United States Department of Agriculture

345 – Residue and Tillage Management, Reduced Till

Producer:		**Project or Contract:**	
Location:		**County:**	
Farm Name:		**Tract Number:**	

Practice Lifespan – 1 year

Practice Purpose(s): (check all that apply)

- ☐ Reduce sheet, rill and wind erosion and excessive sediment in surface waters.
- ☐ Reduce tillage-induced particulate emissions.
- ☐ Reduce water quality degradation
- ☐ Improve soil health and maintain or increase organic matter content.
- ☐ Reduce energy use.
- ☐ Other: (Specify)

Description of work:

NRCS Use Only

Designed By:		**Date**	
Checked By:		**Date**	
Approved By:		**Date**	

GENERAL CRITERIA:

This practice includes tillage methods commonly referred to as mulch tillage or conservation tillage where the entire soil surface may be disturbed by tillage operations such as chisel plowing, field cultivating, tandem disking, or vertical tillage. No primary inversion tillage implements (e.g., moldboard plow) shall be used.

It also includes tillage/planting systems with few tillage operations (e.g., ridge till) but which do not meet the soil tillage intensity rating (STIR) criteria for conservation practice Residue and Tillage Management, No Till (Code 329).

Uniformly distribute residues over the entire field. Removing residue from the row area prior to or as part of the planting operation is acceptable.

Do not burn residues.

The STIR value shall include all soil disturbance field operations and shall be no greater than 80.

SPECIFICATIONS:

To implement this practice, do the following:

- Utilize tillage implements and operations that provide a reduced level of soil disturbance as compared to conventional tillage. Manage the amount, orientation and distribution of crop and other plant residue on the soil surface year round while limiting the soil-disturbing activities used to grow and harvest crops.
- Where reduction of sheet, rill and wind erosion or reduction of excessive sediment in surface waters are a planned purpose, field operations must provide the amount of randomly distributed surface residue needed, time of year residue needs to be present in the field, and amount of surface soil disturbance allowed to reduce erosion to T or less. Check if applicable: ☐
- Where maintaining or increasing soil health and organic matter content is a purpose, the soil condition index (SCI) for the cropping system must result in a rating greater than zero. Check if applicable: ☐
- If energy use reduction is a stated purpose, the total energy consumption associated with field operations must be reduced by at least 25 percent compared to the benchmark condition. Use the current approved NRCS tool for determining energy use to document energy use reductions. Check if applicable: ☐ Calculated energy use reduction percentage:
- Follow the cropping sequence and field operations as listed below to meet desired goals.
  (Complete the following table, or attach the erosion prediction output table showing planned operations with dates and vegetation.)

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Implementation Requirements

Tract	Field Number(s)	Acres	Planned Crop	Planned Soil Loss (T/A/Y)	List All Field Operations Affecting Residue cover, Orientation and Surface Disturbance	Operation or Activity Timing (Month)	Calculated Value *	
							SCI	STIR

* Soil tillage intensity rating (STIR) value to accomplish purpose(s); must be shall be no greater than 80

* If a practice purpose is 'Maintain or increase soil health and organic matter content' Soil conditioning index (SCI) value rating must be greater than 0.

OPERATION AND MAINTENANCE:

- Evaluate/measure the crop residue cover and orientation for each crop to ensure the planned amounts and orientation are being achieved. Adjust management as needed to either plan a new residue amount or orientation; or adjust the planting, tillage, or harvesting equipment.

- If there are areas of heavy residue accumulation (because of movement by water or wind) in the field, spread the residue prior to planting so it does not interfere with planter operation.

Specific Additional Operation and Maintenance Requirements For Your Practice:

☐ A map(s) showing all fields planned for Residue and Tillage Management-Reduced Till is attached.

If you have questions about this planned **Residue and Tillage Management-Reduced Till** practice contact:

Name:		Tel:		Email:	

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