

# RESOURCE ENHANCEMENT AND PROTECTION PROGRAM (REAP)



## SECTION ONE (1) PROGRAM GUIDELINES

Fiscal Year 2008-2009

**State Conservation Commission  
2301 N. Cameron Street  
Harrisburg, PA 17110-9408**

Phone: 717-787-8821  
FAX: 717-705-3778

[www.agriculture.state.pa.us/REAP](http://www.agriculture.state.pa.us/REAP)



Applications will be accepted beginning August 4, 2008

# Table of Contents

---

## Section 1 Program Guidelines

- Introduction .....1
- Eligibility.....1
- Program Requirements and Conditions.....1
- Application, Certification and Approval Procedures.....3

## Attachments

- Attachment 1 REAP Definitions (from Act 55 of 2007).....5
- Attachment 2 REAP Eligible Best Management Practices (BMPS) Year 08-09.....8
- Attachment 3 REAP Policy Conservation and Ag E&S Plans.....14
- Attachment 4 REAP No Till Equipment Requirements.....15
- Attachment 5 REAP Low Disturbance Manure Incorporation Equipment Requirements.... 17
- Attachment 6 Verification Signatures..... 19
- Attachment 7 Tax Credit Brokers.....20
- Attachment 8 Map Requirements..... 21
- Attachment 9 Nutrient Management Policy for REAP Participants..... 22
- Attachment 10 REAP Manure Management Summary..... 23



## Resource Enhancement and Protection (REAP) Program Guidelines 2008-2009

### Introduction

- Act 55 of 2007 created the Resource Enhancement and Protection Program (REAP). REAP allows farmers and businesses to earn tax credits in exchange for implementing “Best Management Practices” (BMPs) on agricultural operations that will enhance farm production and protect natural resources. All terms defined in Act 55 and used throughout these guidelines may be found in Attachment 1 (pages 5-7)
- The program is administered by the State Conservation Commission (Commission) and the tax credits will be granted by the Pennsylvania Department of Revenue.
- Eligible applicants may receive between 50% and 75% of project costs as state tax credits for up to \$150,000 per agricultural operation. The amount of tax credit available to a recipient is dependent on the type of BMP implemented. See Attachment 2 (pages 8-13) for a list of REAP Eligible BMPs.

### Eligibility

- Any individual or business who is subject to taxation by the Commonwealth of Pennsylvania under the following taxes is eligible to participate in REAP: Personal Income Tax, Corporate Net Income Tax, Capital Stock and Franchise Tax, Bank Shares Tax, Title Insurance Company Tax, Insurance Premiums Tax, and Mutual Thrift Institutions Tax.
- Agricultural operations must have a current conservation plan, an agricultural erosion and sedimentation control plan (Ag E&S plan), and a nutrient management plan, if one is required. The cost of developing and implementing these plans may be included as part of an application to qualify for the tax credit. All required plans must meet standards and criteria as established by the Commission. See Attachment 3 (page 14) for more information.
- An agricultural operation with an animal concentration area (ACA) must have implemented the Best Management Practices (BMPs) to control storm water runoff, loss of sediment and nutrients and runoff of other pollutants from the animal concentration area, or the implementation of these BMPs must be included in the application for a tax credit. Animal concentration areas are defined in Attachment 1 (page 5). Examples of animal concentration areas include barnyards, feedlots, loafing areas, etc.
- An agricultural operation with uncompleted BMPs contained in either an Ag E&S plan or a nutrient management plan must **first** include the remaining BMPs required in these plans in the application for a tax credit.

### Program Requirements and Conditions

There are three ways for applicants to participate in the REAP Program.

1. Implement eligible BMPs and receive tax credits directly to reduce your state tax bill. REAP tax credits will reduce, dollar for dollar, the amount of state tax you owe. You may carry forward your tax credit for up to fifteen years from the date the tax credit is awarded by the Department of Revenue, applying the credit on your annual taxes until you have depleted the credit.

2. You may sell your tax credits to another Pennsylvania taxpayer. Many taxpayers – individuals or corporations – seek to reduce their tax liability through the purchase of tax credits. A list of private brokers who arrange the sale of tax credits is found in Attachment 7 (page 20). The guidelines and application for the sale of REAP tax credits are included in Section 3 of these guidelines.
3. You may work with a sponsor that will help finance the BMPs on an agricultural operation. The farmer will be compensated for making improvements and the sponsor will receive the tax credit. A “sponsor” is defined in Attachment 1 (page 7). Examples of sponsors could include banks and other lending institutions, and businesses wishing to make an investment in conservation projects.

Tax credits for **75% of eligible costs** include the BMPs listed in Attachment 2 (pages 8-13). The following BMPs are eligible for 75% tax credits:

- Agricultural E&S Plans
- Conservation Plans
- Nutrient Management Plans, voluntary or mandatory
- Animal Concentration Area (ACA) BMPs
- BMPs to restrict livestock from streams when implemented with a 50 foot riparian forest buffer
- Riparian buffers of at least 50 foot in minimum width

Tax credits for **50% of eligible costs** include the BMPs and equipment listed in Attachment 2 (pages 8-13). These include the following:

- BMPs to exclude livestock from streams when implemented with a 35 foot riparian forest or vegetated buffer.
- BMP design and implementation or equipment purchase and installation, as approved by the Commission, where the BMP is necessary to reduce existing sediment and nutrient pollution to surface waters; including:
  - Manure storage systems
  - Alternative uses of manure
  - Filter strips
  - Grassed waterways
  - Management intensive grazing systems
  - No-till planting equipment

No tax credit will be provided for a publicly funded portion of a project; however, any portion of a project paid by a farmer for an eligible project may be included in a REAP application.

Tax credits will be awarded to projects completed after October 23, 2007.

The tax credit is to be returned if the practice is not maintained for the life span of the practice. Life spans established by the Commission for specific practices are found in Attachment 2 (pages 8-13). If the BMP is not maintained for the required period, the owner of the property upon which the project exists shall return to the Department of Revenue the full amount of the tax credit originally granted.

If the recipient of a tax credit provides prior written notification to the Commission that the recipient will be unable to maintain a BMP due to the sale of the property, cessation of an agricultural operation or other factors, the Commission may direct the Department of Revenue to prorate the amount of the tax credit that shall be returned based on the remaining lifespan of the BMP in question.

The Commission has established a policy on the trading of no till planting and low disturbance manure incorporation equipment which has received a REAP tax credit before the established lifespan of the equipment has expired. See Attachments 4 and 5 (pages 15-18) for more information on this policy.

The following are considered eligible costs of a project to which a tax credit may be applied:

1. Project design engineering and associated planning
2. Project management costs, including contracting, document preparation and applications.
3. Project construction or installation.
4. Equipment, materials and other components of eligible projects.
5. Post construction inspections.
6. Interest payments on loans for project implementation for up to one year prior to the award of the tax credit.

Any of the above costs for services that may be provided by a Conservation District or private sector technical service provider through a fee or charge are eligible costs and may be included in the REAP application. These services are eligible for 75% of eligible costs. This includes fees charged for preparation or verification of the REAP application.

### **Application, Certification and Approval Procedure**

The Commission will accept two types of applications:

- 1) Applications for eligible projects which are complete (after October 23, 2007).
- 2) Applications for eligible proposed projects which will be completed after the Commission determines project eligibility.

Applications will be accepted by the Commission on a first-come, first-served basis beginning **August 4, 2008** during the normal business hours of 8:00 am through 4:00 pm, Monday through Friday. Applications may be delivered in person, via US Postal Service, or via a private carrier to the Commission office at the following address: **Resource Enhancement and Protection (REAP) Program, State Conservation Commission, Room 407, 2301 North Cameron Street, Harrisburg, PA 17110**. Any applications received by the Commission which are postmarked prior to July 30, 2008 will be returned. The Commission will not accept any applications delivered in person prior to August 4, 2008 at 8:00 a.m. Applications will be accepted until the fiscal year 2008-2009 appropriation has been committed to eligible projects. Applications will be logged, date stamped, and reviewed in the order in which they are received.

The Commission will complete the application review within 60 days, and will notify the applicant in writing whether or not the application meets the requirements for an eligible project and is authorized to receive a tax credit under REAP.

When an eligible project is complete, the applicant must provide to the Commission a signed certification form indicating that the project is complete, and copies of paid receipts for the completed project. If the project is complete at the time of application, these documents should be included in the application. Upon receipt of these documents, the Commission will provide notification to the Department of Revenue that the eligible applicant has completed a project which meets the criteria for a REAP tax credit, and the amount of tax credit for the eligible applicant.

The Department of Revenue will conduct a compliance check to determine if the applicant has filed all required state tax reports and returns for all applicable tax years, and paid all balances of state taxes due.

Within 60 days of notice from the Commission that a completed project is eligible, the Department of Revenue will issue a notice of award of a tax credit to the eligible applicant.

For projects where the applicant is a sponsor, the Commission will require a signed written agreement between the sponsor (applicant) and the owner of the property on which the project will be completed, certifying that the property owner will comply with all of the requirements associated with award of the REAP tax credit.

For those applicants that do not have a current conservation plan, Ag E&S plan or nutrient management plan (if required), the applicant will be restricted to applying for tax credits for planning-related activities in the 2008-09 application. All plans completed for the purposes of REAP eligibility should, at a minimum, include Inventory and Evaluations for Animal Concentration Areas (ACAs) and uncompleted BMPs for which a future REAP tax credit will be requested. If the initial application is limited to planning activities, design work for ACAs and uncompleted BMPs contained in an Ag E&S plan or nutrient management plan (if required) may be included.

For projects that include the proposed purchase of equipment, delivery of equipment must take place by **June 30, 2009**.

In order to address projects with BMPs (other than equipment purchases) which must be phased in to successfully complete the proposed project(s), the Commission will also accept applications for these projects which span no more than **two** years total implementation.

Applications for projects which extend beyond June 30, 2009 must contain a detailed implementation schedule outlining the staging of the design and construction of all BMPs contained in the application. Multi-year applications must also include a detailed schedule of estimated costs, indicating the month and year in which these costs will be incurred.

All multi-year projects deemed eligible by the Commission will be charged against the total REAP appropriation in the fiscal year in which the original application is approved. Tax credits will be apportioned under the project agreement to cover costs incurred in future fiscal years.

Applicants are encouraged to complete all approved projects before June 30, 2009, or in the shortest timeframe possible. Implementation and completion schedules may be extended on a case-by case basis at the discretion of the Commission if the applicant notifies the Commission, in writing, of extraordinary circumstances which prevent the applicant from implementing a project on the approved schedule.

Tax credits awarded will not exceed the total amount approved in this application. Additional credits for projects costing more than the amount deemed eligible in this application must be submitted as a new application and will be considered if and when additional REAP tax credits are available.

The Commission will consider applications for tax credits for BMPs on existing agricultural operations. Projects which include expansion of an existing agricultural operation of greater than 25% will not be eligible for REAP tax credit.

For all issues not specifically addressed by these guidelines, please refer to the provisions of Act 55 of 2007, Section 1701-E to Section 1710-E, or contact the Commission at 717-787-8821. Questions regarding tax implications for individual applicants should be directed to an accountant or other tax professional.

Act 55 of 2007 (Section 1702-E)

**DEFINITIONS**

"AGRICULTURAL EROSION AND SEDIMENTATION CONTROL PLAN." SITE-SPECIFIC PLAN THAT:

1. MEETS THE REQUIREMENTS OF THE ACT OF JUNE 22, 1937 P.L.1987, NO.394), KNOWN AS THE CLEAN STREAMS LAW AND 25 PA. CODE CH. 102 (RELATING TO EROSION AND SEDIMENT CONTROL);
2. IDENTIFIES BEST MANAGEMENT PRACTICES TO MINIMIZE ACCELERATED EROSION AND SEDIMENT FROM AN AGRICULTURAL OPERATION.

"AGRICULTURAL OPERATION." THE PROPERTY ON WHICH OCCUR THE MANAGEMENT AND USE OF FARMING RESOURCES FOR THE PRODUCTION OF CROPS, LIVESTOCK OR POULTRY OR FOR EQUINE ACTIVITY.

"ANIMAL CONCENTRATION AREAS." AN EXTERIOR AREA OF AN AGRICULTURAL OPERATION SUBJECT TO RAINFALL WHERE LIVESTOCK CONGREGATE, INCLUDING A BARNYARD, A FEEDLOT, A LOAFING AREA, AN EXERCISE LOT OR OTHER SIMILAR ANIMAL CONFINEMENT AREA THAT WILL NOT MAINTAIN A GROWING CROP, OR WHERE DEPOSITED MANURE NUTRIENTS ARE IN EXCESS OF CROP NEEDS. THE TERM DOES NOT INCLUDE AREAS MANAGED AS A PASTURE OR OTHER CROPLAND AND PASTURE ACCESSWAYS IF THEY DO NOT CAUSE DIRECT FLOW OF NUTRIENTS TO SURFACE WATER OR GROUNDWATER.

"BEST MANAGEMENT PRACTICE." A PRACTICE OR COMBINATION OF PRACTICES DETERMINED BY THE STATE CONSERVATION COMMISSION OR UNITED STATES DEPARTMENT OF AGRICULTURE NATURAL RESOURCES AND CONSERVATION SERVICE TO BE EFFECTIVE AND PRACTICAL, CONSIDERING TECHNOLOGICAL, ECONOMIC AND INSTITUTIONAL FACTORS, TO MANAGE NUTRIENTS AND SEDIMENT TO PROTECT SURFACE WATER AND GROUNDWATER.

"BUSINESS FIRM." AN ENTITY AUTHORIZED TO DO BUSINESS IN THIS COMMONWEALTH AND SUBJECT TO THE TAXES IMPOSED BY ARTICLE III, IV, VI, VII, VIII, IX OR XV.

"COMMISSION." THE STATE CONSERVATION COMMISSION.

"CONSERVATION DISTRICT." A COUNTY CONSERVATION DISTRICT ESTABLISHED UNDER THE ACT OF MAY 15, 1945 (P.L.547, NO.217), KNOWN AS THE CONSERVATION DISTRICT LAW.

"CONSERVATION PLAN." A PLAN, INCLUDING A SCHEDULE FOR IMPLEMENTATION, THAT IDENTIFIES SITE SPECIFIC CONSERVATION BEST MANAGEMENT PRACTICES ON AN AGRICULTURAL OPERATION.

"DEPARTMENT." THE DEPARTMENT OF REVENUE OF THE COMMONWEALTH.

"ELIGIBLE APPLICANTS." A BUSINESS FIRM OR AN INDIVIDUAL WHO IS SUBJECT TO THE TAXES IMPOSED BY ARTICLE III, IV, VI, VII, VIII, IX OR XV.

"EQUINE ACTIVITY." THE TERM INCLUDES THE FOLLOWING ACTIVITIES:

- (1) THE BOARDING OF EQUINES.
- (2) THE TRAINING OF EQUINES.
- (3) THE INSTRUCTION OF PEOPLE IN HANDLING, DRIVING OR RIDING EQUINES.
- (4) THE USE OF EQUINES FOR RIDING OR DRIVING PURPOSES.
- (5) THE PASTURING OF EQUINES.

THE TERM DOES NOT INCLUDE ACTIVITY LICENSED UNDER THE ACT OF DECEMBER 17, 1981 (P.L.435, NO.135), KNOWN AS THE RACE HORSE INDUSTRY REFORM ACT.

"INDIVIDUAL." A NATURAL PERSON.

"LEGACY SEDIMENT." SEDIMENT THAT MEETS ALL OF THE FOLLOWING CONDITIONS:

- (1) WAS ERODED FROM UPLAND AREAS AFTER THE ARRIVAL OF EARLY PENNSYLVANIA SETTLERS AND DURING CENTURIES OF INTENSIVE LAND USE.
- (2) WAS DEPOSITED IN VALLEY BOTTOMS ALONG STREAM CORRIDORS, BURYING PRESETTLEMENT STREAMS, FLOODPLAINS, WETLANDS AND VALLEY BOTTOMS.
- (3) ALTERED AND CONTINUES TO IMPAIR THE HYDROLOGIC BIOLOGIC, AQUATIC, RIPARIAN AND WATER QUALITY FUNCTIONS OF PRESETTLEMENT AND MODERN ENVIRONMENTS.

"NUTRIENT MANAGEMENT PLAN." AS DEFINED UNDER 3 PA.C.S. CH. 5 (RELATING TO NUTRIENT MANAGEMENT AND ODOR MANAGEMENT).

"NUTRIENT MANAGEMENT SPECIALIST." AS DEFINED UNDER 3 PA.C.S. CH. 5 (RELATING TO NUTRIENT MANAGEMENT AND ODOR MANAGEMENT).

"PASS-THROUGH ENTITY." A PARTNERSHIP AS DEFINED IN SECTION 301(N.0) OR A PENNSYLVANIA S CORPORATION AS DEFINED IN SECTION 301(N.1).

"QUALIFIED TAX LIABILITY." THE LIABILITY FOR TAXES IMPOSED UPON AN ELIGIBLE APPLICANT UNDER ARTICLE III, IV, VI, VII, VIII, IX OR XV. THE TERM SHALL NOT INCLUDE ANY TAX WITHHELD BY AN EMPLOYER FROM AN EMPLOYEE UNDER ARTICLE III.

"RIPARIAN FOREST BUFFER." AN AREA OF MOSTLY TREES OR SHRUBS WHICH IS ADJACENT TO AND UP-GRADIENT FROM WATERCOURSES OR WATER BODIES AND WHICH MEETS STANDARDS ESTABLISHED BY THE UNITED STATES DEPARTMENT OF AGRICULTURE NATURAL RESOURCES AND CONSERVATION SERVICE.

"TECHNICAL SERVICE PROVIDER." AN INDIVIDUAL, ENTITY OR PUBLIC AGENCY CERTIFIED BY THE UNITED STATES DEPARTMENT OF AGRICULTURE NATURAL RESOURCES CONSERVATION SERVICE AND PLACED ON THE APPROVED LIST TO PROVIDE TECHNICAL SERVICES TO PROGRAM PARTICIPANTS OR TO THE UNITED STATES DEPARTMENT OF AGRICULTURE PROGRAM PARTICIPANTS.

"USDA-NRCS." THE UNITED STATES DEPARTMENT OF AGRICULTURAL NATURAL RESOURCES AND CONSERVATION SERVICE.

.....  
Terms not found in Act 55, as defined by the Commission:

"SPONSOR." A BUSINESS SUBJECT TO THE FOLLOWING PENNSYLVANIA TAXES (PERSONAL INCOME TAX, CORPORATE NET INCOME TAX, CAPITAL STOCK AND FRANCHISE TAX, BANK SHARES TAX, TITLE INSURANCE COMPANY PREMIUMS TAX, INSURANCE PREMIUMS TAX, AND MUTUAL THRIFT INSTITUTIONS TAX) WHICH RECEIVES A REAP TAX CREDIT EQUAL TO THE AMOUNT OF MONEY IT CONTRIBUTES TOWARD ELIGIBLE FARM CONSERVATION PROJECTS. IN RETURN, THE BUSINESS RECEIVES ITS ENTIRE INVESTMENT BACK IN THE FORM OF A TAX CREDIT. AGRICULTURAL OPERATIONS PROVIDE THE MATCHING FUNDS. THE SPONSOR IS THE APPLICANT FOR THE REAP TAX CREDIT.

**REAP Eligible Best Management Practices (BMPs)**

1. BMPs with practice codes (xxx) are conservation practices contained in the PA Soil and Water Conservation Technical Guide (eFOTG)
  2. Unless otherwise noted, BMP lifespan is 5 years
  3. Unless otherwise noted, REAP tax credit rate is 50%
- .....

**Access Road (Ft.) – 560**

- Eligible for access to newly established BMPs only (i.e., 313, 316, 317, 561)

**Animal Mortality Facility (No.) – 316**

- Lifespan: 10 years
- If nutrient resource planning has not been completed, REAP MMS or similar Manure Management Plan required

**Animal Trails and Walkways (Ft.) – 575**

- Eligible in conjunction with Prescribed Grazing (528) only

**Brush Management (Ac.) – 314**

- Applicable to removing undesirable woody vegetation in pastures by mechanical and/or chemical methods
- Eligible in conjunction with Prescribed Grazing (528) only

**Channel Vegetation (Ac.) – 322**

- Eligible in conjunction with Vegetated Buffer and Filter Strip (393) establishment only

**Clearing and Snagging (Ac.) – 326**

- Eligible in conjunction with Prescribed Grazing (528) only

**Closure of Waste Impoundments (No.) – 360**

**Composting Equipment**

- Lifespan: Equipment Lifespan New-7 years, used-3 years
  - Compost Screeners
  - Compost Turning Equipment
  - Compost Baggers
  - Other Equipment approved by the Commission

**Composting Facility (No.) – 317**

- Lifespan: 10 years
- If nutrient resource planning has not been completed, REAP MMS or similar Manure Management Plan required

**Comprehensive Nutrient Management Plan (CNMP) (No.) – 100**

- Lifespan: 3 years
- May be used to meet REAP nutrient resource planning requirements
- See NRCS policy guidance in eFOTG

**Constructed Wetland (No.) – 656**

- Eligible for wastewater treatment only

**Contour Farming (Ac.) – 330**

- Planning and Layout costs only

#### **Cover Crop (Ac.) – 340**

- Establishment costs for initial year only.

#### **Critical Area Planting (Ac.) – 342**

#### **Diversion (Ft.) – 362**

#### **Fence (Ft.) – 382**

- Lifespan: 10 years
- Used in conjunction with Use Exclusion (472) to protect other practices and/or land uses and in conjunction with Prescribed Grazing (528) only
- **75% rate when used for animal exclusion in conjunction with 50 Foot Riparian Forest Buffer (391)**
- 50% rate when used for animal exclusion in conjunction with Riparian Herbaceous Buffer (390) and 35 foot vegetated buffer

#### **Filter Strip (Ac.) – 393**

- Vegetated buffer establishment only

#### **Grade Stabilization Structure (No.) – 410**

- Gully erosion control, or
- Diversion of clean water around livestock areas, or
- Collection/storage of contaminated wastewater

#### **Grassed waterway (Ac.) – 412**

#### **Grazing Land Mechanical Treatment (Ac.) – 548**

- Eligible in conjunction with Prescribed Grazing (528) only

#### **Heavy Use Area Protection (Ac.) – 561**

- Lifespan: 10 years
- Roof structures over **entire** Heavy Use Areas are not eligible for REAP tax credits.
- Roof structures over portions of Heavy Use Areas, when used for the storage of manure (See Waste Storage Facility) **may be** eligible for REAP tax credits.
- If nutrient resource planning has not been completed, REAP MMS or similar Manure Management Plan required
  - REAP MMS not required when used in Prescribed Grazing (528)
- **75% rate when used for ACA treatment**

#### **Lined Waterway or Outlet (Ft.) – 468**

- Used where vegetation alone will not provide adequate stabilization

#### **Manure Incineration Equipment**

- Lifespan: Equipment New-7 years, Used-3 Years
  - Furnaces
  - Burners
  - Conveyors
  - Other Equipment approved by the Commission

#### **Manure Incorporation Equipment – Low-disturbance**

- Lifespan: Equipment New – 7 years, Used – 3 years

- Vertical Tillage Tools (flat coulters)
- Rotary Harrows
- Shallow Disc Injectors
- Aerator Type Equipment
- Aerator/Injector Combination
- If nutrient resource planning has not been completed, REAP MMS or similar Manure Management Plan required.

### **Manure Separation Equipment**

- Lifespan: Equipment New -7 years, Used- 3 years
  - Centrifuges
  - Dryers
  - Pelletizers
  - Screens
  - Screw Presses
  - Other Equipment approved by the Commission
- If nutrient resource planning has not been completed, REAP MMS or similar Manure Management Plan required

### **Manure Transfer (No.) – 634**

- Lifespan: 10 years
- Eligible in conjunction with Waste Storage Facility (313) and Alternative Manure Utilization only
- Not eligible for transfer of manure from a Waste Storage Facility (313) for distribution, application or irrigation
- If nutrient resource planning has not been completed, REAP MMS or similar Manure Management Plan required

### **Mulching (Ac.) – 484**

#### **No Till Planting Equipment**

- Lifespan: New – 7 years, Used – 3 years
  - No-till Planters
  - No-till Drills

#### **Nutrient Management Planning (Ac.) – 590 or Act 38 Standards**

- Lifespan: 3 years
- May be used to meet REAP nutrient resource planning requirements
- See NRCS policy guidance in eFOTG or Act 38 Technical Manual

#### **Obstruction Removal (Ac.) – 500**

- Eligible when existing obstructions interfere with other planned BMPs

#### **Pasture and Hayland Planting (Ac.) – 512**

- Eligible for conversion to Prescribed Grazing (528) only

#### **Pipeline (Ft.) – 516**

- Not eligible for transfer of manure from a Waste Storage Facility (313) for distribution, application or irrigation

#### **Pond (No.) – 378**

- Lifespan: 10 years
- Livestock water source only

- Eligible in conjunction with Prescribed Grazing (528) only

**Pond sealing or Lining (No.) – 521**

- Eligible for earthen Waste Storage Facilities
- Eligible for Ponds, when used as a livestock water source

**Prescribed Grazing (Ac.) – 528**

- Planning costs only

**Pumping Plant for Water Control (No.) – 533**

- Lifespan: 10 years
- Eligible for livestock water source only

**Riparian Forest Buffer (Ac.) – 391**

- Lifespan: 15 years
- Vegetated buffer establishment only
- 180 foot maximum width eligible for REAP Tax Credit
- **75% rate when used in conjunction with 50 foot minimum width**
- 50% rate when used in conjunction with 35 foot minimum width
- Maintenance costs for three (3) years may be included in eligible costs
- Practice available to agricultural and non-agriculture operations

**Riparian Herbaceous Cover (Ac.) – 390**

- Vegetated buffer establishment only

**Roof Runoff Structure (No.) – 558**

- **75% rate when used for ACA treatment**
- Used to collect and direct water coming from roofs over an ACA, manure storage and barns.
- Roofs not included under this practice.

**Sediment Basin (No.) – 350**

**Sinkhole and Sinkhole Area Treatment Interim (Ac.) – 370**

**Silage Leachate Management**

- Lifespan: Equal to longest component BMP lifespan not to exceed 15 years

**Solid/Liquid Waste Separation Facility (No.) – 632**

- Lifespan: 10 years
- If nutrient resource planning has not been completed, REAP MMS or similar Manure Management Plan required

**Spring Development (No.) – 574**

- Eligible in conjunction with Prescribed Grazing (528) only

**Stream Channel Stabilization (Ft.) - 584**

- Lifespan: 10 years
- Used to stabilize stream banks eroded due to excessive water flow or livestock activity

**Stream Crossing (No.) – 578**

- Lifespan: 10 years

- Eligible for agricultural equipment crossings and in conjunction with Prescribed Grazing (528)

**Streambank and Shoreline Protection (Ft.) - 580**

- Lifespan: 10 years
- Used to stabilize stream banks eroded due to excessive water flow or livestock activity

**Stripcropping (Ac.) – 585**

- Planning and layout costs only

**Structure for Water Control (No.) – 587**

**Subsurface Drain (Ft.) – 606**

- Tile drainage
- Eligible in support of other BMP installation only

**Subsurface Drainage (Ft.) – 607**

- Other than tile drainage (ditches, etc.)
- Eligible in support of other BMP installation only

**Terrace (Ft.) – 600**

**Tree/Shrub Establishment (Ac.) – 612**

- Lifespan: Riparian Forest Buffer (391) – 15 years
- Lifespan: Vegetated Buffer – 10 years
- 180 foot maximum width eligible for REAP Tax Credit
- Eligible in conjunction with Riparian Forest Buffer (391) and Vegetated Buffer establishment only
- ***75% rate when used in conjunction with 50 foot minimum width Riparian Forest Buffer***

**Underground Outlet (Ft.) – 620**

**Vegetated Buffer (Ac.)**

- Eligible for Act 38 manure application buffer
- 35' minimum width
- Establishment of any mixture of herbaceous vegetation

**Waste Facility Cover (No.) – 367**

- Lifespan: 10 years
- If nutrient resource planning has not been completed, REAP MMS or similar Manure Management Plan required

**Waste Storage Facility (No.) – 313**

- Lifespan: 10 years
- If nutrient resource planning has not been completed, REAP MMS or similar Manure Management Plan required

**Waste Treatment (No.) – 629**

- Eligible for mechanical treatment only

- If nutrient resource planning has not been completed, REAP MMS or similar Manure Management Plan required

**Waste Treatment Lagoon (No.) – 359**

- Lifespan: 10 years
- If nutrient resource planning has not been completed, REAP MMS or similar Manure Management Plan required

**Waste Utilization (Ac.) – 633**

- Eligible in conjunction with Alternative Manure Utilization only

**Wastewater Treatment Strip (Ac.) – 635**

- If nutrient resource planning has not been completed, REAP MMS or similar Manure Management Plan required
- **75% rate when used for ACA treatment**

**Water and Sediment Control Basin (No.) – 638**

**Water Well (No.) – 642**

- Eligible for livestock water source when used in conjunction with Prescribed Grazing (528) only

**Watering Facility (No.) – 614**

- Eligible in conjunction with Prescribed Grazing (528) only

**Well Decommissioning (No.) – 351**

**Windbreak/Shelterbelt Establishment (Ft.) – 380**

- Lifespan: 10 years
- Eligible in conjunction with Prescribed Grazing (528) only

REAP Policy – Conservation and Ag E&S Plans

For the purposes of REAP, a conservation plan is defined as “current” if the plan accurately reflects the existing operation; including correct current number of acres, crop rotations, tillage, and animal numbers.

A current conservation plan must address the following soil, water and nutrient resource concerns on the agricultural operation with the identified quality criteria:

Resource Concern	Description of Concern	Quality Criteria	Assessment or Evaluation Tools
Soil Erosion – Sheet & Rill	Detachment and transport of soil particles degrade soil quality.	Sheet and Rill erosion does not exceed “T” over the crop rotation.	Visual, RUSLE hard copy, RUSLE2
Soil Erosion – Ephemeral & Classic Gully	Small and large channels degrade soil quality.	Conservation Practices or BMPs stabilize the small and large channels.	Visual, volume calculation
Water Quality – Excessive Suspended Sediment in Surface Water	Cropping system includes crops with <25% <i>cover</i> * adjacent to <i>surface water</i> ** , which degrades <i>surface water</i> ** quality.	Cropland with <25% <i>cover</i> * within 100’ of <i>surface water</i> ** are treated with additional Conservation Practices or BMPs to mitigate adverse effect.	Visual, transect measurement
Water Quality – Excessive Nutrients & Organics in Surface Water and Groundwater #	Pollution from human-induced nutrients (N, P and Organics) degrades <i>surface water</i> **/groundwater.	Nutrients and organics are stored, handled and applied to mitigate adverse effect.	Visual, water quality indicators, P Index, MMM***, P.C. 590, Act 38, Act 38 + Permit

- \* The term *cover* includes post-harvest living plant cover and crop residue.
- \*\* The term *surface water* is limited to: perennial and intermittent streams, lakes, ponds and existing open sinkholes.
- \*\*\* The term *MMM* denotes the requirements of the DEP Manure Management Manual.
- # This resource concern is only required to be addressed for REAP farms if there are manure management issues requiring corrective action.

## REAP No Till Equipment Requirements

All REAP tax credit applications for the purchase of no-till equipment must meet ALL other general REAP Eligibility Requirements. Please complete the REAP Eligibility questions beginning on Page 3 of the Application to determine eligibility.

### Requirements for No-Till Equipment

The Commission will not approve applications for tax credits for any no-till equipment delivered before October 23, 2007.

For the fiscal year 2008-09 program, delivery of all no till planting equipment must take place by **June 30, 2009.**

All applicants for REAP tax credits for no till planting equipment must attach a bill of sale, sales order, price quote or receipt which shows the purchase price of the equipment. For sales transactions which are complete at the time of application, please provide the completion information on page 15 of the application, with signatures, and paid receipts which clearly reflect the total cost paid by the applicant.

### New equipment qualifications

- The no-till planter or drill must be capable of placing seeds at the optimum depth for germination and growth in untilled soil with residue cover.
- The equipment purchase must include field setup by an equipment dealer.
- Applicant must sign the attached agreement stating that the equipment will be utilized as intended in untilled soil consistent with the provisions of a current conservation plan.
- New equipment shall have a REAP lifespan of 7 years.

### Used equipment qualifications:

- The used no till drill or planter must be capable of placing seeds at the optimum depth for germination and growth in untilled soil with residue cover.
- The equipment purchase must include field setup by the equipment dealer.
- All wear items must meet or exceed manufacturer's guidelines for wear replacement parts as certified by a qualified equipment dealer.
- The equipment is certified to meet the above used equipment criteria by a qualified farm equipment dealer authorized by the Commission or any other person authorized by the Commission.
- Applicant must sign the certification stating that the equipment will be utilized as intended in untilled soil consistent with the provisions of a current conservation plan.
- The costs of parts, repair or refurbishing of existing no-till planting equipment does **not qualify** for REAP Tax credits.

- *Used equipment sold privately must also be certified by a dealer representative to meet the above used equipment criteria.*
- Used equipment shall have a lifespan of 3 years

“Trade in – Trade up” Policy

In some circumstances, an applicant may wish to sell or trade in a piece of no till planting equipment for which the applicant has received a REAP tax credit prior to the expiration of the required lifespan under the REAP program (7 years for new equipment, 3 years for used equipment.) for a comparable or larger piece of eligible no till equipment. The following policy is in effect for these instances:

- If a REAP tax credit recipient wishes to trade in a piece of equipment for which a REAP tax credit was received prior to the expiration of the lifespan, the applicant must immediately make a request to the Commission in writing.
- The Commission will consider the request for a “waiver” of the lifespan requirement if the applicant is trading or selling the original piece(s) of equipment for another piece of no till planting equipment which will allow the farmer to no till a comparable or larger number of no till acres.
- The applicant will be eligible for a REAP tax credit, up to the maximum \$150,000 per applicant, which equals the difference between the credit received on the originally purchased piece of equipment, and the eligible credit on the new equipment.
- The lifespan requirement “starts over” with the new piece of equipment.
- *Example:*
  - In March 2008, a REAP applicant purchased a used piece of no till planting equipment for \$20,000 and received a REAP tax credit of \$10,000. The lifespan of the equipment is three years.
  - In March 2009, the applicant wishes to trade in the used piece of equipment for a new no till planter which costs \$60,000. The difference between the original purchase of \$20,000 and the new purchase of \$60,000 is \$40,000.
  - The applicant is eligible for a REAP tax credit of \$20,000 on the new no till planter (or 50% of \$40,000)
  - The lifespan of the new equipment is seven years, which begins upon delivery of the new equipment in March 2009.
- If the recipient of a tax credit does not provide prior written notification to the Commission that the recipient requests to trade in or sell a piece of equipment for which a REAP tax credit has been received, the recipient is subject to the provisions of the REAP statute which require the recipient to return to the Department of Revenue the full amount of the tax credit originally granted.

## REAP Low-Disturbance Manure Incorporation Requirements

All REAP Tax Credit applications for the purchase of Low-Disturbance Manure Incorporation Equipment must meet ALL other general REAP Eligibility Requirements. Please complete the REAP Eligibility questions beginning on Page 3 of the Application to determine eligibility.

### Requirements for Low-disturbance Manure Incorporation Equipment

The Commission will not approve applications for tax credits for any Low Disturbance Manure Incorporation equipment purchased before October 23, 2007.

For the fiscal year 2008-09 program, delivery of all Low Disturbance Manure Incorporation equipment must take place by **June 30, 2009**.

All applicants for REAP tax credits for all Low Disturbance Manure Incorporation equipment must attach a bill of sale, sales order, price quote or receipt which shows the purchase price of the equipment. For sales transactions which are complete at the time of application, please provide the completion information on page 17 of the application, with signatures, and paid receipts which clearly reflect the total cost paid by the applicant.

### New equipment qualifications

- The equipment must be capable of leaving a minimum of 50% of pre-operation residue or cover on the surface following the manure incorporation operation.
- Adjustable equipment must be adjusted to meet the above residue or cover condition regardless of the number of equipment passes.
- The purchase of adjustable equipment must include field setup by an equipment dealer.
- The applicant must sign the attached agreement stating that the equipment will be utilized as intended in accordance with the provisions of a current conservation plan.
- New equipment shall have a REAP lifespan of 7 years.

### Used equipment qualifications:

- Used equipment must be capable of meeting the same conditions as new equipment
- All wear items must meet or exceed manufacturer's guidelines for wear replacement parts as certified by a qualified equipment dealer.
- The applicant must sign the attached agreement stating that the equipment will be utilized as intended in accordance with the provisions of a current conservation plan.
- The costs of operator-installed parts, repair or refurbishing of existing equipment does **not qualify** for REAP Tax credits
- *Used equipment sold privately must also be certified by a dealer representative to meet the above used equipment criteria.*
- Used equipment shall have a lifespan of 3 years.

### Eligible equipment:

Note: The eligible incorporation equipment below may also be set up to include the actual manure application operation.

1. Vertical tillage tools, using only flat coulters, that level and mix soil and manure at or near the soil surface
2. Combination tillage tools (disc + rotary harrow, disc + rolling basket, etc.) that perform as in item # 1 above
3. Rotary harrows
4. Shallow disk injectors
5. Aerators that form openings in the soil

“Trade in – Trade up” Policy

In some circumstances, an applicant may wish to sell or trade in a piece of Low Disturbance Manure Incorporation equipment, for which the applicant has received a REAP tax credit, prior to the expiration of the required lifespan under the REAP program (7 years for new equipment, 3 years for used equipment.) for a comparable or larger piece of eligible Low Disturbance Manure Incorporation equipment. The following policy is in effect for these instances:

- If a REAP tax credit recipient wishes to trade in a piece of equipment for which a REAP tax credit was received prior to the expiration of the lifespan, the applicant must immediately make a request to the Commission in writing.
- The Commission will consider the request for a “waiver” of the lifespan requirement if the applicant is trading or selling the original piece(s) of equipment for another piece of Low Disturbance Manure Incorporation equipment which will allow the farmer to utilize the equipment on a comparable or larger number of acres.
- The applicant will be eligible for a REAP tax credit, up to the maximum \$150,000 per applicant, which equals the difference between the credit received on the originally purchased piece of equipment, and the eligible credit on the new equipment.
- The lifespan requirement “starts over” with the new piece of equipment.
- *Example:*
  - In March 2008, a REAP applicant purchased a used piece of Low Disturbance Manure Incorporation equipment for \$20,000 and received a REAP tax credit of \$10,000. The lifespan of the equipment is three years.
  - In March 2009, the applicant wishes to trade in the used piece of equipment for a new piece of Low Disturbance Manure Incorporation equipment which costs \$60,000. The difference between the original purchase of \$20,000 and the new purchase of \$60,000 is \$40,000.
  - The applicant is eligible for a REAP tax credit of \$20,000 on the new equipment.(50% Of \$40,000)
  - The lifespan of the new equipment is seven years, which begins upon delivery of the new equipment in March 2009.
- If the recipient of a tax credit does not provide prior written notification to the Commission that the recipient requests to trade in or sell a piece of equipment for which a REAP tax credit has been received, the recipient is subject to the provisions of the REAP statute which require the recipient to return to the Department of Revenue the full amount of the tax credit originally granted.

## Verification Signatures

The individual signing on the “Verification Signature” line for Conservation plans, Ag E&S Plans, Animal Concentration Areas, and Nutrient Management Plans is verifying that: the plan exists, that it reflects the current operation on the agricultural operation (tillage, number of acres, animal numbers and type(s), crop rotations, etc.), and that the plan is either 1) fully implemented, or 2) is being actively implemented on a reasonable implementation schedule.

The following organizations/individuals are qualified under REAP to provide the necessary verification signatures:

- Conservation District Employees with a working knowledge and appropriate training in the conservation planning process and BMP implementation.
- Qualified Technical Service Providers (TSPs)– those in the TSP registry and certified to write conservation plans, or working under the supervision of a certified TSP.
- Individuals with current certification under Act 38 of 2005, both public and private sector.
- USDA NRCS employees who are certified in conservation planning, or working under the supervision of a certified individual. ***The Commission will accept the signature of a USDA NRCS employee on a form provided by the USDA NRCS in lieu of the signature on the REAP application form, provided the NRCS form verifies the same requirements. Please attach the USDA NRCS form where applicable.***

For equipment purchases, manufacturers and dealers of equipment with appropriate knowledge of specific equipment, private sector engineers and others as determined by the Commission are qualified under the REAP program to sign on the “Verification Signature” line of the application.

Note: Where verification signatures may be provided by qualified staff at the County Conservation District as permitted above to verify REAP documents, this is a function of the individual staff and does not require an action of the District Board.

*The Commission reserves the right to disqualify any individual from providing a “Verification Signature.”*

**Tax Credit Brokers**

**Diane M Comrey Tax Credit Sales**

P.O. Box 1421  
826 Grantham Road  
Mechanicsburg, PA 17055  
Phone: 717-315-3765  
Diane Comrey  
[earthcareconservation@yahoo.com](mailto:earthcareconservation@yahoo.com)

**MSC Business Services**

P O Box 8736  
Camp Hill, PA 17001-8736  
Phone: 717-731-3517  
Fax: 717-731-3546  
Michael Evanish, Manager  
[mwevanish@pfb.com](mailto:mwevanish@pfb.com)

**KIZ Resources, LLC.**

1330 11th Avenue  
Altoona, PA 16601  
Phone: 814-296-2414  
Fax: 814-381-7104  
<http://www.kizresources.com>  
Greg Smith  
[gregsmithcpa@verizon.net](mailto:gregsmithcpa@verizon.net)

**MVM Associates, Inc.**

426 Pennsylvania Avenue Suite 110  
Fort Washington, PA 19034  
Phone: 215-540-8463  
Fax: 215-540-8455  
<http://www.mvmgrants.com>  
Michael V. McCann  
[mikem@mvmgrants.co](mailto:mikem@mvmgrants.co)

**Tax Credits, LLC**

45 Knightsbridge Road  
Suite 22  
Piscataway, NJ 08854  
Phone: 866-652-3170  
Fax: 732-885-2938  
Kenneth Blaine  
[KBlaine@taxcreditsllc.com](mailto:KBlaine@taxcreditsllc.com)

Disclaimer: This attachment is provided for informational purposes only. The Commission is aware that these private organizations provide services related to the sale of tax credits, but neither endorses these organizations, guarantees their services, nor the sale price of any tax credit.

## Map Requirements

Each REAP applicant is required to submit the following:

- A 1:24,000 scale USGS Topographic quad map showing an outline of your home farm and any other parcels that contain the BMPs requested in your application.
- Be sure to include the name of the 1:24,000 Quad map.
- Show the location of all the BMPs on the quads.
- An 8.5" X 11" black and white photocopy of a USGS Quad map at 1:24,000 scale is acceptable provided it includes the name of the Quad, and a major cultural feature or map feature that is readily identifiable.

### Do not submit:

- Hand drawn maps
- Maps at a scale of something other than 1:24,000
- Digital satellite images or aerial photographs
- Maps from internet sources such as Mapquest or Google Maps
- County Road Maps or other maps provided by merchants, chambers of commerce or advertisers.

If you have any questions about where to obtain the required map, please call:

- Your technical service provider
- The County Conservation District
- The State Conservation Commission @ 717-787-8821

### *Frequently Asked Map Questions*

**Q.** All I want to do is buy a no-till drill. Do I still have to provide all this mapping information?

**A.** Yes. Draw on a map an outline of the home farm/agricultural operation listed on the application and show the point on that agricultural operation where the machinery will be stored.

**Q.** As a sponsor what do I have to submit?

**A.** Requirements for sponsored applications are the same as those for any other applicant.

**Q.** I have four farms leased as well as my own home farm and all I want is a no-till drill. What should I show on the map?

**A.** At a minimum your application must show the home farm and the storage location described above. You may also include the additional farms. If other BMPs/practices are being put into place on those farms, they must be included in the agricultural operation boundary.

**Q.** My agricultural operation consists of five separate parcels? How should I draw them?

**A.** Draw them as five separate parcels unless they have common boundaries. Those parcels may be drawn with a common exterior perimeter if you desire.

## Nutrient Management Policy for REAP Participants

Proposed and existing CAOs and CAFOs are required to have an approved Nutrient Management Plan under the State Conservation Commission's Nutrient Management Program in order to be eligible for REAP tax credits. If these operators do not have a plan, they may submit a REAP application to support their efforts to get a plan developed for their farm. Likewise, all Non-CAO and Non-CAFO operations may apply for REAP tax credits to develop a nutrient management plan meeting the Commission's Nutrient Management Program criteria.

Non-CAO and Non-CAFO operators requesting REAP tax credits for the implementation of a manure management or manure storage practice must agree to develop a written REAP Manure Management Summary (REAP MMS) or other Commission acceptable manure/nutrient management plan (i.e. NRCS P.C. 590, NRCS CNMP, Act 38 NM plan, DEP Manure Management Plan), as part of the written Operation and Maintenance plan for the new practice. This REAP MMS or other manure/nutrient management plan must address the fields where manure from the operation is planned to be mechanically applied. This REAP MMS or other manure/nutrient management plan must be completed prior to REAP certification, and therefore prior to final REAP tax credit authorization of the manure management or manure storage practice. For grazing operations, a grazing plan meeting P.C. 528 standards will meet this requirement.

The manure management/storage related practices requiring a REAP MMS include: composting systems processing or using manure, heavy use area protection systems, manure transfer systems, manure treatment or processing systems, manure application equipment, and manure storage facilities. Not all livestock oriented practices will require a REAP MMS. Practices such as stream bank fencing and prescribed grazing are not principally manure management practices and therefore will not require a REAP MMS.

REAP MMSs do not require formal review or approval, but are to be developed with the assistance and oversight of the designer involved in the implementation of the manure management/storage practice or a Pa Certified Nutrient Management Specialist.

The development of these REAP MMSs will require soil testing and manure testing to properly determine manure application rates. If manure testing is not possible prior to developing the plan (which will likely be the case as these are being developed to address a new system), book values for manure nutrient content should be used, and the plan updated when actual analysis is available within the first year of operation.

The REAP MMS format has been designed for use on fields having a phosphorus soil test level of less than 200 ppm P. For fields with a phosphorus soil test level of over 200 ppm, and for situations where a farmer would choose to avoid the setback standard in this planning format, the standard REAP MMS planning format will not work. These fields can be assessed using the REAP MMS with the inclusion of the Pa P-Index to identify and address phosphorus concerns, or the fields can be addressed using the NRCS Nutrient Management Planning (P.C. 590) standard or the Commission's Act 38 planning standard.

Manure volume for the operation will be calculated by the project designer as necessary to properly design the manure management or storage practice being considered for this operation.

The operator will need to implement the REAP MMS and keep it current with the farming operation for the lifespan of the practice for which a REAP tax credit has been approved. This will generally be 10 years from the certification date of the practice.

## REAP Manure Management Summary

**For REAP Applicants that do NOT have Nutrient or Manure Management Plans  
and are Proposing Manure-Related REAP Projects**

**For**  
**Operation name**  
**Farmer name**  
**Farmer address**  
**Farmer address, PA Farmer Zip**  
**Farmer phone number**

***Prepared By***

**Name of person preparing the REAP MMS**

**Date of Development** \_\_\_\_\_

### **Manure Management Summary includes**

- Completed operator information page
- Completed Nutrient Balance Worksheets for the various cropping scenarios on the farm
- Maps of the farm fields including identification of fields, barnyards/feedlots, farm boundaries, manure application setback areas, and manure stacking areas

## Operation Information Page

**Acres of the operation**<sup>1</sup>: Owned \_\_\_\_\_  
 Rented \_\_\_\_\_

**Animals on the operation:**

Animal type	Animal #	Animal weight (avg.)	Days on operation

**Crop Rotation used on the Operation:** \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

**Animal Concentration Areas**<sup>2</sup>:

Size of any animal concentration areas, and management practices on those areas (please locate on the farm map): \_\_\_\_\_  
 \_\_\_\_\_

BMPs necessary to address runoff problems in animal concentration areas: \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

**Manure Storage Facilities:**

Size (provide dimensions; also provide volume if handled as a liquid) of any existing manure storage facilities (indicate if exposed to precipitation): \_\_\_\_\_  
 \_\_\_\_\_

Indicate if any additional materials are added to the manure including bedding, washwater, runoff from a barnyard, etc.: \_\_\_\_\_  
 \_\_\_\_\_

Manure storage related BMPs needed on the operation: \_\_\_\_\_  
 \_\_\_\_\_

**Pasture management practices used on the farm:**

Pasture Id	Animal type	Animal #	Days/year pastured	Hours per day

<sup>1</sup> These acres should generally equal the sum of all the crop group acres from all the attached worksheets

<sup>2</sup> Animal Concentration Areas include feedlots, barnyards, and other outdoor heavily stocked non-pasture confinement areas where there is little if any vegetation.

# Nutrient Balance Worksheet

**To be used for fields with soil test P levels of less than 200 ppm P:  
Manure application rate developed based on Nitrogen utilized by the crop**

**Mechanical Manure application setbacks: 150' from streams, lakes & ponds,  
100' from open sinkholes and active water wells**

Crop Group	Fields where this crop group could be used:	Estimated acres in this crop group annually	Average Yield (bu. or ton)
Manure Group	Manure Analysis Total N    P <sub>2</sub> O <sub>5</sub> K <sub>2</sub> O -            -            -	Application Timing	Application Method

	N	P <sub>2</sub> O <sub>5</sub>	K <sub>2</sub> O	Application Record & Notes <sup>2</sup>
<b>A) Recommendation (lb/A)</b> Nitrogen - Table 1 or Soil Test (AG Table 1.2-6) Phosphorus & Potassium - Table 2 or soil test which ever is greater (AG Table 1.2-9)				
<b>B) Fertilizer Applied (lb/A)</b> (Regardless of Manure e.g. Starter)				
<b>C) Other Organic Sources Applied (lb/A)</b> (e.g. Biosolids, Other Manure)				
<b>D) Residual Manure N (lb/A)</b> (Frequent 30 lb N/A or Continuous 50 lb N/A)				
<b>E) Previous Legume N (lb/A)</b> Table 3 (From soil test report or AG table 1.2-8)				
<b>F) Net Nutrient Requirement (lb/A)</b> (A-B-C-D-E)				
<b>G) Manure Nutrient Content</b> (lb/ton or lb/1000gal)				
<b>H) Nitrogen Availability Factor</b> Table 4 (From Agronomy Guide, Table 1.2-14)				
<b>I) Available Nitrogen</b> (lb/ton or lb/1000gal) (F x G)				
<b>J) Balanced Manure Rate</b> (ton/A or gallons/A) For N: (F ÷ I) For P: (F ÷ G)				
<b>K) Actual Planned Manure Rate</b> (ton/A or gallons/A) Must be less than or equal to the Nitrogen Balanced Rate				
<b>L) Nutrients Applied at Planned Rate</b> (lb/A) For N: (K x I) For P & K: (K x G)				
<b>M) Nutrient Balance at Planned Rate</b> (lb/A) (Indicate short or excess) (F - L)				

<sup>1</sup> Soil testing done to develop the REAP MMS will assess soil test levels for P, K and soil pH; & soil test reports will include a liming recommendation

<sup>2</sup> Use this column to record when the planned manure and fertilizer rates were applied or to note changes to the planned groups or rates.

---

## **Manure Management Summary Map(s)**

---

Map showing farm and farm field boundaries, field identification, applicable manure application setbacks, manure stacking areas, and locations of barnyards or feedlots

---

## **Phosphorus Index**

---

This section of the REAP MMS is necessary only if the farmer so desires to mechanically apply manure within the 150' setback or on fields with soil test levels of greater than 200ppm phosphorus. By using this element of the plan the farmer can avoid the 150' standard setback and the 200ppm phosphorus restriction.

If the farmer chooses to use the P-Index, include the current Pennsylvania Phosphorus Index Spreadsheet or paper worksheet for each field assessed.