SWAC Solid Waste Facility Subcommittee February, 23 2023



Scope & Role of Workgroup

- Issues related to solid waste facility permitting, operations, and capacity
- Establish discussion forum and obtain stakeholder input on related MassDEP programs & policies
- First meeting held January 10, 2023
- https://www.mass.gov/info-details/solid-waste-facility-issues-workgroup

Meeting Agenda

- Landfill Post Closure Oversight after Initial 30 Years
- Soils Management Policy and Regulation Issues

Note on Regulation References

- In some cases, regulation language is summarized or paraphrased
- Current regulations available at:
 - https://www.mass.gov/doc/310-cmr-1600-site-assignment-for-solid-waste-facilities
 - https://www.mass.gov/doc/310-cmr-19000-solid-waste-management-facility-regulations/download

Initial Proposed Changes for Discussion

- Initial proposed regulation changes for discussion:
 - https://www.mass.gov/doc/presentation-solid-waste-regulations-discussion-1/download
 - https://www.mass.gov/doc/92121-meeting-summary/download

Landfill Post-Closure Care

Landfill Post-Closure Care

- Will extend beyond initial 30 year post-closure period
- Need to establish framework for post 30 year requirements – either via permitting, policy or regulation
- MassDEP will not approve reductions of financial assurance mechanism (FAM) below 50% of original amount (pending further defining of approach)

General. The owner, successors or assigns shall maintain, care for and monitor the site during the post-closure period in order to ensure the integrity of the closure measures and to detect and prevent any adverse impacts of the site on public health, safety or the environment.

Post-closure Period. For the purposes of 310 CMR 19.142 the post-closure period shall extend for a minimum period of 30 years from the date the Department accepts the closure in accordance with 310 CMR 19.140(6). The post-closure period shall remain in effect until the Department issues a written determination that the post-closure period has ended.

- (3) <u>Post-closure Requirements (310 CMR 19.142(5)</u>. During the post-closure period the owner or operator (or successors or assigns thereto) shall perform the following activities on any closed portion of the facility:
 - a) take corrective actions to remediate and/or mitigate conditions that would compromise the integrity and purpose for the final cover;
 - b) maintain the integrity of the liner system and the final cover system;
 - c) collect leachate from and monitor and maintain leachate collection system(s);
 - d) monitor and maintain the environmental monitoring systems for surface water, ground water and air quality;
 - e) maintain access roads;
 - f) maintain landfill gas control systems;
 - g) protect and maintain surveyed benchmarks;
 - h) have the landfill inspected by a third-party inspector in accordance with 310 CMR 19.018 and such third-party inspection shall be conducted in accordance with the frequency and other requirements of 310 CMR 19.018, unless more frequent inspections or more stringent requirements are contained in the terms of any approval, order or other document issued by the Department pursuant to 310 CMR 19.000; and
 - The owner, successors or assigns shall institute such additional measures during the post-closure period as the Department deems necessary for the protection of public health or safety or the environment.

• Termination of the Post-closure Period (310 CMR 19.142(8)). The post-closure period shall end on the date of the Department's written determination that the post-closure period has ended. Said written determination in no way limits or absolves the owner or operator of liability for the site in the future.

Note – This clarifies existing requirements in 310 CMR 19.142, which read, in part:

- (2) Post-closure Period. For the purposes of 310 CMR 19.142 the post-closure period shall extend for a minimum of a 30 year period.
- (8) Termination of the Post-closure Period. The post-closure period shall end on the date of the Department's written determination that the post-closure care, maintenance and monitoring of the site are no longer required. Said written determination in no way limits or absolves the owner of liability for the site in the future.

• Decrease in the Amount of Financial Assurance. An owner or operator of a solid waste management facility may, upon determining a revised estimate of the cost of closure, corrective action or post-closure maintenance of the facility, decrease the amount of the applicable financial assurance mechanism to an amount equal to the full amount of the revised estimate of the cost of closure, corrective action or post-closure maintenance of the facility, having first requested and received the written approval of the Department. The Department shall approve the decrease upon its determination that the proposed decreased amount of the financial assurance mechanisms equals or exceeds the necessary cost of closure, corrective action or post-closure maintenance and shall not be reduced by greater than 50% of the original post-closure cost estimate.

Factors to Consider

- History of site waste accepted
- Condition of site cap, slopes, grade
- Monitoring results gas, groundwater, surface water
- Threat of emerging contaminants (e.g., PFAS)
- Any off-site impacts (e.g., such as private/private wells, sensitive receptors)
- Nearby wetlands, ecological resources
- Post-closure uses on the landfill

Potential Changes and How

- Reductions in monitoring frequency or scope
- Reductions in FAM where applicable
- Changes to gas collection system operation
- Changes to 3rd party/MassDEP inspections
- Could be defined through:
 - Regulations
 - Policy linked to regulations
 - Site specific permitting

Potential Siting Criteria for Soil Monofills

Soils vs. Solid Waste Landfills

- Different material and potential impacts
- Soils would not generate landfill gas like solid waste
- Would also not generate same type of leachate stream
- Less potential for odor/nuisance concerns
- Should there be different siting or permitting requirements for landfills that take soil only?
 - Could be by waiving siting specific requirements in specific cases (may not apply to all)
 - Or could write specific criteria for soil mono-fills into regulation

Solid Waste Facility Siting Criteria – General Criteria

- Agricultural Lands (proposed to revise)
- Traffic & Access to the Site
- Wildlife & Wildlife Habitat
- Areas of Critical Environmental Concern
- Protection of Open Space

Solid Waste Facility Siting Criteria – General Criteria

- Potential Air Quality Impacts
- Potential for Creation of Nuisances
- Size of Facility
- Existing Facilities
- Other Sources of Pollution
- Regional Participation

Landfill Siting Criteria

- Public and private drinking water supplies and potential supplies – multiple applicable criteria
- Maximum high groundwater > 4 feet of surface, groundwater protection
- Wetlands, including 100 year floodplain
- Not within 400 feet of lake or 200 feet of river
- Not within 1000 feet of sensitive receptors (e.g., school, pre-school, prison, health care facility)

Permitting of Soil Mono-fills

- Permitting requirements may also apply differently to soil landfills
- For example, gas collection requirements and liner requirements

Next Steps & More Information

- Other issues raised for discussion
 - Recycling facility reporting requirements
 - Particularly MRFs
 - PFAS sampling and response approach for landfills
 - Management capacity related discussions
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