

**NATURAL RESOURCES CONSERVATION SERVICE  
PRACTICE DOCUMENTATION GUIDE  
RESIDUE AND TILLAGE MANAGEMENT, MULCH TILL**

345

**345 – STEP 1. INITIAL EVALUATIONS**

**PURPOSE**

The purpose of this step is to determine the landowner's desire to implement Mulch till to predetermined areas for the intended purpose(s). (See Natural Resources Conservation Service, Practice Standard and Specification 345). The landowner must be interviewed to determine the purpose and needs for this conservation practice. Considerations will include landowner goals and objectives, existing conditions and effects of Mulch till on soil, water, air, plant, animal energy use and human resources. A discussion of NRCS Standards and Specifications should also take place. The role of the landowner and the person assisting with the conservation practice should also be discussed. Additional pertinent questions must be asked and answered on a site-specific basis.

**345 – STEP 2. INVESTIGATIONS, SURVEYS, AND INVENTORIES**

**PURPOSE**

The purpose of this step is to identify the resource inventories that are required before Mulch till can be planned and implemented. This includes soils, physical features, field boundaries, existing tillage practices and other pertinent information.

Identify map resources needed such as satellite imagery and USGS 7.5 Minute quadrangle(s). Inventory data collection sheets and an Environmental Evaluation, CPA-52 should be completed. Insure that utilities and cultural resources are considered.

**345 - STEP 3. PRACTICE DESIGN**

**PURPOSE**

The purpose of this step is to meet the objectives, design the conservation practice and develop a record of the completed actions taken.

All required deliverables for the design, installation, and compliance are found on the New Mexico Statement of Work. This document will be followed to successfully complete the project. The local conditions will need to be assessed at the proposed site in order to identify any possible problems that may arise. This includes assessing the tillage implements and other types of field equipment influencing residue burial and the rate of residue decomposition. A working knowledge of the degree to which tillage and other field implements bury crop residue must be gained. The amount of residue likely to remain on the soil surface after a single pass of the implement(s) must be determined. Operating depths and speed must be considered when evaluating the existing and proposed changes. Field measurements of the actual amounts of residue being left by and operation should be made and adjustments made accordingly. (See NRCS Practice Standard 345, Practice Specification 345 and Job Sheet(s) 345). If applicable, the landowner will need to provide the contractor with the appropriate documents and expectations.

**II. SITING**

The purpose of this step is to insure that the client fully understands which land units are involved in the conservation practice. Care should be given to make sure the land unit locations involved in the plan are known by all involved.

**III. MATERIALS/EQUIPMENT**

The purpose of this item is to insure an understanding of the materials/equipment used to implement Mulch till. Appropriate standards, job sheets and expectations that includes the types and number of each type of materials/equipment will need to be provided to the landowner and all those involved in the implementation of the conservation practice.

**345 – STEP 4. PLANS AND SPECIFICATIONS**

**PURPOSE**

The purpose of this step is to document and describe each component of the conservation practice which includes step by step instructions, construction methods and materials to be used while carrying out Mulch till.

This will include the documentation of all components described in Mulch till Job sheet 345. The landowner must be provided with the Mulch till plan in the form of the 345 Job Sheet in order to document the conservation practice implementation process. Any items not described in Job Sheet 345 that are essential for implementation of the practice will be added to the Job Sheet.

**345 - STEP 5. OPERATION AND MAINTENANCE**

**PURPOSE**

The purpose of this step is to insure the proper management and maintenance is completed at

the practice site. (See Natural Resources Conservation Service, Practice Standard 345, Practice Specification 345, and Job Sheet(s) 345). This requires a review of the design and management objectives in order to maintain the site in a proper and safe fashion while meeting the conservation objectives. This should be discussed with the landowner.

**345 – STEP 6. COMPLIANCE OR SPOT CHECKING**

**I. PURPOSE**

The purpose of this step is to determine that all work has been completed to the standards required by the Natural Resources Conservation Service. All completed NRCS forms should be collected from the landowner and submitted to the appropriate persons.

**II. DOCUMENTS**

Copies of all completed job sheets and associated work sheets should be submitted to the Natural Resources Conservation Service representative within 10 working days of completion of the project.