

DRAFT STAKEHOLDER REVIEW

Release from Post-Closure Period Requirements Solid Waste Management Program Draft Feb 2011

Many landfills are reaching the end of their stated post-closure period and will be submitting requests to be released from their post-closure obligations. To date, no information has been provided to owners on what information the Department expects to receive with the request.

The Missouri Department of Natural Resources Solid Waste Management Regulations state:

10 CSR 80-2.030 .4(F) Release of Financial Assurance Instruments states:

2. Post-closure care.

B. Within one (1) year of the end of the designated post-closure care period, and after receipt of a certification by a professional engineer, the department will make an inspection of the solid waste disposal area to determine if the approved post-closure plan has been properly implemented as well as assess the environmental and health impact of the solid waste disposal area. If the inspection reveals that the solid waste disposal area no longer poses a detrimental impact to either the environment or public health, the remaining amount of the financial assurance instrument will be released. If the inspection reveals that the post-closure plan has not been properly implemented or that the solid waste disposal area continues to pose a detrimental environmental or health impact, the department may retain all or part of the remaining financial assurance instrument or require an extension of the post-closure care period.

Upon expiration of the 20 or 30 year post-closure requirement an engineering certification must be submitted by each facility. This certification must be stamped by a professional engineer registered in the state of Missouri and must at a minimum include the following information:

1. Groundwater Monitoring Data.
Provide a detailed analysis of all groundwater monitoring data collected during the active life and post-closure period. Analysis of the data may utilize graphical and/or statistical methods. The purpose of this analysis is to demonstrate that groundwater is not being impacted by the closed landfill. If impacts to groundwater are detected, additional monitoring or corrective action may be necessary.
2. Methane Monitoring Data.
Provide a detailed analysis (graphical or statistical) of all available methane monitoring data. Unless the post-closure plan specifies otherwise, we recommend that this analysis include at least twelve (12) consecutive months of methane monitoring data or three (3) consecutive years of quarterly methane monitoring data taken at the end of the post-closure period. Data analysis should identify any increasing or decreasing trends. The purpose of this analysis is two-fold. The first purpose is to demonstrate that methane is not migrating beyond the facility

boundary or into any permanent on-site structures at concentrations greater than those allowed by regulations. The second purpose is to demonstrate that methane generation rates have stabilized or begun to decline. If methane continues to be a problem or a potential problem exists at the facility boundary, additional monitoring or corrective action may be necessary.

3. **Leachate Monitoring Data.**

If a facility has a leachate collection system, the operator should provide a detailed description of the quantity and quality of leachate which has been generated during the post-closure period. If leachate is still being generated a plan must be submitted describing the final disposition of the leachate as well as an estimate of the remaining time leachate will be generated.
4. **Post-Closure Inspection Reports.**

Copies of all of the operator's post-closure inspection reports should be provided to demonstrate that the site has been inspected on a regular basis to evaluate the integrity and stability of the final cover and surface water diversion systems. If post-closure inspections of the facility identify problems which require maintenance or repair, these problems and associated remedies should be discussed in detail. The quality of the vegetative cover may be demonstrated by comparing photographs of the reclaimed areas to photographs of adjacent undisturbed areas. The purpose of these reports and photos is to demonstrate that the surface and subsurface of the landfill has stabilized and will not require further maintenance or repairs. If the subsurface of the landfill has not stabilized (i.e., waste decomposition is still causing settlement), additional monitoring of the final cover system may be necessary. Likewise, if the final cover system or surface water diversion system demonstrates an ongoing need for repairs due to erosion or poor vegetative growth, additional measures or time may be necessary to stabilize these features.
5. **Final Survey of the landfill boundary and topography representing current conditions at the site.**
6. **Final Disposition of Environmental Monitoring System(s).**

If the owner/operator wishes to plug and abandon any methane or groundwater monitoring wells, a written request must be submitted to and approved by the Department before plugging and abandonment occurs. Requests should include a justification for plugging and abandonment, specify the wells affected, and describe the procedures to be used. These requests can be submitted separately or as part of the post-closure certification documentation. Plugging and abandonment of monitoring wells must be completed in compliance with 10 CSR 23-4. If the monitoring wells are not going to be plugged and abandoned, the owner/operator should provide a justification and a discussion of the planned use of the monitoring wells.

7. A statement of property use after the post-closure period ends. Under no circumstances are structures to be built on the waste mass.
8. A statement signed by the engineer and the owner certifying the approved post-closure plan has been properly implemented and that the solid waste disposal area no longer poses a detrimental impact to either the environment or public health.
9. Owner concurrence.
The owner of the property should include a letter confirming their desire to end the post-closure period and confirm the following:
 - a. The permit for the landfill(s) will remain in effect indefinitely. Release from the post-closure obligations does not release the owner of the landfill from the responsibility to properly maintain the site(s). This includes, at a minimum, annual mowing, keeping woody vegetation from growing on the waste mass and repairing any subsidence areas and reseeded as necessary.
 - b. The Easement, Notice and Covenant on file with the recorder of deeds remains in full force and effect. This includes continuing access by the Department, its agents, or its contractors to enter the premises to inspect the landfill, to conduct sampling and to complete remedial actions as necessary.
 - c. The Department may continue to conduct routine inspections. The Department reserves the right to inspect the site in the future to determine if the landfill is posing a threat to human health or the environment.
 - d. If the owner attempts to sell, convey or transfer title of the property that contains a landfill, section 260.213, RSMo requires the owner to clearly disclose to the potential buyer the existence and location of the site and to notify the potential buyer that he/she may be assuming liability to the state for any remedial actions at the site.
 - e. Per 10 CSR 80-2.020(4)(B), if a change of ownership is to occur, the current owner and proposed owner must submit a letter to the Department of Natural Resources, Solid Waste Management Program requesting the permit be transferred. The proposed owner must also complete a violation history disclosure statement.
 - f. Per section 260.210, RSMo, no person may alter a solid waste disposal area without prior Department approval. This applies to any activity taking place on the landfills, including land disturbance or excavation.

- g. Any buffer zone specified in the permit or permit documents must be maintained in the future. Any construction activity to take place within the buffer zone must be approved in writing by the Department in advance of the activity.
 - h. The owner/operator must state they are aware that the closure and/or post closure of their landfill in no way releases them from any future liability in regards to the landfill.
 - i. Per section 260.227, RSMo the Department reserves the right to require a corrective action Financial Assurance Instrument in the future if the site is deemed to pose a public nuisance, or threat to human health or the environment.
10. If the facility had any previous environmental issues, include a summary of the issue(s) and a chronology of the steps taken to remediate the issue(s).

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