Program Year 2021 Agricultural BMP TAC Animal Waste Subcommittee 11-18-19 Meeting Agenda-10:00 am – 3:00 pm Virginia Department of Forestry, 1st floor Forest Management Conference Room 900 Natural Resources Drive Charlottesville

Voting Members in attendance:

Amanda Pennington, DCR, Chair Megen Dalton, Shenandoah Valley SWCD Josh Walker, Headwaters SWCD Steve Escobar, Equine Council Kevin Dunn, Peter Francisco SWCD Sam Truban, Lord Fairfax SWCD

Non Voting Member in attendance

Ben Chester, DCR

- Solid Liquid Separation Facilities
 - o Tax Credit vs. Cost Share
 - Can cost share on the installation and equipment if the least cost technically feasible option vs building a new pit
 - Would be more appropriate in the WP-4
 - Still would like to preview it at the TAC but supports adding to the WP-4 that if this is the least cost/technically feasible option it is eligible.
 - o Josh is meeting with vendor later this month and will get more information.
- CCI for earthen pits
 - o Only if they have engineered plans.
- Continue to work on remaining WP-4L specs
 - WP-4LL Loafing Lot for Non bovine
 - VOTE-unanimous to advance to TAC, note this vote was on the actual spec language
 - WP-4LSF Seasonal Feeding w/ attached manure storage-VOTE unanimous
 - WP-4-VOTE unanimous to advance to TAC, not this vote was on the actual spec language

WP-4LL

Loafing Lot Management System with Manure Management (Excluding Bovine Dairy)

This document specifies terms and conditions for the Virginia Department of Conservation and Recreation's animal waste control facilities best management practice, which are applicable to all contracts entered into with respect to that practice.

A. Description and Purpose

A planned system designed to prevent those areas exposed to heavy livestock traffic from experiencing excessive manure and soil losses due to the destruction of ground cover and to manage liquid and/or solid waste from areas where livestock are concentrated. The intent of this practice is to improve water quality by preventing manure and sediment runoff from entering watercourses and sensitive karst areas and capturing a portion of the manure as a resource for other uses by storing and spreading waste at the proper time, rate, and location.

A sacrifice lot or covered facility that includes a feeding area as well as a bedded or manure pack area with a manure storage area if needed. A minimum of three associated grassed lots are required. All streams must be excluded. Streams associated with the grassed lots require a 35' minimum buffer.

B. Policies and Specifications

1. Eligibility: Cost-share and tax credit are limited to solving the pollution problems where the livestock operation can show they have either:

i. Access to land for application, and where a full farm plan approach to solving the water quality problem is being carried out.

ii. A current Nutrient Management Plan that has been certified by a Virginia certified nutrient management planner and, if needed, a transfer plan prepared by a certified nutrient management planner for any livestock.

2. Practice Development

i. Before cost-share or tax credit can be approved all other means of reducing the environmental impacts of animal waste from the existing operation must be considered. Lack of space for relocation, economic inefficiency or other factors may be considered. A "Risk Assessment for Water Quality Impairment from heavy Use Areas/Animal Concentrated Areas" must be completed and a minimum score of 120 is required in order to be eligible.

ii. The applicant is also required to sign a Dry Manure Storage Structure Agreement DCR199-86 (03/18) or similar District agreement which addresses the minimum criteria prior to receiving any funds.

iii. A minimum of three grassed loafing lots are required and 60% cover on these lots must be maintained at all times.

iv. Determination of the storage capacity of animal waste facilities shall be reviewed and approved by the DCR agricultural BMP engineer. Storage capacity calculations completed by NRCS may be utilized.

v. Hardened walkway(s) may be installed to facilitate herd movement from the barn to the loafing lots. Walkway to be designed and installed in accordance with NRCS Standard 575, Trails and Walkways.

vi. A sacrifice area is required unless adequate housing facilities are available (e.g. free stall barns).

- Uncovered sacrifice areas must be scraped periodically and shall not exceed 600 square feet per animal unit (1000-lb. equivalent). Maximum slope shall not exceed 8%. Divert surface water away from the sacrifice area.
 - a. Provide filter strip per NRCS standard 393 to filter runoff from the sacrifice area.
 - b. Manure collected from the sacrifice area must be properly stored in an adequately sized structure. Existing storage structures shall be considered when sizing the manure storage facility.
- ii. Covered sacrifice areas shall not exceed 75 square feet per animal unit (1000-lb. equivalent). Manure may be managed as:
 - a. Bedded Pack
 - a. The pack area must be maintained to ensure dry conditions for livestock. Dry material, tillage, ventilation and/or aeration may be needed to maintain proper bedding conditions.
 - b. Does not require a separate manure storage, but it must have walls a minimum of 4' high to contain bedded pack.
 - c. Manure storage for bedded pack area is not authorized, but storage for manure captured from feed lanes is an eligible component.
 - b. Manure Pack
 - The pack area shall be maintained to prevent any materials from migrating from the structure limits as to impact water qualify. Regular scraping and/or the addition of bedding is required to stabilize the manure.
 - b. A separate storage component is required to store up to 6 months of manure production.
 - c. When a feed lane is utilized, a dry stack manure storage area sized based on livestock time at feed bunks, up to six (6) months storage of existing need.

4a. Cost-share and tax credit is authorized for:

- iii. Roofs over the feeding area and manure storage area and roof runoff system.
- iv. A hardened sacrifice area.

v. Fencing, walkways, and water system components to provide functional lots.

vi. For individual components of animal waste systems, only if the DCR Ag BMP Engineer determines that the component stands alone as a measure that will significantly improve water quality.

iii. Water system components to provide a functional structure.

- v. Seeding of permanent vegetative cover on acreage associated with this practice.
- vi. Filter strips in accordance with NRCS Standard 393.

5a. Cost-share and tax credit is not authorized for:

- i. Storage of manure generated outside of this facility.
- ii. Operations with sufficient grazing acreage.

6a. Compliance checks for both the covered and uncovered sacrifice lot and the grassed loafing lots are a required component of this practice and shall be performed in accordance with the schedule below:

- Year 1-All facilities and associated fields shall be checked to ensure compliance with this specification.
- If compliance is confirmed in Year 1, checks shall be performed on the following schedule. For example, the facility would be checked again in Years 4, 8 and 12.
- If the facility if found to be non-compliant, the identified practice failures procedure in the manual shall be followed. Once found to be in compliance, the facility shall be checked one year after compliance is achieved. If compliance is confirmed, checks shall resume in Years 4, 8 and 12.

7. The sizing calculations of the practice shall be reviewed and approved by the DCR Ag BMP Engineer (except for practices previously sized and engineered by NRCS) and shall be coordinated with the nutrient management plan so that adequate storage capacity is installed.

8. All appropriate local and state permits must be obtained before beginning construction.

9. Before cost-share or tax credits are provided, producers must be fully implementing a current Nutrient Management Plan (NMP) on all agricultural production acreage contained within the field that this practice will be implemented on and all associated livestock production acreage. The NMP must comply with all requirements set forth in the Nutrient Management Training and Certification Regulations, (4VAC50-85 et seq.) and the Virginia Nutrient Management Standards and Criteria (revised July 2014), must be prepared and certified by a Virginia certified nutrient management planner. Plans shall also contain any specific production management criteria designated in the BMP practice (4VACV50-85-130G).

10. This practice is subject to NRCS standards 313 Waste Storage Structure, 342 Critical Area Planting, 362 Diversion, 367 Roofs and Covers, 382 Fence, 393 Filter Strip, 412 Grassed Waterway, 516 Livestock Pipeline, 533 Pumping Plant, 558 Roof Run Off Management, 561 Heavy Use Protection, 575 Trails and

Walkways, 578 Stream Crossing, 614 Watering Facility, 620 Underground Outlet, 633 Waste Recycling, 634 Waste Transfer, 642 Water Well.

11. All practice components implemented must be maintained for a minimum of 15 years following the calendar year of installation. The lifespan begins on Jan. 1 of the calendar year following the year of certification of completion. By accepting either a cost-share payment or a state tax credit for this practice the participant agrees to maintain all practice components for the specified lifespan. This practice is subject to spot check by the District throughout the lifespan of the practice and failure to maintain the practice may result in reimbursement of cost share and/or tax credits.

C. Rate(s)

1. The state cost-share payment, alone or if combined with any other cost-share payment, will not exceed 75% of the total eligible cost. The maximum state payment for this practice is not to exceed \$100,000 per landowner per year.

2. As set forth by Virginia Code § 58.1-339.3 and §58.1-439.5, Virginia currently provides a tax credit for implementation of certain BMP practices. The current tax credit rate, which is subject to change in accordance with the Code of Virginia, is 25% of the total eligible cost not to exceed \$17,500.00.

3. If a participant receives cost-share, only the participant's eligible out-of-pocket share of the project cost is used to determine the tax credit.

D. Technical Responsibility

Technical and administrative responsibility is assigned to qualified technical DCR and District staff in consultation, where appropriate and based on the controlling standard, with DCR, Virginia Certified Nutrient Management Planner(s), NRCS, DOF, and VCE. Individuals certifying technical need and technical practice installation shall have appropriate certifications as identified above and/or Engineering Job Approval Authority (EJAA) for the designed and installed component(s). All practices are subject to spot check procedures and any other quality control measures.

WP-4LSF

Seasonal Feeding Facility with Attached Manure Storage

This document specifies terms and conditions for the Virginia Department of Conservation and Recreation's animal waste control facilities best management practice, which are applicable to all contracts entered into with respect to that practice.

A. Description and Purpose

A planned system designed to prevent those areas exposed to heavy livestock traffic from experiencing excessive manure and soil losses due to the destruction of ground cover and to manage liquid and/or solid waste from areas where livestock are concentrated. The intent of this practice is to improve water quality by preventing manure and sediment runoff from entering watercourses and sensitive karst areas and capturing a portion of the manure as a resource for other uses by storing and spreading waste at the proper time, rate, and location.

A covered concrete facility that includes a feeding area as well as a manure storage area that allows for the capture and storage of manure during inclement weather. An approved rotational grazing plan and stream exclusion are required.

B. Policies and Specifications

1. Eligibility: Cost-share and tax credit are limited to solving the pollution problems where the livestock operation can show they have either:

i. Access to land for application, and where a full farm plan approach to solving the water quality problem is being carried out.

ii. A current Nutrient Management Plan that has been certified by a Virginia certified nutrient management planner and, if needed, a transfer plan prepared by a certified nutrient management planner for any livestock.

2. Practice Development

i. Before cost-share or tax credit can be approved all other means of reducing the environmental impacts of animal waste from the existing operation must be considered. Lack of space for relocation, economic inefficiency or other factors may be considered. A "Risk Assessment for Water Quality Impairment from heavy Use Areas/Animal Concentrated Areas" must be completed and a minimum score of 120 is required in order to be eligible.

ii. The applicant is also required to sign a Dry Manure Storage Structure Agreement DCR199-86 (03/18) or similar District agreement which addresses the minimum criteria prior to receiving any funds.

iii. Determination of the storage capacity of animal waste facilities shall be reviewed and approved by the DCR agricultural BMP engineer except for practices previously sized and engineered by NRCS.

iv. Feeding area shall be sized on the current herd size and planned feeding method, not to exceed 75 SF per animal unit.

4a. Cost-share and tax credit is authorized for:

i. Feeding area.

ii. A dry stack manure storage area sized for up to six (6) months of manure production.

iii. Roofs over the feeding area and manure storage area and roof runoff system.

iv. For individual components of animal waste systems, only if the DCR Ag BMP Engineer determines that the component stands alone as a measure that will significantly improve water quality.

b. Fencing and walkways.

4b. Cost-share and tax credit is not authorized for:

i. Storage of manure generated outside of this facility.

ii. Troughs within the structure.

iii. For animal waste facilities that do not meet local or state regulations.

7. The sizing calculations of the practice shall be reviewed and approved by the DCR Ag BMP Engineer (except for practices previously sized and engineered by NRCS) and shall be coordinated with the nutrient management plan so that adequate storage capacity is installed.

8. All appropriate local and state permits must be obtained before beginning construction.

9. Before cost-share or tax credits are provided, producers must be fully implementing a current Nutrient Management Plan (NMP) on all agricultural production acreage contained within the field that this practice will be implemented on and all associated livestock production acreage. The NMP must comply with all requirements set forth in the Nutrient Management Training and Certification Regulations, (4VAC50-85 et seq.) and the Virginia Nutrient Management Standards and Criteria (revised July 2014), must be prepared and certified by a Virginia certified nutrient management planner. Plans shall also contain any specific production management criteria designated in the BMP practice (4VACV50-85-130G).

This practice is subject to NRCS standards 313 Waste Storage Structure, 342 Critical Area Planting,
362 Diversion, 367 Roofs and Covers, 382 Fence, 412 Grassed Waterway, 558 Roof Run Off
Management, 561 Heavy Use Protection, 575 Trails and Walkways, 620 Underground Outlet, 633 Waste
Recycling and 634 Waste Transfer.

11. All practice components implemented must be maintained for a minimum of 15 years following the calendar year of installation. The lifespan begins on Jan. 1 of the calendar year following the year of certification of completion. By accepting either a cost-share payment or a state tax credit for this practice the participant agrees to maintain all practice components for the specified lifespan. This

practice is subject to spot check by the District throughout the lifespan of the practice and failure to maintain the practice may result in reimbursement of cost share and/or tax credits.

C. Rate(s)

1. The state cost-share payment, alone or if combined with any other cost-share payment, will not exceed 75% of the total eligible cost. The maximum state payment for this practice is not to exceed \$100,000 per landowner per year.

2. As set forth by Virginia Code § 58.1-339.3 and §58.1-439.5, Virginia currently provides a tax credit for implementation of certain BMP practices. The current tax credit rate, which is subject to change in accordance with the Code of Virginia, is 25% of the total eligible cost not to exceed \$17,500.00. 3. If a participant receives cost-share, only the participant's eligible out-of-pocket share of the project cost is used to determine the tax credit.

D. Technical Responsibility

Technical and administrative responsibility is assigned to qualified technical DCR and District staff in consultation, where appropriate and based on the controlling standard, with DCR, Virginia Certified Nutrient Management Planner(s), NRCS, DOF, and VCE. Individuals certifying technical need and technical practice installation shall have appropriate certifications as identified above and/or Engineering Job Approval Authority (EJAA) for the designed and installed component(s). All practices are subject to spot check procedures and any other quality control measures.