



Conservation Practice Overview

August 2023

Pond Sealing or Lining Geomembrane or Geosynthetic Clay Liner (Code 521)

Pond sealing or lining is the installation of a liner for a pond or waste impoundment consisting of a continuous synthetic flexible material.

Practice Information

The purpose of this practice is to control seepage from water and waste impoundments for the purposes of water conservation and environmental protection. This method of pond sealing is relatively expensive, but often necessary for sandy textured sites and projects that require a very effective sealant.



This practice applies on ponds and waste storage structures that require treatment to control seepage rates within acceptable limits, and to prevent the migration of contaminants offsite. Subgrade materials must not contain sharp, angular stones or any objects that could damage the liner or adversely impact its function.

Operation and maintenance required for this practice include periodic inspection of the visible portions of the liner for tears, punctures, or other damage; and monitoring the liquid level in the structure for the design capacity.

Common Associated Practices

Conservation Practice Standard (CPS) Pond Sealing or Lining - Geomembrane or Geosynthetic Clay Liner (Code 521) is commonly applied with conservation practices, such as CPSs Irrigation Reservoir (Code 436), Pond (Code 378), Waste Storage Facility (Code 313), and Waste Treatment Lagoon (Code 359).

For further information, contact your local NRCS field office.