

ORIGINAL SENATE  
FILE NO. 0121

ENROLLED ACT NO. 71, SENATE

SIXTY-FIRST LEGISLATURE OF THE STATE OF WYOMING  
2011 GENERAL SESSION

AN ACT relating to environmental quality; providing for performance based evaluation and performance based design in the approval of municipal solid waste landfill permits; providing definitions; making conforming amendments; and providing for an effective date.

*Be It Enacted by the Legislature of the State of Wyoming:*

**Section 1.** W.S. 35-11-523 and 35-11-524 are created to read:

**35-11-523. Performance based design and performance based evaluation in consideration and approval of engineered containment systems as part of municipal solid waste landfill permits.**

(a) A person submitting an application for a permit pursuant to W.S. 35-11-502 which contains a performance based design for a municipal solid waste landfill that does not incorporate an engineered containment system utilizing a composite liner and leachate collection system, shall submit a report with the application. The report shall contain the applicant's findings as to the proposed performance based design's compliance with applicable state and federal laws and regulations. The report shall contain scientific and engineering data supporting the implementation of the proposed design.

(b) In reviewing scientific and engineering data related to a permit application and report containing a performance based design which does not incorporate an engineered containment system utilizing a composite liner and leachate collection system, the administrator shall prepare a detailed performance evaluation based on applied scientific and engineering data that adheres to W.S.

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35-11-524. The administrator shall determine in the performance evaluation whether to validate or invalidate the performance based design or an alternative performance based standard for landfill design contained in the permit application. The administrator shall base the performance based evaluation on acceptable applied scientific and engineering data and an analysis of that data using statistical procedures, including statistical power, when applicable.

(c) The applicant or other interested party may appeal the administrator's determination contained in a performance based evaluation of a permit pursuant to W.S. 35-11-502. If the council determines that the performance based evaluation does not accurately or adequately identify and evaluate all the data and criteria required under this section and W.S. 35-11-524, the council shall direct the administrator to reevaluate his determination. A decision by the council that the performance based evaluation is accurate and adequate shall be a final decision of the agency pursuant to the Wyoming Administrative Procedure Act.

**35-11-524. Performance based design evaluation criteria for municipal solid waste landfill units.**

(a) New municipal solid waste landfill units and lateral expansions approved by the administrator under W.S. 35-11-502 and 35-11-523 shall be constructed:

(i) In accordance with a performance based design approved by the administrator in a performance based evaluation pursuant to W.S. 35-11-523. Any performance based design approved must ensure that the concentration values for pollutants listed in the National Primary Drinking Water Regulations, 40 C.F.R. Part 141, will not be

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exceeded in the uppermost aquifer at the relevant point of compliance as determined under subsection (c) of this section; or

(ii) With an engineered containment system that utilizes a composite liner and a leachate collection system that is designed and constructed to maintain less than a thirty (30) centimeter depth of leachate over the liner.

(b) When approving a design that complies with paragraph (a)(i) of this section, in addition to the requirements of W.S. 35-11-523 the administrator shall consider other relevant factors, including, but not limited to:

(i) The hydrogeologic characteristics of the facility and surrounding land;

(ii) The climatic factors of the area; and

(iii) The physical and chemical characteristics and volume of the leachate.

(c) The relevant point of compliance specified by the administrator for the allowable concentration values for pollutants under paragraph (a)(i) of this section shall be no more than one hundred fifty (150) meters from the waste management unit boundary and shall be located on land owned by the owner of the municipal solid waste landfill. In determining the relevant point of compliance, the administrator shall consider at least the following factors:

(i) The hydrogeologic characteristics of the facility and surrounding land;

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(ii) The physical and chemical characteristics and volume of the leachate;

(iii) The quantity, quality and direction of flow of ground water in the area;

(iv) The proximity and withdrawal rate of ground water users;

(v) The availability of alternative sources of drinking water supplies;

(vi) The existing quality of the ground water, including other sources of contamination and their cumulative impacts on the ground water and whether the ground water is currently used or reasonably expected to be used for drinking water;

(vii) Public health, safety and welfare effects; and

(viii) Practicable capability of the owner or operator.

**Section 2.** W.S. 35-11-103(d) by creating new paragraphs (viii) through (x) is amended to read:

**35-11-103. Definitions.**

(d) Specific definitions applying to solid waste management:

(viii) "Composite liner" means a system consisting of two (2) components; the upper component must consist of a minimum thirty (30) mil flexible membrane liner (FML) and the lower component shall consist of at

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least a two (2) foot layer of compacted soil with a hydraulic conductivity of no more than  $1 \times 10^{-7}$  centimeters per second. A flexible membrane liner components consisting of high density polyethylene (HDPE) shall be at least sixty (60) mil thick. The flexible membrane liner component shall be installed in direct and uniform contact with the compacted soil component;

(ix) "Leachate" means liquid that has passed through or emerged from solid waste and contains soluble, suspended or miscible materials removed from such wastes;

(x) "Statistical power" means the probability of detecting change given that a change has truly occurred.

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**Section 3.** This act is effective immediately upon completion of all acts necessary for a bill to become law as provided by Article 4, Section 8 of the Wyoming Constitution.

(END)

\_\_\_\_\_  
Speaker of the House

\_\_\_\_\_  
President of the Senate

\_\_\_\_\_  
Governor

TIME APPROVED: \_\_\_\_\_

DATE APPROVED: \_\_\_\_\_

I hereby certify that this act originated in the Senate.

\_\_\_\_\_  
Chief Clerk