

Irrigation Water Conveyance/ Ditch and Canal Lining, Flexible Membrane

PRACTICE INTRODUCTION

USDA, Natural Resources Conservation Service - practice code 428B 04/02



DEFINITION

A Flexible Membrane Lining of a ditch or canal is a buried membrane lining of flexible material in an existing or newly constructed irrigation field ditch, canal or lateral.

PRACTICE INFORMATION

This practice applies to linings made of plastic, rubber or asphalt that is buried near the surface to prevent problems associated with seepage.

Lined ditches and canals help improve efficiency and conservation of our irrigation water supplies. The purposes of the practice are to prevent waterlogging, reduce erosion, and reduce water loss from seepage.

Care must be taken to assure design water velocities do not exceed the nonerosive velocity established for the soil material used

to cover the lining. If that occurs, the covering of soil over the lining material will erode away and the lining will be damaged or destroyed.

Care must also be taken to assure ditches and canals are protected from side drainage flooding. Other similar restrictions are discussed in the national practice standard..

Additional information including design criteria and specifications are in the local NRCS Field Office Technical Guide.

The following pages list the conservation effects expected to occur when this practice is applied. These effects are subjective and somewhat dependent on variables such as climate, terrain, and soil. Users are cautioned that these effects are estimates that may or may not apply to a specific site.