**ERNIE BROWN BEEF FARM CERTIFICATION REQUEST REQUIRED DOCUMENTATION**

Mr. Brown has a beef operation located in Cogan House Twp., Lycoming County. The operation is pasture based. The cattle are confined to a pasture with access to a feeding/manure storage building in the winter, but they are never fully confined unless they choose to be. During the growing season, the cattle are moved either daily or every other day.

Currently, there are 33 mature cows, 24 calves, and 4 steers on the operation. For the purposes of this proposal, we are assuming 100 mature cows, 100 calves, and 10 steers. This is the maximum number of animals that the operation could have and still fall under the guidelines of the PA Manure Management Plan Guidelines in terms of not being a regulated Concentrated Animal Operation through the PA Nutrient Management Program.

Animal movements were kept the same with the exception of T 3340 F 1 and T 3341 C1 and T 3341 C2. Thirteen days from their time in T 3340 F 1 were added to T 3341 C1 and T 3341 C2 in order to keep the winter manure application on T 3340 F 1 below the 10 T/A maximum allowed under the DEP Manure Management Plan guidelines.

**CERTIFICATION REQUEST DOCUMENTATION RQUIREMENTS**

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

Mr. Brown meets baseline requirements of 025 PA Code 96.8 by having the following required items:

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

Mr. Brown meets the threshold needed to generate credits by the requirement stated as, “Manure is not mechanically applied within 100 feet of a perennial or intermittent stream with a defined bed or bank, a lake or a pond”. Mr. Brown also applies commercial fertilizer at or below agronomic rates contained in the current ***Penn State University Agronomy Guide*** published by Pennsylvania State University.

**Credit Generation**

Mr. Brown’s operation generates credits based on practice that have been implemented into the grazing operation. These include Precision Grazing, Off-Stream Watering with and without Stream Fencing, and having a Riparian Forested Buffer. The credits are generated based on the difference between how the operation was run before the best management practices (BMPs) were implemented and how it is run now that the BMPs have been implemented.

**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 60. The watershed segment has a Nitrogen delivery ratio of 0.93. The Nitrogen Edge of Stream Ratios for this watershed is 55% for conventional tillage, 31% for conservation tillage, 78% for hay, and 15% for pasture.

The Planned manure figures are based on what was happing before the BMP implementation and the Current manure figures are based on what is happening now, with the assumption that the operation has the maximum number of animals that it can and still not be an Act 38 regulated operation and still be below the nitrogen application rates needed for the grassed hay based on current ***Penn State University Agronomy Guide*** figures.

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

Note: The Aerial Map and the Soil Map in the original proposal are still current and are not included.

1. **Details on the Timing of Credits**

Credits will be verified annually. This will be done by visiting the farm to make sure that all credit generating BMPs are being maintained and obtaining animal numbers and animal movement information. This visit will take place in the May-July timeframe.

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

|  |  |  |  |
| --- | --- | --- | --- |
| Tract numbers | Local Watershed Name | Watershed Name | Major Basin |
| 3340 & 3341 | Larrys Creek | Larrys Creek | Susquehanna River |

Larrys Creek is listed in Chapter 93 as having a designated use of HQ-CWF (High Quality- Cold Water Fishes).

The receiving stream segments for Tracts 3340 and 3341 are not impaired.

1. **Funding Source Information**

Mr. Brown has received public funding sources to generate these credits. The funding was through the USDA’s CREP Program. Mr. Brown’s CREP original contract expired in 2019 and he reenrolled his land into the program again. All credits are free and clear financially.

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 3340 and 3341are enrolled in the Cogan House Township Ag Security Area. Neither tract is enrolled in the Lycoming County Ag Preservation Program.

**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: Ernie Brown Beef Farm

Address: 88 Cowhide Lane

Trout Run, PA 17771

Contact Name: Ernie Brown

Other PRA Participants: N/A

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 checks.

1. **Verification Plan**

Credit verification will take place in the May-July time frame. An on-farm inspection of BMPs and meeting with Mr. Brown to get animal numbers and animal movement information will occur during this visit.

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

**Certification Request Required Documentation**

1. **Spreadsheet Folder**

**This folder contains the following spreadsheets:**

E. Brown T 3340 3 P & 4 P E. Brown T 3340 F 1

E. Brown T 3340 F 2 E. Brown T 3341 C 1

E. Brown T 3341 C 1

2. **RUSLE2 Folder**

E. Brown RUSLE2

3. **Map Folder**

**This folder includes the following maps:**

E. Brown T 3340 and T 3341 Map

E. Brown T 3340 and T 3341 Soil Map

E. Brown T 3340 and T 3341 Topographic Map

**4. E. Brown beef manure figures maximum numbers**

**5. E. Brown BMP Summary Spreadsheet**

**6. E. Brown Spreadsheet Summary**