**alliance practice worksheet**

MINNESOTA

RESIDUE AND TILLAGE MANAGEMENT, reduced TILL (345)

*The conditions and specifications below are adapted from the Natural Resources Conservation Service. Producers who are installing these practices under the Alliance will use the conditions and implementation guides below but are exempt from NRCS verification and certification. Completing the Purposes and Practice Specifications on this document is sufficient to self-verify practice installation and completion.*

# Farm Info

|  |  |
| --- | --- |
| Name | Click or tap here to enter text. |
| County | Click or tap here to enter text. |
| Alliance Contract Number | Click or tap here to enter text. |
| Field Number(s) | Click or tap here to enter text. |
| Tract Number(s) | Click or tap here to enter text. |
| Practice Area | Click or tap here to enter text. |

# PRACTICE: RESIDUE AND TILAGE MANAGEMENT – reduced TILL (345)

**DEFINITION:**Managing the amount, orientation, and distribution of crop and other plant residue on the soil surface year-round while limiting soil-disturbing activities used to grow and harvest crops in systems where the field surface is tilled prior to planting.

**CONDITIONS WHERE PRACTICE APPLIES:** This practice applies to all cropland. This practice includes tillage methods commonly referred to as mulch tillage or conservation tillage where the entire soil surface is disturbed by tillage operations such as chisel plowing, field cultivating, tandem disking, or vertical tillage. It also includes tillage/planting systems with few tillage operations (e.g. ridge till) but which do not meet the STIR criteria (STIR < 20) for Residue and Tillage Management - No Till (code 329).

See <https://efotg.sc.egov.usda.gov/api/CPSFile/417/___> to access the NRCS Conservation Practice Standard.

**NOTE:*****Residue and Tillage Management, Reduced Till (345)*** *has a practice lifespan of one year according to NRCS. However, continued implementation of reduced-till does not require a change of action on the part of the producer, or impose any additional costs.*  *For producers who have already adopted reduced-till and want to enroll in the Alliance pilot, they have the option of switching to no till (329) or adding a practice, such as 340 or 590, to accrue additional GHG benefits. Producers should apply under that practice.*

**AT A MINIMUM, PRODUCERS WILL PROVIDE A RECORD OF THE FOLLOWING:**

* Field number and acres
* Planned crop(s)
* The amount of residue produced by each crop.
* All field operations or activities that affect:
* Amount of residue cover
* Residue orientation
* Surface disturbance
* The amount of residue (pounds/acre or percent surface cover) required to accomplish the purpose, and the time of year it must be present
* The maximum STIR value allowed to accomplish the purpose, and the time of year that soil disturbance is allowed
* Soil conditioning index (SCI) value of implementation year

# GENERAL CRITERIA APPLICABLE TO ALL PURPOSES

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 Soil Tillage Intensity Rating (STIR) value shall include all field operations that are performed during the crop interval between harvest of the previous cash crop and harvest or termination of the current cash crop (includes fallow periods). The STIR value rating shall be no greater than 80, and no primary inversion tillage implements (e.g. moldboard plow) shall be used.

Ensure that an evaluation of the cropping system using the current approved soil conditioning index (SCI) procedure results in zero or higher.

# PLANNED Management:

Attach a RUSLE2 Profile printout or a WEPS printout that displays:

1. Planned crop(s).
2. Specific equipment operations for each crop.
3. The planned residue amounts: (1) after harvest of the prior crop and (2) for planned residue cover after seeding the planned crop.
4. The Soil Tillage Intensity Rating (STIR).
5. Soil Condition Index (SCI).

# Operation and Maintenance

* Evaluate/measure the crop residues 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.

# PRODUCER SELF-CERTIFICATION

By signing below, I certify that I have reviewed all required documentation and have implemented the practice and met all criteria and requirements as defined in the Natural Resources Conservation Service **RESIDUE AND TILLAGE MANAGEMENT (329)** standard and specifications for the identified acres or animal units.

Further, I agree that:

[ ]  I am not currently receiving a payment for this conservation practice on these fields and acres from another USDA Conservation Program, another USDA Partnership for Climate-Smart Commodities grant partner, or a state cost-share program.

[ ]  I will retain all practice documentation to support this certification for up to 12 months following practice adoption and will provide this documentation to the Alliance if selected for a spot check. *(Up to 10% of enrolled Alliance participants will be randomly selected for spot checks).*

|  |  |
| --- | --- |
| ***Participant Name:*** | Click or tap here to enter text. |

|  |  |
| --- | --- |
| ***Participant Signature:*** | Click or tap here to enter text. |

|  |  |
| --- | --- |
| ***Date:*** | Click or tap to enter a date. |