

459A.206 Settled open feedlot effluent basins — soils and hydrogeologic report.

1. A settled open feedlot effluent basin required to be constructed pursuant to a construction permit issued pursuant to [section 459A.205](#) shall meet design standards as required by a soils and hydrogeologic report.

2. The report shall be submitted with the construction permit application as provided in [section 459A.205](#). The report shall include all of the following:

a. A description of the steps to determine the soils and hydrogeologic conditions at the proposed construction site, a description of the geologic units encountered, and a description of the effects of the soil and groundwater elevation and direction of flow on the construction and operation of the basin.

b. The subsurface soil classification of the site. A subsurface soil classification shall be based on ASTM international designation D-2487-92 or D-2488-90.

c. The results of at least three soil corings reflecting the continuous soil profile taken for each basin. The soil corings shall be taken and used in determining subsurface soil characteristics and groundwater elevation and direction of flow of the proposed site for construction. The soil corings shall be taken as follows:

(1) By a qualified person ordinarily engaged in the practice of taking soil cores and in performing soil testing.

(2) At locations that reflect the continuous soil profile conditions existing within the area of the proposed basin, including conditions found near the corners and the deepest point of the proposed basin. The soil corings shall be taken to a minimum depth of ten feet below the bottom elevation of the basin.

(3) By a method such as hollow stem auger or other method that identifies the continuous soil profile and does not result in the mixing of soil layers.

[2005 Acts, ch 136, §8](#); [2011 Acts, ch 25, §143](#)