

Underground Detention

Underground detention is detention storage located in underground tanks or vaults designed to provide water quantity control through temporary storage of stormwater runoff. In addition they can improve water quality by removing heavy amounts of sediment.



There are some common problems to be aware of when maintaining an underground detention area. They include, but are not limited to, the following:

- Sediment build-up
- Clogging in the inlet and outlet structure
- Requirement to have Occupational Safety and Health Administration (OSHA) confined space entry training

Routine maintenance should be performed on the underground detention areas to ensure that the structure is properly functioning. Routine maintenance includes the removal of debris from inlet and outlet structures and cleaning sediment built up inside the structure. Because this is an underground system, inspection and maintenance may be difficult to conduct. Generally these underground systems can be inspected by looking in an access opening. Sometimes, however, maintenance requires an individual who is certified in OSHA confined space entry. Should there be a situation where a safety concern arises, the inspection should stop and the safety concern addressed. Once the concern is addressed, the inspection can continue.

Inspect the underground detention area after a large rainstorm. If the underground detention area is not draining properly, check the inlet and outlet structures to make sure they are not clogged.

Sediment should be removed from the practice by either a vacuum or boom. If the system is accepting water that flowed from a hazardous facility, the sediment may need to be disposed of by other means. Check with the local government to identify any additional constraints on the disposal of sediments excavated from underground detention.

The table on the following page shows a schedule for when different maintenance activities should be performed on a submerged gravel wetland.

Underground Detention Typical Routine Maintenance Activities and Schedule

Activity	Schedule
<ul style="list-style-type: none">• Remove any trash/debris and sediment buildup in the underground trash racks, vaults or tanks.• Check drainage areas for trash, erosion, and debris.• Clean underground detention if hazardous or foreign substances are spilled in the contributing drainage area.• Perform structural repairs to inlet and outlets.	As needed
<ul style="list-style-type: none">• Follow manufacturer's guidelines and develop/adjust plan for the underground detention.• Clean out underground detentions with vacuum or boom trucks.• Clean sediment or oil chambers	Annually