**VANDINE DAIRY FARMSCERTIFICATION REQUEST REQUIRED DOCUMENTATION**

 Vandine Dairy Farms is a dairy farm located in Muncy Creek Township, Lycoming County. They farm cropland in Moreland, Muncy Creek, and Wolf Townships. All of the tracts submitted in the Vandine Dairy Farms current certification and this certification amendment request are farmed with alternating years of corn grain and soybeans. The farms with hay and corn silage that are part of the operation do not generate credits.

**CERTIFICATION REQUEST DOCUMENTATION REQUIREMENTS**

1. **Baseline and Threshold (25 Pa Code 96.8)**

The Vandine Dairy Farms farm meets baseline requirements of 025 PA Code 96.8 by having the following required items:

1. Manure Management Plan for all tracts receiving manure (025 PA 83 Subchapter D)
2. Conservation Plans for all tracts (025 PA 102)

Vandine Dairy Farms is in full compliance of the requirements of its Conservation Plans and Nutrient Management Plan.

Vandine Dairy Farms farm meets the threshold needed to generate credits by applying commercial fertilizer at or below agronomic rates contained in the current *Penn State University Agronomy Guide* published by Pennsylvania State University.

**Credit Generation**

Vandine Dairy Farms is primarily a no-till operation. RUSLE2 calculations were run for each field over the entire operation. All credits generated by Vandine Dairy Farms are generated by going beyond the baseline tillage requirements to meet the tolerable soil loss rate.

**Credit Calculation Method**

All credits for this certification request will be for Nitrogen (N) credits only. To do this, the current version of the Nonpoint Source Nitrogen Calculation Spreadsheet found on the PA DEP Nutrient Trading Webpage was used. The manure figures used include the manure application rates and manure analysis found in the original certification.

 All cropland associated with this certification lies within Watershed Segment 70. The watershed segment has a Nitrogen delivery ratio of 0.941. The Nitrogen Edge of Stream Ratios for this watershed is 45% for conventional tillage, 45% for conservation tillage, 86% for hay, and 13% for pasture.

1. **Location Maps of the Proposed Prevention Reduction Activity (PRA)**

The following maps have been submitted to show the locations of the proposed PRA for each tract:

1. An FSA map showing the farm boundaries, the field boundaries of tracts that generate credits, adjacent or nearby road names, and any visible receiving streams.
2. A soil map showing the soils in the fields generating credits. A chart with all of the operation’s soil type symbols and their names is also attached with this proposal.
3. A topographic map showing the general area, topography of the tract, and a latitude and longitude reading for the center of the PRA activity.
4. **Details on the Timing of Credits**

Credits will be verified after the spring crops have been planted. This is usually done in the May-July timeframe.

1. **Water Quality Uses Under Chapter 93**

|  |  |  |  |
| --- | --- | --- | --- |
| Tract number(s) | Local Watershed Name | Watershed Name | Major Basin |
| 594 & 2651 | Glade Run | Muncy Creek | Susquehanna River |
| 447 & 450 | Little Muncy Creek | Muncy Creek | Susquehanna River |
| 2379,2651 & 2652 | Muncy Creek | Muncy Creek | Susquehanna River |
| 604 & 605 | UNT to Muncy Creek | Muncy Creek | Susquehanna River |
| 969 | Wolf Run | Muncy Creek | Susquehanna River |

Little Muncy Creek, UNT to Muncy Creek, and Wolf Run are listed in Chapter 93 as having a designated use of CWF (Cold Water Fishes). Muncy Creek is listed as TSF (Trout Stocked Fishery) and Glade Run is listed as WWF (Warm Water Fishery). None of the receiving streams segments are listed as having impairments.

1. **Funding Source Information**

Vandine Dairy Farms has not received public funding sources to generate these credits.

1. **Risk Reduction Plan**

Provisions have been put into place to minimize the operator from not producing the credits through a contract with him, the Lycoming County Conservation District, and the County of Lycoming. The contract states that if the operator is under contract for future credits, he must supply them or provide the money required to pay the Lycoming County Nutrient Trading Program the amount it would cost to buy the amount of credits he did not generate. In most cases, we recommend that our producers sign one year contracts for practices that are not permanent like the CREP BMPs. In addition to this provision, the Lycoming Nutrient Trading Program has a fund set aside equal to 25%-30% of all previously sold credits in case there is a credit generator who defaults on contracted credits by no fault of his own. This fund could also be used to produce contracted credits for a generator instead of having a generator purchase them if he defaults depending on the circumstance of the credit default.

1. **Preservation and Conservation Easement Information**

Tracts 59 4and 604 are enrolled in the Muncy Creek Township Ag Security Program. None of tracts are enrolled in the Lycoming County Ag Preservation Program.

1. **Confidential Business Information**

N/A

1. **Submitting Person and PRA Participants**

**Submitter’s Information**

Submitting Agency: Lycoming County Conservation District

Address: 542 County Farm Road, Suite 202

 Montoursville, PA 17754

Contact Name: Rod Morehart, Chesapeake Bay Technician

Contact Phone #: 1(570) 329-1619

**PRA Participants Information**

Operation Information: Vandine Dairy Farms

Address: 809 Swank Hill Road

 Muncy, PA 17756

Contact Name: Wayne Vandine

Other PRA Participants: Steven Vandine

1. **Professional Qualifications**

Rod Morehart received a B.S.in Wildlife Management from Delaware State University in 2001. He has worked in the conservation field full time since May 2001. He has been nutrient management certified in Maryland, Delaware or Pennsylvania since 2002. He is also a certified conservation planner through the NRCS’s training program. Rod has been involved with the Lycoming County Nutrient Trading Program since its inception. He has written most of the proposals that have been submitted to date. He has completed all of the annual field verification and credit verification submission work since the program started selling credits.

1. **Verification Plan**

A field verification visit will be made to inspect the tillage used on all fields that can generate tillage related credits after the spring planting has occurred.

**Attachments to Supplement the Certification Request Form and**

**Certification Request Required Documentation**

1. **Maps Folder (Each folder listed below contains an FSA map, Soil Map, and a Topographic Map)**

Tract 447 Tract 450 Tract 594 Tract 604 Tract 605

Tract 969 Tract 2379 Tract 2561 Tract 2562

An Aerial Map or FSA map showing the farm boundaries, the field boundaries of tracts that generate credits, adjacent or nearby road names, and any visible receiving streams.

A soil map showing the soils in the fields generating credits.

A topographic map which shows a tract’s general location, topography, and a latitude and longitude coordinate of the center of the tract’s PRA activities.

1. **RUSLE2 Folder**

**This folder contains the following RULSE2 PDFs:**

Tract 447F 2 Tract 447 F 1 Tract 447 F 2 Tract 594 F 1

Tract 604 F 1-2 Tract 969 F 2 & 3 Tract 2651 Tract 2379 F 2 & 3

Tract 2651 F 1 Tract 2562 F 1

1. **Spreadsheet Folder**

**This folder contains the following spreadsheets:**

 Vandine T 447 F 2 Vandine T 450 F 1-2 Vandine T 594 F 1

 Vandine T 604 F 1 Vandine T 605 F 1-2 Vandine T 969 F 2 & 3

 Vandine T 2379 F 2-3 Vandine T 2651 F 1 Vandine T 2652 F 1

1. **BMP Summary Spreadsheet**
2. **Spreadsheet Summary**