

SUMMARY OF LANDFILL RECOMMENDATIONS

1. Specify how a landfill applicant must demonstrate financial qualifications to construct and operate the landfill.

The applicant should provide cost estimates for: performing environmental studies; acquiring the site; designing the landfill; constructing and operating the landfill; and financial assurance required for corrective action and closure of the landfill. To show financial qualification, the applicant should submit an audited, certified, financial statement and identify sufficient assets to cover the estimated costs. Where assets of a parent, subsidiary, affiliate or joint venturer are offered in support of the financial qualifications of the applicant, then that party must be listed as an owner/operator on the facility permit.

2. Expand financial assurance requirements.

Require that the landfill operator provide financial assurance to cover possible corrective action (in the event of a leak from the landfill, for example). This would be in addition to the financial assurance currently required for the cost of closing the landfill and providing post-closure care. The minimum amount of financial assurance for corrective action should be \$3 million. Financial assurance for corrective action should apply to both new and existing facilities. For new facilities, the financial assurance would be required before permit issuance.

3. Strengthen environmental compliance review of potential landfill operators.

Expand the scope of the existing environmental compliance review to include any past environmental violation (not just those related to solid waste) and a larger group of people associated with the permit applicant. For example, the environmental compliance review would be broadened to cover a person who holds a minority interest in the entity applying for a landfill permit (except for minority shareholders in publicly traded corporations who do have any involvement in management or control of the corporation.)

4. Broaden the definition of "owner or operator".

Include in the definition of "owner or operator" any person who has a financial or equitable interest in the entity that has applied for the landfill permit (except for minority shareholders in publicly traded corporations who do have any involvement in management or control of the corporation.)

5. Clarify solid waste enforcement provisions.

Amend the statute sections that authorize injunctive relief and civil penalties for solid waste violations to expressly allow the use of those enforcement remedies in response to a violation of a permit issued by the Department or an order issued by the Commission for Health Services. Increase the maximum civil penalty allowed for a solid waste or hazardous waste violation. Authorize the Department to recover the costs of investigating a violation.

6. Require notice to the Department of any significant change in the structure or assets of the business entity that holds a landfill permit.

The Department should be notified within 30 days of any significant change in the structure of the business entity that owns or operates the landfill facility; the identity of any person or business entity previously identified as an owner or operator of the facility pursuant to G.S. 130A-309.27(a)(1); or in the financial assets identified in the financial qualification of the owner or operator. A change is significant if it could effect the financial qualifications of the permit holder or result in a change in the identity of the owners or operators for purposes of either financial qualification or environmental compliance review. When the Department receives notice of a change, it can require a new environmental compliance or financial qualification review.

7. Set standards for safe transportation of solid waste by railway or barge.

Containers used to transport solid waste should be leak-tested and covered. Records of leak testing should be retained at the permitted solid waste facility for 3 years. It would be a violation to allow liquid to enter a container of solid waste or to allow solid waste, liquids or odors to escape from a container.

8. Require a traffic study for larger solid waste facilities.

Require that applications for solid waste management facilities proposed to handle more than 100,000 tons of waste per year include a study of the traffic impacts of the facility. The results of the study would be considered in the permit decision.

9. Authorize local landfill liaisons.

Authorize a local government with planning authority over a sanitary landfill that has a service area of greater than a 100-mile radius to designate a landfill liaison. The liaison would be a certified landfill manager, but would not direct the operation of the landfill. The landfill liaison would have authority to enter the landfill facility at reasonable times and inspect the landfill operation for purposes of: ensuring that the facility meets all local requirements; identifying and notifying the Department of potential violations; and identifying and notifying the Department of potentially hazardous conditions.

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10. Require the permittee to employ an independent quality assurance engineer to oversee construction of the landfill.

The permittee should employ a licensed engineer who is independent of both the landfill owner and any person engaged in the design or construction of the landfill to inspect during construction. The project engineer would be responsible for certifying that construction of the solid waste management facility units, leachate handling facilities and landfill appurtenances conforms to the plan approved by the Department, the permit to construct, and the rules adopted by the Commission.

11. Establish minimum standards for new landfills and for landfill expansions onto previously unpermitted property.

Minimum standards for new landfills and for landfill expansion onto property that was not included within the scope of a previous permit would include:

- a. double liners and a leachate collection system for municipal solid waste landfills;
- b. composite liners for construction and demolition landfills;
- c. a minimum separation of 5 feet between the bottom elevation of the waste (or the liner system, if the landfill has a liner) and seasonal high groundwater and bedrock;
- d. a 200-foot buffer between the waste boundary and streams or wetlands (unless no feasible alternative location is available that would comply with the buffer requirement); and
- e. a prohibition against siting landfill units in the 100-year floodplain or in area reclaimed from the floodplain.

12. Establish new standards for construction of lined sanitary landfill units permitted on or after the effective date of the bill

Specific standards for leachate collection systems and liners would include:

- a. leachate collections systems should be designed to maintain a head of less than one foot during leachate recirculation.
- b. the leachate collection system should be designed to return the head to one foot or less within 72 hours based on a 25 year-24 hour design storm falling on an empty cell.
- c. geomembrane base liner systems must be tested for leaks and damage.
- d. leachate collection lines should be designed and constructed to allow for remote camera inspection and cleaning. Lines should be cleaned and remotely inspected annually.
- e. all pipes used to carry leachate should be constructed with dual containment outside of the lined disposal unit.
- f. new units and lateral expansions should be constructed without pipe penetrations of the bottom liner, whether for leachate, stormwater or gas.

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13. Direct the Commission for Health Services to review landfill rules and adopt new rules necessary to protect public health and the environment.

Rules adopted by the Commission should:

- a. establish standards for the collection, control and utilization or destruction of landfill gasses at municipal solid waste landfills;
- b. establish standards for the construction, operation, and maintenance of bioreactor landfills;
- c. establish criteria for development of bird and wildlife management plans; and
- d. incorporate measures necessary to minimize impacts to natural, historic and cultural resources, including but not limited to wetlands, critical fisheries habitat, parks, recreation areas, cultural and historic sites, and potential water supplies.

14 Require that all sanitary landfills have a waste screening plan to ensure that the facility is in compliance with waste bans.

15 Require an environmental study of very large landfills and landfills with an extended service area.

The existing exemption from the N.C. Environmental Policy Act for landfills owned and operated by local governments should be removed for facilities that receive more than 300,000 tons of waste per year; have a total disposal capacity of more than 15 million cubic yards of solid waste; or have a service area of more than 100 miles in radius. An environmental study should also be required for privately-constructed landfills that will exceed one or more of those thresholds. The environmental document would need to meet the standards for an environmental impact statement under the N.C. Environmental Policy Act and rules adopted by the Department of Administration to implement the act. The documents would also be subject to the same public notice and a public hearing would be required.

16. Change landfill franchise authority to differentiate between landfills that provide local service and those that have large regional or multi-state service areas.

The Department is still working on the specific recommendation to alter local government franchise authority.

17. Add a new statute section setting out the grounds for denial of a landfill permit.

The statute should authorize the Department to deny a landfill permit if it finds one of the following:

- (a) Construction or operation of the landfill would violate water quality standards for groundwater or surface waters;

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- (b) The landfill would jeopardize a renewable resource of more than local concern, such as watersheds or aquifers that are sources of public water supply.
 - (c) Construction or operation of the landfill would damage fragile or historic areas or areas containing environmental or natural resources of more than local significance. Examples of these areas would include national or State parks or forests; wilderness areas; historic sites; recreation areas; segments of the natural and scenic rivers system; wildlife refuges, preserves and management areas; areas that provide habitat for threatened or endangered species; primary nursery areas and critical fisheries habitat designated by the Marine Fisheries Commission; and Outstanding Resource Waters designated by the Environmental Management Commission.
 - (d) Construction or operation of the facility would jeopardize public rights to access or use public trust waters.
 - (e) The facility will be located in a natural hazard area, such as an area subject to excessive seismic activity, that would increase the risk to public health or safety.
 - (f) The proposed facility would be inconsistent with statutory standards or rules adopted by the Commission for Health Services.
 - (g) The proposed facility would be inconsistent with ordinances adopted by the local government that has planning jurisdiction over the site of the proposed facility.
 - (h) There is a practicable alternative to be proposed landfill that would have less adverse impact on public resources.
 - (i) Construction of the landfill would contribute to cumulative effects that would damage a natural, historic, or cultural resource protected under the statute.
18. Establish permit fees for solid waste facilities. A copy of the proposed fee schedule is attached. Fee revenue would be used to support the solid waste regulatory program.
19. Establish a state-wide surcharge on disposal of solid waste at \$2 per ton. The surcharge would apply to municipal solid waste and to construction and demolition waste that is either disposed of at a permitted solid waste facility or moves through a permitted transfer station en route to a disposal facility outside the State. The surcharge would be used to pay for cleanup of orphan landfills and other orphan inactive hazardous waste sites; provide state matching funds for remediation, monitoring and maintenance of Superfund sites in North Carolina; provide funds to local government for redevelopment of contaminated sites; and provide funds for administration of contracts to cleanup orphan landfills and inactive hazardous waste sites.