can be estimated at 844,800 cubic yards or 380,160 tons.

CLOSURE TIMING AND NOTIFICATION

Closure activities at the Long valley Sanitary Landfill will be performed on an ongoing basis. The Executive Secretary will be notified of closure progress by reviewing quarterly and annual reports, and by contacting Division of Solid and Hazardous Waste inspectors who have visited the site. Considering the ongoing nature of closure operations and the justification for performing closure operations as a cell reaches final elevation, alternate notification procedures may not be feasible.

In addition to the ongoing notification indicated above, The Executive Secretary will be notified in writing prior to initiation of final cover operations, and the final cover design and the construction quality assurance/quality control (QA/QC) plan will be submitted to the Executive Secretary for review and approval. The QA/QC plan for closure will include tests for permeability and depth. Permeability tests, where required, will be performed at the rate of test per 3000 cubic yards of material and will randomly selected throughout the working area. Permeability tests may include in field or laboratory tests, nuclear density extrapolations, or other industry wide procedures and practices. Depth tests will utilize standard cross section survey methods and will be performed at a rate equal to or greater than tests performed for permeability. Closure as-builts and certification of closure according to the plan identified above will be signed by a registered professional engineer and forwarded to the Executive Secretary within 90 days of completion.

FINAL INSPECTION

The Long Valley Landfill is anticipated to operate well beyond the life of this permit. At least 60 days prior to any closure. the Division of Solid and Hazardous Waste will be contacted, and a final inspection will be scheduled. The Executive Secretary will be informed of incremental closure of individual cells through routine state inspections. annual reports. and renewal applications. In addition. a QA/QC plan will be submitted for approval prior to any closure operations. Within 90 days of unit and/or facility closure. as built plans signed by a professional engineer shall be forwarded to the Executive Secretary.

Landfill owners and operators shall allow the Executive Secretary of the Utah Solid and Hazardous Waste Control Board or an authorized representative. including representatives from the local District Health Department, upon representation of credentials. to enter during operating hours and/or inspect at reasonable times any facilities. equipment. practices. or operations regulated or required under this permit.

A record of the inspection may be made by photographic. videotape, electronic or other reasonable means. and a copy of any such record shall be provided to the owner and the operator within a reasonable time.

SITE MONITORING

No permanent monitoring devices are proposed for the Long Valley Sanitary Landfill. Landfill gas in closed sections will be monitored as described for active cells in the Preliminary Engineering Report section of this document.

No groundwater monitoring wells. lysimeters. vadose zone equipment or other monitors are planned for this facility. Surface waters in closed portions of the landfill will be evaluated as pt of the annual inspection. Monitoring will be limited to identifying situations which promote infiltration.

LAND TRANSFERS AND USES

Plats and a statement of fact concerning the location of any disposal site shall be recorded as part of the record of title with the County Recorder not later than 60 days after certification of closure. Upon recording. proof of the record of filing will be submitted to the Executive Secretary.

POST CLOSURE MAINTENANCE

Post-closure care of inactive sections of the landfill will consist of maintaining the integrity of the final and vegetative covers. Any areas subject to erosion will be corrected. and appropriate measures

will be implemented to identify and eliminate the source. No active or technical devices are proposed for use at the Long Valley Sanitary Landfill. Best management practices will be implemented to minimize infiltration and assure the integrity of the run-on/run-off system. Evaluation of the system will be made during the quarterly inspections, and corrective measures, if any, will be implemented. Run-on and run-off from events smaller than the 25-year storm will be controlled by way of ditches, berms and use of machinery to ensure proper run-off.

No leachate collection devices are proposed for the facility. Closed portions of the landfill will be inspected as part of the quarterly reviews performed by the landfill operator. Closed areas will also be inspected as part of the in-depth annual inspection. Any deficiencies will be repaired as soon as practical. For those failures which jeopardize the environmental integrity of the facility or permit the uncontrolled infiltration of significant amounts of moisture, corrective measures will be initiated immediately.

No alternate land use for closed sections has been developed to date. Closed cells will remain under the jurisdiction of the landfill manager. If alternate land use plans are developed, they will be addressed during the permit renewal process, or a separate permit modification may be processed.

RESPONSIBLE PARTIES

The applicant, property owner, and responsible party for the post closure care period is:

Western Kane County Special Service
District No. 1
1000 E Kaneplex Dr.
Kanab, Utah 84741
Attn: Danny Little
Phone: (435) 644-5089

It should be noted Western Kane County Special Service District County is continually upgrading solid waste management services. Future agreements, potential special service district creation, the extended life of the landfill, and alternate ownership/operation scenarios may require modification of this section of the permit. In addition, the District may contract site operations with private entities. The District will notify the Executive Secretary of any changes in responsible party status at least 30 days prior to their effective date. Other changes to the information listed above will be provided in annual reports and permit renewal documents.