

**567—108.6(455B,455D) Requirements for beneficial uses other than alternative cover material.**

**108.6(1) *Solid by-products beneficially used as fill material.*** All beneficial uses, including those listed in 567—108.4(455B,455D) other than rubble and soil, shall meet the following requirements, unless a variance is granted in writing by the department for a specific location, if the beneficial use entails the solid by-product's being used as fill material:

*a.* Leachate characteristics of the solid by-product shall be measured by the synthetic precipitation leaching procedure (SPLP, EPA Method 1312) and shall be less than or equal to ten times the maximum contaminant levels (MCL) for drinking water. Foundry sand and coal combustion by-products may limit the SPLP analytes to total metals for drinking water.

*b.* Total metals testing results, which shall include thallium, shall be consistent with the department's statewide standards for soil pursuant to 567—Chapter 137. Arsenic levels shall be consistent with the statewide standards for soil or the naturally occurring (i.e., background) arsenic levels of the soil, whichever are greater.

*c.* The solid by-product shall produce a fill that has a pH:

(1) Greater than or equal to 5 and less than or equal to 8 if the fill may be used as growing media either now or in the future.

(2) Greater than or equal to 5 and less than 12 if the fill is specifically intended not to be used as growing media either now or in the future. In this category of fill, materials with a pH equal to or greater than 10 but less than 12 shall be used only in areas where direct physical contact by humans for long periods of time is not expected to occur.

(3) For deep fills where only the surface may serve as growing media either now or in the future, then at a minimum the top three feet shall have a pH greater than or equal to 5 and less than or equal to 8. Fill material below the top three feet shall have a pH greater than or equal to 5 and less than or equal to 12.

*d.* The by-product shall not be placed in a waterway or wetland or any waters of the state or extend below or within five feet of the high water table.

*e.* The by-product shall not be placed within the 100-year flood plain unless in accordance with all local and department regulations including rule 567—71.5(455B).

*f.* The by-product shall not be placed closer than 200 feet to a sinkhole or to a well that is being used or could be used for human or livestock water consumption.

*g.* The by-product shall not be putrescible.

**108.6(2) *Solid by-product management plans.*** All recipients of beneficial use determinations granted pursuant to 567—108.5(455B,455D) and coal combustion by-product and foundry sand beneficial uses listed in 567—108.4(455B,455D) shall develop and maintain a solid by-product management plan that satisfies the following requirements:

*a.* Lists the source(s) of the solid by-product.

*b.* Lists procedures for periodic testing of the solid by-product to ensure that the chemical and physical composition has not changed significantly.

*c.* Provides a description of storage procedures including:

(1) Storage location(s).

(2) Maximum anticipated inventory, including dimensions of any stockpiles.

(3) Run-on and run-off controls, which may include a storm water National Pollutant Discharge Elimination System (NPDES) permit.

(4) Management practices to minimize uncontrolled dispersion of the solid by-product.

(5) Maximum storage time, not to exceed six months unless authorized in writing by the department.