**alliance practice worksheet**

MINNESOTA

RESIDUE AND TILLAGE MANAGEMENT, NO TILL/strip till (329)

*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

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| --- | --- |
| 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 – NO TILL/strip till (329)

**DEFINITION:**Limiting soil disturbance to manage the amount, orientation, and distribution of crop and plant residue on the soil surface year around.

**CONDITIONS WHERE PRACTICE APPLIES:** This practice applies to all cropland.

*See* [*https://efotg.sc.egov.usda.gov/api/CPSFile/32976*](https://efotg.sc.egov.usda.gov/api/CPSFile/32976) to access the NRCS Conservation Practice Standard.

**NOTE:*****Residue and Tillage Management, No Till (329)*** *has a practice lifespan of one year according to NRCS. However, continuing implementation of no-till does not require a change of action by the producer or impose additional costs. For producers who have already adopted no-till and want to enroll in the Alliance pilot, they have the option of 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:**

The specifications shall identify, as appropriate, the—

* Field number and acres.
* Purpose for applying the practice
* Planned crops.
* Amount of residue produced by each crop.
* All field operations or activities that affect the:
  + Surface disturbance.
  + 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 conditioning index (SCI) value of implementation year

# GENERAL CRITERIA APPLICABLE TO ALL PURPOSES

* Residue shall not be burned.
* Distribute all residues uniformly over the entire field. Removing residue from directly within the seeding or transplanting area prior to or as part of the planting operation is acceptable.
* This practice only involves an in-row soil disturbance operation during strip tillage, the planting operation, and a seed row/furrow closing device. There is no full-width soil disturbance performed from the time immediately following harvest or termination of one cash crop through harvest or termination of the next cash crop in the rotation regardless of the depth of the tillage operation.
* The soil tillage intensity rating (STIR) value shall include all field operations that are performed during the crop interval between harvest and termination of the previous cash crop and harvest or termination of the current cash crop (includes fallow periods). The crop interval STIR value shall be no greater than 20.
* Ensure the soil condition index (SCI) for the year of implementation results in a positive rating.
* Reduce the total energy consumption associated with field operations 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. *You may report the STIR from RUSLE2. The change to no-till should be significant.*

# Erosion/tillage/crop rotation:

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Field Number** | **Planned Crops** | **Amount of Residue Produced by Crop** (lb/ac or % Surface Cover) | **All Field Operations** | **Operation or Activity Timing (month)** |
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# RESIDUE AND TIMING

|  |  |  |
| --- | --- | --- |
| **Planned Crops** | **Amount of Residue Required (lbs/ac or % Surface Cover)** | **Time of Year Residue Must be Present** |
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\*RUSLE2 reports can be utilized and attached to practice worksheet in lieu of completing the above tables.

Soil tillage intensity rating (STIR) value to accomplish purpose(s); must be <20: Click or tap here to enter text.

Soil condition index (SCI) value, must be a positive value: Click or tap here to enter text.

# Operation and Maintenance

Evaluate/measure the crop residues cover and orientation after each crop to ensure the planned amounts and orientation are being achieved.

Adjust management as needed to either plan a new residue amount and orientation or adjust the planting equipment, and if applicable, the harvesting equipment.

Limited tillage is allowed to close or level ruts from harvesting equipment. No more than 10 percent of the field may be tilled for this purpose.

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 **FOR RESIDUE AND TILLAGE MANAGEMENT NO-TILL/STRIP TILL (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. |

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