**alliance practice worksheet**

NORTH DAKOTA

RESIDUE & 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 & TILLAGE 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.

**MINIMUM REQUIREMENTS FOR RESIDUE & TILLAGE MANAGEMENT, REDUCED TILL (345)**:

<https://efotg.sc.egov.usda.gov/api/CPSFile/23682/345_ND_CPS_Residue_and_Tillage_Management_Reduced_Till_2016>

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

* Planned crop and application rates
* Purpose for applying the practice
* Amount of residue produced by each crop
* All field operations or activities that affect:
	+ Residue orientation including height (where applicable).
	+ Surface disturbance
	+ The field operations and amount of residue (pounds/acre or percent surface cover) required to accomplish the purpose, and the time of year it must be present.
* Planned soil tillage intensity rating STIR value, soil condition index value, and erosion rate.
* Benchmark and planned fuel consumption, if applicable.

# GENERAL CRITERIA APPLICABLE TO ALL PURPOSES

* 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. 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 NRCS Conservation Practice Standard (CPS) 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.
* During implementation, make note of any planned changes in crops, crop rotation, or field operations to verify the planned system meets the enhancement criteria.
* During implementation, no residue will be burned.
* During implementation, all residues will be uniformly distributed over the entire field. Removing residue from the row area prior to or as part of the planting operation is acceptable.
* During implementation, no primary inversion tillage implements (e.g. moldboard plow) will be used.
* The STIR value shall include all soil disturbance field operations that are performed during the crop interval (i.e., from the time immediately following harvest or termination of one cash crop through harvest or termination of the next cash crop in the rotation, including fallow periods). The crop interval STIR value rating shall be no greater than 80, and no primary inversion tillage implements (e.g., moldboard plow) shall be used.

# ENHANCEMENT: REDUCED TILLAGE TO INCREASE SOIL HEALTH & SOIL ORGANIC MATTER CONTENT

Ensure the soil condition index (SCI) for the cropping system results in a rating of greater than zero.

# ENHANCEMENT: REDUCED TILLAGE TO INCREASE PLANT-AVAILABLE MOISTURE

In addition to criteria above:

* Maintain a minimum 60 percent surface residue cover throughout the year to reduce evaporation from the soil surface.

# PRACTICE CERTIFICATION DOCUMENTATION

**Field Operations** *– The practice is certified complete at time of new planting based on the treatment of the residue and tillage practices associated with previous crop’s residue.*

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Field | Acres | Crop Planted | Date of Planting*Month/Year* | Residue at Planting *(Prior crop)* | Amount of residue *(lbs./ac or**% surface cover)* | Residue Height *(inches)* |
| Click or tap here to enter text. | Click or tap here to enter text. | Click or tap here to enter text. | Click or tap here to enter text. | Click or tap here to enter text. | Click or tap here to enter text. | Click or tap here to enter text. |
| Click or tap here to enter text. | Click or tap here to enter text. | Click or tap here to enter text. | Click or tap here to enter text. | Click or tap here to enter text. | Click or tap here to enter text. | Click or tap here to enter text. |
| Click or tap here to enter text. | Click or tap here to enter text. | Click or tap here to enter text. | Click or tap here to enter text. | Click or tap here to enter text. | Click or tap here to enter text. | Click or tap here to enter text. |
| Click or tap here to enter text. | Click or tap here to enter text. | Click or tap here to enter text. | Click or tap here to enter text. | Click or tap here to enter text. | Click or tap here to enter text. | Click or tap here to enter text. |

|  |  |  |
| --- | --- | --- |
| The crop residues on the identified fields were not burned. | [ ]  Yes | [ ]  No |
| There was no inversion tillage completed in the identified fields and acres between the harvest of the prior crop and the planting of the current crop. | [ ]  Yes | [ ]  No |
| The planned crop rotation including the cover crop and associated management activities will score a Soil Conditioning Index (SCI) value > 0. | [ ]  Yes | [ ]  No |
| The Soil Intensity Rating (STIR) for the crop interval on each identified field was no greater than 80.  | [ ]  Yes | [ ]  No |

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

# 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 & TILLAGE MANAGEMENT, REDUCED TILL (345)** standard and specifications for the identified acres or animal units.

Further, I agree that:

[ ]  I have not received a payment for this conservation practice on these fields and acres from another USDA Conservation Program or another USDA Partnership for Climate-Smart Commodities grant partner.

[ ]  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).*

|  |  |
| --- | --- |
| **Producer Name:** | Click or tap here to enter text. |
| **Date:** | Click or tap to enter a date. |