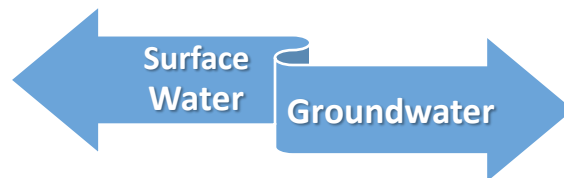


4.5 Water Monitoring

If surface water or groundwater monitoring is required, the facility must follow all regulations under 18 AAC 60.810 and 18 AAC 60.820-860, respectively.

Water monitoring is when samples are collected from water bodies or groundwater in or near the landfill to verify if the landfill is affecting water quality. If it is required at a landfill, the requirement will be included in the permit and will be guided by a monitoring plan approved by ADEC. Water monitoring can also be done on a voluntary basis.

Types:



There are two types of water monitoring at landfills: surface water and groundwater. Surface water is defined as water open to the atmosphere and subject to run-off. This includes water bodies such as streams, rivers, lakes, ponds, wetlands, etc., and also includes springs, wells, or other collectors directly influenced by surface water. Groundwater is the water below the land surface in the zone of saturation and is the source of water in drinking water wells.

When is monitoring required?

Monitoring of surface water or groundwater is generally not required at Class III landfills. However, it can be required if there is evidence the landfill is impacting either surface water or groundwater. If a landfill is located in a Drinking Water Protection Area, water monitoring may be required. Currently, only a few Class III landfills are required to perform water monitoring, and a few more have chosen to voluntarily perform water monitoring due to community concerns or other reasons. Whether a landfill is required to monitor or chooses to monitor, the facility must follow the applicable regulations. Contact your Rural Landfill Specialist for assistance.

How can landfill water monitoring be set up?

- The solid waste regulations require water monitoring if the owner or operator has knowledge that the facility is contaminating groundwater or surface water. This means that before committing to monitoring, it is important to consider whether it is necessary and what will be done if the landfill is found to be contaminating groundwater or surface water.
- Determine the reasons for sampling and what to do with the data. There are many different constituents for which water can be tested. Decide which types of sampling will be most useful and if they fit within the budget.
- Call your ADEC Rural Landfill Specialist or the ADEC landfill monitoring contact (907-269-1099) for guidance prior to any sampling.

- Contact a certified lab. They can provide guidance on how to pack and submit samples. The lab also usually provides instructions in the sampling cooler for how to collect and preserve the samples correctly.
- Poorly collected samples are not useful, and retesting is costly, so if at all possible, get a qualified sampler. In some communities the water or wastewater treatment plant operators may be trained to sample properly.
- Sampling groundwater can be costly since it will require the installation of monitoring wells, which require drilling similar to drinking water wells.