RESIDUE MANAGEMENT, MULCH-TILL

PRACTICE INTRODUCTION

USDA, Natural Resources Conservation Service - practice code 345

RESIDUE MANAGEMENT, MULCH TILL - This practice is managing crop residue on a year round basis to provide an acceptable erosion rate, conserve moisture and maintain or improve soil tilth.

PRACTICE INFORMATION

This practice generally applies to cropland but may also be used on other areas where field crops are grown such as wildlife or recreation lands.

Mulch tillage is a term used when referring to non-inversion tillage such as chiseling and disk harrowing to partially incorporate organic material left on the soil surface.

Mulch tillage includes at least the following:

1. Uniformly spreading the residue on the soil surface to accommodate planting the following crop.
2. Use non-inversion tillage tools that only partially incorporate surface organic material.
3. Plan the number, sequence, and timing of tillage operations to achieve the prescribed amount of surface residue needed to accomplish the objectives of the practice.
4. Use planting equipment designed to operate in high residue situations .
5. Minimize removal of organic residue by burning, baling or grazing.
6. Additional criteria is provided in the practice standard and specifications contained in the NRCS Field Office Technical Guide.

The benefits of this practice are significant. Soil slowly but steadily improves when erosion is reduced and organic matter increases. Soil tilth improves and productivity increases as the constant supply of organic material left on the soil surface is decomposed by a healthy population of earth worms and other organisms.