

Lagoon Biosolids Removal Practice

Definition/Purpose

Lagoon Biosolids Removal means removing accumulated biosolids from active anaerobic lagoons. The biosolids will be properly utilized on farmland or forestland or processed to a value-added product, including energy production, to reduce nutrient impacts from nitrogen only based planning and impacts of phosphorus accumulation on application land. (DIP)

Policies

1. The *generator* of the waste product will be the applicant. A *generator* is an independent or contract poultry or livestock grower.
2. This practice shall only be used to remove biosolids when a biosolids survey indicates the ratio (R) of biosolids/sludge layer volume to total treatment volume is 45% or greater. at accumulation is reaching non-compliance of permit conditions. needs to be managed.
3. Each contract must contain the following information and must be reviewed by the Division prior to approval:
 - a. Biosolids removal waste management plan.
 - b. Phosphorus loss potential (PLAT) results for each application field
 - c. Cooperator acknowledgement form
 - d. Sludge-Biosolids Impacts to Land Acknowledgement Form for each leased application field
 - a.e. Division biosolids removal waste management plan approval letter
- 2.4. This practice shall not be used to apply biosolids at a rate exceeding the following maximums:
 - a. No application is allowed for sites with a phosphorus loss potential (per PLAT) of high and very high.
 - b. For sites with a phosphorus loss potential (per PLAT) of low or medium, biosolids shall be applied in accordance to the Lagoon Biosolids Removal P Calculation Spreadsheet. This calculation limits the phosphorus application rate to 50% of what may be applied under a nitrogen based biosolids application plan, unless otherwise recommended by NCDA&CS soil test recommendations.
 - c. Planning shall project the impact of the biosolids application to heavy metal critical levels based on soil index.
 - d. In addition, the application shall not exceed the nitrogen requirement of the next receiving crop. If additional nitrogen is needed, consideration must be given to limit additional phosphorus application.

- ~~3.5.~~ ~~It is highly recommended that b~~Biosolids shall not be applied to fields that are used for continual animal waste application due to increases in metals and phosphorus nutrient levels.-
- 4.6. If required, a Manure/Litter Shared Responsibility Agreement must be used with each entity receiving transported biosolids.
- ~~5.7.~~ Applicants who engage in value-added processing onsite are eligible for this practice. However, a cooperator who receives state cost share for any components of their value-added processing system (e.g., litter or manure composter, pelletizer) is not eligible for this practice.
- ~~6.8.~~ An applicant may receive cost share for ~~_-waste impoundment closure,~~ waste storage structures, waste treatment structures, ~~and~~ solids separation systems, and manure litter transport incentive and remain eligible for this practice. An applicant, who received cost share for waste application systems previously, ~~may be is~~ eligible- for this practice.
- ~~— An applicant may not receive cost share for this BMP and still be eligible for the manure litter transport incentive BMP on the same operation.~~
- ~~7.9.~~ A pre-construction conference including the district technical representative, biosolids management plan developer, contractor and landowner shall be held prior to commencement of biosolids removal.
- 8.10. Payments will be based upon the amount of biosolids transported for land application or processing. Requirements for payment include:
- a. The applicant must present a record of the amount of manure transported to each receiving entity using the appropriate DWRNG forms.
 - b. If the biosolids are being transferred to a manure hauler or other ~~third party~~third-party applicator or processor, the applicant must present:
 - i. NMP from each entity receiving biosolids for land application compliant with the NRCS Standard 590 and in accordance with the 1217 Interagency Committee Guidance and/or other applicable rules. A Technical Specialist with the Waste Utilization Planning/ Nutrient Management designation must approve the nutrient management plan.
 - ii. The receiving entity must also provide the applicant with records using appropriate DWRNG forms indicating the fields to which biosolids has been applied and any other records required by 1217 Interagency Committee Guidance and/or other applicable rules. (Receiving entity must be in compliance with all applicable requirements)
 - iii. Certification from each entity receiving biosolids for processing that the waste has been processed and that the product has been transported from the processing facility for use.
 - iii-c. A DSWC certification of ~~sludge~~biosolids removal form must accompany the Request for Payment.

11. ~~A signed copy of the biosolids removal waste management plan must be sent to the appropriate DWR Regional Office and to animal.operations@deg.nc.gov prior to starting the biosolids removal.~~

9.12. Biosecurity measures outlined by the NC Department of Agriculture and Consumer Services must be followed for all transported biosolids.

13. BMP life is one year. Cooperators are ineligible to reapply for assistance for this practice ~~_____~~ on the receiving fields for 5 years and are not to exceed the cap per operation. ~~For all operations, e~~Cost share payments for this practice are limited to a ~~\$25,000~~50,000 lifetime cap per operation.

10.14. Soil loss is not required. Include the amount of nitrogen and phosphorous units that will be properly managed under the BMP~~transportation incentive~~.

Specifications

N.C. NRCS Field Office Technical Guide, Section IV, Conservation Practice ~~Standard~~Specification #590 (Nutrient Management), 1217 Interagency Committee Guidance Document.

LAGOON BIOSOLID REMOVAL PRACTICE	
Maintenance Period	10 years
BMP Units	EACH
Required Effects	ACRES_AFFECTED ANIMAL TYPE ANIMAL UNITS N and P Waste Managed
JAA/ NRCS standards unless otherwise noted	NRCS - ECS - 590 - Nutrient Management SWCD JAA – JAA-590LBR –Lagoon Biosolids Removal <u>Practice</u>
NRCS Standards and Supporting Documents	CPS—590 Nutrient Management 1217 Interagency Guidance Document
CS2 Reference Materials	NC-ACSP-11 Signature Page Map with BMP location, fields, and roads. NC WMP Form Division Sludge <u>Biosolid</u> Removal WMP Approval Letter
Additional Spot-check Requirements	All waste management systems for operations not permitted by the Division of Water Resources must be spot-checked annually for five years following implementation.

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Policies

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 - c. Cooperator acknowledgement form
 - d. Biosolids Impacts to Land Acknowledgement Form for each leased application field
 - e. Division biosolids removal waste management plan approval letter
4. This practice shall not be used to apply biosolids at a rate exceeding the following maximums:
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 - c. Planning shall project the impact of the biosolids application to heavy metal critical levels based on soil index.
 - d. In addition, the application shall not exceed the nitrogen requirement of the next receiving crop. If additional nitrogen is needed, consideration must be given to limit additional phosphorus application.
5. Biosolids shall not be applied to fields that are used for continual animal waste application due to increases in metals and phosphorus nutrient levels.

6. If required, a Manure/Litter Shared Responsibility Agreement must be used with each entity receiving transported biosolids.
7. Applicants who engage in value-added processing onsite are eligible for this practice. However, a cooperator who receives state cost share for any components of their value-added processing system (e.g., litter or manure composter, pelletizer) is not eligible for this practice.
8. An applicant may receive cost share for waste impoundment closure, waste storage structures, waste treatment structures, solids separation systems, and manure litter transport incentive and remain eligible for this practice. An applicant who received cost share for waste application systems previously is eligible for this practice.
9. A pre-construction conference including the district technical representative, biosolids management plan developer, contractor and landowner shall be held prior to commencement of biosolids removal.
10. Payments will be based upon the amount of biosolids transported for land application or processing. Requirements for payment include:
 - a. The applicant must present a record of the amount of manure transported to each receiving entity using the appropriate DWR forms.
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 - ii. The receiving entity must also provide the applicant with records using appropriate DWR forms indicating the fields to which biosolids has been applied and any other records required by 1217 Interagency Committee Guidance and/or other applicable rules. (Receiving entity must be in compliance with all applicable requirements)
 - iii. Certification from each entity receiving biosolids for processing that the waste has been processed and that the product has been transported from the processing facility for use.
 - c. A DSWC certification of biosolids removal form must accompany the Request for Payment.
11. A signed copy of the biosolids removal waste management plan must be sent to the appropriate DWR Regional Office and to animal.operations@deg.nc.gov prior to starting the biosolids removal.
12. Biosecurity measures outlined by the NC Department of Agriculture and Consumer Services must be followed for all transported biosolids.

13. BMP life is one year. Cooperators are ineligible to reapply for assistance for this practice on the receiving fields for 5 years and are not to exceed the cap per operation. Cost share payments for this practice are limited to a \$50,000 lifetime cap per operation.
14. Soil loss is not required. Include the amount of nitrogen and phosphorous units that will be properly managed under the BMP.

Specifications

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NRCS Standards and Supporting Documents	CPS—590 Nutrient Management 1217 Interagency Guidance Document
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