

Risk Assessment for Solid Waste

The Virginia Solid Waste Management Regulations (VSWMR) provides regulations governing solid waste management facilities. Under the VSWMR, solid waste management facilities include but are not limited to landfills, including sanitary landfills, industrial waste landfills, and construction and demolition debris landfills. Pursuant to the VSWMR, these facilities may be required to monitor groundwater.

At various stages of application, operation, post closure care, and corrective action activities the facilities may need to perform [Human Health Risk Assessment](#) to demonstrate that the risk posed by contaminants attributed to their facilities are within acceptable limits thereby protecting the public health, the environment, and our natural resources.

The risk assessment, under VSWMR, is applied at the following junctures:

1. Calculate [Default Alternate Concentration Limits \(ACL\)](#) that get incorporated into the permit as Groundwater Protection Standards (GPS) (9VAC20-81-250.6.b)
2. [Site Specific ACL Proposal](#) (9VAC20-81-250.6.b.(4).b. (i), (ii), and (iii))
3. [Proposed Presumptive Remedy \(PPR\)](#) (9VAC20-81-260.C.2)
4. [Assessment of Corrective Measures \(ACM\)](#) (9VAC20-81-260.C)
5. [Corrective Action Plan \(CAP\)](#) (9VAC20-81-260.D.1.a.(1))

These links above lead to detailed descriptions of how risk assessment is applied at each of the stages of Solid Waste monitoring and corrective action.

This guidance is primarily intended to assist environmental consultants and risk assessors who perform investigations and risk assessments for Solid Waste facilities. However, it is also important for facility owners and operators to understand both the regulatory and scientific basis for DEQ's risk assessment requirements. The following section gives a basic introduction to the risk assessment process as it applies to environmental programs. The regulatory citations for the risk assessment requirements are included in each applicable section.