

*** DRAFT – NOT FOR FILING ***

3745-511-60 Settlement analysis and reporting for the liner system and leachate management system.

- (A) The settlement analysis shall demonstrate that the liner system is designed to meet the design requirements for the liner system after accounting for the following:
- (1) The total mass of materials above the liner system.
 - (2) One hundred per cent of the primary consolidation settlement and the secondary consolidation settlement of the compressible materials beneath the surface of the liner system. Secondary settlement shall be calculated using a one hundred-year time frame.
- (B) The settlement analysis shall demonstrate that the leachate management system is designed to meet the design requirements for the leachate management system after accounting for the following:
- (1) The total mass of materials above the leachate management system.
 - (2) One hundred per cent of the primary consolidation settlement and the secondary consolidation settlement of the compressible materials beneath the leachate collection system. Secondary settlement shall be calculated using a one hundred-year time frame.
- (C) The geotechnical and stability analyses of the liner system shall not rely on any of the tensile strength properties of any of the geosynthetic engineered components included in the design other than those engineered components used primarily for tensile reinforcement.
- (D) The geotechnical and stability analyses report identified in rule 3745-511-10 of the Administrative Code shall include a section titled "Settlement Analysis of the Liner System and Leachate Management System" which shall include the following information:
- (1) A description of the rationale used for the selection of the settlement analysis input parameters.
 - (2) A description of the method used to calculate settlement.
 - (3) A description of the assessed settlement modes and conditions.
 - (4) A drawing of each critical cross section that fully depicts the analysis input model including the following:
 - (a) The liner system.

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- (b) The leachate management system.
- (c) The material boundaries.
- (d) The material characteristics.
- (e) The material types.
- (f) The in situ unit weights and saturated unit weights of the materials.
- (5) A plan view showing the location of each critical cross section including northings and eastings for the endpoints of each critical cross sections.
- (6) A summary of the results.
- (7) All inputs, outputs, and calculations used for the settlement analysis. If a computer was used for any calculations, the computer inputs and outputs shall also be included.