USDA NRCS
United States Department of Agriculture
Natural Resources Conservation Service

Conservation Practice Standard Overview

Waste Treatment Lagoon (359)

A waste treatment lagoon is an impoundment made by excavation or earth fill to provide storage for biological treatment of animal or other agriculture waste.

Practice Information

The purpose of this practice is to store and biologically treat organic waste, reduce pollution, and protect water quality.

The three general types of waste treatment lagoons are:

- Anaerobic—require less surface area than naturally aerobic lagoons, but may give off offensive odors
- Naturally aerobic—require more surface area, but are relatively odor free
- Mechanically aerated—comparable in size to anaerobic lagoons, but require energy for aeration

Waste treatment lagoons are located as near the source of waste as possible but as far from human dwellings as possible. The location should also be where prevailing winds will carry odors away from residences and public areas.

To improve efficiency and reduce sludge buildup, solids should be removed from the waste before it enters the lagoon. A solids trap or separator should be installed between the waste source and the lagoon.

Operation and maintenance requirements will include periodic inspections with prompt repair or replacement of damaged components. The waste will be removed from the lagoon and utilized at locations, times, rates, and volume in accordance with the overall waste management system plan.

Common Associated Practices

Waste Treatment Lagoon (359) is commonly applied with conservation practices such as Solid/Liquid Waste Separation Facility (632), Waste Utilization (633), and Nutrient Management (590).

For further information, contact your local NRCS field office.