

TECHNICAL REVIEW COMMITTEE

Quarterly Meeting

Monday, May 13, 2013

Albemarle Agri-Civic Center, 26032 Newt Road, Albemarle NC 28001

Teleconference phone number: (704) 342-6203

To join the Connect Pro meeting: <https://agr.ncgovconnect.com/trc/>

TRC Business Meeting – Kelly Ibrahim, Chair

1:30 pm - 4:30 pm

DRAFT AGENDA

Welcome & Introductions

Approval of minutes

Approval of agenda

Discussion items:

1. Report on Commission Actions on TRC Recommendations

Action Items

1. Consideration of revisions to the Nutrient Scavenger Crop policy
Kelly Ibrahim
2. Consideration of revisions to the Cover Crop policy
<http://www.sare.org/Learning-Center/Books/Managing-Cover-Crops-Profitably-3rd-Edition/Text-Version>
Kelly Ibrahim
3. Consideration of revisions to the Waste Application Systems policy
Lisa Fine/Kelly Ibrahim
4. Set next meeting location and date: June/August

Discussion items (continued)

1. Above ground storage tanks- Greg Hughes
2. Work group reports
 - a. Precision Farming – David Williams
 - b. Aquaculture – Natalie Woolard
 - c. Integrated Pest Management – Davis Ferguson
 - d. Pasture BMPs – Ralston James/Matt Flint
 - e. Compost Workgroup – Teresa Furr
 - f. Conservation Effects Workgroup – Kelly Ibrahim
 - g. Christmas Tree/Orchard Workgroup – Davis Ferguson
 - h. Enhanced Water Management Workgroup – Kelly Ibrahim

i. Animal Waste Policy Workgroup-Julie Henshaw

3. Member/guest comments

TECHNICAL REVIEW COMMITTEE

Quarterly Meeting

Tuesday, February 12, 2013

NC Farm Bureau Building, Press Room, 5301 Glenwood Avenue, Raleigh, NC

Teleconference phone number: [\(919\) 420-7945](tel:9194207945)

To join the Connect Pro meeting: <https://agr.ncgovconnect.com/trc/>

9am to Noon

Attendees: Kelly Ibrahim*, Greg Hughes*, Lisa Fine, Tom Hill, J. Ben Knox*, Tom Ellis*, Dewitt Hardee*, Ken Parks, Julie Henshaw, Davis Ferguson*, Jeff Young*, Benjy Strobe*, Chester Lowder*, David Williams, Jeff Parker. (* member)

DRAFT MINUTES

The minutes from November were approved as presented. Chester Lowder motioned, Dewitt Hardy seconded, and all approved.

Action Items

1. Consideration of district BMP Transylvania- Compost Spreader- Lisa Fine and the Transylvania SWCD presented the need for a compost spreader BMP.
 - a. Ben Knox made a motion to approve the district BMP, 75% of actual not to exceed the poultry spreader cap. Dewitt Hardy seconded, All approved.
2. Consideration of revisions to the Well policy-Kelly Ibrahim and Ken Parks presented documentation to the committee.
 - a. Motion Dewitt Hardy, Tom Ellis seconded. All approved changes to policy (see attached).
 - b. Item 10 of the policy was revised, Ben Knox motioned, Tom Ellis seconded. All approved.
3. Consideration of the Cultural Resources Review Process-Julie Henshaw presented the state policy on cultural resources review and reviewed a website where districts could go to look up their proposed cost share projects. This was an informational item; the TRC did not take action.
4. Consideration of the use of Tillage Radish-David Williams and Julie Henshaw presented information on using the tillage radish. The TRC reviewed and made changes to the Cover Crop BMP policy.
 - a. Cover crop policy changes (See Attached): Chester Lowder motioned, Dewitt Hardy seconded and all approved.
<http://www.tillageradish.com/landing/capture-soil-nutrients.php>
<http://www.tilthpro.com/>
5. Set next meeting location and date: Consider May dates on location. Consider in conjunction with SWCC meeting.

Discussion items (continued)

1. Work group reports- The committee removed the compost workgroup due to the BMP now being in the cost share program. The group is no longer needed.
 - a. Precision Farming – David Williams
 - b. Aquaculture – Natalie Woolard –Spoke to aquaculture conference.
 - c. Integrated Pest Management – Davis Ferguson
 - d. Pasture BMPs – Ralston James/Matt Flint
 - e. ~~Compost Workgroup – Teresa Furr~~
 - f. Conservation Effects Workgroup – Kelly Ibrahim
 - g. Christmas Tree/Orchard Workgroup – Davis Ferguson
 - h. Enhanced Water Management Workgroup – Kelly Ibrahim
 - i. Animal Waste Policy Workgroup-Julie Henshaw

Nutrient Scavenger Crop

Definition/Purpose

A Nutrient Scavenger Crop is a crop of small grain grown primarily as a seasonal nutrient scavenger. The purpose is to scavenge and cycle plant nutrients. The nutrient scavenger crop also adds organic matter to the soil, improves infiltration, aeration and tilth, improves soil quality, reduces soil crusting, provides residue for conservation tillage, and sequesters carbon. Benefits may include reduction of soil erosion, sedimentation and pollution from dissolved and sediment-attached substances.

Policies

1. For a nutrient scavenger crop to improve water quality, it must become quickly established, grow vigorously, and accumulate significant biomass in the early fall before nutrients are leached below the root zone. Only the following crops are eligible for this incentive. They **must** be planted by the planting deadline and sown at the seeding rates given below for each region.

Nutrient Scavenger Crop	Minimum Planting Rate	Coastal Plain Plant Deadline/ <i>Earliest Kill Date*</i>	Piedmont Plant Deadline/ <i>Earliest Kill Date*</i>	Mountains Plant Deadline/ <i>Earliest Kill Date*</i>
Barley	2-3 bu	Oct. 15/ <i>April 1</i>	Oct. 10/ <i>April 10</i>	Oct. 10/ <i>April 10</i>
Oats	3 bu	Oct. 15/ <i>April 1</i>	Oct. 10/ <i>April 10</i>	Nov.1/ <i>April 10</i>
Rye	2 bu	Nov. 30/ <i>April 1</i>	Nov. 30/ <i>April 10</i>	Nov.1/ <i>April 10</i>
Triticale	90 lb	Nov. 30/ <i>April 1</i>	Nov. 30/ <i>April 10</i>	Nov.1/ <i>April 10</i>
Wheat	2-3 bu	Nov. 30/ <i>April 1</i>	Nov. 30/ <i>April 10</i>	Nov. 1/ <i>April 10</i>

*Note: Planting deadline in standard print and earliest kill date shown in *italics*.

2. Establishment of nutrient scavenger crops must be planned well in advance to achieve a good stand. Seedbed preparation may be done by any suitable method. Seedbed preparation may be eliminated when nutrient scavenger crops are seeded by broadcasting into a standing crop, into residues of a previous crop by conservation tillage methods or when the harvesting procedure or residue shredding will cover seeds. No-till methods are preferred.
3. Drill or broadcast methods of seeding may be used. Broadcast methods of seeding should be completed prior to harvest for cotton and soybeans. For cotton or soybeans, it is highly recommended that seed be broadcast during the defoliation pass or before leaf drop. Subsequent leaf drop and harvest operations will cover seeds and help ensure good germination.

4. Nutrient scavenger crops must be allowed to grow throughout the winter and early spring to achieve the purpose of the incentive. Greatest effectiveness is achieved if left to grow until the early boot stage. The planting and kill dates (see table under policy #1) are given in order to achieve optimum physiological maturity. ~~Earliest kill date is April 1 in the Coastal Plain and April 10 for the Piedmont and Mountains.~~
5. No animal waste or fertilizer will be applied to these nutrient scavenger crops unless it is specifically recommended by an agronomist. The fields must not be grazed nor the crop removed. No burning of crop residue will be permitted.
6. No payment for this incentive shall be made until the nutrient scavenger crop reaches the kill date. Field office representatives shall verify each spring that cover has reached either physiological maturity (early bootstage) or has been left to grow until the required kill date. Field offices unwilling to assist operators in achieving success and monitor nutrient scavenger crop establishment and stand quality should not offer this incentive to cooperators in their district.
7. Disking or plowing destroys the majority of the soil quality gains associated with nutrient scavenger crop management. Therefore, while disking or plowing may be allowed by this practice, conservation tillage is encouraged.
8. Certified seeds or bin seed may be used for each year to receive the annual incentive payment. **Cooperators using bin seed must be careful to adhere to the restrictions imposed by the federal Plant Variety Protection Act, the NC seed rules and statutes, and laws governing the use of seed from patented plants.** Seed allowed for cost share includes rye, triticale, oats, barley, or wheat. Rye or triticale is preferred for higher rates of nutrient scavenging and biomass accumulation. Incentive rates are dependent on the species planted can be found on the average cost list.
9. Practice has a \$25,000 lifetime cap per cooperator. Each field is eligible for up to three annual contracts per cooperator. Annual contracts do not need to be consecutive years. The life of the BMP is one year.
10. Growers currently receiving state or federal cost share for any conservation tillage practice are not eligible for this practice on the same field or group of fields. (All conservation tillage incentive rates include cost of nutrient scavenger crops.)
11. Growers who have previously received state or federal cost share for any conservation tillage practice are eligible for this BMP.
12. When determining the acreage for which payments can be made for this practice, only the acreage actually planted shall be considered. The area occupied by farm roads, best management practices, ditches, structures, etc. shall not be included in planted acreage.
13. BMP soil, nitrogen, and phosphorus impacts are required on the contract. Include the planted acreage as well. Refer to the Minimum NCACSP Effects Requirements table later in this section for the correct methods of calculation.
14. On occasion it may be unavoidable for the cooperator to need to access the field when the traffic will result in ruts in the field (e.g., harvest operations). With documented

approval from field staff, the cooperators can spot disk/level ruts to smooth out the surface. The field staff will work with the cooperators to stay in compliance with his/her conservation tillage contract. If field staff determines adequate cover can be established prior to next crop being planted, a cover crop should be planted immediately. The field staff can provide a recommendation on what might be best to plant as a quick cover. Cooperators must contact their district office for assistance.

- a. Field staff needs to determine the level of need for isolated disking. If smoothing the ruts will allow for the cooperators to stay in compliance, no contract extension will be required.
- b. If extensive disking and leveling occurs, contract must be extended by one year or cooperators must refund entire amount of incentive payment.

Recommendation

Growers are encouraged to establish this BMP using conservation tillage or long term no-till.

Specifications

NC NRCS Technical Guide, Section IV, Specification #340 (Cover Crop), # 328 (Conservation Cropping Rotation), #329A (Residue and Tillage Management, No-Till and Strip Till), and #778 (Long Term No Till).

(Revised July 2009; Policy #14 added March 2010)

Well

Definition/Purpose

A Well means constructing a drilled, driven or dug well to supply water from an underground source. (DIP)

Policies

1. Installation of the well must include wellhead protection.
2. Average cost for pumps for wells include all costs associated with installation and is based on actual cost.
3. Pumps, Solar Pumps, Wells & Windmills must have a qualifying statement that they will be used for agricultural use only. Wells must include well head protection. The cost for the pump includes all costs associated with pump installation, including the cost of getting electricity to the pump.
4. The solar powered pump installation is limited to sites where, due to the topography, property lines, etc., it is not possible to locate the tank or trough such that water may be supplied by gravity. The pump cost includes a submersible pump, photovoltaic panels, control box, support structure, pump cable, drop pipe, and fittings to make up plumbing at pump.
5. Permits are a cost-shareable component for this practice in counties where agricultural wells are not exempt from permit fees. A copy of the permit, receipt of the permit fee, and any supporting water quality reports associated with the permit are required to be kept in the district's contract file.
6. Cooperators are responsible for obtaining and complying with all required permits and local requirements as applicable.
7. Repairs of an existing well that is part of a new stream protection system is cost sharable, including pump if needed, and must be completed by a certified well contractor.
8. New wells and pump installation must be completed by a well contractor certified by the North Carolina Well Contractors Certification Commission. A NC certified well contractor is allowed to sign as Job Approval Authority within their approved level of certification.
9. Replacement of a previously cost shared pump cannot receive additional cost share.
- 5-10. Where the certified well contractor determines alternative casing is required by 15A NCAC Subchapter 02C Well Construction Standards the additional cost is eligible for cost share assistance.
- 6-11. Life of the BMP is ten (10) years.

Specifications

North Carolina NRCS Technical Guide, Section IV, Specification # 642 (Water Well)

(Revised November 2010)

Nutrient Scavenger Crop

Definition/Purpose

A Nutrient Scavenger Crop is a crop of small grain grown primarily as a seasonal nutrient scavenger. The purpose is to scavenge and cycle plant nutrients. The nutrient scavenger crop also adds organic matter to the soil, improves infiltration, aeration and tilth, improves soil quality, reduces soil crusting, provides residue for conservation tillage, and sequesters carbon. Benefits may include reduction of soil erosion, sedimentation and pollution from dissolved and sediment-attached substances.

Policies

1. For a nutrient scavenger crop to improve water quality, it must become quickly established, grow vigorously, and accumulate significant biomass in the early fall before nutrients are leached below the root zone. Only the following crops are eligible for this incentive. They **must** be planted by the planting deadline and sown at the seeding rates given below for each region.

Nutrient Scavenger Crop	Minimum Planting Rate	Coastal Plain Plant Deadline/ <i>Earliest Kill Date*</i>	Piedmont Plant Deadline/ <i>Earliest Kill Date*</i>	Mountains Plant Deadline/ <i>Earliest Kill Date*</i>
Barley	2-3 bu	Oct. 15/ <i>April 1</i>	Oct. 10/ <i>April 10</i>	Oct. 10/ <i>April 10</i>
Oats	3 bu	Oct. 15/ <i>April 1</i>	Oct. 10/ <i>April 10</i>	Nov.1/ <i>April 10</i>
Rye	2 bu	Nov. 30/ <i>April 1</i>	Nov. 30/ <i>April 10</i>	Nov.1/ <i>April 10</i>
Triticale	90 lb	Nov. 30/ <i>April 1</i>	Nov. 30/ <i>April 10</i>	Nov.1/ <i>April 10</i>
Wheat	2-3 bu	Nov. 30/ <i>April 1</i>	Nov. 30/ <i>April 10</i>	Nov. 1/ <i>April 10</i>

*Note: Planting deadline in standard print and earliest kill date shown in *italics*.

2. Establishment of nutrient scavenger crops must be planned well in advance to achieve a good stand. Seedbed preparation may be done by any suitable method. Seedbed preparation may be eliminated when nutrient scavenger crops are seeded by broadcasting into a standing crop, into residues of a previous crop by conservation tillage methods or when the harvesting procedure or residue shredding will cover seeds. No-till methods are preferred.
3. Drill or broadcast methods of seeding may be used. Broadcast methods of seeding should be completed prior to harvest for cotton and soybeans. For cotton or soybeans, it is highly recommended that seed be broadcast during the defoliation pass or before leaf drop. Subsequent leaf drop and harvest operations will cover seeds and help ensure good germination.

4. Nutrient scavenger crops must be allowed to grow throughout the winter and early spring to achieve the purpose of the incentive. Greatest effectiveness is achieved if left to grow until the early boot stage. The planting and kill dates (see table under policy #1) are given in order to achieve optimum physiological maturity..
5. No animal waste or fertilizer will be applied to these nutrient scavenger crops unless it is specifically recommended by an agronomist, a NCDA&CS regional agronomist, or an agronomist certified by the N.C. Agricultural Consultants Association (NCACA) or Certified Crop Advisor Program (CCA). The fields must not be grazed nor the crop removed. No burning of crop residue will be permitted.
6. No payment for this incentive shall be made until the nutrient scavenger crop reaches the kill date. Field office representatives shall verify each spring that cover has reached either physiological maturity (early bootstage) or has been left to grow until the required kill date. Field offices unwilling to assist operators in achieving success and monitor nutrient scavenger crop establishment and stand quality should not offer this incentive to cooperators in their district.
7. Disking or plowing destroys the majority of the soil quality gains associated with nutrient scavenger crop management. Therefore, while disking or plowing may be allowed by this practice, conservation tillage is encouraged.
8. Certified seeds or bin seed may be used for each year to receive the annual incentive payment. **Cooperators using bin seed must be careful to adhere to the restrictions imposed by the federal Plant Variety Protection Act, the NC seed rules and statutes, and laws governing the use of seed from patented plants.** Seed allowed for cost share includes rye, triticale, oats, barley, or wheat. Rye or triticale is preferred for higher rates of nutrient scavenging and biomass accumulation. Incentive rates are dependent on the species planted can be found on the average cost list.
9. Practice has a \$25,000 lifetime cap per cooperator. Each field is eligible for up to three annual contracts per cooperator. Annual contracts do not need to be consecutive years. The life of the BMP is one year.
10. Growers currently receiving state or federal cost share for any conservation tillage practice are not eligible for this practice on the same field or group of fields. (All conservation tillage incentive rates include cost of nutrient scavenger crops.)
11. Growers who have previously received state or federal cost share for any conservation tillage practice are eligible for this BMP.
12. When determining the acreage for which payments can be made for this practice, only the acreage actually planted shall be considered. The area occupied by farm roads, best management practices, ditches, structures, etc. shall not be included in planted acreage.
13. BMP soil, nitrogen, and phosphorus impacts are required on the contract. Include the planted acreage as well. Refer to the Minimum NCACSP Effects Requirements table later in this section for the correct methods of calculation.

14. On occasion it may be unavoidable for the cooperators to need to access the field when the traffic will result in ruts in the field (e.g., harvest operations). With documented approval from field staff, the cooperators can spot disk/level ruts to smooth out the surface. The field staff will work with the cooperators to stay in compliance with his/her conservation tillage contract. If field staff determines adequate cover can be established prior to next crop being planted, a cover crop should be planted immediately. The field staff can provide a recommendation on what might be best to plant as a quick cover. Cooperators must contact their district office for assistance.
 - a. Field staff needs to determine the level of need for isolated disking. If smoothing the ruts will allow for the cooperators to stay in compliance, no contract extension will be required.
 - b. If extensive disking and leveling occurs, contract must be extended by one year or cooperators must refund entire amount of incentive payment.

Recommendation

Growers are encouraged to establish this BMP using conservation tillage or long term no-till.

Specifications

NC NRCS Technical Guide, Section IV, Specification #340 (Cover Crop), # 328 (Conservation Cropping Rotation), #329A (Residue and Tillage Management, No-Till and Strip Till), and #778 (Long Term No Till).

| (Revised July 2009; Policy #14 added March 2010, revised July 2013)

Cover Crop

Definition/Purpose

A crop ~~or mixture of crops of grasses, legumes, or small grain~~ grown primarily for seasonal protection, erosion control and soil improvement. It usually is grown for one year or less. The major purposes ~~are to~~ water and wind erosion control, ~~to cycle~~ plant nutrients ~~to cycle~~, adding organic matter to the soil, improve infiltration, aeration and tilth, improve soil quality, ~~minimize and reduce soil compaction~~, reduce soil crusting, ~~suppress weeds~~, and sequester carbon/~~nutrients~~. Benefits may include reduction of soil erosion, sedimentation and pollution from dissolved and sediment-attached substances. (DIP)

Policies

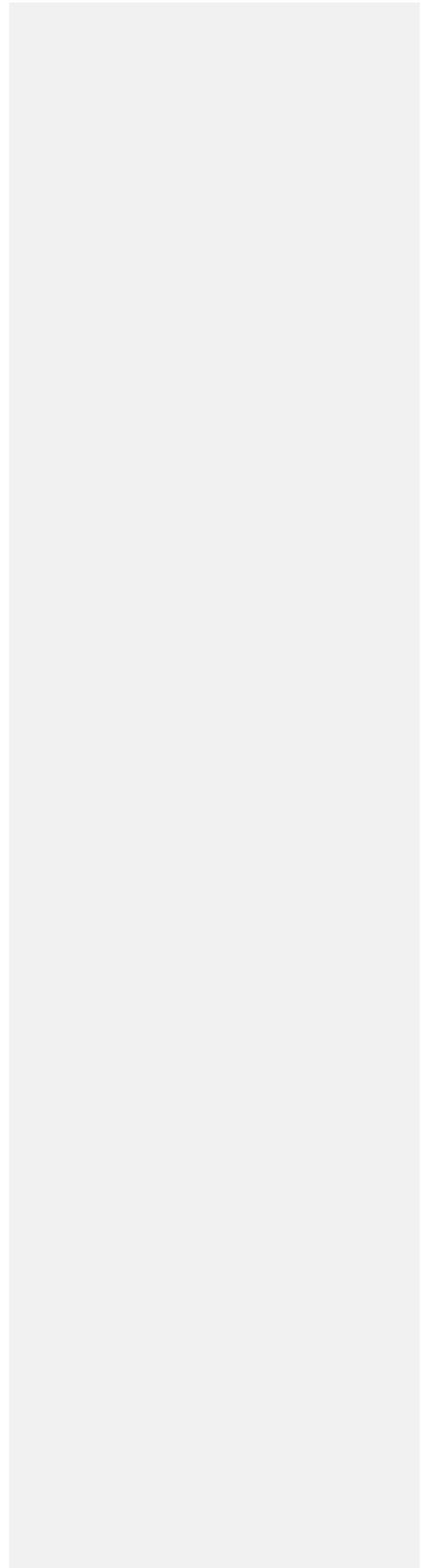
- For a cover crop to improve water quality, it must become quickly established, grow vigorously, and accumulate significant biomass. ~~The following crops are eligible for this incentive. The following table suggests planting dates for establishment of common cover crops. They must be planted by the planting deadline and sown at the seeding rates given below for each region (cover crops are not limited to those listed in these Table 1).~~

Table 1. ~~Required-Suggested Pplanting rRates and Deadline-pPlanting dDates for common cover crops.~~

Cover Crop Species	Planting Rates (Lower amount: minimum rate)	Required Minimum Planting Dates by Physiographic Region	Deadline Planting Dates by Physiographic Region
		1.Coastal Plain 2.Piedmont 3.Mountain Coastal Plain Piedmont Mountains	1.Coastal Plain 2.Piedmont 3.Mountains
Annual Lespedeza ^{s 1}	20-40 lbs.	1. February 1 2. February 1 3. March 15	1. March 15 2. April 1 3. April 15
Austrian Winter Pea ⁴	30-40 lbs.	1. August 25 2. August 25 3. N/A	1. October 25 2. October 15 3. N/A
Barley	2-3 bu.	1. September 1 3. 2. August 20 4-3. August 1	1. October 15 2. October 10 3. October 10
Crimson Clover ⁴	15-30 lbs.	1. Sept. 15 2. Sept. 5 3. Sept. 1	1. November 15 2. November 5 3. November 1
Cow Pea (Southern Pea)	30-90 lbs drilled or 70-120		Late summer

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	lbs broadcast		
Hairy Vetch 5	30-40 lbs.	1. August 25 2. October 15 3 July 15	1. Oct. 25 2. October 15 3. August 30



Cover Crop Species	Planting Rates (Lower amount: minimum rate)	Required Minimum Planting Dates by Physiographic Region	Deadline Planting Dates by Physiographic Region
Oats	3 bu.	1. September 1 2. August 20 3. August 1	1. October 15 2. October 10 3. November 1
Pearl Millet ³	6-10 lbs. in row; 20-25 lbs. drilled or broadcast	1. May 5 2. April 25 3. April 15	1. July 5 2. June 30 3. June 30
Rye	2 bu.	1. Sept. 15 2. Sept. 5 3. August 15	1. November 1 2. November 1 3. November 1
Ryegrass ⁵	30-40 lbs.	1. Sept. 15 2. Sept. 15 3. Sept. 1	1. November 15 2. November 1 3. November 1
Sorghum-Sudan Hybrids ^{1,2}	15-20 lbs in row 35-40 lbs drilled or broadcast	1. May 5 2. April 15 3. April 15	1. July 5 2. June 30 3. June 20
Sweet Clover, Red Clover	6-10 lb/ac drilled 10-20 lb/ac broadcast	Dec to Jan 15 or after wheat	Dec to Jan 15 or after wheat
Sun Hemp	40-50 lb/ac	9 weeks before average fall freeze date	9 weeks before average fall freeze date
Triticale	1 ½ bu.	1. Sept. 15 2. Sept. 1 3. Aug. 20	1. Nov. 30 2. Nov. 20 3. Oct. 20
Wheat	2-3 bu.	1. Oct. 25 2. October 10 3. October 1	1. November 15 2. November 1 3. November 1

¹ Tolerates fairly acid soil but performs best when a soil pH of 6.0 to 6.5 is maintained.

² Potential danger from prussic acid poison if plants are frosted, stunted or young growth is grazed. Do not allow horses to graze the green plants; apparently the hay may be used if properly cured.

³ No problem with prussic acid.

⁴ Inoculate seed. ⁵ May at times become a pest since it volunteers readily. Herbicides can now be used effectively to reduce this problem. ⁶ Mid range of production. Amounts will vary ± 50% depending on numerous factors. Top growth only

Comment [dlak1]: Can the cover crops be grazed? It says no below, but referencing this makes it seem ok?

2. ~~Selection and E~~establishment of cover crops must be planned well in advance to achieve a good stand and maintain 85 percent or greater ground cover until a minimum of 30 days prior to planting. Seedbed preparation may be done by any suitable implement or method. Seedbed preparation may be eliminated when cover crops are seeded by broadcasting into a standing crop, into residues of a previous crop by conservation tillage methods or when the harvesting procedure or residue shredding will cover seeds. No-till methods are preferred.
3. Drill or broadcast methods of seeding may be used. Broadcast methods of seeding should be completed prior to harvest for cotton, soybeans and peanuts. For cotton or soybeans, it is highly recommended that cover be broadcast during the defoliation pass or before leaf drop. Subsequent leaf drop and harvest operations will cover seeds and help ensure good germination.
4. No payment for this cost-shared practice shall be made until the cover crop is established.
5. Field offices unwilling to assist operators in achieving success and monitor cover crop establishment and stand quality should not offer this incentive to cooperators in their district.
6. Allow the cover crop to grow until a minimum of 30 days before prior to planting the succeeding crop. Terminate cover crop as late as possible to maximize plant biomass production considering the time needed to prepare the field for the next crop. Disking or plowing destroys the majority of the soil quality gains associated with cover crop management. Therefore, while disking or plowing may be allowed by this practice, conservation tillage is encouraged. Small grains should grow until at least early boot stage. Legumes should grow until at least early flower.
7. ~~C~~Either certified seed or bin seed may be used for this cost share practice in order to receive payment. The maximum payment for planting shall be \$20.00 per acre. **Cooperators using bin seed must be careful to adhere to the restrictions imposed by the federal Plant Variety Protection Act, the NC seed rules and statutes, and laws governing the use of seed from patented plants.**
8. Practice has a \$15,000 lifetime limit per applicant and is limited to 3 annual contracts per applicant.
9. BMP soil and phosphorus impacts are required on the contract. Include the planted acreage as well. Refer to the Minimum NCACSP Effects Requirements table later in this section for the correct methods of calculation.
10. Cover crop is an annual practice. Request for payment must be made annually.
- ~~11.~~ Animal waste or fertilizer may be applied to ~~these~~ cover crops when needed to improve the vigor of the crop.
- ~~11.~~ This practice precludes the planting of cover crop for harvest. The fields must not be grazed or the crop removed. No burning by fire of crop residue will be permitted. This practice precludes the planting of small grain for harvest.

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12. An applicant may not simultaneously receive the cover crop incentive and either the 3-year conservation tillage incentive, the long-term no-till incentive, or the nutrient scavenger cover crop incentive.
13. On occasion it may be unavoidable for the cooperators to need to access the field when the traffic will result in ruts in the field (e.g., harvest operations). With documented approval from field staff, the cooperator can spot disk/level ruts to smooth out the surface. The field staff will work with the cooperator to stay in compliance with his/her conservation tillage contract. If field staff determines adequate cover can be established prior to next crop being planted, a cover crop should be planted immediately. The field staff can provide a recommendation on what might be best to plant as a quick cover. Cooperators must contact their district office for assistance.
- a. Field staff needs to determine the level of need for isolated disking. If smoothing the ruts will allow for the cooperator to stay in compliance, no contract extension will be required.
 - b. If extensive disking and leveling occurs, contract must be extended by one year or cooperator must refund entire amount of incentive payment.

Specifications

NC NRCS Technical Guide, Section IV, [Specification Conservation Practice Standards #340 \(Cover Crop\)](#), # 328 (Conservation Cropping Rotation), #329A (Residue and Tillage Management, No-Till/~~and~~ Strip Till/[Direct Seed](#)), ~~and #778 (Long Term No Till)~~.

(Revised July 2009; Policy #13 added March 2010; [Revised February 2013](#))

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April 5, 2013

NRCS Technical Committee

To Whom It May Concern:

I am writing this letter in regard to the cover crop deadline planting dates currently required by the Agriculture Cost Share Program. I would like to propose that several of these deadlines be extended until November 15th since many farmers in eastern North Carolina cannot harvest their main crop in time to meet the currently prescribed planting deadlines for cover crops mandated by the Agricultural Cost Share Program. This proposed change would give farmers more flexibility and incentive to plant cover crops.

Many farmers in Bladen County grow crops that are harvested late in the fall. They often do not complete harvest in time to meet the deadline planting dates established for the more effective and economical small grain cover crops, like oats and rye. Current deadlines for planting in the coastal plain range from October 15th for barley and oats, to November 1st for rye, to November 15th for ryegrass and wheat, to November 30th for triticale.

To encourage more farmers to plant cover crops and to provide greater flexibility in choosing those crops, I advise the Technical Committee to consider extending the deadline planting date to November 15th for barley, oats, rye, ryegrass and wheat grown as cover crops in the coastal plain of North Carolina.

Thank you for considering this proposal.

Sincerely,

Rick Morris
NCDA&CS Regional Agronomist

**NATURAL RESOURCES CONSERVATION SERVICE
CONSERVATION PRACTICE STANDARD**

COVER CROP

(Ac.)

CODE 340

DEFINITION

Crops including grasses, legumes, and forbs for seasonal cover and other conservation purposes.

PURPOSE

- Reduce erosion from wind and water.
- Increase soil organic matter content.
- Capture and recycle or redistribute nutrients in the soil profile.
- Promote biological nitrogen fixation and reduce energy use.
- Increase biodiversity.
- Suppress weeds.
- Manage soil moisture.
- Minimize and reduce soil compaction.

CONDITIONS WHERE PRACTICE APPLIES

All lands requiring vegetative cover for natural resource protection and or improvement.

CRITERIA

General Criteria Applicable to All Purposes

Plant species, seedbed preparation, seeding rates, seeding dates, seeding depths, fertility requirements, and planting methods will be consistent with approved local criteria and site conditions.

The species selected will be compatible with other components of the cropping system.

Ensure herbicides used with cover crops are compatible with the following crop.

Ensure that plants are not listed as noxious weeds or invasive species for a particular state.

Cover crop residue will not be burned.

Additional Criteria to Reduce Erosion from Wind and Water

Time cover crop establishment in conjunction with other practices, so that the soil will be adequately protected during the critical erosion period(s).

Plants selected for cover crops will have the physical characteristics necessary to provide adequate protection.

Determine the amount of surface and/or canopy cover needed from the cover crop using current erosion prediction technology.

Additional Criteria to Increase Soil Organic Matter Content

Cover crop species will be selected on the basis of producing high volumes of organic material and or root mass to maintain or improve soil organic matter.

The NRCS Soil Conditioning Index (SCI) procedure will be used to determine the amount of biomass required to have a positive trend in the soil organic matter subfactor.

The cover crop shall be planted plant as early as possible and be terminated as late as feasible to maximize plant biomass production, considering crop insurance criteria, the time needed to prepare the field for planting the next crop, and soil moisture depletion.

Additional Criteria to Capture and Recycle Excess Nutrients in the Soil Profile

Cover crops will be established and actively growing before the expected period(s) of nutrient leaching.

Select cover crop species for their ability to take up large amounts of nutrients from the rooting profile of the soil.

Terminate the cover crop as late as feasible to maximize plant biomass production. Consider the time needed to prepare the field for planting the next crop and soil moisture depletion.

Additional Criteria to Promote Biological Nitrogen Fixation and Reduce Energy Use

Use legumes or legume-grass mixtures to establish cover crops.

The specific Rhizobium bacteria for the selected legume will either be present in the soil or the seed will be inoculated at the time of planting.

Additional Criteria to Increase Biodiversity

Select cover crop species to achieve one or more of the following: species mix with different maturity dates, attract beneficial insects, attract pollinators, increase soil biological diversity, serve as a trap crop for damaging insects, and/or provide food and cover for wildlife habitat management.

Additional Criteria for Weed Suppression

Species for the cover crop will be selected for their chemical or physical characteristics to suppress or compete with weeds.

Higher seeding rates to provide additional cover will help control weeds to eliminate or reduce herbicide use.

Cover crops residues will be left on the soil surface to maximize allelopathic (chemical) and mulching (physical) effects.

A late kill may be used if the objectives are to use as a biocontrol.

For long-term weed suppression, reseeding annuals and/or biennial species can be used.

Additional Criteria for Soil Moisture Management

Terminate growth of the cover crop sufficiently early to conserve soil moisture for the subsequent crop. Cover crops established for moisture conservation shall be left on the soil surface.

In areas of potential excess soil moisture, allow the cover crop to grow as long as possible to maximize soil moisture removal.

Additional Criteria to Minimize and Reduce Soil Compaction

Select and manage cover crop species that will produce deep roots and large amounts of surface or root biomass to increase soil organic matter, improve soil structure, and increase soil moisture through better infiltration.

CONSIDERATIONS

Plant cover crops in a timely matter to establish a good stand.

When applicable, ensure cover crops are managed and are compatible with the client's crop insurance criteria.

Maintain an actively growing cover crop as late as feasible to maximize plant growth, allowing time to prepare the field for the next crop and moisture depletion.

When used to redistribute nutrients from deeper in the profile up to the surface layer, consider killing of the cover crop in relation to the planting date of the following crop.

If the objective is to best synchronize the use of cover crop as a green manure to cycle nutrients, factors such as the carbon/nitrogen ratios may be considered to kill early and have a faster mineralization of nutrients to match release of nutrient with uptake by following cash crop.

The right moment to kill the cover crop will depend on the specific rotation, weather, and grower objectives.

Use deep-rooted species to maximize nutrient recovery.

Use grasses to utilize more soil nitrogen, and legumes utilize both nitrogen and phosphorus.

Avoid cover crop species that harbor or carryover potentially damaging diseases or insects.

For most purposes for which cover crops are established, the combined canopy and surface cover is at nearly 90 percent or greater, and the above ground (dry weight) biomass production is at least 4,000 lbs/acre.

Cover crops may be used to improve site conditions for establishment of perennial species.

Use plant species that enhance bio-fuels opportunities.

Use plant species that enhance forage opportunities for pollinators by using diverse legumes and other forbs.

Use a diverse mixture of 2 or more species to address multiple purposes.

PLANS AND SPECIFICATIONS

Plans and specifications will be prepared for the practice site. Plans for the establishment of cover crops shall include:

- Field number and acres
- Species or species of plants to be established.
- Seeding rates.
- Recommended seeding dates.
- Establishment procedure.
- Planned rates and timing of nutrient application.
- Planned dates and method to terminate the cover crop.
- Other information pertinent to establishing and managing the cover crop.

Plans and specifications for the establishment and management of cover crops may be recorded in narrative form, on job sheets, or on other forms.

OPERATION AND MAINTENANCE

Control growth of the cover crop to reduce competition from volunteer plants and shading.

Control weeds in cover crops by mowing or by using other pest management techniques.

Control soil moisture depletion by selecting water efficient plant species and terminating the cover crop before excessive transpiration.

Evaluate the cover crop to determine if the cover crop is meeting the planned purpose(s). If the cover crop is not meeting the purpose(s) adjust the management, change the species of cover crop, or choose a different technology.

REFERENCES

A. Clark (ed.). 2007. Managing cover crops profitably. 3rd ed. Sustainable Agriculture Network Handbook Series; book 9.

Hargrove, W.L., ed. Cover crops for clean water. SWCS, 1991.

Magdoff, F. and H. van Es. Cover Crops. 2000. p. 87-96 *In* Building soils for better crops. 2nd ed. Sustainable Agriculture Network Handbook Series; book 4. National Agriculture Library. Beltsville, MD.

Reeves, D.W. 1994. Cover crops and erosion. p. 125-172 *In* J.L. Hatfield and B.A. Stewart (eds.) Crops Residue Management. CRC Press, Boca Raton, FL.

**NATURAL RESOURCES CONSERVATION SERVICE
CONSERVATION PRACTICE STANDARD**

COVER CROP

CODE 340

SPECIFICATIONS

TABLE 1 – COMMONLY USED COVER CROPS IN NORTH CAROLINA

Cover Crop <i>Italic -Summer Cover Crops</i>	Plant Type	Planting Rate lbs/ac minimum rate	Planting Range by Physiographic Region		
			Coastal Plain	Piedmont	Mountains
NON-LEGUMES					
Barley	grass	Drill 80 Bcast 100	Sept 1 - Nov 15	Aug 20 - Oct 31	Aug 15 - Oct 15
Little Barley	grass	Drill 35 Bcast 70	Sept 1 - Nov 15	Aug 20 - Oct 31	Aug 15 - Oct 15
<i>Millet (Browntop)</i>	<i>grass</i>	<i>Drill 20 Bcast 30</i>	<i>May 5 - July 5</i>	<i>Apr 25 - July 1</i>	<i>Apr 15 - Jun 20</i>
<i>Millet (Pearl)</i>	<i>grass</i>	<i>Drill 15 Bcast 30</i>	<i>May 5 - July 5</i>	<i>Apr 25 - July 1</i>	<i>Apr 15 - Jun 20</i>
Oats	grass	Drill 60Bcast 100	Sept 5 - Nov 15	Aug 20 - Oct 31	Aug 15 - Oct 15
Rye (Cereal)	grass	Drill 80 Bcast 100	Sept 5 - Nov 15	Aug 20 - Oct 31	Aug 15 - Oct 15
<i>Sorghum-Sudan Hybrids</i>	<i>grass</i>	<i>Drill 25 Bcast 40</i>	<i>May 5 - July 5</i>	<i>Apr 25 - July 1</i>	<i>Apr 15 - Jun 20</i>
Triticale	grass	Drill 100 Bcast 120	Sept 5 - Nov 15	Aug 20 - Oct 31	Aug 15 - Oct 15
Wheat	grass	Drill 100 Bcast 150	Sept 5 - Nov 15	Aug 20 - Oct 31	Aug 15 - Oct 15
<i>Buckwheat</i>	<i>forb</i>	<i>Drill 50 Bcast 75</i>	<i>May 5 - July 5</i>	<i>Apr 25 - July 1</i>	<i>Apr 15 - Jun 20</i>
Forage Radish	forb	Drill 8 Bcast 10	Aug 15 - Oct 1	Aug 1 - Sept 15	Aug 1 - Sept 1
Turnip	forb	Drill 7 Bcast 10	Sept 1 - Oct 15	Aug 25 - Oct 10	Aug 10 - Oct 1
LEGUMES					
Arrowleaf Clover	legume	Drill 5 Bcast 10	Sept 1 - Oct 15	Aug 25 - Oct 10	Aug 10 - Oct 1
Austrian Winter Pea	legume	Drill 20 Bcast 25	Sept 1 - Oct 15	Aug 25 - Oct 10	Aug 10 - Oct 1
<i>Cowpeas</i>	<i>legume</i>	<i>Drill 30 Bcast 70</i>	<i>May 5 - July 5</i>	<i>Apr 25 - July 1</i>	<i>Apr 15 - Jun 20</i>
Crimson Clover	legume	Drill 15 Bcast 20	Sept 1 - Oct 15	Aug 25 - Oct 10	Aug 10 - Oct 1
Hairy Vetch	legume	Drill 15 Bcast 20	Sept 1 - Oct 15	Aug 25 - Oct 10	Aug 10 - Oct 1
<i>Soybeans</i>	<i>legume</i>	<i>Drill 50 Bcast 90</i>	<i>May 5 - July 5</i>	<i>Apr 25 - July 1</i>	<i>Apr 15 - Jun 20</i>

Conservation practice standards are reviewed periodically, and updated if needed. To obtain the current version of this standard, contact the Natural Resources Conservation Service.

NOTES:

*OTHER SPECIES, INCLUDING NATIVE ANNUALS, NOT INCLUDED MAY BE USED IF THE COVER PROVIDED WILL BE ADEQUATE TO TREAT THE RESOURCE CONCERN. IF MORE THAN ONE RESOURCE CONCERN IS BEING ADDRESSED WITH THE COVER CROP, A MIXTURE OF TWO OR MORE SPECIES MAY BE ADVANTAGEOUS.

*WHEN LEGUMES ARE SEEDED WITH GRASSES, USE THE SEEDING DATES FOR THE GRASSES.

*WHEN TWO OR MORE GRASSES ARE USED IN A MIXTURE, REDUCE THE SEEDING RATE OF EACH BY ABOUT ONE-THIRD. DO NOT REDUCE THE SEEDING RATES OF LEGUMES WHEN USED IN A MIXTURE.

*SEEDING RATES SHOULD BE INCREASED AT LEAST 30% WHEN AERIALY SEEDED

Prepared for: _____

Prepared by: _____

Farm: _____ Tract: _____ Date: _____



Thick cover of rye is rolled to terminate growth and to provide more ground cover for a no-till crop to follow.



DEFINITION

Crops grown, including grasses, legumes, and forbs, for seasonal cover and other conservation purposes.

PURPOSE

- Reduce erosion from wind and water.
- Increase soil organic matter content.
- Capture and recycle or redistribute nutrients in the soil profile.
- Promote biological nitrogen fixation and reduce energy use.
- Increase biodiversity.
- Weed suppression.
- Soil moisture management.
- Minimize and reduce soil compaction.

CRITERIA

Plant species, seedbed preparation, seeding rates, seeding dates, seeding depths, fertility requirements, and planting

methods will be consistent with approved local criteria and site conditions.

The species selected will be compatible with other components of the cropping system.

If applicable, herbicides used to terminate cover crops will be compatible with the following crop.

Avoid using noxious or invasive species.

Cover crop residue will not be burned.

CONSIDERATIONS

Plant cover crop in a timely manner to establish a good stand.

Maintain an actively growing cover crop as late as feasible to maximize plant growth while allowing time to prepare the field for the next crop.

Use deep-rooted species to maximize nutrient recovery.

Avoid cover crop species that attract potentially damaging insects.

The United States Department of Agriculture (USDA) prohibits discrimination in its programs on the basis of race, color, national origin, sex, religion, age, disability, political beliefs, and marital or familial status. (Not all prohibited bases apply to all programs.) Persons with disabilities who require alternative means for communication of program information (Braille, large print, audiotape, etc.) should contact USDA's TARGET Center at (202) 720-2600 (voice and TDD). To file a complaint, write the Secretary of Agriculture, U.S. Department of Agriculture, Washington, DC 20250, or call 1-800-245-6340 (voice) or (202) 720-1127 (TDD). USDA is an equal employment opportunity employer. To file a complaint of discrimination write USDA, Director, Office of Civil Rights, Room 326-W, Whitten Building, 14th and Independence Avenue, SW, Washington, DC 20250-9410 or call (202) 720-5964 (voice or TDD). USDA is an equal opportunity provider and employer.

For most purposes for which cover crops are established, the combined canopy and surface cover is at nearly 90 percent or greater, and the above ground (dry weight) biomass production is at least 4,000 lbs/acre.

Use plant species that enhance forage opportunities for pollinators.

PLANS AND SPECIFICATIONS

Plans and specifications will be prepared for each practice site. Plans for the establishment of cover crops shall include:

- Field number and acres.
- Species of plants to be established.
- Seeding rates.
- Recommended seeding dates.
- Establishment procedure.
- Planned rates and timing of nutrient application, if applicable.
- Planned dates of cover crop termination.
- Other information pertinent to establishing and managing the cover crop.

Plans and specifications for the establishment and management of cover crops may be recorded in narrative form, on this job sheet, or on other forms provided to the farmer.

COMMONLY USED COVER CROPS IN NORTH CAROLINA

Cover Crop <i>Italic -Summer Cover Crops</i>	Plant Type	Planting Rate lbs/ac minimum rate	Planting Range by Physiographic Region		
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*SEEDING RATES SHOULD BE INCREASED AT LEAST 30% WHEN AERIALY SEEDED

Waste Application Systems

Definition/Purpose

A Waste Application System means an environmentally safe system (such as solid set, dry hydrant, mobile irrigation equipment, etc.) for the conveyance and distribution of animal wastes from waste treatment and storage structures to agricultural fields as part of an irrigation and waste utilization plan. (DIP)

Mobile Application System means a portable conveyance system for the application of liquid animal waste from a waste storage pond or lagoon or a manure spreader for the application of dry waste or compost.

Solid Set System means an in-ground sprinkler system which allows the conveyance of liquid waste from a waste storage pond or lagoon to allow land application of liquid wastes.

Underground Main and Hydrant System means an in ground system of pipes ending in hydrants which allows the conveyance of liquid waste from a waste storage pond or lagoon to facilitate the land application of animal wastes.

Policies

1. Items for reimbursement under the maximum are all equipment, materials, construction, installation, vegetation, pumps, etc. from the waste structure to and including the delivery system. **The type of system must be specified on CPO** (i.e. center pivot, traveling gun, solid set, etc.) Reimbursable items must be supported by receipts, including any previous payments to the cooperators for pipe, hydrants or other elements of a waste application system. **For all operations, cost share payments are limited to a \$35,000 lifetime cap.** Cost share will not pay for any motorized vehicles used in transporting/applying waste or for replacing worn out equipment that was previously cost shared on.
2. By signing the Cost Share Agreement (NC-ACSP-2), the cooperator and/or landowner acknowledges and agrees that they are responsible for the maintenance or replacement of all equipment cost shared as a component of waste management measure(s) at their expense and that any cost shared component will not be sold or used as collateral for the life of the practice must be included in the CPO.
3. Above-ground mobile irrigation pipe may be used as a component of a waste application system for cost share with the following stipulations:
 - a. All pipe from the lagoon or waste storage pond to the field must be buried according to NRCS standards;
 - b. The waste application system must include a safety valve that will close in case pressure is lost; and
 - c. The use of above ground pipe must be approved by an engineer.

Agriculture Cost Share Program

4. The following guidelines apply for poultry litter spreaders:
 - a. Before a cooperator can receive Cost Share assistance for a poultry litter spreader he/she must have a method for mortality disposal approved by the State Veterinarian and must have adequate litter storage (i.e. storage for 25% of the volume of waste generated annually). For purposes of the cost share program, storing covered or uncovered litter on the ground is not considered acceptable storage, nor is pit disposal acceptable for mortalities (unless approved in an emergency by the State Veterinarian).
 - b. Only a commercially sold fan spinner, rotary type spreader with an adjustable door for calibration may be cost shared.
 - c. Cost share will be based on actual cost with receipts required not to exceed the amount on the average cost list for ACSP.

d. Non-producers are not eligible for litter or manure spreaders.

5. The following guidelines apply for compost spreaders:

- a. A permit is required from the North Carolina Department of Agriculture, State Veterinarian for all composters, and all state regulations must be followed.
- b. Only a commercially sold fan spinner, rotary type spreader with an adjustable door for calibration may be cost shared.
- c. Cost share will be based on actual cost with receipts required not to exceed the amount on the average cost list for ACSP.
- d. Non-producers are not eligible for litter or manure spreaders

5-6. Fencing was ruled to be a production practice by the TRC and **is not** an acceptable element of this BMP.

6-7. When .0200 and Cost Share converge:

- a. When Cost Share is used for a waste application system that meets the .0200-certification requirements, and a new water quality problem associated with the waste application system is created through the actions of the farmer, Cost Share funds shall not be used to solve the new problem.
- b. When a waste management system is certified with equipment that is not cost shared, the farmer will be eligible to upgrade the system with Cost Share assistance as long as greater water quality benefits can be shown.
- c. Cost Share funds can be used to pay the difference between the current replacement value of a previously Cost Shared waste application system (e.g., a honey wagon) and a new system (e.g., solid set) as long as the new system is shown to provide greater water quality improvements.
- d. If a third party applicator arrangement for an animal operation fails the application system. This example would be analogous to a system that breaks through no fault of the operator, and a repair contract would be allowable.

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Agriculture Cost Share Program

- e. Cost Share would be available to extend irrigation pipe when an existing Waste Management Plan (WMP) is updated and the operation will need to expand the waste application systems to take phosphorus or other nutrients into consideration or to base the application rates on more current realistic yield estimates. The operation would still be limited to the amount listed on the average cost list.

| ~~7.8.~~ Waste Management Plan Statement (NC-ACSP-WMP) is required.

| ~~8.9.~~ BMP soil impact is not required on this BMP. Include the amount of fresh manure in nitrogen and phosphorus units, which will be generated and properly managed under the waste management system. Also include the number of acres affected, animal type, and animal units.

| ~~9.10.~~ Minimum life of BMP is ten (10) years.

Specifications

| N. C. NRCS Technical Guide, Section IV, Specification #442 (Irrigation System, Sprinkler), #430 (Irrigation Pipeline), #449 (Irrigation Water Management), and #590 (Nutrient Management). [\(Additional references\)](#)

Livestock Mortality Management System

Definition/Purpose

A livestock mortality management system is a facility for managing livestock mortalities such as to minimize water quality impacts or to produce a material that can be recycled as a soil amendment and fertilizer substitute. Cost shareable mortality management system components include: composter, rotary drum composter, forced aeration static pile composter, mortality freezer, mortality incinerator and mortality gasification system.

A composter means a facility for the biological treatment, stabilization and environmentally safe storage of organic waste material (such as manure from poultry and livestock and dead animal carcasses) to produce a material that can be recycled as a soil amendment and fertilizer substitute.

A freezer means a unit capable of freezing and storing poultry and other small animal carcasses until such time they can be moved offsite rendering.

An incinerator or gasifier means a piece of equipment used to cremate dead poultry, swine, or other small animals.

Policies

1. ACSP funds will only be used to fund one mortality management system for each operation. Operations that have already received cost share for one mortality management system and are still in the required maintenance period for the practice have the option of repaying the prorated portion of their cost share to buy back eligibility. Recipients of cost share for composters have the additional option of converting the composter to a dry stack, provided the dry stack was of sufficient volume to meet NRCS standards.
2. A permit is required from the North Carolina Department of Agriculture, State Veterinarian for all composters, and all state regulations must be followed.
3. If a composter is approved, then a Waste Management Plan will be completed for the entire confined animal operation and not just the acreage associated with composter and compost. The Waste Management Plan must address storage of litter needs for the entire confined animal operation. If compost or waste is land applied by the cooperator on any land under his/her control (owned, rented, etc.), then a detailed site location map delineating the fields and compost/waste is moved off the farm by a commercial contract hauler, the name and address of the hauler is required with the contract. Waste Management Plan Statement (NC-ACSP-WMP) is required.
4. A composter shared by landowners is eligible for cost share if a landowner agreement is being attached to the contract. This agreement must be signed and dated by all landowners sharing the facility and must state that the facility may be used by each landowner for a minimum period of ten (10) years.

Agriculture Cost Share Program

5. Landowners requesting commercial composters may receive 75% of treatment and storage volume. Payment will then be limited to the minimum volume required using the design criteria of the NRCS and the Cooperative Extension Service.
6. Payment will be made for the minimum volume required using NRCS and Extension Service design criteria for primary and secondary treatment, and/or storage of composted material in one structure. Storage volume is equal to a maximum of four (4) times the primary volume. Additional volume needed to accommodate the producer's equipment and/or desires will be at the producer's expense.
7. Pursuant to 15A NCAC 2H.0100 and 2H.0200 regulations, poultry waste storage structures must be located at least 100 feet from perennial streams and groundwater wells.
8. All NRCS and NC Agriculture Cost Share Program standards and policies relative to vegetation of critical areas must be followed, if applicable.
9. North Carolina Division of Air Quality exempts incinerators used to dispose of dead animals or poultry under the following conditions:
 - a. The incinerator is located on a farm and is owned and operated by the farm owner or by the farm operator.
 - b. The incinerator is used solely to dispose of animals or poultry originating on the farm where the incinerator is located.
 - c. The incinerator is not charged at a rate that exceeds its design capacity.
 - d. The incinerator complies with visible emissions and odorous emissions requirements.
10. An Operation and Maintenance Plan Statement (NC-ACSP-OMP) is required for mortality incinerators, gasifiers and freezers.
11. A Waste Management Plan Statement (NC-ACSP-WMP) is required.
12. A mortality management system can only be used to dispose of mortalities associated with the planned operation.
13. Farmers with freezers must include in their waste management plans the name and telephone number of the rendering plant or recycling plant responsible for handling animal carcasses.
14. A Mortality System for poultry with an incinerator may include a roof over the incinerator.
15. BMP soil impact is not required on this BMP. Include the amount of fresh manure in nitrogen and phosphorus units, which will be generated and properly managed under the waste management system. Also include the number of acres affected, animal type, and animal units.

Agriculture Cost Share Program

16. Minimum life of BMP is ten (10) years for composters, rotary drum composters, forced aeration static pile composters, mortality freezers, and mortality gasification systems. Minimum life of BMP is five (5) years for mortality incinerators.

Specifications

North Carolina NRCS Technical Guide, Section IV, Specification #316 (Animal Mortality Facility).

Please be sure you or an ag agent in your center is familiar with these regulations that go into effect for farms May 10 of this year. These regulations have been discussed for farms for years but the deadlines have always been pushed back. The Farm Bureau feels that the date will not get moved this year, so farmers need to be in compliance. Many or most may be unaware of the regulation. Many may need engineering help to get in compliance. Anne Coan with Farm Bureau, who is more familiar with this, indicated that an engineer affiliated with the NC Petroleum and Convenience Marketer Assoc has helped some farmers. But we don't have contact information other than their website <http://www.ncpcm.org/> and don't know if they are still doing this or have the capacity to do large numbers.

The rules for farmers are here: http://www.epa.gov/emergencies/docs/oil/spcc/spcc_extfs.pdf

You and/or your ag agent and your farmers probably will benefit from the webinar listed below. You may want to advertise this to your growers and/or host a viewing session for them. This information is courtesy of the NC Farm Bureau:

A Webinar on Aboveground Storage Tank (SPCC) regulations for farmers will be held Tuesday, March 26, 2013 10:00 AM - 11:30 AM EDT. It is hosted by the Michigan Department of Environmental Quality and will include EPA staff members. The rules are the same throughout the country, so the webinar will be relevant to NC farmers. The deadline for compliance with the federal Spill Prevention Control and Countermeasures regulation is May 10, 2013.

Here is the link to register for the webinar: <https://www1.gotomeeting.com/register/984064929>

If you already know all about this, I apologize the duplication. If there are agents or directors that have expertise in the area that could help others, please let me know. I don't think we have much if any expertise on campus, but I am just trying to get the basic information out. YOU NOW KNOW EVERYTHING I KNOW. I'd like to serve as a resource person on this, but I do not have any more information. I will be copying DELS and some specific faculty to see if any may be able to provide further technical help.

From Anne Coan:

If the farmer has more than 10,000 gallons of storage capacity (does not include nitrogen or propane) he must use a professional engineer. We have been working with the NC Petroleum Marketers and Convenience Store Owners on-staff engineer on this. He has done farm SPCC plans (for a fee) and designed the secondary containment, and he has experience. His name is Tim Laughlin and he can be contacted at [919-782-4411](tel:919-782-4411) or tlaughlin@NCPCM.ORG

If the farmer has 10,000 gallons or less of storage capacity he can write the plan himself and install the secondary containment. The farmer needs to consider whether that is something they want to do for themselves or not. Again, Mr. Laughlin might be able to write the plan (for a fee). EPA has a template on their website, SPCC for Agriculture (address below) that a farmer can use to write their own plan, but the design and build of the containment varies from site-to-site, so have to consider that.

On our NCFB website there is a PowerPoint presentation that explains the rules. Go to www.ncfb.org Click "Public Policy" then click on "Environment" in the dropdown menu. Then click

on "Above Ground Storage Tanks." The first part of the PowerPoint is general and the second part is more specific. There are web site addresses in that presentation that might help as well.

Especially helpful is EPA's website "SPCC for Agriculture"

at: http://www.epa.gov/emergencies/content/spcc/spcc_ag.htm

Paul Sherman on our staff has worked on implementation more than I have in the last couple of years, so if you have specific questions, about this information, you should contact

Paul. paul.sherman@ncfb.org 919-719-7292.