## NATURAL RESOURCES AND ENVIRONMENTAL PROTECTION ACT (EXCERPT) Act 451 of 1994

## 324.11542 Municipal solid waste incinerator ash; disposal.

Sec. 11542.

- (1) Except as provided in subsection (5) and except for municipal solid waste incinerator ash that is described and used as provided in section 11506(6)(h), municipal solid waste incinerator ash shall be disposed of in 1 of the following:
  - (a) A landfill that meets all of the following requirements:
  - (i) The landfill is in compliance with this part and the rules promulgated under this part.
  - (ii) The landfill is used exclusively for the disposal of municipal solid waste incinerator ash.
- (iii) The landfill design includes all of the following in descending order according to their placement in the landfill:
  - (A) A leachate collection system.
  - (B) A synthetic liner at least 60 mils thick.
- (C) A compacted clay liner of 5 feet or more with a maximum hydraulic conductivity of 1 x 10-7 centimeters per second.
  - (D) A leak detection and leachate collection system.
- (E) A compacted clay liner at least 3 feet thick with a maximum hydraulic conductivity of 1 x 10-7 centimeters per second or a synthetic liner at least 40 mils thick.
  - (b) A landfill that meets all of the following requirements:
  - (i) The landfill is in compliance with this part and the rules promulgated under this part.
  - (ii) The landfill is used exclusively for the disposal of municipal solid waste incinerator ash.
- (iii) The landfill design includes all of the following in descending order according to their placement in the landfill:
  - (A) A leachate collection system.
  - (B) A composite liner, as defined in R 299.4102 of the part 115 rules.
  - (C) A leak detection and leachate collection system.
  - (D) A second composite liner.
- (iv) If contaminants that may threaten the public health, safety, or welfare, or the environment are found in the leachate collection system described in subparagraph (iii)(C), the owner or operator of the landfill shall determine the source and nature of the contaminants and make repairs, to the extent practicable, that will prevent the contaminants from entering the leachate collection system. If the department determines that the source of the contaminants is caused by a design failure of the landfill, the department, notwithstanding an approved construction permit or operating license, may require landfill cells at that landfill that will be used for the disposal of municipal solid waste incinerator ash, which are under construction or will be constructed in the future at the landfill, to be constructed in conformance with improved design standards approved by the department. However, this subparagraph does not require the removal of liners or leak detection and leachate collection systems that are already in place in a landfill cell under construction.
- (c) A landfill that is a monitorable unit, as defined in R 299.4104 of the part 115 rules, and that meets all of the following requirements:
  - (i) The landfill is in compliance with this part and the rules promulgated under this part.
  - (ii) The landfill is used exclusively for the disposal of municipal solid waste incinerator ash.
- (iii) The landfill design includes all of the following in descending order according to their placement in the landfill:
  - (A) A leachate collection system.
  - (B) A synthetic liner at least 60 mils thick.
- (C) Immediately below the synthetic liner, either 2 feet of compacted clay with a maximum hydraulic conductivity of 1 x 10-7 centimeters per second or a bentonite geocomposite liner, as specified in R 299.4914 of the part 115 rules.
- (D) At least 10 feet of either natural or compacted clay with a maximum hydraulic conductivity of 1 x 10-7 centimeters per second, or equivalent.
- (d) A landfill with a design approved by the department that will prevent the migration of any hazardous constituent into the groundwater or surface water at least as effectively as the design requirements of subdivisions (a) to (c).
  - (e) A type II landfill, as described in R 299.4105 of the part 115 rules if both of the following conditions apply:
- (i) The ash was generated by a municipal solid waste incinerator that is designed to burn at a temperature in excess of 2500 degrees Fahrenheit.

- (ii) The ash from any individual municipal solid waste incinerator is disposed of pursuant to this subdivision for a period not to exceed 60 days.
- (2) Except as provided in subsection (3), a landfill that is constructed pursuant to the design described in subsection (1) shall be capped following its closure by all of the following in descending order:
  - (a) Six inches of top soil with a vegetative cover.
  - (b) Two feet of soil to protect against animal burrowing, temperature, erosion, and rooted vegetation.
  - (c) An infiltration collection system.
  - (d) A synthetic liner at least 30 mils thick.
  - (e) Two feet of compacted clay with a maximum hydraulic conductivity of 1 x 10-7 centimeters per second.
- (3) A landfill that receives municipal solid waste incinerator ash under this section may be capped with a design approved by the department that will prevent the migration of any hazardous constituent into the groundwater or surface water at least as effectively as the design requirements of subsection (2).
- (4) If leachate is collected from a landfill under this section, the leachate shall be monitored and tested in accordance with this part and the rules promulgated under this part.
- (5) As an alternative to disposal described in subsection (1), the owner or operator of a municipal solid waste incinerator may process municipal solid waste incinerator ash through mechanical or chemical methods, or both, to substantially diminish the toxicity of the ash or its constituents or limit the leachability of the ash or its constituents to minimize threats to human health and the environment, if processing is performed on the site of the municipal solid waste incinerator or at the site of a landfill described in subsection (1), if the process has been approved by the department as provided by rule, and if the ash is tested after processing in accordance with a protocol approved by the department as provided by rule. The department shall approve the process and testing protocol under this subsection only if the process and testing protocol will protect human health and the environment. In making this determination, the department shall consider all potential pathways of human and environmental exposure, including both short-term and long-term, to constituents of the ash that may be released during the reuse or recycling of the ash. The department shall consider requiring methods to determine the leaching, total chemical analysis, respirability, and toxicity of reused or recycled ash. A leaching procedure shall include testing under both acidic and native conditions. If municipal solid waste incinerator ash is processed in accordance with the requirements of this subsection and the processed ash satisfies the testing protocol approved by the department as provided by rule, the ash may be disposed of in a municipal solid waste landfill, as defined by R 299.4104 of the part 115 rules, licensed under this part or may be used in any manner approved by the department. If municipal solid waste incinerator ash is processed as provided in this subsection, but does not comply with the testing protocol approved by the department as provided by rule, the ash shall be disposed of in accordance with
- (6) The disposal of municipal solid waste incinerator ash within a landfill that is in compliance with subsection (1) does not constitute a new proposal for which a new construction permit is required under section 11509, if a construction permit has previously been issued under section 11509 for the landfill and the owner or operator of the landfill submits 6 copies of an operating license amendment application to the department for approval pursuant to part 13. The operating license amendment application shall include revised plans and specifications for all facility modifications including a leachate disposal plan, an erosion control plan, and a dust control plan which shall be part of the operating license amendment. The dust control plan shall contain sufficient detail to ensure that dust emissions are controlled by available control technologies that reduce dust emissions by a reasonably achievable amount to the extent necessary to protect human health and the environment. The dust control plan shall provide for the ash to be wet during all times that the ash is exposed to the atmosphere at the landfill or otherwise to be covered by daily cover material; for dust emissions to be controlled during dumping, grading, loading, and bulk transporting of the ash at the landfill; and for dust emissions from access roads within the landfill to be controlled. With the exception of a landfill that is in existence on June 12, 1989 that the department determines is otherwise in compliance with this section, the owner or operator of the landfill shall obtain the operating license amendment prior to initiating construction. Prior to operation, the owner or operator of a landfill shall submit to the department certification from a licensed professional engineer that the landfill has been constructed in accordance with the approved plan and specifications. When the copies are submitted to the department, the owner or operator of the landfill shall send a copy of the operating license amendment application to the municipality where the landfill is located. At least 30 days prior to making a final decision on the operating license amendment, the department shall hold at least 1 public meeting in the vicinity of the landfill to receive public comments. Prior to a public meeting, the department shall publish notice of the meeting in a newspaper serving the local area.
- (7) The owner or operator of a municipal solid waste incinerator or a disposal area that receives municipal solid waste incinerator ash shall allow the department access to the facility for the purpose of supervising the collection of samples or obtaining samples of ash to test or to monitor air quality at the facility.
  - (8) As used in subsection (1), "landfill" means a landfill or a specific portion of a landfill.

Popular Name: Act 451 Popular Name: NREPA Popular Name: Solid Waste Act