

Pennsylvania State Conservation Commission

# **ODOR MANAGEMENT PROGRAM GUIDANCE & TECHNICAL MANUAL**

Version 2.0

Provided by:

The Pennsylvania State Conservation Commission  
(With the assistance of the Penn State University)

The Program Guidance & Technical Manual Version 2.0 released in July 2014 supports:

Version 3.x of the Odor Management Plan Templates

Version 2.x of the Odor Site Index

The guidance in the Program Guidance & Technical Manual Version 2.0 is required for odor management plan submissions after September 1, 2014.

## **Acknowledgements**

The State Conservation Commission (Commission) thanks all of those people who provided input into the development of this program guidance and technical manual. Special thanks are given to the Technical Advisory Workgroup from the Penn State University for providing their time and expertise in the generation of the original and revised *SCC Odor Management Program Guidance & Technical Manual*.

## **Disclaimer**

The policies and procedures outlined in this document are intended to supplement existing requirements. Nothing in the policies or procedures shall affect regulatory requirements. The policies and procedures herein are not an adjudication, or a regulation. There is no intent on the part of the Commission to give the rules in these policies that weight or deference. This document establishes the framework, within which the Commission will exercise its administrative discretion. The Commission reserves the discretion to deviate from this guidance if circumstances warrant.

## **Preface**

The State Conservation Commission (SCC or Commission) is pleased to provide this program guidance and technical manual as an aid in understanding the requirements of the act of July 6, 2005 (P.L. 112, No. 38), (relating to nutrient and odor management), known as Act 38, that relate to Odor Management Plans (OMPs). This document has been developed to promote statewide consistency in the development, review, and implementation of OMPs under Act 38. It describes how the various calculations should be performed and the basis upon which decisions should be made during plan development, review, and implementation. Additional program refinements will be incorporated into later revisions of this document as time and resources allow.

Please remember that program staff at the Commission is available to assist you in fully understanding program requirements and policies.

Information in this document is to be used as a guide for those individuals working within the odor management program, particularly Pennsylvania certified odor management specialists who will be developing, reviewing or assisting with the implementation of OMPs to meet the requirements of Act 38 or related programs. For the final direction on how to implement and interpret program requirements or policies, please contact Commission staff who is readily available to provide assistance.

Please keep this program guidance and technical manual up-to-date by inserting in the update sections any updates provided by program staff, as well as, program direction provided in newsletters.

## **How to Use This Manual**

This program guidance and technical manual (manual) has been developed to assist planners and reviewers with the performance of their functions under Act 38 and to aid in ensuring that the requirements of Act 38 are consistently implemented statewide. The format of this manual follows an outline structure. Overall, the manual has been developed to provide an easy-to-read description of the program policies related to the various elements of the OMP, as well as other program elements.

This manual provides a standard format plan and sample plans in the Appendices. It is recommended that the user of this manual become familiar with these plans. Familiarity with the sample plans will better assure recognition of the references made in the manual text.

Odor Management Specialists are encouraged and directed to use the most recent version of this manual for their planning and review responsibilities. The specialist can be assured that factor values referenced in this manual are acceptable for use in plan development calculations unless future supplemental program guidance directs otherwise. Such supplemental program guidance is provided in program newsletters, fact sheets, other written materials, or Commission staff direction. When factor values used are different than those provided in the cited reference manuals, the planner will need to justify to, and receive permission from the Commission, for the use of those values.

# Odor Management Program Guidance & Technical Manual

## Table of Contents

	<b><u>Current Date*</u></b>
<a href="#">Manual Cover Page</a> .....	March 2014
<a href="#">Acknowledgements &amp; Disclaimer</a> .....	March 2014
<a href="#">Preface</a> .....	March 2014
<a href="#">How To Use This Manual</a> .....	March 2014
<a href="#">Table of Contents</a> .....	March 2014
<a href="#">Chapter 1: Applicability of OMP</a> .....	March 2014
<a href="#">Chapter 2: Required Odor Management Plan Elements</a> .....	March 2014
<a href="#">Chapter 3: Required Odor Management Plan Elements – Appendix 1</a> .....	March 2014
<a href="#">Chapter 4: Required Odor Management Plan Elements – Appendix 2</a> .....	March 2014
<a href="#">Chapter 5: Required Odor Management Plan Elements – Appendix 3</a> .....	March 2014
<a href="#">Chapter 6: Required Odor Management Plan Elements – Appendix 4</a> .....	March 2014
<a href="#">Chapter 7: Required Odor Management Plan Elements – Appendix 5</a> .....	March 2014
<a href="#">Chapter 8: Documentation Guidance</a> .....	March 2014
<a href="#">Chapter 9: Plan Review and Implementation</a> .....	March 2014
<a href="#">Chapter 10: Plan Amendments, Transfers &amp; Updates</a> .....	March 2014
<a href="#">Supplements</a> .....	
<a href="#">1 – OM Standard Plan</a> .....	March 2014
<a href="#">2 – OMP Amendment</a> .....	March 2014
<a href="#">3 – Odor Site Index (OSI)</a> .....	March 2014
<a href="#">4 – Manure Handling Systems/ Manure Storage Facilities Examples</a> .....	March 2014
<a href="#">5 – Sample Odor Management Plan – Poultry Operation</a> .....	March 2014
<a href="#">6 – Sample Odor Management Plan – Swine Operation</a> .....	March 2014
<a href="#">7 – Sample Odor Management Plan – Cattle Operation</a> .....	March 2014
<a href="#">8 – Penn State Cooperative Extension Agronomy Fact Sheet # 54</a> .....	March 2014
<a href="#">9 – Program Contacts</a> .....	March 2014

\*The Current Date listed will match the header date and indicates when the Section, Appendix, or Supplement was updated.

# Chapter 1 Applicability of OMP

## Chapter 1 Table of Contents

Chapter 1 Applicability of OMP.....	1-1
Chapter 1 Table of Contents .....	1-1
A. Identification of Who Needs an OMP: Regulated Operations & Construction Activities .	1-1
B. OMP Exemptions .....	1-2
1. Exempted Animal Housing Facilities.....	1-2
2. Exempted Manure Storage Facilities.....	1-2
C. 25 Pa. Code §83.701 (Definitions).....	1-3
D. Policy Notes: Applicability .....	1-4
1. <i>When is a Plan Needed – Manure or Mortality Composting</i> .....	1-4
2. <i>When is a Plan Needed – Renovating Barn Roof</i> .....	1-4
3. <i>When is a Plan Needed – Renovating Barn Interior Only</i> .....	1-5
4. <i>When is a Plan Amendment Needed – Renovation</i> .....	1-6
5. <i>When is a Plan Amendment Needed – Multiple Proposed Facilities</i> .....	1-6
E. Voluntary Compliance of Non-Regulated Facilities .....	1-7

### ***A. Identification of Who Needs an OMP: Regulated Operations & Construction Activities***

An odor management plan (OMP) is required for two types of agricultural operations when they are engaged in certain activities. To determine whether an OMP is required, two conditions must be satisfied.

1. Part **one** - The agricultural operation must be a regulated operation. The following agricultural operations are regulated operations: agricultural operations designated as a Concentrated Animal Operation (CAO), as defined by the act of July 6, 2005 (P.L. 112, No. 38), (relating to nutrient and odor management), (Act 38) and the State Conservation Commission’s (Commission) Nutrient Management program, 25 Pa. Code Chapter 83; and agricultural operations designated as a Concentrated Animal Feeding Operation (CAFO), as defined by the Pennsylvania Department of Environmental Protection (DEP) regulations at Chapter 92a (relating to the national pollution discharge elimination system permitting, monitoring and compliance). .
2. Part **two** - The regulated operation must be engaging in a construction activity, as described in § 509 of Act 38 and defined in § 83.701, which includes the construction of new, or expanding existing animal housing facilities or manure storage facilities Refer to 25 Pa. Code §83.701(relating to definitions), as provided in C below, for more information on construction activities.

3. When a CAO or a CAFO engages in an activity that meets the definition of construction, construction activities, expand, or expansion, for a regulated facility (i.e. animal housing facility or manure storage facility), an OMP will be required.
4. Other agricultural operations may voluntarily comply with the relevant odor management sections of Act 38 and Chapter 83, 25 Pa. Code Subchapter G, (relating to facility odor management) as Volunteer Animal Operations (VAO).
5. Two key aspects of the Facility Odor Management regulations bear special mention.
  - a. First, the regulations are limited in their scope to odors associated with new or expanding manure storage and animal housing facilities at CAOs and CAFOs. These regulations do not otherwise apply to existing agricultural operations, and they do not address odor from land application of manure. These limitations reflect the odor management provisions in Act 38.
  - b. Second, the odor management plans are not required to eliminate odors. Under Act 38, they only need to include reasonably available technology, practices, standards and strategies to manage odor impacts, considering both the practical and economic feasibility of installation and operation and the potential impacts from the facilities. This aspect of the statute reflects the impracticality of completely eliminating odors associated with agricultural operations, as well as the evolving nature of the science of odor management and of the regulation of odor management. The legislature was obviously cognizant of the subjective nature of odors in rural areas and the difficulties in eliminating and regulating them. The Commission has developed this program with that legislative dictate in mind.

## **B. OMP Exemptions**

### **1. Exempted Animal Housing Facilities**

The regulations provide for exemption criteria for animal housing facilities when considering the types of activities that are regulated. The following are not considered to be construction activities requiring the development of an odor management plan:

- a. Replacement of existing equipment at an existing animal housing facility.
- b. Replacement of an existing animal housing facility in existence as of February 27, 2009, that has been destroyed by acts of God, vandalism, or other similar circumstances beyond the operator's control, with a facility that is of similar animal capacity.

### **2. Exempted Manure Storage Facilities**

The regulations provide for exemption criteria for manure storage facilities when considering the types of activities that are regulated. The following are not considered to be construction activities requiring the development of an odor management plan:

- a. Improving storage integrity with no more than a 15% increase in storage volume, as measured from the current storage volume documented in the approved nutrient management plan.
- b. Adding treatment technology, such as solids separation, anaerobic digestion and composting, and their associated facilities, on agricultural operations in existence as of February 27, 2009, provided that the treatment technology is designed, constructed and operated consistent with the Odor Management Guidance.
- c. For agricultural operations in existence as of February 27, 2009, adding mortality composting, when the mortality composting facilities primary purpose is mortality composting. If this mortality composter is additionally used to store manure not used in the mortality composting process, then it would be considered a new manure storage facility and would be regulated.

**C. 25 Pa. Code §83.701 (Definitions)**

1. Construction or construction activities--*The act or process of systematically building, forming, assembling or otherwise putting together a facility or parts of a facility.*
  - (i) *The terms do not include any of the following, when used in relation to the following activities at animal housing facilities:*
    - (A) *Replacement of existing equipment at an existing animal housing facility.*
    - (B) *Replacement of an existing animal housing facility in existence as of February 27, 2009, that has been destroyed by fire, flooding, wind, or other acts of God, vandalism, or other similar circumstances beyond the operator's control, with a facility that is of similar animal capacity.*
  - (ii) *The terms do not include any of the following, when used in relation to the following activities at manure management facilities:*
    - (A) *Improving the integrity of an existing manure storage facility with no more than a 15% increase in manure storage volume as measured from the current storage volume documented in the approved nutrient management plan.*
    - (B) *Adding treatment technology, such as solids separation, anaerobic digestion, and composting, and their associated facilities, on agricultural operations in existence as of February 27, 2009, provided that the treatment technology is designed, built and operated consistent with the Commission's current "Odor Management Guidance."*
2. Expand, expansion--*Creation of additional space of an animal housing facility by increasing the size of an animal housing facility, or increasing the volume of a manure storage facility by increasing the size of the manure storage facility.*
3. Animal housing facility--*A roofed structure or facility, or any portion thereof, used for occupation by livestock or poultry*

4. Manure management facility -

(i) A manure storage facility, including a permanent structure or facility, or a portion of a structure or facility, utilized for the primary purpose of containing manure.

(ii) The term includes liquid manure structures, manure storage ponds, component reception pits and transfer pipes, containment structures built under a confinement building, permanent stacking and composting facilities and manure treatment facilities.

(iii) The term does not include the animal confinement areas of poultry houses, horse stalls, free stall barns or bedded pack animal housing systems.

#### **D. Policy Notes: Applicability**

##### **1. When is a Plan Needed – Manure or Mortality Composting**

- a. In accordance with §83.761, plan writers are to clearly identify both existing and proposed facilities in the plan (Appendix 1 and Appendix 2), clarifying the primary purpose of each structure, which in turn can then be used by the plan reviewer to verify which facilities are regulated under the Odor Management program.
- b. Construction for new composting facilities (manure or animal mortality) does not necessarily require an odor management plan. If an operation is only adding this type of manure treatment technology and the treatment technology is designed, built and operated consistent with the Commission's current Odor Management Program Guidance & Technical Manual (which incorporates the PA Soil and Water Technical Guide standards), a plan is not required. Under § 83.701, definition of “construction or construction activities,” the addition of treatment technologies on agricultural operations in existence as of February 27, 2009 is exempt from being defined as a construction activity if the Odor Management Guidance is followed. If however an operation will be proposing to construct animal housing or additional manure storage facilities in addition to the composting facility, then the composting facility needs to be detailed in the OMP.
- c. Mortality compost sites, in regards to nutrient management and odor management plans, are not to be considered manure storage facilities since the primary purpose of the mortality composter’s operations is to compost on-site mortality. In cases where the primary purpose for composting is in question, it will be treated as a manure storage facility, i.e. the composting facility is of a dual nature where the facility was oversized to accommodate space for manure storage, as its secondary purpose. The determining factor is the primary purpose of the facility in question. If the primary purpose is storage of manure, then the facility must be treated as a manure storage facility. A roofed bin-type composting facility indicates the primary purpose of the facility is manure storage, whereas windrow composting pads are less likely indications of this type of operation. Refer to §83.701, definition of “*construction or construction activities*,” subsection (ii) (B) and “*manure management facility*.”

##### **2. When is a Plan Needed – Renovating Barn Roof**

- a. Merely doing maintenance activities on an existing animal housing facility, i.e. replacing the barn roof, does not trigger the need for an OMP. What would need to

be looked at are any changes to the facility. If this renovation does not change the footprint of the facility, then this would be considered a maintenance activity.

- b. If the new roof is extended beyond the original footprint (height, width and length), then it would need to be determined whether the activity meets the §83.701 definition of construction, construction activities, expand, or expansion. If it meets any of those definitions then an OMP will be needed.
- c. Example: A CAFO dairy operator has two existing barns located parallel to each other and the operator decides to replace the roof of each barn. Once started, the operator decides to add a new roof area to join the two existing barns and puts in free-stalls under that new roof area. This is now a construction activity and that area which now houses the new free-stalls is considered an animal housing facility and is now regulated.

### 3. ***When is a Plan Needed – Renovating Barn Interior Only***

- a. When renovating the barn inside only (construction activities of parts of a facility, but not increasing the footprint of the facility), it needs to be determined whether there is an increase in the potential odor impacts. If the renovated operation is expected to have less of an odor impact than the original operation, then an OMP is not needed. However, if the renovated operation is expected to have a higher odor impact than the original facility, an OMP is needed. For example, if the renovations will potentially create more odors (greater perceived animal offensiveness, significantly more animals, etc.), which could cause more impacts than the original facility, then an OMP would be needed.
- b. To determine the extent of impacts caused by renovations to a barn interior, a comparison should be done between the previous scenario and the proposed scenario to determine if there is a significant change.
- c. Same Animal Type: When evaluating odors from the same animal type, the AEU numbers before and after the renovations should be considered. If there will be substantially more AEUs on the renovated operation (i.e. 25% or more), then there could be significantly more odor from the same facility and an OMP would be necessary.
- d. Different Animal Type: When evaluating odors from different animal types, the entire Odor Site Index (OSI) Part A criteria should be considered. If the potential impact may be higher (the proposed OSI Part A score is higher than the original OSI Part A score) then an OMP would be necessary.
- e. If an operation is planning to renovate the barn interior only, is merely replacing or removing existing equipment, and is not increasing animal numbers, and is not changing animal species, then the renovations are exempt from the definition of “construction or construction activities,” §83.701(i)(A) and an OMP would not be required
- f. If a barn has not housed animals within the last three years, then it is considered a new operation with zero livestock history.

- g. Example 1: A new operator buys four high-rise layer facilities from the old operator. The barns have not housed any birds in 2 years. The new operator is renovating the inside only (no new space is being created – same building footprint). The amount of birds will decrease from the previous amount, 455,000 to 137,500 because the management style is changing from a high-rise caged operation to one that only uses the floor-space to house floor layers (cage free layers).

This example does not meet the definition of construction/ construction activities or expand/ expansion and does not have an increase in potential impacts. This site would not need an OMP.

- h. Example 2: An operator proposes to convert an animal housing facility from turkey to duck. It has been more than 3 years since the barn was used. Since a new animal type is being proposed and since the barn has been empty for more than 3 years, it is now considered a new operation which also will be a CAFO for raising more than 5,000 wet ducks.

The animal housing renovation is being done for the purpose of changing animal species. The OSI Part A proposed score shows a higher score than the original OSI Part A score. Additionally, the barn has been empty for 3 years, thus with the addition of animals, it would be considered a new operation. The animal housing facility is now regulated and an OMP would be needed.

#### **4. When is a Plan Amendment Needed – Renovation**

- a. When an operation already has an OMP and is planning to renovate the barn interior only (not increasing the footprint), a comparison should be done with the previous scenario and proposed scenario to determine if there is a significant change.
- b. Remember that for the same animal species, §83.811 provides that a plan amendment is required if there is a significant change ( $\geq 25\%$  increase in AEUs), but when there is an animal change, OSI Part A will need to be re-run and compared to the original scenario (see discussion above).
- c. If an operation already has an OMP and is planning to renovate the barn interior only and is merely replacing existing or worn out equipment with new or more modern equipment and does not increase animal numbers, nor change animal species, then the renovations are exempt from the definition of “construction or construction activities,” §83.701(i) (A) and a plan amendment would not be required.
- d. If there is a change in the manure storage facility other than a type of change that would be exempt (treatment technology) from the definition of “construction or construction activities” as defined in §83.701, subsection (ii) (B), then a plan amendment is needed.

#### **5. When is a Plan Amendment Needed – Multiple Proposed Facilities**

- a. If an operation is planning a multi-year construction activity for regulated facilities, the plan writer and operator need to determine the most realistic amount of construction activity that can be done within a 3-year timeframe. §83.771(d) provides for a 3-year deadline from the plan approval date to the start of construction. The plan writer needs to account for that multi-year construction activity for each

regulated facility in the OMP, taking into consideration the policy for creating a geographic center with multiple facilities.

- b. Any construction activity on future regulated facilities (beyond the 3 years after plan approval) would require an amendment to the OMP to account for this future construction activity.

Example: A racetrack operation is proposing to replace all of their stables over the next 5 years. The plan writer should only include the stables that the operator is projecting to replace over the next 3 years. In this case, there will be more stables that will need to be regulated in the future, beyond the 3 years after plan approval; a plan amendment will be required for the future construction activities of those stables.

### **E. Voluntary Compliance of Non-Regulated Facilities**

1. Act 38 and the Chapter 83 regulations do not require any existing animal housing or manure storage facilities to be included in the odor management plan as regulated facilities. An operator can voluntarily choose to include non-regulated facilities, or portions thereof, into the plan, by including the existing voluntary AEU's with the proposed additional AEU's. These additions may increase the evaluation distance area. When this occurs, the evaluation distance area is now based upon the existing AEU's plus the proposed AEU's.
2. Unlike the Nutrient Management Program, §509(a) (1) (i) of Act 38 regulates both CAOs and CAFOs, thus a CAFO cannot be considered a VAO in the Odor Management Program.
3. If a VAO wishes to voluntarily participate in this program when planning to build new facilities, they will need to include all the new proposed facilities. However, the regulations do not include any obligation to include existing animal housing facilities or existing manure storage facilities.
4. If an operation has multiple animal groups in the plan, then they must comply with the OSI score requirements for the Odor BMPs for all of the animal groups they have in the plan. For example a duck and cattle VAO with a neighboring facility in the evaluations distance area would require Level 1 Odor Best Management Practices (BMPs) for both the ducks and the cattle. The VAO can, however, decide to remove the cattle and eliminate the need to provide Level 1 Odor BMPs for them.
5. Limited Liability protection (§83.706) and Commission support would only be provided for the portion of the farm that is covered under the odor management plan. In other words, the only way the VAO would get the full limited liability protection would be if the plan covered all of the facilities, including all of the animal groups. Otherwise, the VAO would be exposing themselves to liability if they chose to leave out a facility, including an animal group. Regardless of how the VAO operator chooses to implement its odor management plan, the plan will only give protection to the extent of what is addressed in the plan.

## Chapter 2 : Required Odor Management Plan Elements

### Chapter 2 Table of Contents

Chapter 2 : Required Odor Management Plan Elements .....	2-1
Chapter 2 Table of Contents .....	2-1
A. Plan Cover Page .....	2-2
B. Plan Element A: Planner & Operator Commitments & Responsibilities .....	2-2
C. Policy Notes: Planner & Operator Commitments & Responsibilities .....	2-2
1. Plan Name as a Business Entity .....	2-2
2. Operator Signature Authority .....	2-2
3. Plan Writer Site Visit Requirement .....	2-3
4. Pre Plan Submittal Meeting for Required Level II Odor BMP plans.....	2-3
D. Plan Element B: Plan Summary .....	2-3
1. Part A: Operation Summary .....	2-4
2. Part B: Odor Site Index Summary .....	2-4
3. Part C: Odor BMP Implementation, Operation & Maintenance Schedule.....	2-4
4. Level I Odor BMPs.....	2-5
5. Level II Odor BMPs .....	2-5
6. Implementation of Supplemental Odor BMPs .....	2-6
E. Part D: Documentation Requirements.....	2-7
1. Level I Odor BMPs.....	2-7
2. Level II Odor BMPs .....	2-7
F. Policy Notes: Plan Summary .....	2-7
Staging/ Construction Sequence Timeframes of Level II Odor BMPs with Multiple Proposed Regulated Facilities.....	2-7

*Act 38 directs the Odor Management Program to develop consistent plan content requirements that are to be followed for those planning under the Act. The Facility Odor Management regulations also require that a plan must follow a standardized format provided by the Commission, unless otherwise approved by the Commission. Supplement 1 contains a copy of the standardized plan template and Supplement 2 contains a copy of the plan amendment template.*

## **A. Plan Cover Page**

1. The name of the plan on the Plan Cover Page should be consistently used throughout the other sections of the plan.
2. If the name of the plan will be in the operator's name (vs. a business entity name), then the operator's name should only be detailed once on the Plan Cover Page.

## **B. Plan Element A: Planner & Operator Commitments & Responsibilities**

1. This part of the plan details why the OMP is being developed due to the size of the facility. The following sized facilities should be documented and the planner should select all that apply.
  - a. Pennsylvania Act 38 Concentrated Animal Operation (CAO)
  - b. Pennsylvania CAFO (Concentrated Animal Feeding Operation (CAFO) program
  - c. Odor Management Program Volunteer Animal Operation (VAO)
2. Please note that Act 38 OMP requirements are for both CAOs and CAFOs. If the animal operation for which the plan is being developed is a CAFO, unlike the Nutrient Management Program, the operation cannot also be considered a VAO.
3. This part of the plan requires the plan writer and the operator to provide verifications for the following:
  - a. Type of operation
  - b. Meeting the plan implementation and documentation requirements
  - c. Biosecurity protocols
4. The plan writer must verify that a site visit was conducted.

## **C. Policy Notes: Planner & Operator Commitments & Responsibilities**

### **1. Plan Name as a Business Entity**

- a. If a plan name is going to be put in the name of a business, then the business entity needs to have filed a registration with the PA Department of State so that the reviewer can verify that it is a legally registered business (<https://www.corporations.state.pa.us/corp/soskb/csearch.asp?corpsNav=1>). If verification of the legal status is not provided, then the plan will need to be put in the name of the actual person as the operator.

### **2. Operator Signature Authority**

- a. In accordance with §83.741(i), plans shall be signed by the *Operator/ Authorized Representative* of the agricultural operation indicating concurrence with the information in the plan and acceptance of responsibilities under the plan. For corporations (C, S, LLC) a president or vice president may sign. However, in LLCs it is also common that the members of the LLC only use the term "member". If the business name search (see Plan Name above) identifies that members are identified in the business entity filing, then the title of member will be accepted. Otherwise for any other authorized representative, the plan must contain an attachment, executed by

the secretary of the corporation, which states that the person signing on behalf of the corporation is authorized to do so.

### 3. **Plan Writer Site Visit Requirement**

- a. The Commission requires the planner, or his/her representative, to conduct a site visit of the entire evaluation distance area during the development of the plan. This site visit will be done in order to ensure that the characteristics of the entire evaluation area are accurately represented on the Operational Map and in the Odor Site Index, e.g. the odor sources, site land use and surrounding land use factors, and that the information is displayed on the Operational Map.
- b. Please note that it may be necessary to communicate with Conservation District staff and/or local government staff to verify Site and Surrounding Land Use criteria.
- c. Please also note that if the Commission suspects that the evaluation distance area site visits are not being conducted, then Commission and/or Pennsylvania Department of Agriculture (PDA) staff will attempt to resolve this issue with the certified plan writer. Please be aware that if this continues and/or is not resolved, the planner's certification status may be adversely affected or revoked.

### 4. **Pre Plan Submittal Meeting for Required Level II Odor BMP plans**

- a. The Commission requires that for scenarios where Level II Odor BMPs are required to be built in order to address potential odor impacts from proposed regulated facilities, that a meeting be set up prior to the submission of that OMP, with the Operator, the plan writer, the Commission plan review staff and the Commission's Technical advisor. Plan writers should contact the Commission's Odor Management Program Coordinator to set up this meeting.
- b. The purpose of the pre-submittal meeting is to determine which Level II Odor BMPs will be proposed to address the potential odor impacts while meeting the site specific needs of that operation. If a plan is submitted as only requiring Level I Odor BMPs and during the technical review it is determined that the OSI score is now a 100 or more, the plan will be returned to the operator without any Commission action, so that the process will restart and a pre-submittal meeting can be conducted.

## **D. Plan Element B: Plan Summary**

The Plan Summary is typically developed after the Appendix 2 (the Operational Maps) and the Appendix 3 (the Evaluation – the OSI) are developed. Some of this information is then transferred to this section of the plan. The Plan Summary consists of four major components:

- Operation Summary – (Amendments also have the subsection of Currently Regulated Facilities)
- Odor Site Index Summary
- Odor BMP Implementation, Operation & Maintenance Schedule
- Documentation Requirements.

## 1. Part A: Operation Summary

### a. Proposed Facilities

The purpose of this section is to facilitate looking up commonly used information from the Operation Information Appendix. Data on the Proposed OSI Animal type, Proposed Animal Numbers and Proposed Animal Equivalent Units are copied to this section. If any existing AEU's are voluntarily being included by the Operator, then this information must be entered as well. In addition, the AEU's per acre for the operation must be detailed; this calculation must be consistent with the most current Nutrient Management Plan otherwise a narrative must be included in Appendix 5: Supporting Documentation.

### b. Amendments – Currently Regulated Facilities

Amended plans must also detail the currently regulated facilities information from the original plan and any previous plan amendments. Please note that for previously approved multiple facilities, those facilities must also be constructed to be a Currently Regulated Facility.

## 2. Part B: Odor Site Index Summary

The purpose of this section is to facilitate looking up commonly used information from the Odor Site Index Appendix. Data on the OSI score is copied to this section.

## 3. Part C: Odor BMP Implementation, Operation & Maintenance Schedule

- a. The purpose of this section is to identify all existing and planned Odor BMPs used to address the potential for impacts from the off-site migration of odors generated from the facilities covered by the plan.

### b. Identification of Odor BMPs

1. The Odor BMPs are fundamentally based on some form of intervention in the odor pathway, which consists of (1) an odor source, (2) odor release, (3) off-site odor transport, and (4) odor perception.
2. The Commission has approved the use of Odor BMPs described in the following three reference sources for identification, design, construction and operation of the Odor BMPs that are appropriate for the site specific situation. The farmer, in conjunction with the plan writer, are to choose which individual Odor BMPs to install and operate based on those which are feasible from a practical and economic perspective. Please note that in addition to the Odor BMPs described in these reference sources, other Odor BMPs as proposed by the operator, may be used if approved by the Commission.
  - I. **PA Odor BMP Reference List.** This list was compiled with the assistance of odor management experts at The Pennsylvania State University (PSU) to assist odor management specialists and farmers in developing odor management plans consistent with the State Conservation Commission's Odor Management Guidance. This list is intended to provide links to a number of possible references describing various Odor BMPs a farmer may

consider for their operation. The [PA Odor BMP Reference List](#) can be found at the Commission's Odor Management Program webpage.

- II. "[PA Tech Guide](#)", Section IV of the NRCS electronic Field Office Technical Guide, at [http://efotg.nrcs.usda.gov/efotg\\_locator.aspx?map=PA](http://efotg.nrcs.usda.gov/efotg_locator.aspx?map=PA).
- III. [ASABE Standards: Management of Manure Odors](#). (ASAE EP379.4 Jan2007), at <http://asae.frymulti.com/abstract.asp?aid=23560&t=2>,

#### 4. Level I Odor BMPs

- a. Level I Odor BMPs are basic Odor BMPs that are applicable to the operation according to the species of animals and/or to the manure handling system. These Odor BMPs manage odors by the use of generally accepted operation and maintenance activities used in Pennsylvania animal operations. The plan writer and operator together will determine how to implement the applicable Odor BMPs for the site specific scenario, detailing how they will meet the goals of reducing odor generation and/or odor transport.
- b. The following are core Level I Odor BMP principles that focus on reducing the odor generation and/or odor transport from an animal housing facility or manure storage facility.
  1. Steps are taken to reduce dust and feed accumulation in pens, aisles, and on animals.
  2. Ventilation is managed to provide sufficient fresh airflow throughout the facility to keep animals and facility surfaces clean and dry.
  3. Manure is managed to minimize damp, exposed manure that contributes to odor generation.
  4. Mortalities are removed daily and managed appropriately.
  5. Feed nutrients are matched to animal nutrient requirements to avoid excess nutrient excretion.
  6. Manure storage facility is managed to reduce exposed surface area and off-site odor transfer.
- c. For plans in which the OSI score is 50 or more points, or in which the Operational Map identifies one or more neighboring or public use facilities in the evaluation distance area, the operation must implement Level I Odor BMPs that are applicable to their operation, and are required to attest to the implementation of the Odor BMPs (via the Odor BMP Implementation Commitment Statement).

#### 5. Level II Odor BMPs

- a. Level II Odor BMPs are additional, specialized Odor BMPs that provide additional technology, practices, standards and strategies for odor management commensurate with additional potential for odor impacts.
- b. For OSI scores of 100 or above, the operation must implement all applicable Level I Odor BMPs. In addition, the operation must implement Level II Odor BMPs to

address the identified odor source(s) on the operation as determined by the planner in conjunction with the operator, and as approved by the Commission.

- c. The plan writer in conjunction with the farmer must determine which individual Level II Odor BMP(s) to install and operate based on those which are expected to be effective for the site specific situation at the operation and feasible from a practical and economic perspective. The plan shall only list those Level 2 Odor BMPs that are necessary to address the potential offsite impacts of odors associated with the new or expanded facility, detailed in the Act 38 Odor Management Plan.
- d. The plan shall list the Odor BMPs general construction and implementation criteria, their operation and maintenance requirements and their corresponding timeframes. To facilitate this, the use of existing standards and specification that are applicable to the Level II Odor BMP, such as NRCS Conservation Practice Standards and Job Sheets, are encouraged to be used for construction, implementation, and operation and maintenance criteria.

An example of this is the NRCS Conservation Practice Standard 380 for Windbreak Shelterbelt Establishment and the NRCS PA 380 Job Sheet. Please note that when using an Odor BMP that involves planting of vegetation such as a shelterbelt, it is considered fully implemented if the planting is consistent with the implementation and operation and maintenance schedules in an approved plan.

- e. The plan must detail all operation and maintenance procedures and their corresponding timeframes, for each Odor BMP being implemented. The plan must also detail the lifespan for each Odor BMP. Please note that all Odor BMPs must be for the lifetime of the animal housing facility unless otherwise planned for and approved.
- f. Also note that the regulations not only require an agricultural operation to obtain approval of their OMP prior to constructing new or expanded facilities, but also require that prior to utilizing a new or expanded facility, the operation must provide Commission with written notification by certified mail, of the intent to utilize the facility.
- g. For more information on Odor BMPs, refer to the [PA Odor BMP Reference List](#).

## **6. Implementation of Supplemental Odor BMPs**

- a. Please note that *Supplemental* Odor BMPs, may be implemented in addition to the approved Odor BMPs in the plan, on a temporary or permanent basis, without approval by the Commission, but they do require an update to the odor management plan.
- b. Plan updates to address operational changes of these supplemental Odor BMPs shall be (1) retained at the operation and (2) submitted to the Commission for inclusion in the approved odor management plan within 30 days after the end of the calendar year in which they are implemented. Inspection reports that detail the implementation of Supplemental Odor BMPs may be used as documentation for plan updates.

- c. When sending in a plan update, or when developing a plan and Odor BMP implementation is not required, the implementation of Supplemental Odor BMPs should be detailed in the Odor BMP narratives via the check-boxes for Supplemental Level I Odor BMPs and Supplemental Level II Odor BMPs. Note that since Supplemental Odor BMPs do not require Commission action, they do not require any changes to section D. Documentation.

## **E. Part D: Documentation Requirements**

### **1. Level I Odor BMPs**

- a. This part of the plan is to provide specific instructions to the operator as to what details need to be documented for the Odor BMPs implementation, operation and maintenance. **To facilitate the documentation process, an Odor BMP Implementation Attestation form is to be used to document the implementation of the Level I Odor BMPs for any plan that has a neighboring facility or public use facility in the evaluation distance area on the Operational Map.**
- b. In order to document major maintenance activities or corrective actions, a maintenance log is to be used with plans having scores of 50 or more points.

### **2. Level II Odor BMPs**

- a. If Level II Odor BMPs are required, as determined from the evaluation, then the Level II Odor BMPs Quarterly Observation Log must be created. Likewise, this part of the plan is to provide specific instructions to the operator as to what details need to be documented for demonstrating compliance with the Odor BMPs implementation, operation and maintenance criteria and procedures. As a minimum, quarterly observations must be noted of the implementation. This same chart should be used to document corrective actions, operation and maintenance procedures, etc., on an as-needed basis. Multiple log charts should be provided to the operator.
- b. *Please note that Chapter 8 of the manual/guidance provides more detailed information about documentation needs for demonstrating compliance in general.*

## **F. Policy Notes: Plan Summary**

### **Staging/ Construction Sequence Timeframes of Level II Odor BMPs with Multiple Proposed Regulated Facilities**

- a. The Commission requires that for scenarios where Level II Odor BMPs (e.g., Windbreak Shelterbelt) are proposed to be built to address odor issues for multiple proposed regulated facilities, and the Operator intends to stage/ phase in those multiple proposed facilities, then the Level II Odor BMPs must be designed and implemented in such a way as to ensure that they are staged/ phased in a manner consistent with the phased/ staged construction of the regulated facilities. In accordance with §83.771, an operation has 3 years to start construction of the regulated facilities, thus plans for multiple facilities should only be for construction activities that can be started in 3 years.

- b. In the case of Windbreak Shelterbelts built to address odor issues under this program, Shelterbelts are to be designed and implemented in such a way as to ensure they fill in to an approximate 65% density within a three year time frame of the plan approval. The Commission would not be fulfilling its responsibilities if it allowed operators to construct and populate all of the regulated animal housing facilities without simultaneously implementing the required Level II Odor BMPs.

# Chapter 3 Required Odor Management Plan Elements – Appendix 1

## Chapter 3 Table of Contents

Chapter 3 Required Odor Management Plan Elements – Appendix 1 .....	3-1
Chapter 3 Table of Contents .....	3-1
A. Plan Element C: Appendix 1: Operation Information.....	3-1
Part A: Odor Source Factors: .....	3-2
B. Policy Notes – Part A: Odor Source Factors.....	3-2
1. Site Livestock History .....	3-2
2. AEU's – Consistency with Associated Plans.....	3-3
3. AEU's – Transferred AEU's .....	3-3
4. Existing vs. Current vs. Proposed Facilities .....	3-4
5. After-The-Fact Approval of a Regulated Facility .....	3-5
6. Animal Housing Facilities .....	3-5
8. Multiple Geographic Centers for Multiple Proposed Facilities.....	3-6
9. Manure Storage Facilities – Consistency with Associated Plans .....	3-6
10. Manure Storage – Dual Use Nature of Facility .....	3-6
11. Manure Storage – Egg Wash-Water Pond.....	3-7
12. Manure Storage – Improved Stacking Pads/ Stacking Areas .....	3-7
13. Manure Storage – Roll-off Containers/ Dumpsters .....	3-7
14. Currently Regulated Facilities (Plan Amendments) – Required Odor BMPs .....	3-7
15. Construction Activities of Multiple Proposed Regulated Facilities .....	3-8
C. Part B: Site Land Use Factors: .....	3-8
1. Policy Notes – Part B: Site Land Use Factors .....	3-8
D. Part C: Surrounding Land Use Factors: .....	3-9
1. Policy Notes – Part C: Surrounding Land Use Factors .....	3-9
Other Livestock Operations .....	3-9
2. Neighboring Property Preserved Farm Status .....	3-9

### **A. Plan Element C: Appendix 1: Operation Information**

1. The Appendix 1: Operational Information section is designed to provide detailed information on the agricultural operation, following the three categories of the OSI factors; the Odor Source; the Site Land Use; and the Surrounding Land Use.

2. The Appendix 1: Operation Information must include a detailed description of the operation for the existing and the proposed facilities, clearly indicating the regulated facilities and/or portions thereof, and including any Odor BMPs implemented in the existing facilities that are used to address the potential for offsite migration of odors.

### **Part A: Odor Source Factors:**

The first category of the OSI factors are odor source factors, which are meant to clarify the items that are proposed to be regulated and what is existing or not regulated. This section is especially important for future compliance. The factors that should be considered are as follows:

- Site Livestock History
- Existing Facilities (Animal Housing and/or Manure Storage)
  - i. Animal type(s), numbers, and AEUs
  - ii. Facilities descriptions including dimensions, capacities, & existing Odor BMPs
    - Proposed Facilities (Animal Housing/ Manure Storage)
      - i. OSI Animal type(s), numbers, and AEUs
      - ii. Additional (new) AEUs vs. Voluntary Existing AEUs, & Transferred AEUs (animals already on site)
  - iii. Facilities descriptions including dimensions and capacities
- Amended plans
  - i. Currently Regulated Facilities including Previous Plan Approval Date, OSI score, AEUs, Population/ Use Dates,
  - ii. Facilities descriptions including dimensions, and capacities
  - iii. Required Odor BMPs for Currently Regulated Facilities

*For more information, see Chapter 5, Plan Element E: Completing the Odor Site Index.*

### **B. Policy Notes – Part A: Odor Source Factors**

#### **1. Site Livestock History**

- a. If the Site Livestock History is different than the existing AEUs, please explain in detail the reason for the difference. This can either be done in Appendix 1 or in Appendix 5: Supporting Documentation. When an operator has multiple operations under the same management control which are counted as such in the NMP, and are located within the evaluation distance area on the Odor Management Plan's (OMP) Operational Map, then the animals from those operations should be counted for the Site Livestock History. Please note however that these agricultural operations should not then be counted as "Other Livestock Operations" because the favorable credit for livestock/ poultry would be duplicated. Please also note that these operational related animal housing facilities and manure storage facilities must also be identified in Appendix 1, Part A, in the Existing Facilities section and in Appendix 2: Operational Maps.
- b. When an operator has multiple facilities under the same management control which are counted as such in the NMP, and are located outside of the evaluation distance area on the Operational Map, then the animals from those facilities should not be counted

for the Site Livestock History. The credit given for Site Livestock History for facilities outside the evaluation distance area must be consistent with the NMP. Please note that the operational related facilities located outside the evaluation distance area do not need to be detailed in Appendix 1, Part A, in the Existing Facilities section.

- c. Existing livestock and poultry that are currently on the operation, but will be gone once the OMP goes into effect, should be listed for the Site Livestock History since the operator should receive credit for the animals raised on the operation over the last 3 years. Please identify in a note in that section of the plan the amount of time within which the animals will be removed.
- d. If an operation is subdivided and existing animals are not part of the new subdivided land, then no prior history should be given since the operation is considered a new operation.
- e. Example: A proposed 2,400 head swine finishing barn (CAFO) is to be located on a family member's property which has a total of 150 acres and includes a 50 cow dairy barn. The operator has no ground under his management control. The operator's proposed swine operation is a separate business from the family member's dairy operation and the family member is not a co-owner or an employee of the proposed swine operation. In this case, the dairy operation would not be counted as Site Livestock History in Part A but would be counted as Other Livestock in Part C. The family member's house would be counted in the OSI as a neighboring facility unless the operator (swine facility) lives in that house with the family member. If the operator (swine facility) lives there, then the house would be shown on the Operational Map as an Operational Related Property but would not be counted in the OSI. Also the property lines would just be around the facility that the operator (swine facility) is in management control of.

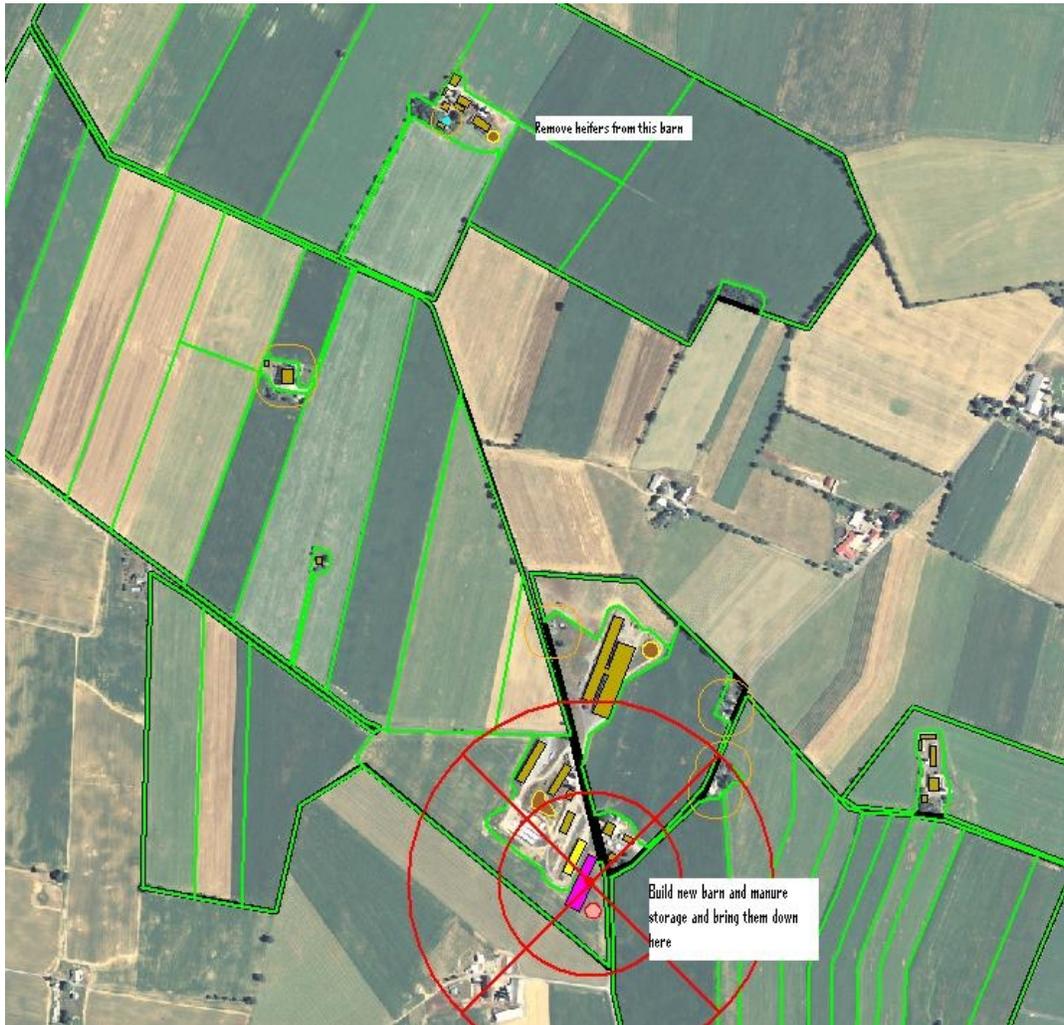
## **2. AEU – Consistency with Associated Plans**

If an OMP needs to detail multiple locations beyond the site identified in the OMP, which an operation is using to stay consistent with the NMP/CAFO permitting, then the animal numbers and AEU should be reported, but the existing animal housing facilities and manure storage facilities should not. They have no bearing on the OMP since it is site specific. Appendix 5: Supporting Documentation section is required to be used to clarify these differences. *See also, Site Livestock History above.*

## **3. AEU – Transferred AEU**

- a. Transferred AEU are animals currently part of the operation that are being transferred out of an existing facility (or may not be raised in any existing facility, but are left in the open fields) and into a proposed animal housing facility. Whereas Proposed AEU are used for determining the Odor Site Index evaluation distance area, Transferred AEU are used for determining significant change of the regulated facility(ies) for plan amendment criteria. A significant change is defined as a net increase of equal to or greater than 25% in AEU, as measured from the time of the initial plan approval, which will require a plan amendment.
- b. Example: A large dairy operation is a single operation with multiple facilities, is proposing to construct a new heifer barn to transfer 75 heifers (86.25 AEU) into the

new proposed animal housing facility. Since the heifers are already on site and part of the existing operation, there are no Additional AEUs and the evaluation distance area for this plan would be 1200'. Since 86.25 AEUs are being transferred into the newly regulated animal housing facility, the baseline for the significant change criteria ( $\geq 25\%$  AEU increase) that would trigger the need for a plan amendment would be an additional 21.56 AEUs.



Transferred AEUs Example

#### 4. Existing vs. Current vs. Proposed Facilities

- a. Existing Facilities – Those animal housing facilities or manure storage facilities constructed before February 27, 2009, must be identified in the OMP. Existing facilities are the baseline facilities that are not subject to Odor Management program requirements.
- b. Current Facilities – Those animal housing facilities or manure storage facilities that are associated with plan amendments which have already been approved in the original plan or subsequent plan amendments.

- c. Proposed Facilities – Those animal housing facilities or manure storage facilities which are proposed to be built and have not yet been approved via the plan reviewing process.

## 5. After-The-Fact Approval of a Regulated Facility

- a. Any animal housing facility or manure storage facility (or expansion on an existing facility) which was constructed after February 27, 2009, but that did not get evaluated prior to being constructed (via an approved plan) is considered after-the-fact and must be identified as a proposed facility and go through the normal OMP development and review processes.
- b. A short narrative will be needed detailing the approximate month and year that the facility was constructed and populated or utilized.
- c. If the plan is again amended at a future date, that particular facility will be identified as a currently regulated facility along with the other approved facilities.

## 6. Animal Housing Facilities

- a. If any proposed structure is not used for occupation (permanent dwelling), it would not be considered an animal housing area. (§83.701 - definition for *Animal housing facility* – A roofed structure or facility, or any portion thereof, used for occupation by livestock or poultry.)
- b. Example: A racetrack (CAFO) currently has a roofed area (paddock building) where the horses are staged and harnessed to prepare for the events of the day, but no animals are housed at the facility overnight; it is more of a holding area. This holding area is not used for permanent occupation and thus is not considered an animal housing facility.
- c. If a Heavy Use Area Protection (NRCS Code 561) with Roof BMP (NRCS Code 367) has been modified to allow for animal occupation, e.g. by adding sides, walls, stalls, curtains, etc.), it has become animal housing.

Please contact SCC Staff for assistance with animal housing facility determinations, as many combinations of alternatives exist and it is impractical to list all.

## 7. Manure Storage Facility Siting

- a. In accordance with §83.702(3) – *Scope*, when the SCC approves an OMP, we are approving the proposed location of that newly regulated animal housing facility and manure storage facility.
- b. In regards to the proposed location and the determination of setback requirements, in accordance with §83.704 – *Relation to Subchapter D (relating to nutrient management regulations)*, the odor management program does not have its own rules on setbacks, but follows the nutrient management regulations on setbacks for manure storage facilities as it relates to existing operations or new operations.
- c. In accordance with §83.705 – *Preemption of local ordinances*, the nutrient management regulations preempt any local regulations or ordinances and the local ordinances may not be in conflict with or more stringent than these regulations.

- d. When the SCC approves an OMP, it is approving the location of the newly regulated facility as meeting all setback requirements in the nutrient management regulations.

## **8. Multiple Geographic Centers for Multiple Proposed Facilities**

- a. For OMPs submitted for situations where multiple facilities are proposed, at a distance of **less than 1,200 feet apart**, only one set of evaluation circles will be required in the OMP, with the geographic center of all the proposed facilities being used as the center of the evaluation circle set.
- b. For OMPs addressing multiple proposed facilities on one plan where the proposed facilities are planned to be spaced **more than 1,200 feet apart**, separate sets of evaluation circles will be required for each facility (or facility cluster), with the geographic centers for each of those evaluation circle sets being centered on each individual facility or facility cluster. The plan, including the map and the OSI evaluation, must address each set of these multiple evaluation circle sets.

## **9. Manure Storage Facilities – Consistency with Associated Plans**

- a. As a general provision, the associated Nutrient Management and Odor Management plans for an operation cannot conflict with each other or their associated program regulations. §83.704., 83.751(c)). The OMP, NMP, and Agriculture Erosion and Sedimentation Control Plan (Ag E&S) or conservation plan, must all be consistent.
- b. Proposed manure storage facilities cannot be in conflict with nutrient management program standards and regulations. If a proposed manure storage facility will not meet the setback criteria of the nutrient management program for the proximity to the property line, a properly executed Setback Waiver Form will be required prior to the SCC being able to take a favorable action on the plan. This form is necessary to document that the proposed manure storage facility will be able to be located as outlined on the Operational Map in the proposed OMP. For an operation that is required to obtain an NMP, that operation cannot locate the proposed manure storage facility in conflict with the nutrient management program water body setback requirement.
- c. Plans should be consistent with the NMP and should include a clear description of manure handling practices. If a plan details shallow pits only, the nutrient management program policy should be followed and those shallow pits should be considered as manure storage facilities when they are the only storage conveyances. For example, improved stacking pads (manure storage facility) vs. push-out pads (place to temporarily move the manure and haul away, not stacking the manure); under-barn shallow gutters/pits (manure storage facility when the only storage) vs. under-barn shallow gutters/pits to transfer manure to other manure storage.

## **10. Manure Storage – Dual Use Nature of Facility**

- a. Oversized composting facilities are generally viewed as dual-natured facilities having their primary purpose in question; they tend to be used for both composting and storage. When this is the case, it no longer is considered just treatment technology.

The plan writer has to treat the whole facility as a manure storage facility and thus this dual-use manure storage facility would need a plan.

- b. Section 83.701 does include composting facilities in the definition of a manure storage (management) facility. The exemption clause in the definition of “construction or construction activities” was intended to assist the operator by not requiring an OMP when the only basis for the OMP was the installation of a composting facility (treatment technology).
- c. For more information, see also Chapter 1, Policy Notes: When is a Plan Needed – Manure or Mortality Composting.

### **11. Manure Storage – Egg Wash-Water Pond**

- a. An egg wash-water pond (a pond that collects the wash-water from an egg packing room) is considered a manure storage facility and therefore would require an OMP. This interpretation is consistent with the PA DEP’s requirements?

### **12. Manure Storage – Improved Stacking Pads/ Stacking Areas**

- a. Manure stacking areas or improved stacking pads are considered manure storage areas when an improvement has been made to the areas or pads, e.g. compacting aggregate as the base, concrete base, etc., vs. merely placing manure directly on the soil. Improvements make the areas and pads more permanent, and therefore satisfy the definition of manure management facility in section 83.701 as follows: 1) permanence (permanent structure or facility, or portion thereof), and 2) primary purpose of containing manure.

Because the nutrient management regulations do not define manure storage facilities to include field stacking of manure, the OMP would not need to address this activity.

### **13. Manure Storage – Roll-off Containers/ Dumpsters**

A roll-off container is not permanent, and therefore not considered a manure storage facility for the purposes of requiring an OMP. However, if a permanent structure, i.e. a roof, is built over the roll off container, it would be considered a permanent structure. (§83.701 - definition for *Manure management facility* – A manure storage facility, including a permanent structure or facility, or a portion of a structure or facility, utilized for the primary purpose of containing manure).

### **14. Currently Regulated Facilities (Plan Amendments) – Required Odor BMPs**

- a. Indicate in the applicable check-box if the currently regulated facilities have required Odor BMPs.
  - i. Detail in the Plan Summary, C. Odor BMP Implementation, Operation & Maintenance Schedule, all required odor BMPs from previous approved plans or plan amendments which are still applicable to its associated regulated facility.

- ii. If specific Odor BMPs that were previously approved no longer apply to this site specific scenario, contact odor management program staff to identify and discuss this operational change prior to submitting the plan amendment.
- b. Indicate in the applicable check-box if the previously approved Odor BMPs are no longer applicable and thus are no longer part of the plan amendment. This is only applicable when the plan amendment is either:
  - i. Changing Odor BMPs and that the new Odor BMPs are detailed in the Plan Summary, e.g. the previously approved plan included a Windbreak Shelterbelt (Level II Odor BMP) but the proposed plan amendment is switching out the Windbreak Shelterbelt for a Solids Separator and an anaerobic Digester.
  - ii. Please note that version 2.0 of the OSI allows no odor BMPs in certain situations and that this has an impact on the Operational Maps; the currently regulated facilities must be included in the geographic center with the proposed facilities so as to ensure that they were properly evaluated as part of the plan amendment.

### **15. Construction Activities of Multiple Proposed Regulated Facilities**

- a. The operator's intent of staging (having multiple construction sequence timeframes) for multiple proposed facilities needs to be detailed in the applicable section of Part A, Proposed Regulated Facilities Description. In accordance with §83.771, the operator has three years to start construction of the proposed facilities. If multiple facilities are being proposed, the plan should only include those facilities for which the construction can begin within the three year timeframe (from the plan approval date).
- b. If Level II Odor BMPs are required for the plan, then those Odor BMPs need to be implemented in a similar timeframe as the construction sequence for the regulated facilities.
- c. *For more information, see the Plan Summary policy notes for Staging/ Construction Sequence Timeframes of Level II Odor BMPs with Multiple Proposed Regulated Facilities.(Chapter 2)*

### **C. Part B: Site Land Use Factors:**

- Ag Security Area
- Ag Zoning
- Preserved Farm

*For more information, see also Chapter 5, Plan Element E: Completing the Odor Site Index.*

#### **1. Policy Notes – Part B: Site Land Use Factors**

- a. In addition to conducting an actual site visit of the evaluation distance area and by questioning the operator, the plan writer is required to independently verify these criteria. It may be necessary to communicate with Conservation District staff and/or state or local government staff to verify that the site is zoned for agriculture, is in an Agricultural Security Area, and already has a Preserved Farm status.
- b. If the operator is to be given credit for any of the Site Land Use factors, then verification of these factors will need to be detailed in the plan in Appendix 5:

Supporting Documentation. A letter from the municipality and/or Conservation District verifying the agricultural land use factors claimed is preferred, but documentation from a municipality's website, i.e. an ASA/ Agricultural Easement map which the operator's farm is located in, will be accepted, provided that it has sufficient detail for the reviewer to verify the agricultural land use factors claimed.

#### **D. Part C: Surrounding Land Use Factors:**

- Other Poultry & Livestock Operations  $\geq$  8 AEUs within the Evaluation Distance Area
- Distance to Nearest Property Line Measurement (measured from nearest corner of the animal housing facility or manure storage facility to the property line)
- Neighboring Property Preserved Farm Status

*For more information, see Chapter 5, Plan Element E: Completing the Odor Site Index.*

### **1. Policy Notes – Part C: Surrounding Land Use Factors**

#### **Other Livestock Operations**

- a. Other Livestock Operations within the evaluation distance area which the SCC would potentially regulate, i.e.  $\geq$  8 AEUs, are counted in the OSI since they are a business.
- b. When counting Other Livestock Operations in the evaluation distance area, if the operator's home and operation are together on the same property, only count the home in the OSI Neighboring Facilities & Public Use Facilities Table; the Other Livestock Operation is discounted in the OSI. Since the rationale of this criteria revolves around Other Livestock Operations already having an odor source, the intent here is to not penalize (by double counting) the operator's home and business (livestock operation). But just as with the operational related properties, the residence along with the animal housing facility must be identified on the Operational Map in order to fulfill the requirement of Act 38 in addressing the surrounding land use.

### **2. Neighboring Property Preserved Farm Status**

If the operator is to be given credit for the Neighboring Property Preserved Farm Status (if nearest property is less than 300' for the Distance to Nearest Property Line Measurement), then verification of this distance will need to be detailed on the standard plan, i.e. neighboring property owner's name and how verified.

# Chapter 4 Required Odor Management Plan Elements – Appendix 2

## Chapter 4 Table of Contents

Chapter 4 Required Odor Management Plan Elements – Appendix 2 .....	4-1
A. Plan Element D: Mapping .....	4-1
B. Operational Map Elements:.....	4-1
Topographical map .....	4-1
Site Map .....	4-3
C. Policy Notes – Appendix 2: Operational Maps.....	4-4
1. Distance to Nearest Property Line.....	4-4
2. Distance to Nearest Property Line – Measuring to Roads.....	4-4
3. Distance to Nearest Property Line – Multiple Operations .....	4-4
4. Distance to Nearest Property Line – Operation on Rented Land .....	4-4
5. Geographic Center for Multiple Facilities.....	4-5
6. Operational Related Neighboring Facilities .....	4-5
7. Neighboring Facilities .....	4-6

### ***A. Plan Element D: Mapping***

The plan must include a topographic map drawn to scale (an Operational Map) identifying the lands where the facilities that are addressed in the plan are located. This map will then be used for the evaluation requirements. The Commission’s preferred method of evaluation is the use of the Odor Site Index (OSI) in conjunction with the Operational Map; they are intended to be used together as the primary method for evaluating the potential for impacts from the off-site migration of odors from a facility regulated under Act 38. A plan writer must first receive permission from the Commission if an alternative method to the OSI will be used.

### ***B. Operational Map Elements:***

Create an Operational Map using the following steps.

Topographical map,

1. Identify and draw to scale the existing and proposed (labeled as such) animal housing facility(ies) and manure storage facility(ies), including building footprints. Please note that the scale chosen must be reasonable and practical for use in evaluating the OMP.



2. Identify and mark the geographical center of the animal housing/manure storage structure complex.

3. Identify and draw the property line boundaries of the agricultural operation, any operational related properties.

4. Identify and draw the distance to nearest property line measurement from the nearest proposed facility.

a. If there is any question that the nearest point of the building or manure storage structure is less than 300 feet from property line, obtain a precise measurement of the nearest distance.

b. If the nearest distance between the barn or manure storage structure edge to the nearest property line is less than 300', determine if the adjacent property has been permanently preserved for agriculture.

Table # 1 - Evaluation Distances

Evaluation Distances	
AEUs	Evaluation Distance
<50	1200'
50-199	1800'
200-499	2400'
500+	3000'

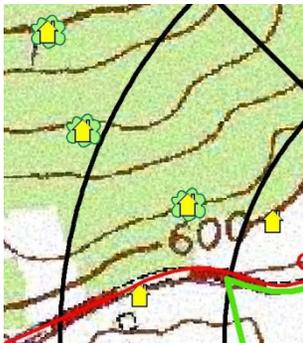
5. The evaluation distance area is based on the AEU numbers relating to the facilities being assessed. From the Evaluation Distance Table, Table # 1, calculate the number of AEUs to be covered by the OMP in the evaluation distance area.

6. At the following distances, draw concentric circles beginning at the geographical center previously identified, up to the determined evaluation distance: 600', 1200', 1800', 2400', 3000', (Example, an operation of 400 AEUs would have circles drawn at 600', 1200', 1800', and 2400', from the geographical center.) Draw 45-degree lines through the geographical center reaching to the end of the evaluation distance area in order to divide the evaluation distance area into four quadrants: East (45°-135), South (135°-225°), North (315°-45°) and West (225°-315°). If a house is on the "line" take the most conservative value. See example map above.

7. Mark all neighboring facilities (including all occupied homes/permanent residences, active businesses and churches), public use facilities, and other livestock operations  $\geq 8$ AEUs within the evaluation distance area.
  - a. Public use facilities are defined in § 83.701 as: public schools, hospitals, public nursing homes/elder care facilities and apartment buildings with greater than four dwelling units.
  - b. Neighboring facilities are listed in § 83.761(b)(2) as any occupied homes/permanent residence or active business or church not falling under the category of “Public Use Facility”. A home/residence does not include a hunting cabin, campground lot, vacation home, etc., because a person’s stay there is temporary and it is not a permanent dwelling. Therefore, it would not be taken into consideration as a neighboring facility.

*For more information, see Chapter 5, OSI Part C – Neighboring Facilities and Public Use Facilities Multiplication Factor. See also Policy Notes Chapter 2 and Plan Element E.*

8. Identify all neighboring facilities and public use facilities that are being given credit for the Intervening Topography and Vegetation Factor (*see Table 13*) on the Operational Maps and in the map legends. These symbols as well as the symbols for the operational related properties must be different or a different color than from the symbols used for neighboring facilities and public use facilities.
  - a. Intervening vegetation is defined by at least 50 feet of woody, perennial



vegetation or by at least a 30-foot upslope and at least a 30-foot down slope, respectively.

b. Multiple maps may be provided to facilitate specific details.



Examples of Maps with Multiple Symbols

### Site Map

1. The purpose of the Site Map is to facilitate the plan review process of identifying specific details about the operation being evaluated; a zoomed-in map is preferred. The Site Map is to be drawn to scale with a map legend, with at a minimum detailing the location of the animal housing facilities and manure storage facilities (Existing, Currently Regulated, and Proposed), the geographic center, the distance to nearest property line measurements, and operational boundaries.



a. When there are multiple facilities on the site, detail the names of each facility, as each facility is referred to by the operator. It may be helpful to use multiple

legends, or multiple site maps to complete this section.

- b. For example, facilities may be labeled with numbers, while the map legend details the names of the facilities to the corresponding numbering.
- c. Note that the Appendix 1 details of the facilities' names should match with the Appendix 2 details of the facilities' names.

## **C. Policy Notes – Appendix 2: Operational Maps**

### **1. Distance to Nearest Property Line**

The Distance to Nearest Property Line measurement must be shown on the Operational Map so that the reviewer can determine from where the measurement was taken. The regulations refer to the topographic map, so it must be accurate even if the information is already submitted on a separate aerial map.

### **2. Distance to Nearest Property Line – Measuring to Roads**

In general, measure to the road edge, unless the operator has verified that his/her deed demonstrates that the property line extends to the middle of the road.

### **3. Distance to Nearest Property Line – Multiple Operations**

- a. When an Operator has multiple operations under same management control and is counted as such in the NMP, show the other operations that are located in the evaluation distance area on the OMP's Operational Map.
- b. For example: An Operator has a layer operation that is proposing additional regulated facilities. The Operator also has a pullet operation in the outer quadrants of the evaluation distance area. The pullet animal housing facilities and manure storage facilities must be shown on the map and detailed in Appendix 1, Part A, for the existing facilities information.

### **4. Distance to Nearest Property Line – Operation on Rented Land**

- a. When the Operation's facility is on rented land; only the land that the operation is in control of (the rented land) can be counted. If the operation is in control of other contiguous land, then that land also may be counted.
- b. For example: The Operator leases 5 acres, on which he/she is proposing to put 3 poultry houses. The Operator does not control any contiguous land to the 5 acres. The property line boundary for the Operational Map will show the 5 acre plot, for the area over which the operator has management control.

## 5. Geographic Center for Multiple Facilities

- a. For OMPs submitted to the Commission for situations where multiple facilities are proposed, at a distance of less than 1,200 feet apart, only one set of evaluation circles will be used in the OMP, with the geographic center of all the proposed facilities being used as the center of the evaluation circle set.
- b. For OMPs addressing multiple proposed facilities on one plan where the proposed facilities are planned to be spaced more than 1,200 feet apart, separate sets of evaluation circles will be required for each facility (or facility cluster), with the geographic centers for each of those evaluation circle sets being centered on each individual facility or facility cluster. The plan, including the map and the OSI evaluation, must address each set of these multiple evaluation circle sets.
- c. Plan Amendments – Due to a change from the newest evaluation for Plan Amendments, the OSI allows for no Required Odor BMPs. Please note that in order to stop a previously approved Odor BMP requirement, the Currently Regulated Facilities must be included in the geographic center, along with the proposed facilities, so as to ensure that the Currently Regulated Facilities were properly evaluated as part of the plan amendment.

## 6. Operational Related Neighboring Facilities

- a. The Commission has a policy to exempt from the OSI homes or businesses owned by owners or co-owners of the agricultural operation (provided that they are not a public use facility) which are within the evaluation distance area. Neighboring facilities that fall into this category are referred to as Operational Related neighboring facilities and must be detailed as such on the Operational Maps to ensure they are addressed as required by Act 38.
- b. Homes or businesses that are owned by relatives of the owner/co-owners of the operation being evaluated are exempt from consideration in the OSI. Additionally, relatives that are actively involved in the agricultural operation, i.e. employees, owners, partners, members (LLC), and their homes or businesses are exempt from being considered in the OSI.
- c. Example 1: The Operator's house and two other homes are shown on the Operational Map as being located within the evaluation distance area, within the Operator's property line boundaries. They are considered operational related properties and are not counted in the OSI, but are shown on the Operational Map.
- d. Example 2: The Operator owns land on which a private parochial school is built. The school is shown on the Operational Map as being located within the evaluation distance area, and within the Operator's property line boundaries for the livestock operation listed in the OMP. Since a private school is not considered a public use facility, this parochial school is considered an operational related property. It is not counted in the OSI, but is shown on the Operational Map.

- e. Example 3: The Operator owns a business and two other rental properties. They are shown on the Operational Map as being located within the evaluation distance area, but outside of the Operator's property line boundaries for the livestock operation listed in the OMP. Since they are the Operator's businesses and rental properties, they are considered operational related properties. They are not counted in the OSI, but are shown on the Operational Map.
- f. Please note that the planner must document each Operational Related Property on the Operational Map to show that each property (home, business, etc.) was addressed in the evaluation. Please use a different color for the Operational Related Properties than that of the neighboring facilities and label it as such in the map legend.

## **7. Neighboring Facilities**

- a. Neighboring facilities include any occupied homes / permanent residences and active businesses and churches. A home/residence does not include a hunting cabin, campground lot, vacation home, etc., because a person's stay there is temporary and it is not a permanent dwelling. The intent of a neighboring facility is to count permanent dwellings. Do not count homes that are clearly vacant (like when the electric meter has been pulled, etc.) or something that would not be expected to be a permanent home (like a hunting cabin, a wood shed, etc.). If however, you determine that someone is using a cabin as their permanent residence, then it should be counted. Government buildings that have a normal expected use are considered the equivalent of business facilities for the intent of this program.
- b. Example 1: A church campground is in the evaluation distance area. This campground includes a permanent building for the church, a cabin that is used year round as the permanent residence of a church employee, and a catering business in a permanent structure that is operated year round for the campground. These facilities are all counted as neighboring facilities. However, if there are non-permanent sites and cabins that are not used as permanent residences, these are not considered to be neighboring facilities.
- c. Example 2: A municipal office that is used by employees and/or the public is considered a neighboring facility because it is an active business.
- d. Example 3: A PADOT maintenance site has a building for the employees to use during their normal work duties. It is considered a neighboring facility because it is an active business.

## **8. Public Use Facilities**

- a. A public use facility is defined in § 83.701 as public schools, hospitals, public nursing homes/elder care facilities and apartment buildings with greater than four dwelling units.
- b. When conducting the evaluation of the surrounding land use within the evaluation distance area, apply the concept of 5 units or more in one building to businesses that have reasonable expectations of people using that facility.

- c. Example: A business office building has 5 different businesses located in that building and there are 5 power meters on the building, and cars in the parking area. If it is determined that there is a reasonable expectation that the building is being used on a regular basis (an equivalent of occupying a home), this building would be considered a public use facility.

# Chapter 5 Required Odor Management Plan Elements – Appendix 3

## Chapter 5 Table of Contents

Chapter 5 Required Odor Management Plan Elements – Appendix 3 .....	5-1
Plan Element E: Completing the Odor Site Index (OSI) .....	5-1
4. Part A: Odor Source Factors:.....	5-2
a. Site Livestock History .....	5-2
b. Facility Size/ AEU's Covered by OMP .....	5-3
c. Manure Handling System.....	5-3
5. Part B: Site Land Use Factors.....	5-4
6. Part C: Surrounding Land Use Factors .....	5-5
a. Other Neighboring Livestock Operations .....	5-5
b. Property Line Separation Distances .....	5-6
c. OSI Appendix A: Neighboring Facilities Multiplication Factors .....	5-6
d. OSI Appendix B: Public Use Facilities Multiplication Factors .....	10
7. OSI Intervening Topography and Vegetation .....	11
8. Species Adjustment Factor .....	12
9. Part D: Final OSI Score Categories.....	12

### ***Plan Element E: Completing the Odor Site Index (OSI)***

1. The Commission is providing the OSI in an Excel spreadsheet format for consistent application of the evaluation factors and for ease of use. Contact the Commission Odor Management staff for a copy of this spreadsheet or download it from the Odor Management Program webpage ([www.pda.state.pa.us/scc](http://www.pda.state.pa.us/scc) - click on the Programs link, then the Odor Management Program link, then the Forms Link).
2. **OSI Spreadsheet Notes:**
  - a. Yellow blocks indicate potential input cells for the planner; some of these input cells are drop down lists in which you will need to select the applicable criterion.
  - b. The Operator Name must be consistent with the name of the OMP as detailed on the Plan Cover Page.
  - c. The Type of Operation is a drop down list in which the Animal Type being evaluated in the OSI must be identified. This criterion is commonly referred to as the OSI Animal Type. If the OMP or Amended Plan is for a manure storage facility only, then this criterion relates to the OSI Animal Type of manure that is associated with the regulated manure storage facility/ manure handling system. When the OSI Animal Type is selected in the Type of Operation drop down list, it will pre-populate the spreadsheet cell for the Species Adjustment Factor.

- d. The AEU's covered by the OMP value entered into the spreadsheet cell will pre-populate the Evaluation Distance Area cell value. The values put into the Voluntary Existing AEU's, the Proposed AEU's, and the Previously Approved AEU's do not automatically sum into the AEU's Covered by the OMP cell; rather, they are intended to facilitate the OMP development and plan review processes.
3. The Odor Site Index is made up of three main categories of factors and an overall (species) adjustment factor, which affects the total OSI score.
- a. **Part A: Odor Source Factors:**
    - Site Livestock History
    - Facility Size Covered by OMP
    - Manure Handling System
  - b. **Part B: Site Land Use Factors:**
    - Ag Security Area
    - Ag Zoning
    - Preserved Farm
  - c. **Part C: Surrounding Land Use Factors:**
    - Other Livestock  $\geq$  8 AEU's Within the Evaluation Distance Area
    - Distance to Nearest Property Line
    - Number, Distance & Direction of Neighboring Dwelling, Churches & Businesses
    - Number, Distance & Direction of Neighboring Public Use facilities
  - d. **Species Adjustment Factor**
    - OSI Animal Type

**4. Part A: Odor Source Factors:**

**a. Site Livestock History**

- i. This factor evaluates the number of AEU's previously housed on the farm being evaluated.
- ii. Rationale: Previous livestock have historically been a source of odors. If no other livestock have been present in the past, the potential for odor impact is increased because neighbors have been not accustomed to the smells associated with animal agriculture. Alternately, if many AEU's of livestock have been historically present on the site, the addition of more AEU's may not substantially increase community odor impacts.
- iii. *Instructions for use:*
  1. Insert the highest number of AEU's previously housed on the farm being evaluated within the past 3 years.
    - a) In the case of an amendment to an existing approved plan, the AEU's associated with any regulated animal housing facilities should be included in this calculation provided that 1) the animals are still being housed in those regulated facilities, and 2) the animals have been in those regulated facilities for at least one year.
    - b) Scores are assigned to the OSI as indicated in the Previous AEU's Table, Table #2:

Previous AEU's	
Previous AEU's	Points
0	12
1-49	9
50-199	6
200-499	3
500+	0

Table # 2 - Previous AEU's

**b. Facility Size/ AEU's Covered by OMP**

- i. Rationale: More AEU's result in increased odor generation and the potential for odor dispersion from the housing and/or manure storage facility.
- ii. *Instructions for use:*
  1. The AEU's Covered by the OMP value entered into the spreadsheet cell will pre-populate the Facility Size Covered by the OMP cell value.
  2. These factor-associated OSI points are assigned according to the Facility Size Covered by the OMP Table, Table # 3:

Facility Size/ AEU's Covered by the OMP					
AEU's	<200	200-499	500-749	750-999	1000+
Points	2	4	6	8	10

Table # 3 - Facility Size/ AEU's Covered by the OMP

- iii. Note: When calculating the AEU's to be covered by the OMP, including the Voluntary Existing AEU's may increase the evaluation distance area. In the case of plan amendments, the AEU's associated with the currently regulated facilities (Previously Approved AEU's) must be included in this calculation.
- iv. Note: The PSU Extension AEU Fact sheet explains how to calculate AEU's and is attached in the appendices as Appendix 7, Penn State Cooperative Extension Agronomy Fact Sheet # 54.

**c. Manure Handling System**

- i. This factor evaluates the potential for odor generation and transport from the manure storage facility.
- ii. Rationale: Manure stored outdoors and/or uncovered creates a greater potential for odor release because of a large surface area constantly exposed to “wind-stripping” and down-wind transport of odors. Indoor, under-building, or covered manure storage structures have less exposure to wind and thus less down-wind transport. Outdoor, uncovered, anaerobic liquid storage systems have the highest potential for off-site odor transfer.
- iii. *Instructions for use:*
  1. Select the manure handling system/ manure storage type that best describes the manure storage on the proposed site from the drop-down list in the factor-associated yellow block of the OSI spreadsheet.
  2. These factor-associated points are based on the Manure Handling Systems Types Table, Table #4:

<b><u>Manure Handling Systems</u></b>		
<b>Points</b>	<b>Species</b>	<b>Category 1</b>
2	All	In-Barn Storage, Dry Manure Only - No Detached Storage
2	Poultry	3+ Sided, Roofed, Attached (Air Dried)
2	Poultry	Litter Cleaned each Flock and Exported at Cleanout
2	Equine	3+ Sided, Roofed
2	Cattle	Bedded Pack
<b>Category 2</b>		
4	Poultry/ Swine/ Cattle	Deep Pit, Under Building Storage, Liquid or Dry Manure
4	Poultry	Multi-flock litter, With or Without External Covered Storage
4	All	Outdoor, Impermeable Covered Storage, Wet or Dry
<b>Category 3</b>		
8	All	Outdoor Permeable Covered Liquid
8	All	Outdoor Uncovered Liquid (Crust Expected on 1st Stage)
8	All	Outdoor Uncovered Dry
<b>Category 4</b>		
16	All	Outdoor Uncovered Liquid, No Crust Expected

Table # 4 - Manure Handling Systems

- For more information, refer to Appendix 4 for examples of manure handling systems/ manure storage facilities.

## 5. Part B: Site Land Use Factors

- This factor evaluates the current land use designation of the proposed site.
- Rationale: Land that has in some way been designated for agricultural use via ag security area enrollment, ag zoning, or farmland preservation is credited for that use designation in the OSI.
- Instructions for use:*
  - Select the appropriate “Yes” or “No” answer to each of the following questions in the associated green dropdown box of the OSI, as indicated in the Land Use Factors Table, Table # 5.

Land Use Factor Adjustments	
Land on Proposed Farm in Ag Security Area?	
Land on Proposed Farm in Ag Zone?	
Land on Proposed Farm is Preserved?	

Table # 5 - Land Use Factor Adjustments

- 2. Sites that are enrolled in a township Ag Security Area will have 5 percent removed from the Part A and Part C portion of the index score. Farms zoned for agriculture will have 10 percent removed from the Part A and Part C portion of the index score. Sites that are located on permanently preserved farms will have 20 percent removed from the Part A and Part C portion of the index score. Scores will appear in the purple blocks opposite each question.
- iv. Note: The site land use factors are cumulative and can potentially result in minus 35 percent from the Part A and Part C portion of the index score.

**6. Part C: Surrounding Land Use Factors**

The Surrounding Land Use Factors involve those of the properties that surround the operation identified in this plan and can be broken down into multiple categories: Other Neighboring Livestock Operations, Property Line Separation Distance, Neighbor Factor and Public Use Facility Factor.

**a. Other Neighboring Livestock Operations**

- i. Neighboring livestock facilities are those facilities within the evaluation distance area which are housing at least 8 AEUs of livestock or poultry, that are not under the management control or part of the same business entity as the animal operation being evaluated.
- ii. Rationale: Other neighboring livestock are sources of odor. If no other livestock are present, the potential for odor impact is increased. When other livestock operations are present, neighboring odor receptors may be accustomed to the smells associated with animal agriculture and result in negligible odor impact change. Alternately, if many livestock operations are already in the area, an additional livestock odor source may increase local odor impacts.
- iii. *Instructions for use:*
  - 1. From the map of the facility, count the number of other livestock operations  $\geq 8$  AEUs within the evaluation distance area.
  - 2. Scores are assigned to the OSI as indicated in the Other Neighboring Livestock Operations Table, Table # 6:

Other Neighboring Livestock Operations	
Number	Score
0	5
1 or more	0

Table # 6 - Other Neighboring Livestock Operations

- 3. Using the dropdown list on the spreadsheet, select the appropriate value that corresponds to number of counted livestock operations into the yellow block opposite the area titled "Other Livestock".

## b. Property Line Separation Distances

- i. Rationale: Producers have no control over the current or future land use of adjacent nearby properties. Thus sites located very near property boundaries are discouraged.
- ii. *Instructions for use:*
  1. Measure the distance from the nearest property line to the edge or corner of the animal housing or manure storage facility.
  2. Note if the nearest neighboring property is preserved farmland.
  3. Assign initial Odor Site Index points according to the Property Line Separation Distances, Table # 7:

Property Line Separation Distances			
<b>Distance</b>	< 150'	150-300'	> 300'
<b>Points</b>	10	5	0

Table # 7 - Property Line Separation Distances

4. Select appropriate value from the drop-down list in the factor-associated yellow block of the OSI spreadsheet.
5. If the property line separation distance is less than 300 feet and the nearest adjacent property is preserved farmland, select “Yes” from the drop-down list in the factor-associated yellow block on the OSI. If the property line separation distance is less than 300 feet and the nearest adjacent property is **not** preserved farmland, select “No” from the drop-down list in the factor-associated yellow block on the OSI. If the property line separation distance is more than 300 feet, select “N/A” from the drop-down list in the factor-associated yellow block on the OSI.

## c. OSI Appendix A: Neighboring Facilities Multiplication Factors

- i. Neighboring Facilities are normally occupied dwellings (permanent homes/ residences), active businesses and churches or other occupied dwellings (having 4 or less units) and do not fall under the category of “Public Use Facility”. A neighboring home is not considered a temporary dwelling such as a hunting cabin or campground lot, vacation home, etc.
- ii. Rationale: Individual neighboring homes and businesses are the odor receptors that may be impacted by odors from the proposed facility. According to published wind roses from multiple locations in Pennsylvania, neighbors located to the East are most susceptible to odors from the site. Neighbors to the South are intermediate in susceptibility, while neighbors to the North and to the West are least susceptible.
- iii. Intervening topography between the site and neighboring homes stimulates the odor plume to mix and be diluted. Vegetation between the site and neighboring homes acts as an odor filter during the summer months when odor complaints are most common.
- iv. *Instructions for use:* Refer to the OSI Neighboring Facilities & Public Use Facilities Table.
  1. From the topographic map of the agricultural operation, count the number of neighboring facilities (homes, businesses, churches, and other occupied dwellings having less than or equal to 4 units) in each quadrant and at each 600-foot increment out to the evaluation

distance.

2. In the OSI Neighboring Facilities & Public Use Facilities Table, Table # 11, insert the neighboring facilities numbers into the appropriate spreadsheet cell for distances in the < 600', 600 – 1200' and 1200' – 1800' categories. For distances greater than 1800', the neighboring facilities are grouped into the following categories: 1, 2 to 5 neighbors, 6 to 20 neighbors, and more than 20 neighbors. From the drop-down list in the factor-associated yellow block of the OSI spreadsheet, select the appropriate category for the number of Neighboring Facilities.
3. Determine if the neighboring facilities in each quadrant are shielded from the site by at least 50 feet of woody, perennial vegetation or by at least a 30-foot upslope and 30-foot down slope respectively. The OSI Intervening Topography and Vegetation Factors Table, Table # 13, categorizes them into All Shielded, Some Shielded and None Shielded. If more than one home is present in a distance/direction quadrant, each home will be individually evaluated for topographical and/or vegetation shielding. If all homes in the quadrant are shielded, the “all shielded” multiplier will be used. If one or more homes fall into the “shielded” category, the “some shielded” multiplier will be used (or in other words, only one home in the quadrant needs to meet the criteria for the whole quadrant to be considered “some shielded”). Likewise, if none of the homes in a quadrant are judged to be shielded, the “None shielded” multiplier will be used. If only one home is present in a quadrant, the home will be either shielded or not, and the “some shielded” multiplier will not be used.
4. In the OSI Neighboring Facilities & Public Use Facilities Table, Table # 11, select the appropriate value from the dropdown list in the appropriate evaluation distance quadrant, column. For example, for the “Less Than 600-foot” quadrant:
  - If all neighbors in that quadrant are shielded, select “0.5”.
  - Select “0.75” from the dropdown list if some neighbors in that quadrant are shielded.
  - Select “1” from the dropdown list if none of the neighbors in that quadrant are shielded.
5. The Neighboring Facilities score is calculated as follows:
  - a. For distances up to 1800', each neighbor is multiplied by a score for that quadrant according to the Neighbor Weighting Factors Table, Table # 8. As noted previously, points are assigned in the following order (from most to least): East, South, North, and West.

Neighbor Weighting Factors			
	< 600	600-1200	1200-1800
East of site	15	7	3
South of site	10	5	2
North of site	6	2	0.5
West of site	4	1	0.5

Table # 8 -Neighbor Weighting Factors

- b. For distances greater than 1800', neighbors are categorized as follows: zero, 1, 2 to 5 neighbors, 6 to 20 neighbors, and more than 20 neighbors. Points are assigned by category and direction as indicated in the Grouping Categories Table, Table # 9:

<b>Grouping Categories</b>	<b>1800'-2400'</b>	<b>2400'-3000'</b>
East 0	0	0
East 1 Home	2	1
East 2-5 Homes	6	3
East 6-20 Homes	25	13
East > 20 Homes	40	20
South 0	0	0
South 1 Home	1	0.5
South 2-5 Homes	3	1.5
South 6-20 Homes	13	6.5
South > 20 Homes	20	10
North 0	0	0
North 1 Home	0.3	0.2
North 2-5 Homes	1	0.6
North 6-20 Homes	3	1
North > 20 Homes	5	3
West 0	0	0
West 1 Home	0.3	0.2
West 2-5 Homes	1	0.6
West 6-20 Homes	3	1
West > 20 Homes	5	3

Table # 9 - Grouping Categories

- c. Scores in each category are adjusted based on the OSI Intervening Topography and Vegetation Factors Table, Table # 13, from the dropdown list in column “C”.
- d. The total calculated Neighboring Facilities score summarizes all quadrant categories scores. It is reported on the right hand side of the table in the pink block titled “Total Facilities”.
- e. Each quadrant score is then summarized with the Total Public Use Facilities score for the same quadrants and Total East, South, North and West Scores are reported on the right hand side of the table in the pink column.
- f. A Grand Total is provided on the right hand side of the table at the bottom of the pink column.

### East Quadrant

<600      600-1200      1200-1800      1800-2400      2400-3000

# Neighboring Facilities				Select from list	Select from list		
Facility Value	15	7	3	0	0		
Home Shielding	Select from list	<b>Total Facilities</b>	<b>0.0</b>				
# Public Use Facilities						<b>Total Public</b>	<b>0.0</b>
Public Use Value	40	20	10	5	3		
Public Use Shielding	Select from list	<b>Total East</b>	<b>0.0</b>				
<b>South Quadrant</b>	<600	600-1200	1200-1800	1800-2400	2400-3000		
# Neighboring Facilities				Select from list	Select from list		
Facility Value	10	5	2	0	0		
Home Shielding	Select from list	<b>Total Facilities</b>	<b>0.0</b>				
# Public Use Facilities						<b>Total Public</b>	<b>0.0</b>
Public Use Value	30	15	7	4	2		
Public Use Shielding	Select from list	<b>Total South</b>	<b>0.0</b>				
<b>North Quadrant</b>	<600	600-1200	1200-1800	1800-2400	2400-3000		
# Neighboring Facilities				Select from list	Select from list		
Facility Value	6	3	0.5	0	0		
Home Shielding	Select from list	<b>Total Facilities</b>	<b>0.0</b>				
# Public Use Facilities						<b>Total Public</b>	<b>0.0</b>
Public Use Value	25	13	6	3	1		
Public Use Shielding	Select from list	<b>Total North</b>	<b>0.0</b>				
<b>West Quadrant</b>	<600	600-1200	1200-1800	1800-2400	2400-3000		
# Neighboring Facilities				Select from list	Select from list		
Facility Value	6	3	0.5	0	0		
Home Shielding	Select from list	<b>Total Facilities</b>	<b>0.0</b>				
# Public Use Facilities						<b>Total Public</b>	<b>0.0</b>
Public Use Value	25	13	6	3	1		
Public Use Shielding	Select from list	<b>Total West</b>	<b>0.0</b>				
						<b>Grand Total</b>	<b>0.0</b>

Table # 11 - Neighboring Facilities and Public Use Facilities Multiplication Factors

#### **d. OSI Appendix B: Public Use Facilities Multiplication Factors**

- i. Public Use Facilities are defined as elder care facilities, public schools, hospitals, and multi-family dwellings with more than four living units. Likewise, a business office complex that houses five or more active individual business is considered a Public Use Facility.
- ii. Rationale: Defined public use facilities are areas where many people congregate due to the type of facility. These receptors may also be impacted by odors from the proposed facility. According to published wind roses from multiple locations in Pennsylvania, neighbors located to the East are most susceptible to odors from the site. Neighbors to the South are intermediate in susceptibility; neighbors to the North and to the West are least susceptible. Intervening topography between the site and public use facility stimulates the odor plume to mix and be diluted. Vegetation between the site and public use facility acts as an odor filter during the summer months.
- iii. *Instructions for use:*

Refer to the OSI Neighboring Facilities & Public Use Facilities Table.

1. From the map of the facility, count the number of public use facilities in each quadrant and at each 600-foot increment out to the evaluation distance,
2. In the OSI Neighboring Facilities & Public Use Facilities Table, Table # 11 on the previous page, insert the Public Use facilities numbers into the appropriate spreadsheet cell for each quadrant.
3. Determine if the public use facilities in each quadrant category are shielded from the site by at least 50 feet of woody, perennial vegetation or by at least a 30-foot upslope and 30-foot down slope respectively. The OSI Intervening Topography and Vegetation Factors Table, Table # 13, categorizes them into All Shielded, Some Shielded and None Shielded. Note: if there are multiple public use facilities in a quadrant, only one public use facility in that quadrant needs to meet the criteria for the whole quadrant category to be considered “some shielded”.
4. In the OSI Neighboring Facilities & Public Use Facilities Table, Table # 11, select the appropriate value from the dropdown list in the appropriate evaluation distance quadrant, column. For example, for the “Less Than 600-foot” quadrant:
  - If all neighbors in that quadrant are shielded, select “0.5”.
  - Select “0.75” from the dropdown list if some neighbors in that quadrant are shielded.
  - Select “1” from the dropdown list if none of the neighbors in that quadrant are shielded.
5. The Public Use Facility score is calculated as follows:
  - a. Each public use facility is multiplied by a score for that quadrant category according to the Public Use Facility Weighting Factors Table, Table # 12. As noted previously, points are assigned in the following order (from most to least): East, South, North and West.

Public Use Facility Weighting Factors					
	<600	600-1200	1200-1800	1800-2400	2400-3000
East of site	40	20	10	5	3
South of site	30	15	7	4	2
North of site	25	13	6	3	1
West of site	25	13	6	3	1

Table # 12 - Public Use Facility Weighting Factors

- b. Scores in each quadrant category are adjusted based on the OSI Intervening Topography and Vegetation Table, Table # 13:
- c. The total calculated Public Use Facilities score summarizes all quadrant categories scores. It is reported on the right hand side of the table in the pink block titled “Total Public”.
- d. Each quadrant score is then summarized with the Total Neighboring Facilities score for the same quadrants and Total East, South, North and West Scores are reported on the right hand side of the table in the pink column.
- e. A Grand Total is provided on the right hand side of the table at the bottom of the pink column.

## 7. OSI Intervening Topography and Vegetation

- i. Intervening Topography and Vegetation are defined as at least a 30-foot upslope and at least a 30-foot down slope or by at least 50 feet of woody, perennial vegetation, respectively.
- ii. Rationale: Intervening topography between the site and the receptors (neighboring facility or public use facility) stimulates the odor plume to mix and be diluted. Vegetation between the site and public use facility acts as an odor filter during the summer months.
- iii. *Instructions for use:*
  1. As with scores for neighboring homes, scores for each quadrant in this factor can be reduced by 25% to 75% if they are shielded from the site by an odor reduction barrier consisting of either a >30’ topographical upslope or >50’ of vegetation. Determine if the neighboring or public use facilities in each block are shielded from the site by at least 50 feet of woody, perennial vegetation or by at least a 30-foot upslope and 30-foot down slope respectively.
  2. If more than one receptor (neighboring facility or public use facility) is present in a distance/direction quadrant, each neighboring facility or public use facility will be individually evaluated for topographical and/or vegetation shielding. If all receptors in the quadrant are shielded, the “all shielded” multiplier will be used. If one or more receptors fall into the “shielded” category, the “some shielded” multiplier will be used, or in other words, only one neighboring facility or public use facility in the quadrant needs to meet

the criteria for the whole quadrant to be considered “some shielded”. Likewise, if none of the receptors in a quadrant are judged to be shielded, the “None shielded” multiplier will be used. If only one receptor is present in a quadrant, the home will be either shielded or not, and the “some shielded” multiplier will not be used.

**OSI Appendix C: Intervening Topography and Vegetation Factors** (% of initial score /100)

	<600'	600'-1200'	1200'-1800'	1800'-2400'	2400'-3000'
All shielded	.50	.40	.25	.25	.25
Some shielded	.75	.60	.50	.50	.50
None shielded	1.0	1.0	1.0	1.0	1.0

Table # 13 - Odor Site Index Intervening Topography and Vegetation Factors

## 8. Species Adjustment Factor

- i. Rationale: Although the research is incomplete, some studies indicate that odor from certain species is more offensive than odors from other species. The Species Adjustment Factor directly affects the weighting of the receptors (the neighboring facilities and public use facilities in Part C) in the evaluation distance area (Total OSI = (Part A + Part C) – Part B x Species Adjustment Factor).
- ii. *Instructions for use:*
  1. Select the appropriate OSI Animal Type from the drop-down list that is being evaluated for the proposed facility according to the OSI Animal Type Multiplier Factor Table, Table # 14:

<b>OSI Animal Type Multiplier Factor</b>					
<b>Species</b>	Swine, Ducks, Veal	Layers, Pullets, Cattle	Broilers, Turkeys,	Horses	Other
<b>Multiplier Factor</b>	1.15	1	0.9	0.5	(Call SCC)

Table # 14 – OSI Animal Type Multiplier Factor

2. The Commission will assign points to species not listed in the table.
3. Select score in the factor-associated yellow block of the OSI spreadsheet.

Note: If the agricultural operation is a multi-species operation, use the most restrictive species for the calculation.

## 9. Part D: Final OSI Score Categories

- a. The sum total of all factors will appear in the green block opposite the area titled “Final OSI Score”. This score in conjunction with the presence of neighboring facilities and/or public use facilities within the evaluation distance area determines

what Odor BMPs, if any, are necessary to address the potential for off-site migration of odors. Since the degree of potential impact is proportional to the number of receptors, the OSI score correspondingly increases with higher numbers of potential receptors in the areas of the prevailing wind. The OSI score does not correspond however with increasing intensity of offsite migration of odors.

- i. Low Potential. A low potential is an Odor Index Score of less than 50.
- a. For plans in which the Operational Map identifies one or more neighboring or public use facilities in the evaluation distance area, the operation must implement Level I Odor BMPs that are applicable to their operation, and are required to attest to the implementation of the Odor BMPs (via the Odor BMP Implementation Commitment Statement).
- b. For plans in which the Operational Map does not identify any neighboring facilities or public use facilities within the evaluation distance area, and the OSI score is less than 50, no Odor BMPs are required, however the agricultural operation is encouraged to continue any conventional industry practices.
- ii. Medium Potential. A medium potential is an Odor Index Score between 50 and 99.9. All applicable Level I Odor BMPs are required.
- iii. High Potential. A high potential is an Odor Index Score of 100 or more. The operation must implement all applicable Level I Odor BMPs. In addition, the operation must implement Level II Odor BMPs to address the identified odor source(s) on the operation as determined by the planner in conjunction with the operator, and as approved by the Commission.

## **Chapter 6 Required Odor Management Plan Elements – Appendix 4**

### ***Plan Element F: Biosecurity Protocol***

- a. Operators are required to allow the Commission access to the facilities for inspection purposes and in accordance with Act 125 of 2010, are to provide the Commission biosecurity protocols for entering agricultural biosecurity areas, to include animal housing facilities.
- b. Operators are advised that if they do not have proper documentation of their plan implementation, operation and maintenance, then inspection staff will follow the operator's biosecurity protocols and enter the regulated animal housing facility so that a determination can be made on the plan implementation, operation and maintenance. If the operator fails to provide biosecurity measures to be taken to enter a biosecurity area, staff will follow generally accepted, reasonable biosecurity measures.

## **Chapter 7 Required Odor Management Plan Elements – Appendix 5**

### ***Plan Element G: Supporting Documentation***

This section is reserved for the plan writer when developing this plan to have a dedicated area to include supporting documentation such as for agricultural land use designation verification, Nutrient Management program setback waiver verification, AEU calculation verification when no NMP is available, etc.

# Chapter 8 Documentation Guidance

## Chapter 8 Table of Contents

Chapter 8 Documentation Guidance.....	8-1
A.    General Documentation Requirements .....	8-1
B.    Documentation Relating to Plan Implementation .....	8-2
C.    Documentation relating to Plan Amendments .....	8-2
D.    Documentation relating to Supplemental Odor BMPs.....	8-2

1. The agricultural operation needs to maintain documentation to demonstrate compliance with Act 38 and the regulations promulgated under the act.
2. Please note that the OMP needs to provide the Operator and the plan reviewer enough details that the plan reviewer is able to determine that the documentation is adequate to demonstrate compliance with the implementation, operation and maintenance criteria and related schedule, and flexible enough that the Operator will actually complete the documentation. Existing documentation that demonstrates compliance may be used. The Commission is not intending to have the plan writer create new documentation if the Operator already has documentation that will demonstrate compliance with the implementation, operation and maintenance criteria and related schedule. See the appendices for sample OMPs for examples of documentation.

### **A. General Documentation Requirements**

1. 25 Pa. Code § 83.791 provides that documentation is not required to be submitted to the Commission, but must be retained by the agricultural operation for at least 3 years from the date the documents are prepared, unless it is otherwise specified in the plan.
2. In § 83.762(3), the Operator Commitment Statement, the Operator acknowledges, via his/her signature, the requirement to keep documentation and to allow the inspector access to the documentation needed to determine the Operator’s compliance status.
3. Some documentation is needed to prevent an action from being taken on the agricultural operation, such as:
  - a. Triggering becoming a regulated facility – i.e. manure storage integrity improvement 15% increase in volume threshold (§83.701 – definitions) or,
  - b. Triggering the need for a plan amendment – i.e. 25% increase in AEUs, as measured from the time of the initial plan approval, threshold (§83.811(b)(1)).
4. Other documentation is required as a condition of the OMP, such as under § 83.706 which provides for limitation of liability when the operator is fully and properly implementing and maintaining an approved OMP; the documentation can play a critical role in demonstrating this compliance for appropriate consideration as a mitigating factor

in civil actions for penalties and alleged damages. Other required documentation is discussed in A, B, C and D as set forth below.

### ***B. Documentation Relating to Plan Implementation***

Section 83.792 provides that written documentation which demonstrates the overall implementation of the OMP, must be completed and maintained at the operation. This includes documentation of the installation, operation and maintenance activities relating to the approved Odor BMPs. This documentation must be consistent with the documentation requirements included in the approved plan, thus when writing the plan, make sure that the Operator has the ability to, and is willing to maintain the documentation in the format and amounts as detailed in the OMP.

### ***C. Documentation Relating to Plan Amendments***

Section 83.811(d) provides that a Plan Amendment may be submitted for changing the Odor BMPs, without re-running the Odor Site Index, when the following apply:

- a. Supporting documentation is submitted, such as the implementation, operation and maintenance schedule, to demonstrate compliance with § 83.771(c) (relating to managing odors).
- b. The operation is not making a significant change in the operation as described in subsection (b).
- c. The Operator will continue to implement the original Odor BMPs until the Commission has approved the requested amendment

### ***D. Documentation Relating to Supplemental Odor BMPs***

1. Section 83.781(e) allows the Operator to implement supplemental Odor BMPs, in addition to the approved Odor BMPs and without Commission approval, provided that Plan Updates, documentation of the operation changes from implementing the supplemental Odor BMPs, are provided to the Commission for inclusion in the approved odor management plan within 30 days after the end of the calendar year in which they are implemented.
2. Inspection reports that detail the implementation of the Supplemental Odor BMP may be used as documentation for plan updates.

# Chapter 9 Plan Review and Implementation

## Chapter 9 Table of Contents

Chapter 9 Plan Review and Implementation .....	9-1
Chapter 9 Table of Contents .....	9-1
A. Plan Submission and Review .....	9-1
B. Plan Implementation .....	9-2
C. Policy Notes – Plan Review & Implementation .....	9-2
1. Plan Submission .....	9-2
2. Plan Review .....	9-2
3. OMPs Relationship to Nutrient Management Plans .....	9-2
D. Plan Action Authority .....	9-3
E. Public Noticing .....	9-3
F. Withdrawing a Plan .....	9-3
G. Rescinding a Plan .....	9-4

### **A. Plan Submission and Review**

1. Odor Management Plans shall be submitted for initial review and approval to the Commission for an administratively complete review. The reviewer will provide notice to the Operator, copying the plan writer, within 10 days from the date of receipt of the OMP, indicating whether all of the required plan elements have been received.
2. All parts of the OMP must be completed to be considered administratively complete. Any plan submission determined to be incomplete, will be returned with a brief explanation of the information that is necessary, but was not included. Once the plan is re-submitted and is determined to be administratively complete, the date of the plan submission of the administratively complete plan will be used as the starting point for the 90-days that the Commission has to take action on the submitted plan.
3. Once an administratively complete plan is received, the reviewing authority has 90 days to act on the plan (or plan amendment); if the plan is not acted on within the 90-day period, then it is deemed approved. The reviewer may confer with experts in odor management and with others having knowledge of the local community.
4. If a plan is disapproved, a Notice of Determination will be provided to the Operator submitting the plan detailing why it was not approved. The Operator will then have another 90 days (after receipt of the Notice of Determination) to submit a revised plan, which will then be reviewed.
5. If a revised plan is not submitted after 90 days of the Notice of Determination, it would be considered a new plan whenever it is resubmitted and will have to follow the most current guidance, if guidance has changed.

## ***B. Plan Implementation***

1. Plans shall be fully implemented in accordance with the approved implementation, operation and maintenance schedule.
2. The Commission will conduct periodic (at least annually) inspections and review of the agricultural operation, the plan and the plan implementation documentation to determine the status of the operation's compliance and whether a plan amendment is required.

## ***C. Policy Notes – Plan Review & Implementation***

### **1. Plan Submission**

- a. Until the Commission sends out notification otherwise, all OMPs should be submitted to the Odor Management Program Coordinator, at the Pennsylvania Department of Agriculture Region 3 Office (PO Box C, SR 92S, Tunkhannock, PA 18657). OMPs sent to any additional Commission office will cause delays in the review process. Electronic plan submissions are encouraged to be sent by email versus mailing a hardcopy plan.
- b. For electronic plan submissions, please remember to scan in the signature pages and submit them with the rest of the electronic plan submission in order to have a complete plan; those plans sent electronically that are determined to be complete (from the administrative completeness review) can be publicly noticed on the Commission's Odor Management Program website and then sent through the review process.
- c. Electronic plan submissions, preferred, should be sent to the following e-mail: [kdymond@pa.gov](mailto:kdymond@pa.gov)

### **2. Plan Review**

It is the intention of the Commission to work with the plan writers to get all submitted OMPs to meet the program standards as quickly as possible via the plan review process. Please note that the Commission has the expectation that plan writers are submitting a complete, technically accurate plan on the first submission and should not normally need to go beyond two additional revisions. However, if there are significant technical errors in a plan submission, or if there are continual repeated errors from multiple plan submissions, the Commission may take immediate (adverse) action on that plan.

### **3. OMPs Relationship to Nutrient Management Plans**

- a. Odor Management Plans are separate plans from NMPs and as such, go through their own plan review and plan action processes. OMP action is not contingent upon NMP action, and vice versa.
- b. In accordance with §83.704, the Facility Odor Management regulations and standards for OMPs may not modify, rescind, or supersede any manure management

requirements for water quality protection. An OMP may not be able to be approved when the proposed Manure Storage Facility will not be able to be located as outlined on the Operational Map in the proposed OMP if it is conflict with the NM Program regulations and program standards; *see Policy Notes for Appendix 1, Odor Source Factors, Manure Storage – Consistency with Associated Plans.*

#### **D. Plan Action Authority**

1. For Facility Odor Management Plans with a final OSI score of less than 100 (low or medium odor impact potential), the Commission’s Executive Secretary has been delegated authority to take action on these plans recognizing that the criteria for these plans is fully identified in Commission approved guidance.
2. For Facility Odor Management Plans with a final OSI score of 100 or greater (high odor impact potential), these plans must be presented to the Commission members at a regularly scheduled Commission meeting for the Commission’s consideration and action recognizing that these plans have a broader range of acceptable options that may be included in the plan. Prior to submitting these types of plans, the Operator and plan writer are expected to meet on site with Commission staff to review the proposed Level II Odor BMPs.

#### **E. Public Noticing**

1. Odor Management Plans are public documents. At the May 2009 Commission meeting, the SCC created the following policy for noticing and acting on these public documents:
  - a. All OMPs submitted to the State Conservation Commission for action under Act 38 will be noticed on the State Conservation Commission’s [Public Notices webpage](#) for 21 calendar days.
  - b. The public may provide written comments to the Commission during those 21 calendar days. After the 21 calendar days, the Commission may act on the submitted OMP.
2. Once an OMP is acted on, the Commission will publish that action in the Pennsylvania Bulletin. The Commission will also annually publish a notice in the Bulletin that directs individuals to the Commission’s website for information on OMPs currently under review.
3. The Commission is required to follow the provisions of the Right-to-Know Law, which are outlined in the PDA Right-To-Know process which is linked in the Odor Management Program webpage.

#### **F. Withdrawing a Plan**

1. Prior to Commission action on an OMP, an Operator, or plan writer with the Operator’s consent, in writing, can withdraw an OMP submission. This may likely occur if the submitted plan is getting near the 90-day required timeframe and the Operator still has items to address.
2. Please note that if an operation already started constructing the facility and the plan is submitted after the construction activities have begun, then the reviewer would act on the

plan within the 90 days and not allow the Operator to withdraw the plan, since the Operator was already in violation of the timeframe.

3. Example: An Operator submits a plan that is proposing a new CAO/CAFO for a 4,400 head swine finishing barn with under-barn manure storage. The plan is approved, but the Operator chooses to build at half of what was proposed (thus no longer having a CAO/CAFO status). The Operator may now amend the plan and submit as a VAO at the as-built size facility and animal numbers (half of what was originally proposed) or may request the Commission to rescind the plan due to the fact of no-longer being regulated.

### ***G. Rescinding a Plan***

1. Once the Commission has approved an OMP, only the Commission can rescind approval of an OMP if that operation is no longer regulated.
2. When due to an operational change, the operation is no longer defined as a CAO or a CAFO, i.e. more land is in the management control of the operation or less animals are physically on site and the threshold levels for CAO or CAFO are no longer met, then the operation may send a written request along with proper documentation verifying this change, to the Commission to rescind the plan approval.

# Chapter 10 Plan Amendments, Transfers & Updates

## Chapter 10 Table of Contents

Chapter 10 Plan Amendments, Transfers & Updates .....	10-1
A. Plan Amendments .....	10-1
B. Plan Transfers.....	10-1
C. Plan Updates.....	10-2
1. Minor Operational Changes or Corrections.....	10-2
2. Supplemental Odor BMPs .....	10-2

### A. *Plan Amendments*

1. A plan amendment is required if the operation:
  - a. Expects to make a significant change in any animal housing and manure storage facilities covered in the approved plan. An approved plan amendment is required prior to those changes being implemented.
  - b. A net increase of equal to or greater than 25% in AEUs, as measured from the time of the initial plan approval, is presumed to be a significant change in the operation which will require a plan amendment.

Any operation which would be required to submit a plan amendment under subsection (b) may avoid that requirement if it can demonstrate that there will not be an increase in the potential for offsite migration of odors under §83.771.
  - c. A plan amendment may be submitted requesting to change the Odor BMPs that are to be implemented, without conducting a new evaluation (OSI), if the following apply:
    - i. Supporting documentation, such as the implementation, operation and maintenance schedule, to demonstrate compliance is submitted.
    - ii. The operation is not making a significant change in the operation.
    - iii. The Operator will continue to implement the original Odor BMPs until the Commission has approved the requested amendment.
2. A plan amendment shall be developed and certified by an odor management specialist and be submitted to the Commission for approval.

### B. *Plan Transfers*

1. An approved OMP may be transferred to a subsequent Owner or Operator of an agricultural operation by notification of the transfer to the Commission in writing, unless the transfer

results in operational changes requiring a plan amendment, however, any new signatures required by 83.741(i) must be obtained before a plan is transferred to any new Operator.

2. If the transfer of the approved plan results in operational changes, a plan amendment must be submitted for approval along with, or before, the notification of transfer.
3. To transfer a plan name, the Commission would need the following:
  - a. A letter from the Operator detailing the ownership change
  - b. A new plan cover page identifying the original plan approval date, and insert a line for Date of Plan Transfer
  - c. New signature pages – use the new format for the Planner and Operator Commitments & Responsibilities (see attached draft plan template)
4. This plan transfer will be treated the equivalent as a plan update (not needing SCC action). An acknowledgement letter of the transfer will be sent to the Operator.

### **C. *Plan Updates***

#### **1. *Minor Operational Changes or Corrections***

- a. An update to the plan must be completed by a certified Odor Management Specialist. Updates are submitted to identify minor operational changes and to correct minor errors in a plan provided that the errors do not cause a significant change.
- b. Plan updates do not require a Commission action on the plan.

#### **2. *Supplemental Odor BMPs***

In accordance with §83.781(e)(1), *Implementation of Supplemental Odor BMPs*, plan updates are to address operational changes of Supplemental Odor BMPs being implemented and are to be submitted for inclusion in the approved OMP.

## ***Supplement 1 – OM Standard Plan***

(January 2014)

The following standard plan format contains all of the required plan elements as developed for the Odor Management program. Planners are required to follow the format of this standard plan to assure that all elements have been completed. Planners should note that the easier the plan is to follow and check, the quicker, and more efficient, the plan review will be.

# Odor Management Plan

*Prepared For:*

**PLAN NAME (Operator or Business)**

**OPERATOR(S) NAME(S)**

**Site Address 1**

**Site Address 2**

**Phone Number**

**County/ Municipality: \_\_\_\_\_**

**Mailing Address (if Different from Site Address)**

*Prepared By:*

**Planner Name**

**OM Certification # \_\_\_\_\_**

**Address 1**

**Address 2**

**Phone Number**

**E-mail Address**

For Official Use Only
<b>Date of Plan Submission:</b> _____
<b>Date of Plan Approval:</b> _____
<b>Date(s) of Plan Updates (not requiring SCC action):</b> _____

# Table of Contents

## PLAN NAME Odor Management Plan

*\*Editorial Note: When The Plan is Completed, Delete This Note, Then Right Click On Page Numbers & “Update Field”*

Planner and Operator Commitments & Responsibilities .....	1-1
Plan Development Requirements.....	1-1
Planner Signature & Agreement .....	1-1
Operator Requirements .....	1-2
Odor Management Plan Signature Requirements.....	1-2
Operator Signature & Agreement .....	1-2
Plan Summary.....	1-2
A. Operation Summary (see Appendix 1 to view complete Operation Information).....	1-3
Proposed Facilities:.....	1-3
B. Odor Site Index Summary (see Appendix 3 to view complete Index).....	1-3
C. Odor BMP Implementation, Operation & Maintenance Schedule .....	1-3
Level I Odor BMPs Principles.....	1-3
Level I Odor BMPs to be Implemented.....	1-4
Level II Odor BMPs to be Implemented: .....	1-4
D. Documentation Requirements.....	1-4
Level I Odor BMP Documentation Requirements.....	1-4
Level II Odor BMP Documentation Requirements .....	1-5
Odor BMP Implementation Commitment Statement .....	1-6
Odor Management Plan Name:.....	1-6
Level I Odor BMPs Principles.....	1-6
Odor Management Plan Requirements .....	1-6
Level I Odor BMPs – Maintenance Log YEAR .....	1-7
Level II Odor BMPs – Quarterly Observation Log YEAR.....	1-8
LEVEL II ODOR BMP NAME:.....	1-8
Appendix 1: Operation Information.....	1-9
Part A: Odor Source Factors .....	1-9
Existing Facilities Description:.....	1-9
Proposed Regulated Facility (ies) Description: .....	1-9
Part B: Site Land Use Factors.....	1-12
Part C: Surrounding Area Land Use Factors .....	1-12
Appendix 2: Operational Maps.....	1-13
Topographic Map.....	1-13
Site Map.....	1-13

Appendix 3: Plan Evaluation – OSI..... 1-14

Appendix 4: Biosecurity ..... 1-15

    Biosecurity Protocol Contact Information ..... 1-15

Appendix 5: Supporting Documentation ..... 1-16

# Planner and Operator Commitments & Responsibilities

## Plan Development Requirements

This odor management plan (OMP) has been developed to meet the requirements of Pennsylvania’s Nutrient and Odor Management Act, Act 38 of 2005 (Act 38), for the State Conservation Commission’s (Commission) Odor Management Program for the following farm type(s): **NOTE: Select all check-boxes that apply.**

- Pennsylvania Act 38 Concentrated Animal Operation (CAO)
- Pennsylvania CAFO (Concentrated Animal Feeding Operation (CAFO) program
- Odor Management Program Volunteer Animal Operation (VAO)

## Planner Signature & Agreement

The planner’s signature below certifies that this plan was developed in conjunction with, and reviewed by the operator, prior to submitting it for review. The plan cannot be submitted until the operator understands and agrees with all the provisions of the plan. If the reviewer finds that the planner has not reviewed at least the Plan Summary with the farmer, then the plan reviewer is to relay that information to the certification program staff for their consideration.

The planner’s signature and below date(s) certifies that a site visit(s) was conducted **by an Act 38 Certified Odor Management Specialist** to verify the criteria within the evaluation distance area at the time of developing the plan, specifically for the odor source(s), for locating houses, churches, businesses and public use facilities within the evaluation distance, as well as for the site land use and the surrounding land use factors.

The information contained in this plan is accurate to the best of my knowledge. This plan has been developed in accordance with the criteria established for the Act 38 Odor Management Program indicated above. I affirm the foregoing to be true and correct, and make these statements subject to the penalties of 18 Pa. C.S. § 4904, relating to unsworn falsification to authorities.

*Planner Name:* \_\_\_\_\_ *Certification number:* \_\_\_\_\_

*Signature of Planner:* \_\_\_\_\_ *Date:* \_\_\_\_\_

*Date(s) Evaluation Distance Area Site Visit Conducted:* \_\_\_\_\_

**Odor Management Plan Name:** \_\_\_\_\_

**Operator Requirements**

**Plan Implementation & Documentation:** Odor Management Plans developed under Act 38 are required to be implemented as approved in order to maintain compliance. Implementation includes: adherence to installation of listed Odor Best Management Practices (Odor BMPs) within implementation schedule timeframes and conditions; maintenance of the Odor BMPs consistent with the operation and maintenance schedule timeframes; conditions contained in this plan; and record keeping obligations of the program. Agricultural operations are also required to keep and maintain accurate records of the Odor BMPs consistent with the schedules and are required to allow the Commission access to those records in order to determine the compliance status.

**Post Construction Inspection:** Prior to utilizing a new or expanded animal housing facility or manure storage facility addressed in this plan, the operation must receive written approval from the Commission confirming implementation of the plan. **In order to obtain this written approval the operator, upon completion of construction activities, must inform the Commission in writing via certified mail of their desire to begin using the new or expanded regulated facilities.** At that time the Commission will send out a representative to assess and verify the implementation of the approved Odor Management Plan.

**Compliance Inspections:** Plans developed under this program also require agricultural operations to allow periodic access by the Commission for status review and complaint inspections, in order to determine the status of the operation's compliance and whether a plan amendment is required. Inspections will be scheduled at least annually. Agricultural operations will provide the operation's biosecurity contact and protocols to the Commission.

**Odor Management Plan Signature Requirements**

In accordance with §83.741(i), plans shall be signed by the *Operator/ Authorized Representative* of the agricultural operation indicating concurrence with the information in the plan and acceptance of responsibilities under the plan. The following signature requirements apply:

- (i) For sole proprietorships, the proprietor.
- (ii) For partnerships, a general partner.
- (iii) For corporations, a vice president or president. For any other authorized representative, the plan must contain an attachment, executed by the secretary of the corporation, which states that the person signing on behalf of the corporation is authorized to do so.

*NOTE: When using a business name for the plan, the business name must be registered with the Pennsylvania Department of State.*

**Operator Signature & Agreement**

In accordance with §§83.751 (content of plans) and 83.762 (operator commitment statement), the *Signature of Operator/ Authorized Representative* below certifies that I was involved with the development of this plan, that the plan writer reviewed the plan with me, and that I am agreeable to the provisions outlined in this plan. All the information I provided in this odor management plan is accurate to the best of my knowledge and I will implement the practices and procedures outlined in the odor management plan in order to manage the potential for impacts from the offsite migration of odors associated with the operation for which this OMP is written.

Indicate business entity type: Sole Proprietor  Partnership/ LP/ LLP  Corporation/ LLC

*Signature of Operator/ Authorized Representative:* \_\_\_\_\_ *Date:* \_\_\_\_\_

*Print Name of Operator/ Authorized Representative:* \_\_\_\_\_

*Title of Operator/ Authorized Representative:* \_\_\_\_\_

*Business Legal Name of the Operation:* \_\_\_\_\_

## Plan Summary

### A. Operation Summary (see Appendix 1 to view complete Operation Information)

#### Proposed Facilities:

*Detail the Animal Type associated with the Proposed Facilities and that is consistent with the Animal Type detailed in the OSI. If animal numbers (AEUs) from existing facilities are voluntarily being added to the plan, detail the AEUs number; otherwise state "None", "Zero (0)" or "Not Applicable".*

*NOTE: AEU calculations and AEUs per acre calculation must reflect those in the most current Act 38 NMP, otherwise explain the difference and submit the calculations in Appendix 5: Supporting Documentation.*

Proposed OSI Animal Type: \_\_\_\_\_

Proposed Animal Numbers: \_\_\_\_\_

Proposed AEUs (per animal type): \_\_\_\_\_

Voluntary Existing Animal Type: \_\_\_\_\_

Voluntary Existing AEUs (per animal type): \_\_\_\_\_

Total AEUs Covered by this Plan: \_\_\_\_\_

AEUs per acre for the operation: \_\_\_\_\_

Is there an approved Act 38 NMP for this operation?  Yes  No

*NOTE: If No, explain in Appendix 5: Supporting Documentation.*

### B. Odor Site Index Summary (see Appendix 3 to view complete Index)

*NOTE: If multiple Geographic Centers are used, you must provide scores for each geographic center. Scores listed here must match the final scores in the OSI.*

Score: \_\_\_\_\_

### C. Odor BMP Implementation, Operation & Maintenance Schedule

#### Level I Odor BMPs Principles

1. Steps taken to reduce dust and feed accumulation in pens, aisles, and on animals.
2. Manage ventilation to provide sufficient fresh airflow throughout the facility to keep animals and facility surfaces clean and dry.
3. Manage manure to minimize damp, exposed manure that contributes to odor generation.
4. Remove mortalities daily and manage appropriately.
5. Manage feed nutrients to animal nutrient requirements in order to avoid excess nutrient excretion.
6. Manage manure storage facility to reduce exposed surface area and off-site odor transfer.

**Definitions:**

- **Required Odor BMPs** – In accordance with §§83.771, 83.781-83.783, Required Odor BMPs are the Odor BMPs required for implementation when there is a neighboring facility or a public use facility in the evaluation distance area, or when the OSI score is 50 or more points (Level I Odor BMPs), and when the OSI score is 100 or more points (Level II Odor BMPs).
- **Voluntary Odor BMPs** – The operator has voluntarily chosen to include Odor BMPs in the plan. Voluntary Odor BMPs must meet the same program standards that Required Odor BMPs do for implementation, operation, maintenance, and documentation.
- **Supplemental Odor BMPs** – In accordance with §83.781(e), Supplemental Odor BMPs are implemented in addition to the approved Odor BMPs in the plan and are also associated with plan updates.

*NOTE: Odor BMPs must be relevant to the site specific factors and must be maintained for the lifetime of the regulated facility unless otherwise approved.*

### Level I Odor BMPs to be Implemented

*Select each check-box that applies; if more than one category applies, clearly detail the respective Level I Odor BMPs criteria with each respective category. Detail below all Level I Odor BMPs Principles, adapted from the PA Odor BMP Reference List, that are applicable to the site specific factors of this animal operation and the regulated facilities.*

- None Required**
  - Voluntary Level I Odor BMP:**
  - Required Level I Odor BMP:**
  - Supplemental Level I Odor BMP:**
- 

### Level II Odor BMPs to be Implemented:

*Select each check-box that applies; if more than one category applies, clearly detail the respective Level II Odor BMPs criteria with each respective category. Detail below all Level II Odor BMPs criteria addressing the following:*

- 1. the general construction and implementation criteria*
- 2. the corresponding timeframes of when each Odor BMP will be implemented*
- 3. all operation and maintenance procedures for each Odor BMP along with the corresponding timeframes for carrying out those procedures*
- 4. the lifespan of each Odor BMP.*

*NOTE: NRCS Conservation Practice Standards and Job Sheets that are in existence for the Level II Odor BMP are encouraged to be used for construction, implementation, and operation and maintenance criteria.*

- None Required**
  - Voluntary Level II Odor BMP:**
  - Required Level II Odor BMP:**
  - Supplemental Level II Odor BMP:**
- 

## D. Documentation Requirements

*The following information will be documented by the Operator for each Odor BMP to ensure compliance with the plan. Documentation is needed to demonstrate implementation of the plan as well as for corrective actions taken for significant maintenance activities needed to return an Odor BMP back to normal operating parameters.*

### Level I Odor BMP Documentation Requirements

*Select each check-box that applies; if more than one category applies, clearly detail each documentation criterion.*

**None Required** – *(NOTE: Delete the Odor BMP Implementation Commitment Statement and the Level I Maintenance Log)*

**Level I Odor BMPs – Odor BMP Implementation Commitment Statement Only**

*The Operator will annually complete the Odor BMP Implementation Commitment Statement.*

**Level I Odor BMPs Documentation Criteria:**

*The Operator will annually complete the Odor BMP Implementation Commitment Statement. The Operator will also complete the Level I Odor BMPs Maintenance Log upon any of the following occurrences:*

- 1.
- 2.

### **Level II Odor BMP Documentation Requirements**

*Select each check-box that applies; if more than one category applies, clearly detail each documentation criterion.*

**None Required** – *(NOTE: Delete the Level II Quarterly Observation Log)*

**Level II Odor BMP Documentation Criteria:**

*The Operator will complete the Level II Odor BMPs Quarterly Observation Log, at least on a quarterly basis, detailing the proper implementation of the Odor BMPs as identified in the Implementation, Operation & Maintenance Schedule. The Operator will also complete the Level II Odor BMPs Quarterly Observation Log upon any of the following occurrences:*

- 1.
- 2.

# Odor BMP Implementation Commitment Statement

*To be completed and signed annually by operators which have a neighboring facility or a public use facility in the evaluation distance area. This form is an attestation of the operator for the daily implementation of the Odor BMPs, and in accordance with §83.791, it is to be kept on site for at least 3 years.*

**(Copy This Page For Future Use)**

**Odor Management Plan Name:** \_\_\_\_\_

## Level I Odor BMPs Principles

1. Steps were taken to reduce dust and feed accumulation in pens, aisles, and on animals.
2. Ventilation was managed to provide sufficient fresh airflow throughout the facility to keep animals and facility surfaces clean and dry.
3. Manure was managed to minimize damp, exposed manure that contributes to odor generation.
4. Mortalities were removed daily and managed appropriately.
5. Feed nutrients were matched to animal nutrient requirements to avoid excess nutrient excretion.
6. Manage manure storage to reduce exposed surface area and off-site odor transfer.

## Odor Management Plan Requirements

In accordance with §§83.762 operator commitment statement), 83.771 (managing odors), 83.781 – 83.783 (Odor BMPs and schedules), 83.791 – 83.792 (documentation requirements) and 83.802 (plan implementation), I affirm that all the information I provided in the odor management plan is accurate to the best of my knowledge.

In order to manage the potential for impacts from the offsite migration of odors associated with the operation, I affirm that I have implemented the specific practices and procedures detailed in the odor management plan Odor BMP Implementation, Operation & Maintenance Schedule (principles identified above) from DATE: \_\_\_\_\_ to DATE: \_\_\_\_\_ (CY/ FY, etc.).

I affirm the foregoing to be true and correct, and make these statements subject to the penalties of 18 Pa. C.S. § 4904, relating to unsworn falsification to authorities.

*Signature of Operator:* \_\_\_\_\_ *Date:* \_\_\_\_\_

*Name of Operator:* \_\_\_\_\_

*Title of Operator:* \_\_\_\_\_

**Level I Odor BMPs – Maintenance Log** YEAR \_\_\_\_\_

*(NOTE: The operator will record occurrences of mechanically related maintenance activities or for any corrective actions taken.)*

**(Copy This Page For Future Use)**

<i>List ODOR BMPs</i>	<i>DATE</i>	<i>NOTES</i>

**Level II Odor BMPs – Quarterly Observation Log YEAR \_\_\_\_\_**

*(NOTE: The operator will record observations relating to 1) the implementation of each Level II Odor BMP at least on the first day (approximately) of each quarter of the year or in accordance with the Implementation, Operation & Maintenance Schedule, and 2,) for mechanically related maintenance activities, as soon as possible upon the observation that maintenance is needed, or upon each occurrence of any corrective actions taken.)*

**(Copy This Page For Future Use)**

*Select  
Quarter:*

<input type="checkbox"/> 1 <sup>st</sup> Quarter (January)	<input type="checkbox"/> 2 <sup>nd</sup> Quarter (April)	<input type="checkbox"/> 3 <sup>rd</sup> Quarter (July)	<input type="checkbox"/> 4 <sup>th</sup> Quarter (October)
---	--	---	---

**LEVEL II ODOR BMP NAME:**

<i>List ACTIVITIES</i>	<i>DATE</i>	<i>NOTES</i>

## Appendix 1: Operation Information

### Part A: Odor Source Factors

**1. Site Livestock History:** \_\_\_\_\_

*Detail the Maximum AEUs of Livestock on the site within the past 3 years.*

#### Existing Facilities Description:

*NOTE: If the facilities or animal information differ from the most current Nutrient Management Plan, detail the differences in Appendix 5: Supporting Documentation.*

*Definitions:* Existing facilities are those animal housing facilities or manure storage facilities constructed before February 27, 2009, and are not subject to Odor Management program requirements.

**2. List the Existing Animal Types:** \_\_\_\_\_ **Existing Animal Numbers:** \_\_\_\_\_

**3. Existing Animal Equivalent Units (AEUs) per Animal Type:** \_\_\_\_\_

**4. Existing Animal Housing Facility(ies):**

*Describe all existing animal housing facilities including their dimensions, capacity and existing Odor BMPs used to address potential impacts.*

Animal Housing Facility	Dimensions	Livestock Capacity	Existing Odor BMPs

**5. Existing Manure Storage Facility(ies) and Manure Handling Systems:**

*a. Describe all existing manure storage facilities and manure treatment technology facilities, including their dimensions, capacity and existing Odor BMPs used to address potential impacts.*

Manure Storage Facility	Dimensions	Usable Capacity	Existing Odor BMPs

*b. Provide a narrative description detailing the manure handling systems, including manure storage facilities, manure stacking areas, and manure treatment technology facilities.*

\_\_\_\_\_

#### Proposed Regulated Facility (ies) Description:

*Detail the information below, clearly indicating:*

- 1) The animals that will be housed in the proposed animal housing facility (ies), which include expansions onto existing facilities;*
- 2) The manure type (animal type detailed in the OSI ) that will be stored in the proposed storage facility and identifying the Act 38 Nutrient Management Program requirements that must be followed for the proposed manure storage facility(ies);*
- 3) If Voluntary Existing Animal Numbers and AEUs or Transferred Existing AEUS do not apply, state "None", "Zero (0)" or "Not Applicable" for that criterion.*

*NOTE: The Animal Type associated with the Proposed Facilities must be consistent with the Animal Type detailed in the OSI.*

*NOTE: If the proposed facilities, animal information, and AEU calculations differ from the most current Nutrient Management Plan (NMP), detail the differences in Appendix 5: Supporting Documentation.*

*Definitions:*

- **Proposed AEUs** are the new additional AEUs associated with the proposed regulated animal housing facility (ies).
- **Voluntary Existing AEUs** are the AEUs associated with the existing animal housing facility (ies).
- **Proposed AEUs and Voluntary Existing AEUs** are used for determining the Odor Site Index evaluation distance area.
- **Transferred Existing AEUs** are existing AEUs on the site that will be transferred into the animal housing facility being evaluated.
- **Total AEUs** are used for determining significant change of the regulated facility (ies); a significant change will require an amendment to the plan. A significant change is defined as a net increase of equal to or greater than 25% in AEUs, as measured from the time of the initial plan approval.

**6. (a) Proposed Facility OSI Animal Types: \_\_\_\_\_**

**Proposed Animal Numbers per animal type:** \_\_\_\_\_

**Proposed AEUs per animal type:** \_\_\_\_\_

**(b) Voluntary Existing Animal Types: \_\_\_\_\_**

**Voluntary Existing Animal Numbers:** \_\_\_\_\_

**Voluntary Existing AEUs per animal type:** \_\_\_\_\_

**(c) Total AEUs Covered by this Plan: \_\_\_\_\_**

**(d) Acres for the operation associated with an approved Act 38 NMP or acres utilized for the CAO calculation: \_\_\_\_\_**

**(e) Total AEUs/ Acre for the operation: \_\_\_\_\_**

*NOTE: The AEUs per acre calculation is only used to verify CAO status. AEUs per acre calculation must reflect the calculations in the most current NMP, otherwise explain the difference and submit the calculations in Appendix 5: Supporting Documentation.*

**(f) Transferred Existing Animal Types:  Check only when Applicable**

*NOTE: Detail the following information in Appendix 5: Supporting Documentation when 0 "Proposed AUEs" are proposed due to transferring existing animals on the site into the animal housing facility being evaluated:*

- 1) The OSI Animal Type associated with the Proposed Facilities,
- 2) The numbers of animals transferred, and
- 3) The AEUs. This information will be used for determining a significant change which will require an amendment to the plan.

**7. Proposed new or expanded animal housing facility(ies):**

*Detail all proposed animal housing facilities, or portions thereof, including their dimensions and livestock capacity.*

*NOTE: If the proposed facilities differ from the most current NMP, detail the differences in Appendix 5: Supporting Documentation.*

Animal Housing Facility <input type="checkbox"/> None Proposed	Dimensions	Livestock Capacity

**8. Proposed new or expanded manure storage facility(ies):**

*NOTE: If the proposed facilities differ from the most current NMP, detail the differences in Appendix 5: Supporting Documentation.*

- (a) *Provide a narrative description detailing all manure handling systems (including all manure storage facilities, manure stacking areas, and manure treatment technology facilities) after the addition of the proposed facilities.*

\_\_\_\_\_

- (b) *Detail all proposed manure storage facilities, manure stacking areas, and manure treatment technology facilities.*

*NOTE: If a waiver is required, it must be attached in Appendix 5: Supporting Documentation for the plan to be administratively complete.*

Manure Storage Facility <input type="checkbox"/> None Proposed	Dimensions	Usable Capacity


**Act 38 NM Program Setback Requirements Verification**

*NOTE: When manure storage facilities are proposed, N/A cannot be detailed for both c & d*

(c) **Existing Operations**  Not Applicable.

*Select all check-boxes that apply for Existing Operations proposing manure storage facilities.*

In accordance with planning provisions of the Commission’s Nutrient Management Program regulations, the proposed manure storage(s) is part of an existing operation (operation that produced livestock or poultry on or before October 1, 1997) and will be located having a minimum setback distance of the following:

- i) 100’ minimum setback distance (in accordance with §83.351(a)(2)(v)(A)-(E)) from wetlands, water bodies and wells (public and private).  Yes  Not Applicable
- ii) 100’ minimum setback distance (in accordance with §83.351(a)(2)(v)(F)) a from the property line; otherwise an executed Manure Storage Setback Waiver from the Neighboring Landowner, must be attached.  Yes  Not Applicable
- iii) 200’ minimum setback distance (in accordance with §83.351(a)(2)(v)(G)) from wetlands, water bodies and wells (public and private) for a manure storage facility of 1.5 million gallons or larger capacity or that is located on slopes exceeding 8%.  Yes  Not Applicable
- iv) 200’ minimum setback distance (in accordance with §83.351(a)(2)(v)(H)) from the property line for a manure storage facility of 1.5 million gallons or larger capacity or that is located on slopes exceeding 8% and the slope is toward the property line; otherwise an executed Manure Storage Setback Waiver from the Neighboring Landowner, must be attached.  Yes  Not Applicable

(d) **New Operations/ New Animal Enterprises**  Not Applicable.

*Select all check-boxes that apply for New Operations/ New Animal Enterprises proposing manure storage facilities.*

If the proposed manure storage(s) is part of a new operation (operation that produced livestock or poultry after October 1, 1997), or a new animal enterprise (an existing operation that expanded after October 1, 1997, via producing different livestock or poultry than what was previously produced – see NM Tech Manual, Section III) and in accordance with planning provisions of the Commission’s Nutrient Management Program regulations the proposed storage will be located having a minimum setback distance of the following:

- i) 100’ minimum setback distance (in accordance with §83.351(a)(2)(vi)(A)-(E)) f from wetlands, water bodies and wells (public and private).  Yes  Not Applicable
- ii) 200’ minimum setback distance (in accordance with §83.351(a)(2)(v)(F)) from the property line; otherwise an executed Manure Storage Setback Waiver from the Neighboring Landowner, must be attached.  Yes  Not Applicable
- iii) 200’ minimum setback distance (in accordance with §83.351(a)(2)(v)(G)) from wetlands, water bodies and wells (public and private) for a manure storage facility of 1.5 million gallons or larger capacity or that is located on slopes exceeding 8%.  Yes  Not Applicable
- iv) 300’ minimum setback distance (in accordance with §83.351(a)(2)(v)(H)) from the property line for a manure storage facility of 1.5 million gallons or larger capacity or that is located on slopes exceeding 8% and the slope is toward the property line; otherwise an executed Manure Storage Setback Waiver from the Neighboring Landowner, must be attached.  Yes  Not Applicable

**9. Construction activities of the proposed regulated facilities:**

*NOTE: Construction activities must be started within 3 years of the plan approval date.*

- a. *Detail the proposed construction sequence timeframes for each proposed regulated facility (or portions thereof) \_\_\_\_\_*

- b. *Have construction activities started on any of the proposed regulated facilities?*  Yes  No *If yes, please detail: \_\_\_\_\_*

## Part B: Site Land Use Factors

1) *Select the applicable check-box below for each special agricultural land use designation, and*

2) *Provide written verification in Appendix 5: Supporting Documentation for each agricultural land use designation claimed.*

**NOTE:** *Documentation verifying each claimed land use must be attached for the plan to be administratively complete.*

Agricultural land use designations applicable to the site being evaluated:

1. Agricultural Security Area  Yes / No
2. Agricultural Zoning  Yes / No
3. Preserved Farm  Yes / No

## Part C: Surrounding Area Land Use Factors

**NOTE:** *Detail applicable criteria for 1 and 2 on the Operational Map in Appendix 2.*

1. Other Livestock Operations ( $\geq 8$  AEUs) within the evaluation distance area  Yes / No   
*If yes, then list the type of operation, the direction (N, S, E, W) and quadrant (distance range from the facility).*

2. Distance to nearest property line measurement:

**NOTE:** *Measured from nearest corner of the proposed animal housing facility and/or manure storage facility to the property line. Measurements must also be detailed on the Operational Map in Appendix 2.*

- a. Animal Housing Facility measurement \_\_\_\_\_ (ft.)  Not Applicable
- b. Manure Storage Facility measurement \_\_\_\_\_ (ft.)  Not Applicable

3. If nearest property (from the nearest property line measurements indicated in “2” above) is less than 300’, is this neighboring property a Preserved Farm?  Yes / No

**NOTE:** *Documentation verifying this claimed status must be attached for the plan to be administratively complete.*

- (a) *If “Yes” is indicated, detail the name and address in Appendix 5: Supporting Documentation of the nearest neighboring property owner who has a Preserved Farm.*

## Appendix 2: Operational Maps

### Topographic Map

Odor Management Plans must include a topographic map drawn to scale with a map legend, identifying:

- Operation boundaries;
- Location of existing and proposed animal housing and manure storage facilities on the operation;
- Location of operation-related neighboring facilities;
- Location of neighboring facilities (normally occupied homes, active businesses and churches) and public use facilities within the evaluation distance area;
- Local topography (as indicated by the topographic lines);
- Geographic center with concentric circles drawn at 600' intervals for the entire evaluation distance area;
- Identification of the various map quadrants to include North, South, East and West;
- Distance to nearest property line from the nearest facility;
- Road names within the evaluation distance area; and
- All neighboring facilities and public use facilities that are being given credit for the Intervening Topography and Vegetation Factor.

In order to distinguish the following criteria from the other neighboring facilities and public use facilities, the Operational Map and the associated map legend must have separate symbols detailing the following:

- All operation-related neighboring facilities, and
- All neighboring facilities and public use facilities which are being given credit for the Intervening Topography and Vegetation Factor.

**NOTE:** *The scale chosen must be reasonable and practical for use in evaluating the OMP. For example:*

- *A scale of 1" = 600' is an example of a scale that is reasonable for use in determining evaluation distances, setbacks, etc., but may not be practical for larger evaluation distance areas for fitting the map on one 8 1/2' x 11' sheet of paper.*
- *A scale of 1.37" = 267.5' is an example of a scale that may be practical for fitting on one 8 1/2' x 11' sheet of paper, but in a scale that is not reasonable or very useful.*
- *Maps need to be to a scale that shows sufficient detail to be reasonable and useful. Planners are encouraged to use a scale that can be divided evenly by, or into, 600' by a round whole number*
- *Multiple maps are encouraged to be provided for the purpose of facilitating specific details, i.e. aerial maps, etc.*

### Site Map

The purpose of the site map is to facilitate the plan review process of identifying specific details about the operation being evaluated. Odor Management Plans must include a site map of the operational related facilities drawn to scale with a map legend, identifying at a minimum the following:

- Operation boundaries;
- Location of existing and proposed animal housing and manure storage facilities on the operation;
- Geographic center with concentric circles drawn at 600' intervals; and
- Distance to nearest property line from the nearest facility

If there are multiple facilities on the site, detail the name of each of the facilities as per what the operator refers to them as, i.e. Layer #1 – Layer #5, mortality composting facility, etc.

If the evaluation distance area is small enough, i.e. a 1200' evaluation distance area, to clearly identify the specific details required, then a separate map will not be required.

## **Appendix 3: Plan Evaluation – OSI**

## Appendix 4: Biosecurity

### Biosecurity Protocol Contact Information

*Detail the point of contact for information on this operation's biosecurity protocols:*

Name: \_\_\_\_\_ Phone: \_\_\_\_\_  
E-mail: \_\_\_\_\_ Relationship: \_\_\_\_\_

## **Appendix 5: Supporting Documentation**

This section is reserved for the plan writer when developing this plan to have a dedicated area to include supporting documentation such as for agricultural land use designation verification, Nutrient Management program setback waiver verification, AEU calculation verification when no NMP is available, etc.

*Provide a heading for each topic discussed in this Appendix.*

## ***Supplement 2 – OMP Amendment***

(January 2014)

The following standard format for Plan Amendments contains all of the required plan elements as developed for the Odor Management program. Planners are required to follow the standard format of this Plan Amendment to assure that all elements have been completed. Planners should note that the easier the plan is to follow and check, the quicker, and more efficient, the plan review will be.

# Odor Management Plan Amendment (X)

*Prepared For:*

**PLAN NAME (Operator or Business)**

**OPERATOR(S) NAME(S)**

**Site Address 1**

**Site Address 2**

**Phone Number**

**County/ Municipality: \_\_\_\_\_**

**Mailing Address (if Different from Site Address)**

*Prepared By:*

**Planner Name**

**OM Certification # \_\_\_\_\_**

**Address 1**

**Address 2**

**Phone Number**

**E-mail Address**

For Official Use Only
<b>Date of Plan Submission:</b> _____
<b>Date of Plan Approval:</b> _____
<b>Date(s) of Plan Updates (not requiring SCC action):</b> _____

# Table of Contents

**PLAN NAME Odor Management Plan**

*\*Editorial Note: When The Plan is Completed, Delete This Note, Then Right Click On Page Numbers & “Update Field”* Planner and Operator Commitments & Responsibilities ..... 2-5

Plan Development Requirements..... 2-5

Planner Signature & Agreement ..... 2-5

OMP Amendment Name: ..... 2-6

Operator Requirements ..... 2-6

Odor Management Plan Signature Requirements ..... 2-6

Operator Signature & Agreement ..... 2-6

Plan Summary ..... 2-7

A. Operation Summary (see Appendix 1 to view complete Operation Information) ..... 2-7

Proposed Facilities: ..... 2-7

Currently Regulated Facilities: ..... 2-7

B. Odor Site Index Summary (see Appendix 3 to view complete Index)..... 2-8

C. Odor BMP Implementation, Operation & Maintenance Schedule ..... 2-8

Level I Odor BMPs Principles ..... 2-8

Level I Odor BMPs to be Implemented ..... 2-8

Level II Odor BMPs to be Implemented: ..... 2-8

D. Documentation Requirements ..... 2-9

Level I Odor BMP Documentation Requirements..... 2-9

Level II Odor BMP Documentation Requirements ..... 2-9

Odor BMP Implementation Commitment Statement ..... 2-10

OMP Amendment Name: ..... 2-10

Level I Odor BMPs Principles ..... 2-10

Odor Management Plan Requirements ..... 2-10

Level I Odor BMPs – Maintenance Log YEAR ..... 2-11

Level II Odor BMPs – Quarterly Observation Log YEAR..... 2-12

LEVEL II ODOR BMP NAME:..... 2-12

Appendix 1: Operation Information..... 2-13

Part A: Odor Source Factors ..... 2-13

Existing Facilities Description: ..... 2-13

Currently Regulated Facilities: ..... 2-13

Proposed Regulated Facility(ies) Description: ..... 2-14

Part B: Site Land Use Factors ..... 2-16

Part C: Surrounding Area Land Use Factors ..... 2-16

Appendix 2: Operational Maps ..... 2-18  
    Topographic Map ..... 2-18  
    Site Map ..... 2-18  
Appendix 3: Plan Evaluation – OSI ..... 2-19  
Appendix 4: Biosecurity ..... 2-20  
    Biosecurity Protocol Contact Information ..... 2-20  
Appendix 5: Supporting Documentation ..... 2-21

## Planner and Operator Commitments & Responsibilities

### Plan Development Requirements

This odor management plan (OMP) has been developed to meet the requirements of Pennsylvania's Nutrient and Odor Management Act, Act 38 of 2005 (Act 38), for the State Conservation Commission's (Commission) Odor Management Program for the following farm type(s): **NOTE: Select all check-boxes that apply.**

- Pennsylvania Act 38 Concentrated Animal Operation (CAO)
- Pennsylvania CAFO (Concentrated Animal Feeding Operation (CAFO) program
- Odor Management Program Volunteer Animal Operation (VAO)

### Planner Signature & Agreement

The planner's signature below certifies that this plan was developed in conjunction with, and reviewed by the operator, prior to submitting it for review. The plan cannot be submitted until the operator understands and agrees with all the provisions of the plan. If the reviewer finds that the planner has not reviewed at least the Plan Summary with the farmer, then the plan reviewer is to relay that information to the certification program staff for their consideration.

The planner's signature and below date(s) certifies that a site visit(s) was conducted **by an Act 38 Certified Odor Management Specialist** to verify the criteria within the evaluation distance area at the time of developing the plan, specifically for the odor source(s), for locating houses, churches, businesses and public use facilities within the evaluation distance, as well as for the site land use and the surrounding land use factors.

The information contained in this plan is accurate to the best of my knowledge. This plan has been developed in accordance with the criteria established for the Act 38 Odor Management Program indicated above. I affirm the foregoing to be true and correct, and make these statements subject to the penalties of 18 Pa. C.S. § 4904, relating to unsworn falsification to authorities.

*Planner Name:* \_\_\_\_\_ *Certification number:* \_\_\_\_\_

*Signature of Planner:* \_\_\_\_\_ *Date:* \_\_\_\_\_

*Date(s) Evaluation Distance Area Site Visit Conducted:* \_\_\_\_\_

**OMP Amendment Name:** \_\_\_\_\_

### Operator Requirements

**Plan Implementation & Documentation:** Odor Management Plans developed under Act 38 are required to be implemented as approved in order to maintain compliance. Implementation includes: adherence to installation of listed Odor Best Management Practices (Odor BMPs) within implementation schedule timeframes and conditions; maintenance of the Odor BMPs consistent with the operation and maintenance schedule timeframes; conditions contained in this plan; and record keeping obligations of the program. Agricultural operations are also required to keep and maintain accurate records of the Odor BMPs consistent with the schedules and are required to allow the Commission access to those records in order to determine the compliance status.

**Post Construction Inspection:** Prior to utilizing a new or expanded animal housing facility or manure storage facility addressed in this plan, the operation must receive written approval from the Commission confirming implementation of the plan. **In order to obtain this written approval the operator, upon completion of construction activities, must inform the Commission in writing via certified mail of their desire to begin using the new or expanded regulated facilities.** At that time the Commission will send out a representative to assess and verify the implementation of the approved Odor Management Plan.

**Compliance Inspections:** Plans developed under this program also require agricultural operations to allow periodic access by the Commission for status review and complaint inspections, in order to determine the status of the operation's compliance and whether a plan amendment is required. Inspections will be scheduled at least annually. Agricultural operations will provide the operation's biosecurity contact and protocols to the Commission.

### Odor Management Plan Signature Requirements

In accordance with §83.741(i), plans shall be signed by the *Operator/ Authorized Representative* of the agricultural operation indicating concurrence with the information in the plan and acceptance of responsibilities under the plan. The following signature requirements apply:

- (i) For sole proprietorships, the proprietor.
- (ii) For partnerships, a general partner.
- (iii) For corporations, a vice president or president. For any other authorized representative, the plan must contain an attachment, executed by the secretary of the corporation, which states that the person signing on behalf of the corporation is authorized to do so.

**NOTE:** When using a business name for the plan, the business name must be registered with the Pennsylvania Department of State.

### Operator Signature & Agreement

In accordance with §§83.751 (content of plans) and 83.762 (operator commitment statement), the *Signature of Operator/ Authorized Representative* below certifies that I was involved with the development of this plan, that the plan writer reviewed the plan with me, and that I am agreeable to the provisions outlined in this plan. All the information I provided in this odor management plan is accurate to the best of my knowledge and I will implement the practices and procedures outlined in the odor management plan in order to manage the potential for impacts from the offsite migration of odors associated with the operation for which this OMP is written.

Indicate business entity type: Sole Proprietor  Partnership/ LP/ LLP  Corporation/ LLC

Signature of Operator/ Authorized Representative: \_\_\_\_\_ Date: \_\_\_\_\_

Print Name of Operator/ Authorized Representative: \_\_\_\_\_

Title of Operator/ Authorized Representative: \_\_\_\_\_

Business Legal Name of the Operation: \_\_\_\_\_

## Plan Summary

Clearly detail why an amendment to the approved plan is required.

### A. Operation Summary (see Appendix 1 to view complete Operation Information)

#### Proposed Facilities:

*Detail the Animal Type associated with the Proposed Facilities and consistent with the Animal Type detailed in the OSI. If animal numbers (AEUs) from existing facilities are voluntarily being added to the plan, detail the AEUs number; otherwise state "None", "Zero (0)" or "Not Applicable".*

**NOTE:** AEU calculations and AEUs per acre calculation must reflect those in the most current Act 38 NMP, otherwise explain the difference and submit the calculations in Appendix 5: Supporting Documentation.

Proposed OSI Animal Type: \_\_\_\_\_

Proposed Animal Numbers: \_\_\_\_\_

Proposed AEUs (per animal type): \_\_\_\_\_

Voluntary Existing Animal Type: \_\_\_\_\_

Voluntary Existing AEUs (per animal type): \_\_\_\_\_

Regulated AEUs under Previous Plan(s): \_\_\_\_\_  
*(Associated with Currently Regulated Facilities below)*

**Total** AEUs Covered by this Plan: \_\_\_\_\_

AEUs per acre for the operation: \_\_\_\_\_

Is there an approved Act 38 NMP for this operation?  Yes  No

**NOTE:** If No, explain in Appendix 5: Supporting Documentation.

#### Currently Regulated Facilities:

*Detail in the tables below, each regulated animal housing facility and/or manure storage facility that was previously approved and is already constructed. Detail the Dates and AEUs separately (copy & paste) for each previously approved plan or amendment.*

Plan Approval Date: \_\_\_\_\_ Currently Regulated AEUs: \_\_\_\_\_

Animal Housing Facility <input type="checkbox"/> None	Dimensions	Livestock Capacity

Manure Storage Facility <input type="checkbox"/> None	Dimensions	Usable Capacity

## B. Odor Site Index Summary (see Appendix 3 to view complete Index)

*NOTE: If multiple Geographic Centers are used, you must provide scores for each geographic center. Scores listed here must match the final scores in the OSI.*

Score: \_\_\_\_\_

## C. Odor BMP Implementation, Operation & Maintenance Schedule

*NOTE: All Required Odor BMPs from previous approved plans or plan amendments, which are still applicable to its associated regulated facility, must be identified below in addition to any proposed Odor BMPs associated with this plan amendment. If specific Odor BMPs that were previously approved no longer apply to this site specific scenario, contact Odor Management program staff to identify and discuss this operational change prior to submitting the plan amendment.*

### Level I Odor BMPs Principles

1. Steps taken to reduce dust and feed accumulation in pens, aisles, and on animals.
2. Manage ventilation to provide sufficient fresh airflow throughout the facility to keep animals and facility surfaces clean and dry.
3. Manage manure to minimize damp, exposed manure that contributes to odor generation.
4. Remove mortalities daily and manage appropriately.
5. Manage feed nutrients to animal nutrient requirements in order to avoid excess nutrient excretion.
6. Manage manure storage facility to reduce exposed surface area and off-site odor transfer.

#### Definitions:

- **Required Odor BMPs** – In accordance with §§83.771, 83.781-83.783, Required Odor BMPs are the Odor BMPs required for implementation when there is a neighboring facility or a public use facility in the evaluation distance area, or when the OSI score is 50 or more points (Level I Odor BMPs), and when the OSI score is 100 or more points (Level II Odor BMPs).
- **Voluntary Odor BMPs** – The operator has voluntarily chosen to include Odor BMPs in the plan. Voluntary Odor BMPs must meet the same program standards that Required Odor BMPs do for implementation, operation, maintenance, and documentation.
- **Supplemental Odor BMPs** – In accordance with §83.781(e), Supplemental Odor BMPs are implemented in addition to the approved Odor BMPs in the plan and are also associated with plan updates.

*NOTE: Odor BMPs must be relevant to the site specific situation and must be maintained for the lifetime of the regulated facility unless otherwise approved.*

### Level I Odor BMPs to be Implemented

*Select each check-box that applies; if more than one category applies, clearly detail the respective Level I Odor BMPs criteria with each respective category. Detail below all Level I Odor BMPs Principles, adapted from the PA Odor BMP Reference List, that are applicable to the site specific factors of this animal operation and the regulated facilities.*

- None Required**
- Voluntary Level I Odor BMP:**
- Required Level I Odor BMP:**
- Supplemental Level I Odor BMP:**

---

### Level II Odor BMPs to be Implemented:

*Select each check-box that applies; if more than one category applies, clearly detail the respective Level II Odor BMPs criteria with each respective category. Detail below all Level II Odor BMPs criteria addressing the following:*

1. *the general construction and implementation criteria*

2. the corresponding timeframes of when each Odor BMP will be implemented
3. all operation and maintenance procedures for each Odor BMP along with the corresponding timeframes for carrying out those procedures
4. the lifespan of each Odor BMP.

**NOTE:** NRCS Conservation Practice Standards and Job Sheets that are in existence for the Level II Odor BMP are encouraged to be used for construction, implementation, and operation and maintenance criteria.

- None Required**
- Voluntary Level II Odor BMP:**
- Required Level II Odor BMP:**
- Supplemental Level II Odor BMP:**
- 

## D. Documentation Requirements

The following information will be documented by the Operator for each Odor BMP to ensure compliance with the plan. Documentation is needed to demonstrate implementation of the plan as well as for corrective actions taken for significant maintenance activities needed to return an Odor BMP back to normal operating parameters.

### Level I Odor BMP Documentation Requirements

Select each check-box that applies; if more than one category applies, clearly detail each documentation criterion.

**None Required** – (NOTE: Delete the Odor BMP Implementation Commitment Statement and the Level I Maintenance Log)

**Level I Odor BMPs – Odor BMP Implementation Commitment Statement Only**

The Operator will annually complete the Odor BMP Implementation Commitment Statement.

**Level I Odor BMP Documentation Criteria:**

The Operator will annually complete the 'Odor BMP Implementation Commitment Statement'. The Operator will also complete the Level I Odor BMPs Maintenance Log upon any of the following occurrences:

1. \_\_\_\_\_
- 2.

### Level II Odor BMP Documentation Requirements

Select each check-box that applies; if more than one category applies, clearly detail each documentation criterion.

**None Required** – (NOTE: Delete the Level II Quarterly Observation Log)

**Level II Odor BMP Documentation Criteria:**

The Operator will complete the Level II Odor BMPs Quarterly Observation Log, at least on a quarterly basis, detailing the proper implementation of the Odor BMPs as identified in the Implementation, Operation & Maintenance Schedule. The Operator will also complete the Level II Odor BMPs Quarterly Observation Log upon any of the following occurrences:

1. \_\_\_\_\_
- 2.

## Odor BMP Implementation Commitment Statement

*To be completed and signed annually by operators which have a neighboring facility or a public use facility in the evaluation distance area. This form is an attestation of the operator for the daily implementation of the Odor BMPs, and in accordance with §83.791, it is to be kept on site for at least 3 years.*

**(Copy This Page For Future Use)**

**OMP Amendment Name:** \_\_\_\_\_

### Level I Odor BMPs Principles

1. Steps were taken to reduce dust and feed accumulation in pens, aisles, and on animals.
2. Ventilation was managed to provide sufficient fresh airflow throughout the facility to keep animals and facility surfaces clean and dry.
3. Manure was managed to minimize damp, exposed manure that contributes to odor generation.
4. Mortalities were removed daily and managed appropriately.
5. Feed nutrients were matched to animal nutrient requirements to avoid excess nutrient excretion.
6. Manage manure storage to reduce exposed surface area and off-site odor transfer.

### Odor Management Plan Requirements

In accordance with §§83.762 operator commitment statement), 83.771 (managing odors), 83.781 – 83.783 (Odor BMPs and schedules), 83.791 – 83.792 (documentation requirements) and 83.802 (plan implementation), I affirm that all the information I provided in the odor management plan is accurate to the best of my knowledge.

In order to manage the potential for impacts from the offsite migration of odors associated with the operation, I affirm that I have implemented the specific practices and procedures detailed in the odor management plan Odor BMP Implementation, Operation & Maintenance Schedule (principles identified above) from DATE: \_\_\_\_\_ to DATE: \_\_\_\_\_ (CY/ FY, etc.).

I affirm the foregoing to be true and correct, and make these statements subject to the penalties of 18 Pa. C.S. § 4904, relating to unsworn falsification to authorities.

*Signature of Operator:* \_\_\_\_\_ *Date:* \_\_\_\_\_

*Name of Operator:* \_\_\_\_\_

*Title of Operator:* \_\_\_\_\_

**Level I Odor BMPs – Maintenance Log**      **YEAR** \_\_\_\_\_

*(NOTE: The operator will record occurrences of mechanically related maintenance activities or for any corrective actions taken.)*

**(Copy This Page For Future Use)**

<i>List ODOR BMPs</i>	<i>DATE</i>	<i>NOTES</i>



# Appendix 1: Operation Information

## Part A: Odor Source Factors

### 1. Site Livestock History: \_\_\_\_\_

*Detail the Maximum AEUs of Livestock on this site (which may also include any animals from regulated facilities) within the past 3 years.*

### Existing Facilities Description:

*NOTE: If the facilities or animal information differ from the most current Nutrient Management Plan, detail the differences in Appendix 5: Supporting Documentation.*

*Definitions:* Existing facilities are those animal housing facilities or manure storage facilities constructed before February 27, 2009, and are not subject to Odor Management program requirements. These are the baseline facilities which were identified in the originally approved OMP.

### 2. List the Existing Animal Types: \_\_\_\_\_ Existing Animal Numbers: \_\_\_\_\_

### 3. Existing Animal Equivalent Units (AEUs) per Animal Type: \_\_\_\_\_

### 4. Existing Animal Housing Facility(ies):

*Describe all existing animal housing facilities including their dimensions, capacity and existing Odor BMPs used to address potential impacts.*

Animal Housing Facility	Dimensions	Livestock Capacity	Existing Odor BMPs

### 5. Existing Manure Storage Facility(ies) and Manure Handling Systems:

*a. Describe all existing manure storage facilities and manure treatment technology facilities, including their dimensions, capacity and existing Odor BMPs used to address potential impacts.*

Manure Storage Facility	Dimensions	Usable Capacity	Existing Odor BMPs

*b. Provide a narrative description detailing the manure handling systems, including manure storage facilities, manure stacking areas, and manure treatment technology facilities.*

\_\_\_\_\_

### Currently Regulated Facilities:

*Detail the information below for each constructed regulated facility, clearly indicating what was previously approved in the original plan and then separately (copy & paste) for each approved plan amendment.*

Previous Plan Approval Date: \_\_\_\_\_ Previous OSI Score: \_\_\_\_\_ Currently Regulated AEUs: \_\_\_\_\_

### 6. Currently regulated animal housing facility(ies): None Regulated

*a. Population Date(s): \_\_\_\_\_ Detail the dates that each regulated animal housing facility was populated.*

*b. Provide a detailed description of all currently regulated animal housing facilities including their dimensions and livestock capacity.*

Animal Housing Facility	Dimensions	Livestock Capacity

**7. Currently regulated manure storage facility(ies):**  *None Regulated*

- a. Storage Use Date(s): \_\_\_\_\_ *Detail the dates that each regulated animal housing facility was utilized.*
- b. *Provide a detailed description of all currently regulated manure storage facilities, manure stacking areas and manure treatment technology facilities including their dimensions and storage capacity.*

Manure Storage Facility	Dimensions	Useable Capacity

**8. Required Odor BMPs for the currently regulated facility(ies):**  Yes/  None Required

*Detail in the Plan Summary, C. Odor BMP Implementation, Operation & Maintenance Schedule, all Required Odor BMPs from previous approved plans or plan amendments which are still applicable to its associated regulated facility. If specific Odor BMPs that were previously approved no longer apply to this site specific scenario, contact Odor Management program staff to identify and discuss this operational change prior to submitting the plan amendment.*

- a. Previous Approved Odor BMPs are no longer applicable and are not part of the OMP.  Yes/ No   
*This is only applicable when the Plan Amendment is either 1) changing Odor BMPs and that the new Odor BMPs are detailed in the Plan Summary, or that 2) due to a change from the newest evaluation for the Plan Amendment, the OSI allows for this change in Odor BMP requirement.*

**Proposed Regulated Facility(ies) Description:**

*Detail the information below, clearly indicating:*

- 1) *The animals that will be housed in the proposed animal housing facility(ies), which include expansions onto existing facilities;*
- 2) *The manure type (animal type detailed in the OSI ) that will be stored in the proposed storage facility and identifying the Act 38 Nutrient Management Program requirements that must be followed for the proposed manure storage facility(ies);*
- 3) *If Voluntary Existing Animal Numbers and AEUs or Transferred Existing AEUS do not apply, state "None", "Zero (0)" or "Not Applicable" for that criterion.*

*NOTE: The Animal Type associated with the Proposed Facilities must be consistent with the Animal Type detailed in the OSI.*

*NOTE: If the proposed facilities, animal information, and AEU calculations differ from the most current Nutrient Management Plan (NMP), detail the differences in Appendix 5: Supporting Documentation.*

**Definitions:**

- **Proposed AEUs** are the new additional AEUs associated with the proposed regulated animal housing facility(ies).
- **Voluntary Existing AEUs** are the AEUs associated with the existing animal housing facility(ies).
- **Proposed AEUs and Voluntary Existing AEUs** are used for determining the Odor Site Index evaluation distance area.
- **Transferred Existing AEUs** are existing AEUs on the site that will be transferred into the animal housing facility being evaluated.
- **Total AEUs** are used for determining significant change of the regulated facility(ies); a significant change will require an amendment to the plan. A significant change is defined as a net increase of equal to or greater than 25% in AEUs, as measured from the time of the initial plan approval.

**9. (a) Proposed Facility OSI Animal Types: \_\_\_\_\_**

**Proposed Animal Numbers per animal type:** \_\_\_\_\_

**Proposed AEUs per animal type:** \_\_\_\_\_

**(b) Voluntary Existing Animal Types: \_\_\_\_\_**

**Voluntary Existing Animal Numbers:** \_\_\_\_\_

**Voluntary Existing AEUs per animal type:** \_\_\_\_\_

**(c) Regulated AEUs under Previous Plan(s) *(Associated with Currently Regulated Facilities):* \_\_\_\_\_**

**(d) Total AEUs Covered by this Plan: \_\_\_\_\_**

(e) **Acres for the operation associated with an approved Act 38 NMP or acres utilized for the CAO calculation:** \_\_\_\_\_

(f) **Total AEUs/ Acre for the operation:** \_\_\_\_\_

*NOTE: The AEUs per acre calculation is only used to verify CAO status. AEUs per acre calculation must reflect the calculations in the most current NMP, otherwise explain the difference and submit the calculations in Appendix 5: Supporting Documentation.*

(g) **Transferred Existing Animal Types:**  Check only when Applicable

*NOTE: Detail the following information in Appendix 5: Supporting Documentation when 0 "Proposed AUEs" are proposed due to transferring existing animals on the site into the animal housing facility being evaluated:*

- 1) The OSI Animal Type associated with the Proposed Facilities,
- 2) The numbers of animals transferred, and
- 3) The AEUs. This information will be used for determining a significant change which will require an amendment to the plan.

**10. Proposed new or expanded animal housing facility(ies):**

*Detail all proposed animal housing facilities, or portions thereof, including their dimensions and livestock capacity.*

*NOTE: If the proposed facilities differ from the most current NMP, detail the differences in Appendix 5: Supporting Documentation.*

Animal Housing Facility <input type="checkbox"/> None Proposed	Dimensions	Livestock Capacity

**11. Proposed new or expanded manure storage facility(ies):**

**NOTE:** If the proposed facilities differ from the most current NMP, detail the differences in Appendix 5: Supporting Documentation.

(a) *Provide a narrative description detailing all manure handling systems (including all manure storage facilities, manure stacking areas, and manure treatment technology facilities) after the addition of the proposed facilities.*

\_\_\_\_\_

(b) *Detail all proposed manure storage facilities, manure stacking areas, and manure treatment technology facilities.*

*NOTE: If a waiver is required, it must be attached in Appendix 5: Supporting Documentation for the plan to be administratively complete.*

Manure Storage Facility <input type="checkbox"/> None Proposed	Dimensions	Usable Capacity

**Act 38 NM Program Setback Requirements Verification**

*NOTE: When manure storage facilities are proposed, N/A cannot be detailed for both c & d*

(c) **Existing Operations**  Not Applicable.

*Select all check-boxes that apply for Existing Operations proposing manure storage facilities.*

In accordance with planning provisions of the Commission’s Nutrient Management Program regulations, the proposed manure storage(s) is part of an existing operation (operation that produced livestock or poultry on or before October 1, 1997) and will be located having a minimum setback distance of the following:

- i. 100’ minimum setback distance (in accordance with **§83.351(a)(2)(v)(A)-(E)**) from wetlands, water bodies and wells (public and private).  Yes  Not Applicable
- ii. 100’ minimum setback distance (in accordance with **§83.351(a)(2)(v)(F)**) a from the property line; otherwise an executed Manure Storage Setback Waiver from the Neighboring Landowner, must be attached.  Yes  Not Applicable
- iii. 200’ minimum setback distance (in accordance with **§83.351(a)(2)(v)(G)**) from wetlands, water bodies and wells (public and private) for a manure storage facility of 1.5 million gallons or larger capacity or that is

located on slopes exceeding 8%.  Yes  Not Applicable

- iv. 200' minimum setback distance (in accordance with §83.351(a)(2)(v)(H) from the property line for a manure storage facility of 1.5 million gallons or larger capacity or that is located on slopes exceeding 8% and the slope is toward the property line; otherwise an executed Manure Storage Setback Waiver from the Neighboring Landowner, must be attached.  Yes  Not Applicable

(d) **New Operations/ New Animal Enterprises**  Not Applicable.

*Select all check-boxes that apply for New Operations/ New Animal Enterprises proposing manure storage facilities.*

If the proposed manure storage(s) is part of a new operation (operation that produced livestock or poultry after October 1, 1997), or a new animal enterprise (an existing operation that expanded after October 1, 1997, via producing different livestock or poultry than what was previously produced – see NM Tech Manual, Section III) and in accordance with planning provisions of the Commission’s Nutrient Management Program regulations the proposed storage will be located having a minimum setback distance of the following:

- i. 100' minimum setback distance (in accordance with §83.351(a)(2)(vi)(A)-(E) f from wetlands, water bodies and wells (public and private).  Yes  Not Applicable
- ii. 200' minimum setback distance (in accordance with §83.351(a)(2)(v)(F) from the property line; otherwise an executed Manure Storage Setback Waiver from the Neighboring Landowner, must be attached.  Yes  Not Applicable
- iii. 200' minimum setback distance (in accordance with §83.351(a)(2)(v)(G) from wetlands, water bodies and wells (public and private) for a manure storage facility of 1.5 million gallons or larger capacity or that is located on slopes exceeding 8%.  Yes  Not Applicable
- iv. 300' minimum setback distance (in accordance with §83.351(a)(2)(v)(H) from the property line for a manure storage facility of 1.5 million gallons or larger capacity or that is located on slopes exceeding 8% and the slope is toward the property line; otherwise an executed Manure Storage Setback Waiver from the Neighboring Landowner, must be attached.  Yes  Not Applicable

**12. Construction activities of the proposed regulated facilities:**

*NOTE: Construction activities must be started within 3 years of the plan approval date.*

- a. *Detail the proposed construction sequence timeframes for each proposed regulated facility (or portions thereof)* \_\_\_\_\_
- b. *Have construction activities started on any of the proposed regulated facilities?*  Yes  No *If yes, please detail:* \_\_\_\_\_

**Part B: Site Land Use Factors**

*1) Select the applicable check-box below for each special agricultural land use designation, and*

*2) Provide written verification in Appendix 5: Supporting Documentation for each agricultural land use designation claimed.*

*NOTE: Documentation verifying each claimed land use must be attached for the plan to be administratively complete.*

Agricultural land use designations applicable to the site being evaluated:

- 1. Agricultural Security Area  Yes / No
- 2. Agricultural Zoning  Yes / No
- 3. Preserved Farm  Yes / No

**Part C: Surrounding Area Land Use Factors**

*NOTE: Detail applicable criteria for 1 and 2 on the Operational Map in Appendix 2.*

- 1. Other Livestock Operations (≥ 8 AEUs) within the evaluation distance area  Yes / No

*If yes, then list the type of operation, the direction (N, S, E, W) and quadrant (distance range from the facility). \_\_\_\_\_*

2. Distance to nearest property line measurements:

*NOTE: Measured from nearest corner of the proposed animal housing facility and/or manure storage facility to the property line. Measurements must also be detailed on the Operational Map in Appendix 2.*

- a. Animal Housing Facility measurement \_\_\_\_\_ (ft.)  Not Applicable
- b. Manure Storage Facility measurement \_\_\_\_\_ (ft.)  Not Applicable

3. If nearest property (from the nearest property line measurements indicated in “2” above) is less than 300’, is this neighboring property a Preserved Farm?  Yes / No

*NOTE: Documentation verifying this claimed status must be attached for the plan to be administratively complete.*

- (a) *If “Yes” is indicated, detail the name and address in Appendix 5: Supporting Documentation of the nearest neighboring property owner who has a Preserved Farm.*

## Appendix 2: Operational Maps

### Topographic Map

Odor Management Plans must include a topographic map drawn to scale with a map legend, identifying:

- Operation boundaries;
- Location of existing and proposed animal housing and manure storage facilities on the operation;
- Location of operation-related neighboring facilities;
- Location of neighboring facilities (normally occupied homes, active businesses and churches) and public use facilities within the evaluation distance area;
- Local topography (as indicated by the topographic lines);
- Geographic center with concentric circles drawn at 600' intervals for the entire evaluation distance area;
- Identification of the various map quadrants to include North, South, East and West;
- Distance to nearest property line from the nearest facility;
- Road names within the evaluation distance area; and
- All neighboring facilities and public use facilities that are being given credit for the Intervening Topography and Vegetation Factor.

In order to distinguish the following criteria from the other neighboring facilities and public use facilities, the Operational Map and the associated map legend must have separate symbols detailing the following:

- All operation-related neighboring facilities, and
- All neighboring facilities and public use facilities which are being given credit for the Intervening Topography and Vegetation Factor.

**NOTE:** *The scale chosen must be reasonable and practical for use in evaluating the OMP. For example:*

- *A scale of 1" = 600' is an example of a scale that is reasonable for use in determining evaluation distances, setbacks, etc., but may not be practical for larger evaluation distance areas for fitting the map on one 8 1/2' x 11' sheet of paper.*
- *A scale of 1.37" = 267.5' is an example of a scale that may be practical for fitting on one 8 1/2' x 11' sheet of paper, but in a scale that is not reasonable or very useful.*
- *Maps need to be to a scale that shows sufficient detail to be reasonable and useful. Planners are encouraged to use a scale that can be divided evenly by, or into, 600' by a round whole number*
- *Multiple maps are encouraged to be provided for the purpose of facilitating specific details, i.e. aerial maps, etc.*

### Site Map

The purpose of the site map is to facilitate the plan review process of identifying specific details about the operation being evaluated. Odor Management Plans must include a site map of the operational related facilities drawn to scale with a map legend, identifying at a minimum the following:

- Operation boundaries;
- Location of existing and proposed animal housing and manure storage facilities on the operation;
- Geographic center with concentric circles drawn at 600' intervals; and
- Distance to nearest property line from the nearest facility

If there are multiple facilities on the site, detail the name of each of the facilities as per what the operator refers to them as, i.e. Layer #1 – Layer #5, mortality composting facility, etc.

If the evaluation distance area is small enough, i.e. a 1200' evaluation distance area, to clearly identify the specific details required, then a separate map will not be required.

## **Appendix 3: Plan Evaluation – OSI**

## Appendix 4: Biosecurity

### Biosecurity Protocol Contact Information

*Detail the point of contact for information on this operation's biosecurity protocols:*

Name: \_\_\_\_\_ Phone: \_\_\_\_\_

E-mail: \_\_\_\_\_ Relationship: \_\_\_\_\_

## **Appendix 5: Supporting Documentation**

This section is reserved for the plan writer when developing this plan to have a dedicated area to include supporting documentation such as for agricultural land use designation verification, Nutrient Management program setback waiver verification, AEU calculation verification when no NMP is available, etc.

*Provide a heading for each topic discussed in this Appendix.*

## ***Supplement 3 – Odor Site Index (OSI)***

(January 2014)

The following OSI format is to be used when developing plans under the Odor Management Program, until a newer version is approved by the Commission.

In accordance with §83.771(b)(2), an Odor Management Specialist (plan writer) developing a plan must use the most current OSI in effect at the time of plan submission, or an alternative method must be approved by the Commission prior to submitting the plan.

Act 38 Odor Management Plan - Odor Site Index

Operator Name			
Planner Name			
Type of Operation		Select from list	
Voluntary Existing AEU's			
Proposed AEU's			
Previously Approved AEU's			
AEU's Covered by OMP			
Evaluation Distance		1200'	
<b>Part A: Odor Source Factors</b>			<b>OSI Score</b>
Facility Size Covered by OMP		0	No AEU's covered by this OMP
Site Livestock History		Select from list	'Waiting for user input'
Manure Handling System		Select from list	Waiting for user input'
			0.00
<b>Part B: Site Land Use</b>			
Ag Security Zone		Select from list	0
Ag Zoning		Select from list	0
Preserved Farm		Select from list	0
			0.00
<b>Part C: Surrounding Land Use</b>			
Other Livestock >8 AEU in evaluation distance		Select from list	'Waiting for user input'
Distance to Nearest Property Line		Select from list	'Waiting for user input'
If nearest property is <300', is it preserved farmland		Select from list	'Waiting for user input'
Neighboring Homes			0.00
Public Use Facilities			0.00
			0.00
Species Adjustment Factor		Select from list	0
		<b>Final OSI Score</b>	<b>0</b>
		<b>No BMPs Required</b>	

<b>East Quadrant</b>	<600	600-1200	1200-1800	1800-2400	2400-3000		
# Neighboring Facilities				Select from list	Select from list		
Facility Value	15	7	3	0	0		
Home Shielding	Select from list	<b>Total Facilities</b>	0.0				
# Public Use Facilities						<b>Total Public</b>	0.0
Public Use Value	40	20	10	5	3		
Public Use Shielding	Select from list	<b>Total East</b>	0.0				
<b>South Quadrant</b>	<600	600-1200	1200-1800	1800-2400	2400-3000		
# Neighboring Facilities				Select from list	Select from list		
Facility Value	10	5	2	0	0		
Home Shielding	Select from list	<b>Total Facilities</b>	0.0				
# Public Use Facilities						<b>Total Public</b>	0.0
Public Use Value	30	15	7	4	2		
Public Use Shielding	Select from list	<b>Total South</b>	0.0				
<b>North Quadrant</b>	<600	600-1200	1200-1800	1800-2400	2400-3000		
# Neighboring Facilities				Select from list	Select from list		
Facility Value	6	3	0.5	0	0		
Home Shielding	Select from list	<b>Total Facilities</b>	0.0				
# Public Use Facilities						<b>Total Public</b>	0.0
Public Use Value	25	13	6	3	1		
Public Use Shielding	Select from list	<b>Total North</b>	0.0				
<b>West Quadrant</b>	<600	600-1200	1200-1800	1800-2400	2400-3000		
# Neighboring Facilities				Select from list	Select from list		
Facility Value	6	3	0.5	0	0		

Return to Program (East)

Return to Program (South)

Return to Program (North)

Return to Program (West)

Click ? for help with homes and shielding. 

Click ? for help with public use facilities 

**OSI 0**

Home Shielding	Select from list	<b>Total Facilities</b>	<b>0.0</b>				
# Public Use Facilities						<b>Total Public</b>	<b>0.0</b>
Public Use Value	<b>25</b>	<b>13</b>	<b>6</b>	<b>3</b>	<b>1</b>		
Public Use Shielding	Select from list	<b>Total West</b>	<b>0.0</b>				
						<b>Grand Total</b>	<b>0.0</b>

Reset Worksheet

# Supplement 4 – Manure Handling Systems/ Manure Storage Facilities Examples

## Supplement 4 Table of Contents

*Supplement 4 – Manure Handling Systems/ Manure Storage Facilities Examples*..... 4-1

Category 1 ..... 4-2

    Poultry – Litter Cleaned-out between Flocks & Exported..... 4-2

    Poultry – 3+ Sided, Roofed, Attached (Air Dried) ..... 4-3

    Equine – In-Barn, Dry Manure & 3+ Sided, Roofed..... 4-3

    Cattle – Bedded Pack ..... 4-3

Category 2..... 4-4

    Swine – Deep-Pit, Under-barn Manure Storage Facility ..... 4-4

    Dairy – Deep-Pit, Under-barn Manure Storage Facility ..... 4-4

    Poultry – Multi-Flock Litter, With or Without External Manure Storage Facility..... 4-4

    Outdoor, Impermeable Covered Storage, Wet or Dry ..... 4-5

Category 3..... 4-5

    Outdoor Permeable Covered Liquid ..... 4-5

    Outdoor Uncovered Liquid (Crust Expected on 1st Stage) ..... 4-6

    Outdoor Uncovered Dry ..... 4-6

Category 4..... 4-7

    Outdoor Uncovered Liquid, No Crust Expected..... 4-7



The following examples of manure handling systems/ manure storage facilities are provided to facilitate the development of odor management plans.

These examples do not include all planning scenarios that may be encountered when developing plans under this program but they do address a number of the manure handling systems/ manure storage facilities common in Pennsylvania.

<b><u>Manure Handling Systems</u></b>		
<b><u>Points</u></b>	<b><u>Species</u></b>	<b><u>Category 1</u></b>
2	All	In-Barn Storage, Dry Manure Only - No Detached Storage
2	Poultry	3+ Sided, Roofed, Attached (Air Dried)
2	Poultry	Litter Cleaned each Flock and Exported at Cleanout
2	Equine	3+ Sided, Roofed
2	Cattle	Bedded Pack
<b><u>Category 2</u></b>		
4	Poultry/ Swine/ Cattle	Deep Pit, Under Building Storage, Liquid or Dry Manure
4	Poultry	Multi-flock litter, With or Without External Covered Storage
4	All	Outdoor, Impermeable Covered Storage, Wet or Dry
<b><u>Category 3</u></b>		
8	All	Outdoor Permeable Covered Liquid
8	All	Outdoor Uncovered Liquid (Crust Expected on 1st Stage)
8	All	Outdoor Uncovered Dry
<b><u>Category 4</u></b>		
16	All	Outdoor Uncovered Liquid, No Crust Expected

### ***Category 1***

#### **Poultry – Litter Cleaned-out between Flocks & Exported**

Here is an example of a typical broiler operation with a manure handling system where manure is completely removed from the site (exported) after each flock. No external manure storage facility is utilized.



### **Poultry – 3+ Sided, Roofed, Attached (Air Dried)**

Here is an example of a caged layer operation using an air dried belt manure handling system, where the dried manure is conveyed to the attached manure storage facility.



### **Equine – In-Barn, Dry Manure & 3+ Sided, Roofed**

Here are examples of a typical horse barn and roofed, 3+ sided, manure storage facilities.



### **Cattle – Bedded Pack**

In a bedded pack system, bedding is added frequently to an enclosed pen or building and the combination of the bedding and manure is removed in bulk one or more times per year.



*Figure 1. Cows lying on a bedded pack*

## Category 2

### Swine – Deep-Pit, Under-barn Manure Storage Facility

Here is an example of a typical swine operation with a manure handling system of deep-pit under-barn manure storage facility.



### Dairy – Deep-Pit, Under-barn Manure Storage Facility

Here is an example of a dairy operation with a manure handling system of deep-pit under-barn manure storage facility.



### Poultry – Multi-Flock Litter, With or Without External Manure Storage Facility

Use this option for floor-reared birds when the litter is not completely cleaned out after each flock, regardless if manure is stored on the premises or not. Here are examples of manure storage facilities with improved flooring, with and without covering.



### **Outdoor, Impermeable Covered Storage, Wet or Dry**

Here are examples of impermeable manure storage covers.



### **Category 3**

#### **Outdoor Permeable Covered Liquid**

Permeable covers for liquid storage can be comprised of either a bio-cover (straw), or a permeable synthetic cover. If gasses can escape the cover is considered permeable.



### **Outdoor Uncovered Liquid (Crust Expected on 1st Stage)**

Liquid manure from animals fed high-forage diets often form a crust which acts to block gas and odor escape to the atmosphere. Use this category for storages where a crust is expected. You may also use this category for multiple stage storage systems when a crust is expected on only the first stage.



### **Outdoor Uncovered Dry**

Examples of dry manure stored outdoors and exposed to the elements.



## ***Category 4***

### **Outdoor Uncovered Liquid, No Crust Expected**

Outdoor uncovered liquid manure creates the most potential for odor generation and transport.



## ***Supplement 5 – Sample Odor Management Plan Amendment – Poultry Operation***

The following plan has been developed to provide a sample of what a complete odor management plan, developed for the Odor Management Program, could look like as it is submitted to the Commission or Conservation District for review and action. This sample plan does not include all the planning concerns that may be encountered when developing plans under this program but it does address a number of the major issues common to odor management planning in Pennsylvania.

This plan format contains all of the required plan elements as developed for the odor Management program. Plans submitted for review and approval must be accompanied by a table of contents indicating where the various required elements of the plan are. Planners are required to follow the format of this sample plan to assure that all elements have been completed. Planners should note that the easier the plan is to follow and check, the quicker, and more efficient, the plan review will be.

Plan reviewers will be checking figures in the plans to assure that they were detailed correctly.

# Odor Management Plan Amendment A

*Prepared For:*

## **SAMPLE PLAN – Layer Operation**

**Ima Farmer, Jr.  
1 Farmer Lane  
Anywhere, PA 01010  
(098) 765-4321**

**County/ Municipality: Near Co/ My Township**

**Mailing Address (if Different from Site Address)**

*Prepared By:*

**Ima Planner  
OM Certification # 007-OMC  
1 Planner Drive  
Anywhere, PA 01010  
(123) 456-7890  
[Ima.Planner@my.co](mailto:Ima.Planner@my.co)**

For Official Use Only	
<b>Date of Plan Submission:</b>	_____
<b>Date of Plan Approval:</b>	_____
<b>Date(s) of Plan Updates (not requiring SCC action):</b>	

# Table of Contents

## Sample Plan – Layer Operation Odor Management Plan Amendment

Planner and Operator Commitments & Responsibilities .....	5-1
Plan Development Requirements.....	5-1
Planner Signature & Agreement .....	5-1
OMP Amendment Name: Sample Plan – Layer Operation .....	5-2
Operator Requirements .....	5-2
Odor Management Plan Signature Requirements.....	5-2
Operator Signature & Agreement .....	5-2
Plan Summary.....	5-3
A. Operation Summary (see Appendix 1 to view complete Operation Information).....	5-3
Proposed Facilities:.....	5-3
Currently Regulated Facilities: .....	5-3
B. Odor Site Index Summary (see Appendix 3 to view complete Index).....	5-4
C. Odor BMP Implementation, Operation & Maintenance Schedule .....	5-4
Level I Odor BMPs Principles.....	5-4
Level I Odor BMPs to be Implemented.....	5-4
Level II Odor BMPs to be Implemented: .....	5-5
D. Documentation Requirements.....	5-6
Level I Odor BMP Documentation Requirements.....	5-6
Level II Odor BMP Documentation Requirements .....	5-6
Odor BMP Implementation Commitment Statement .....	5-7
OMP Amendment Name: Sample Plan – Layer Operation .....	5-7
Level I Odor BMPs Principles.....	5-7
Odor Management Plan Requirements .....	5-7
Level II Odor BMPs – Quarterly Observation Log    YEAR.....	5-8
LEVEL II ODOR BMP NAME: Manure Composting .....	5-8
Appendix 1: Operation Information.....	5-9
Part A: Odor Source Factors .....	5-9
Existing Facilities Description:.....	5-9
Currently Regulated Facilities: .....	5-9
Proposed Regulated Facility(ies) Description: .....	5-10
Part B: Site Land Use Factors.....	5-13
Part C: Surrounding Area Land Use Factors .....	5-13
Appendix 2: Operational Maps.....	5-14

Topographic Map..... 5-14  
Site Map..... 5-14  
Appendix 3: Plan Evaluation – OSI..... 5-18  
Appendix 4: Biosecurity ..... 5-21  
    Biosecurity Protocol Contact Information ..... 5-21  
Appendix 5: Supporting Documentation ..... 5-22

## Planner and Operator Commitments & Responsibilities

### Plan Development Requirements

This odor management plan (OMP) has been developed to meet the requirements of Pennsylvania's Nutrient and Odor Management Act, Act 38 of 2005 (Act 38), for the State Conservation Commission's (Commission) Odor Management Program for the following farm type(s): **NOTE: Select all check-boxes that apply.**

- Pennsylvania Act 38 Concentrated Animal Operation (CAO)
- Pennsylvania CAFO (Concentrated Animal Feeding Operation (CAFO) program
- Odor Management Program Volunteer Animal Operation (VAO)

### Planner Signature & Agreement

The planner's signature below certifies that this plan was developed in conjunction with, and reviewed by the operator, prior to submitting it for review. The plan cannot be submitted until the operator understands and agrees with all the provisions of the plan. If the reviewer finds that the planner has not reviewed at least the Plan Summary with the farmer, then the plan reviewer is to relay that information to the certification program staff for their consideration.

The planner's signature and below date(s) certifies that a site visit(s) was conducted **by an Act 38 Certified Odor Management Specialist** to verify the criteria within the evaluation distance area at the time of developing the plan, specifically for the odor source(s), for locating houses, churches, businesses and public use facilities within the evaluation distance, as well as for the site land use and the surrounding land use factors.

The information contained in this plan is accurate to the best of my knowledge. This plan has been developed in accordance with the criteria established for the Act 38 Odor Management Program indicated above. I affirm the foregoing to be true and correct, and make these statements subject to the penalties of 18 Pa. C.S. § 4904, relating to unsworn falsification to authorities.

Planner Name: Ima Planner Certification number: 007-OMC  
Signature of Planner: Ima Planner Date: 1/1/14  
Date(s) Evaluation Distance Area Site Visit Conducted: 11/12/13, 12/11/13

OMP Amendment Name: Sample Plan – Layer Operation

**Operator Requirements**

**Plan Implementation & Documentation:** Odor Management Plans developed under Act 38 are required to be implemented as approved in order to maintain compliance. Implementation includes: adherence to installation of listed Odor Best Management Practices (Odor BMPs) within implementation schedule timeframes and conditions; maintenance of the Odor BMPs consistent with the operation and maintenance schedule timeframes; conditions contained in this plan; and record keeping obligations of the program. Agricultural operations are also required to keep and maintain accurate records of the Odor BMPs consistent with the schedules and are required to allow the Commission access to those records in order to determine the compliance status.

**Post Construction Inspection:** Prior to utilizing a new or expanded animal housing facility or manure storage facility addressed in this plan, the operation must receive written approval from the Commission confirming implementation of the plan. **In order to obtain this written approval the operator, upon completion of construction activities, must inform the Commission in writing via certified mail of their desire to begin using the new or expanded regulated facilities.** At that time the Commission will send out a representative to assess and verify the implementation of the approved Odor Management Plan.

**Compliance Inspections:** Plans developed under this program also require agricultural operations to allow periodic access by the Commission for status review and complaint inspections, in order to determine the status of the operation's compliance and whether a plan amendment is required. Inspections will be scheduled at least annually. Agricultural operations will provide the operation's biosecurity contact and protocols to the Commission.

**Odor Management Plan Signature Requirements**

In accordance with §83.741(i), plans shall be signed by the *Operator/ Authorized Representative* of the agricultural operation indicating concurrence with the information in the plan and acceptance of responsibilities under the plan. The following signature requirements apply:

- (i) For sole proprietorships, the proprietor.
- (ii) For partnerships, a general partner.
- (iii) For corporations, a vice president or president. For any other authorized representative, the plan must contain an attachment, executed by the secretary of the corporation, which states that the person signing on behalf of the corporation is authorized to do so.

*NOTE: When using a business name for the plan, the business name must be registered with the Pennsylvania Department of State.*

**Operator Signature & Agreement**

In accordance with §§83.751 (content of plans) and 83.762 (operator commitment statement), the *Signature of Operator/ Authorized Representative* below certifies that I was involved with the development of this plan, that the plan writer reviewed the plan with me, and that I am agreeable to the provisions outlined in this plan. All the information I provided in this odor management plan is accurate to the best of my knowledge and I will implement the practices and procedures outlined in the odor management plan in order to manage the potential for impacts from the offsite migration of odors associated with the operation for which this OMP is written.

Indicate business entity type: Sole Proprietor  Partnership/ LP/ LLP  Corporation/ LLC

Signature of Operator/ Authorized Representative: Ima Farmer Jr Date: 1/1/14

Print Name of Operator/ Authorized Representative: Ima Farmer, Jr

Title of Operator/ Authorized Representative: Operator

Business Legal Name of the Operation: Sample Plan – Layer Operation

## Plan Summary

Clearly detail why an amendment to the approved plan is required.

This plan amendment is for new construction activities for a caged-layer house (B11) and its associated attached roofed manure storage facility. Layer house B11 will replace the existing layer houses B2, B3 and B4. No additional birds will be brought onto the operation with the addition of layer house B11.

### A. Operation Summary (see Appendix 1 to view complete Operation Information)

#### Proposed Facilities:

*Detail the Animal Type associated with the Proposed Facilities and consistent with the Animal Type detailed in the OSI. If animal numbers (AEUs) from existing facilities are voluntarily being added to the plan, detail the AEUs number; otherwise state "None", "Zero (0)" or "Not Applicable".*

**NOTE:** *AEU calculations and AEUs per acre calculation must reflect those in the most current Act 38 NMP, otherwise explain the difference and submit the calculations in Appendix 5: Supporting Documentation.*

Proposed OSI Animal Type:	Layer
Proposed Animal Numbers:	0
Proposed AEUs ( <i>per animal type</i> ):	0
Voluntary Existing Animal Type:	Layers – 438,404
Voluntary Existing AEUs ( <i>per animal type</i> ):	1,346.75 Layer AEUs
Regulated AEUs under Previous Plan(s): <i>(Associated with Currently Regulated Facilities below)</i>	984.67 AEUs
<b>Total AEUs Covered by this Plan:</b>	<b>3,071.92 Layer AEUs (see Appendix 5)</b>
 AEUs per acre for the operation:	 3,407.92 AEUs (total of Layers & Pullets)

Is there an approved Act 38 NMP for this operation?  Yes  No

**NOTE:** *If No, explain in Appendix 5: Supporting Documentation.*

#### Currently Regulated Facilities:

*Detail in the tables below, each regulated animal housing facility and/or manure storage facility that was previously approved and is already constructed. Detail the Dates and AEUs separately (copy & paste) for each previously approved plan or amendment.*

Plan Approval Date: 4/1/2009    Currently Regulated AEUs: 984.67

Animal Housing Facility <input type="checkbox"/> None	Dimensions	Livestock Capacity
Layer House B6	56' x426'	160,270 Layers
Layer House B7	56' x426'	160,270 Layers

Manure Storage Facility <input type="checkbox"/> None	Dimensions	Usable Capacity
Roofed Storage Attached to Layer House B7	80' x175' x 8'	4,000 tons

## B. Odor Site Index Summary (see Appendix 3 to view complete Index)

*NOTE: If multiple Geographic Centers are used, you must provide scores for each geographic center. Scores listed here must match the final scores in the OSI.*

Score: 31.2

## C. Odor BMP Implementation, Operation & Maintenance Schedule

*NOTE: All Required Odor BMPs from previous approved plans or plan amendments, which are still applicable to its associated regulated facility, must be identified below in addition to any proposed Odor BMPs associated with this plan amendment. If specific Odor BMPs that were previously approved no longer apply to this site specific scenario, contact Odor Management program staff to identify and discuss this operational change prior to submitting the plan amendment.*

### Level I Odor BMPs Principles

1. Steps taken to reduce dust and feed accumulation in pens, aisles, and on animals.
2. Manage ventilation to provide sufficient fresh airflow throughout the facility to keep animals and facility surfaces clean and dry.
3. Manage manure to minimize damp, exposed manure that contributes to odor generation.
4. Remove mortalities daily and manage appropriately.
5. Manage feed nutrients to animal nutrient requirements in order to avoid excess nutrient excretion.
6. Manage manure storage facility to reduce exposed surface area and off-site odor transfer.

#### Definitions:

- **Required Odor BMPs** – In accordance with §§83.771, 83.781-83.783, Required Odor BMPs are the Odor BMPs required for implementation when there is a neighboring facility or a public use facility in the evaluation distance area, or when the OSI score is 50 or more points (Level I Odor BMPs), and when the OSI score is 100 or more points (Level II Odor BMPs).
- **Voluntary Odor BMPs** – The operator has voluntarily chosen to include Odor BMPs in the plan. Voluntary Odor BMPs must meet the same program standards that Required Odor BMPs do for implementation, operation, maintenance, and documentation.
- **Supplemental Odor BMPs** – In accordance with §83.781(e), Supplemental Odor BMPs are implemented in addition to the approved Odor BMPs in the plan and are also associated with plan updates.

*NOTE: Odor BMPs must be relevant to the site specific situation and must be maintained for the lifetime of the regulated facility unless otherwise approved.*

### Level I Odor BMPs to be Implemented

*Select each check-box that applies; if more than one category applies, clearly detail the respective Level I Odor BMPs criteria with each respective category. Detail below all Level I Odor BMPs Principles, adapted from the PA Odor BMP Reference List, that are applicable to the site specific factors of this animal operation and the regulated facilities.*

- None Required**
- Voluntary Level I Odor BMP:**
- Required Level I Odor BMP:**
- Supplemental Level I Odor BMP:**

1. Steps taken to reduce dust and feed accumulation in pens, aisles, and on animals.
  - a. Dust Control – Stack houses, fan motors, blades, and shrouds will be dry cleaned annually
  - b. Feed Cleanup – Spilled feed we be removed daily.

2. Manage ventilation to provide sufficient fresh airflow throughout the facility to keep animals and facility surfaces clean and dry.
  - a. The mechanical ventilation system components are observed daily for functionality. The computerized ventilation system will be designed to provide appropriate ventilation per room (per age group), including the winter season. As ambient temperature increases, ventilation rate will automatically increase via staged ventilation. Inlet openings will be automatically controlled by a static pressure monitor or by temperature, which will also be integrated into the computer controls.
    - i. Fans (per room) are cleaned and inspected between groups.
    - ii. Inlet openings are adjusted to provide adequate air distribution per room between groups.
    - iii. Static pressure monitors are calibrated per room between groups.
    - iv. Curtains are controlled via the computerized controller system which is observed daily. The curtains, cables, winches and other ventilation system components are inspected per room between groups.
3. Manage manure to minimize damp, exposed manure that contributes to odor generation.
  - a. Moisture control – Water delivery system and drinkers will be checked daily for leaks. Repairs will be performed as needed.
4. Remove mortalities daily and manage appropriately.
  - a. Mortalities will be transferred to the composting facility daily.
5. Manage feed nutrients to animal nutrient requirements in order to avoid excess nutrient excretion.
  - a. Professional nutritionist formulates diets to match animal nutrient requirements.
6. Manage manure storage facility to reduce exposed surface area and off-site odor transfer.
  - a. Manage Surface Water – Keep surface water from entering manure storage area; grade surrounding area to avoid run on, implement and maintain roof and 3-walls.
  - b. Manure Storage Area Cleanliness - A visual inspection of the manure storage area will be completed daily to ensure that any manure scattered during transport activities is cleaned up in a timely manner.

### **Level II Odor BMPs to be Implemented:**

*Select each check-box that applies; if more than one category applies, clearly detail the respective Level II Odor BMPs criteria with each respective category. Detail below all Level II Odor BMPs criteria addressing the following:*

- 1. the general construction and implementation criteria*
- 2. the corresponding timeframes of when each Odor BMP will be implemented*
- 3. all operation and maintenance procedures for each Odor BMP along with the corresponding timeframes for carrying out those procedures*
- 4. the lifespan of each Odor BMP.*

***NOTE:** NRCS Conservation Practice Standards and Job Sheets that are in existence for the Level II Odor BMP are encouraged to be used for construction, implementation, and operation and maintenance criteria.*

**None Required**

**Voluntary Level II Odor BMP:**

**Required Level II Odor BMP:**

**Supplemental Level II Odor BMP:**

1. **Manure Composting** – Composting manure involves mixing manure with a dry material with a high carbon: nitrogen ratio and keeping the material aerobic to reduce odor emissions. – Weekly records of temperature (showing temperature increases from the initial startup phase to active composting) and windrow turnings will be maintained.

## D. Documentation Requirements

*The following information will be documented by the Operator for each Odor BMP to ensure compliance with the plan. Documentation is needed to demonstrate implementation of the plan as well as for corrective actions taken for significant maintenance activities needed to return an Odor BMP back to normal operating parameters.*

### Level I Odor BMP Documentation Requirements

*Select each check-box that applies; if more than one category applies, clearly detail each documentation criterion.*

**None Required** – *(NOTE: Delete the Odor BMP Implementation Commitment Statement and the Level I Maintenance Log)*

**Level I Odor BMPs – Odor BMP Implementation Commitment Statement Only**

*The Operator will annually complete the Odor BMP Implementation Commitment Statement.*

**Level I Odor BMP Documentation Criteria:**

*The Operator will annually complete the ‘Odor BMP Implementation Commitment Statement’. The Operator will also complete the Level I Odor BMPs Maintenance Log upon any of the following occurrences:*

1. \_\_\_\_\_
- 2.

### Level II Odor BMP Documentation Requirements

*Select each check-box that applies; if more than one category applies, clearly detail each documentation criterion.*

**None Required** – **(NOTE: Delete the Level II Quarterly Observation Log)**

**Level II Odor BMP Documentation Criteria:**

*The Operator will complete the Level II Odor BMPs Quarterly Observation Log, at least on a quarterly basis, detailing the proper implementation of the Odor BMPs as identified in the Implementation, Operation & Maintenance Schedule. The Operator will also complete the Level II Odor BMPs Quarterly Observation Log upon any of the following occurrences:*

1. Detail timeframes of initial composting startup phase and any timeframes when the temperature dropped below the optimal temperature range.
- 2.

## Odor BMP Implementation Commitment Statement

*To be completed and signed annually by operators which have a neighboring facility or a public use facility in the evaluation distance area. This form is an attestation of the operator for the daily implementation of the Odor BMPs, and in accordance with §83.791, it is to be kept on site for at least 3 years.*

**(Copy This Page For Future Use)**

**OMP Amendment Name:** Sample Plan – Layer Operation

### Level I Odor BMPs Principles

1. Steps were taken to reduce dust and feed accumulation in pens, aisles, and on animals.
2. Ventilation was managed to provide sufficient fresh airflow throughout the facility to keep animals and facility surfaces clean and dry.
3. Manure was managed to minimize damp, exposed manure that contributes to odor generation.
4. Mortalities were removed daily and managed appropriately.
5. Feed nutrients were matched to animal nutrient requirements to avoid excess nutrient excretion.
6. Manage manure storage to reduce exposed surface area and off-site odor transfer.

### Odor Management Plan Requirements

In accordance with §§83.762 operator commitment statement), 83.771 (managing odors), 83.781 – 83.783 (Odor BMPs and schedules), 83.791 – 83.792 (documentation requirements) and 83.802 (plan implementation), I affirm that all the information I provided in the odor management plan is accurate to the best of my knowledge.

In order to manage the potential for impacts from the offsite migration of odors associated with the operation, I affirm that I have implemented the specific practices and procedures detailed in the odor management plan Odor BMP Implementation, Operation & Maintenance Schedule (principles identified above) from DATE: \_\_\_\_\_ to DATE: \_\_\_\_\_ (CY/ FY, etc.).

I affirm the foregoing to be true and correct, and make these statements subject to the penalties of 18 Pa. C.S. § 4904, relating to unsworn falsification to authorities.

Signature of Operator: \_\_\_\_\_ Date: \_\_\_\_\_

Name of Operator: Ima Farmer, Jr

Title of Operator: Operator

**Level II Odor BMPs – Quarterly Observation Log** YEAR \_\_\_\_\_

*(NOTE: The operator will record observations relating to 1) the implementation of each Level II Odor BMP at least on the first day (approximately) of each quarter of the year or in accordance with the Implementation, Operation & Maintenance Schedule, and 2,) for mechanically related maintenance activities, as soon as possible upon the observation that maintenance is needed, or upon each occurrence of any corrective actions taken.)*

**(Copy This Page For Future Use)**

Select Quarter:  1<sup>st</sup> Quarter (January) |  2<sup>nd</sup> Quarter (April) |  3<sup>rd</sup> Quarter (July) |  4<sup>th</sup> Quarter (October)

<b>Chapter 2 LEVEL II ODOR BMP NAME: Manure Composting</b>		
<i>List ACTIVITIES</i>	<i>DATE</i>	<i>NOTES</i>
Start-up phase		
Weekly temperature readings		
Windrow turnings		

## Appendix 1: Operation Information

### Part A: Odor Source Factors

**1. Site Livestock History: 3,071.92 Layer AEUs (excluding Pullet AEU)s)**

*Detail the Maximum AEU's of Livestock on this site (which may also include any animals from regulated facilities) within the past 3 years.*

#### Existing Facilities Description:

***NOTE:** If the facilities or animal information differ from the most current Nutrient Management Plan, detail the differences in Appendix 5: Supporting Documentation.*

**Definitions:** Existing facilities are those animal housing facilities or manure storage facilities constructed before February 27, 2009, and are not subject to Odor Management program requirements. These are the baseline facilities which were identified in the originally approved OMP.

**2. List the Existing Animal Types: Layers & Pullets    Existing Animal Numbers: 1,000,000 Layers & 300,000 Pullets**

**3. Existing Animal Equivalent Units (AEU)s per Animal Type: 3,071.92 Layers & 336.00 Pullet**

**4. Existing Animal Housing Facility(ies):**

*Describe all existing animal housing facilities including their dimensions, capacity and existing Odor BMPs used to address potential impacts.*

Animal Housing Facility	Dimensions	Livestock Capacity	Existing Odor BMPs
Layer House B2	40' x500'	57,500 layers	Manure Composting
Layer House B3	40' x500'	57,500 layers	Manure Composting
Layer House B4	40' x500'	57,500 layers	Manure Composting
Layer House B5	56' x512'	120,000 layers	Manure Composting
Layer House B8	72' x 528'	120,000 layers	Manure Composting
Layer House B9	72' x 528'	120,000 layers	Manure Composting
Layer House B10	72' x 488'	155,000 layers	Manure Composting
Pullet House #3	72' x 396' – Located w/n the evaluation distance area	120,000 pullets	None

Note: Pullet House #1 = 40' x 396' and Pullet House #2 = 56' x 396' are located on a separate property and are not located within the OSI evaluation distance area.

**5. Existing Manure Storage Facility(ies) and Manure Handling Systems:**

*a. Describe all existing manure storage facilities and manure treatment technology facilities, including their dimensions, capacity and existing Odor BMPs used to address potential impacts.*

Manure Storage Facility	Dimensions	Usable Capacity	Existing Odor BMPs
Egg Wash Concrete tank	10' x 120'	645,992 gallons	None
Main Roofed Storage	100' x200' x 8' (40' center – trussed roof system)	6,000 tons	Manure Composting
Roofed Composting Facility	100' x 200' x 2'	1,500 tons	Manure Composting

*b. Provide a narrative description detailing the manure handling systems, including manure storage facilities, manure stacking areas, and manure treatment technology facilities.*

Manure is hauled from all existing layer houses to the main roofed storage facility (3- 8' sides with center height of 40') where it is exported and/or composted in the composting facility. The Egg Wash Water facility serves the egg processing facility.

#### Currently Regulated Facilities:

*Detail the information below for each constructed regulated facility, clearly indicating what was previously approved in the original plan and then separately (copy & paste) for each approved plan amendment.*

Previous Plan Approval Date: 4/1/2009    Previous OSI Score: 40.4    Currently Regulated AEU's: 984.67

**6. Currently regulated animal housing facility(ies):**  *None Regulated*

a. Population Date(s): B7 – 12/15/09; B6 – 5/1/11 *Detail the dates that each regulated animal housing facility was populated.*

b. *Provide a detailed description of all currently regulated animal housing facilities including their dimensions and livestock capacity.*

Animal Housing Facility	Dimensions	Livestock Capacity
Layer House B6	56' x426'	160,270 Layers
Layer House B7	56' x426'	160,270 Layers

**7. Currently regulated manure storage facility(ies):**  *None Regulated*

a. Storage Use Date(s): 12/18/09 *Detail the dates that each regulated animal housing facility was utilized.*

b. *Provide a detailed description of all currently regulated manure storage facilities, manure stacking areas and manure treatment technology facilities including their dimensions and storage capacity.*

Manure Storage Facility	Dimensions	Useable Capacity
Roofed Storage Attached to Layer House B7	80' x 175' 8' (20' center – trussed roof system)	4,000 tons

**8. Required Odor BMPs for the currently regulated facility(ies):**  Yes/  None Required

*Detail in the Plan Summary, C. Odor BMP Implementation, Operation & Maintenance Schedule, all Required Odor BMPs from previous approved plans or plan amendments which are still applicable to its associated regulated facility. If specific Odor BMPs that were previously approved no longer apply to this site specific scenario, contact Odor Management program staff to identify and discuss this operational change prior to submitting the plan amendment.*

a. Previous Approved Odor BMPs are no longer applicable and are not part of the OMP.  Yes/ No

*This is only applicable when the Plan Amendment is either 1) changing Odor BMPs and that the new Odor BMPs are detailed in the Plan Summary, or that 2) due to a change from the newest evaluation for the Plan Amendment, the OSI allows for this change in Odor BMP requirement.*

**Proposed Regulated Facility(ies) Description:**

*Detail the information below, clearly indicating:*

- 1) *The animals that will be housed in the proposed animal housing facility(ies), which include expansions onto existing facilities;*
- 2) *The manure type (animal type detailed in the OSI ) that will be stored in the proposed storage facility and identifying the Act 38 Nutrient Management Program requirements that must be followed for the proposed manure storage facility(ies);*
- 3) *If Voluntary Existing Animal Numbers and AEUs or Transferred Existing AEUS do not apply, state “None”, “Zero (0)” or “Not Applicable” for that criterion.*

**NOTE:** *The Animal Type associated with the Proposed Facilities must be consistent with the Animal Type detailed in the OSI.*

**NOTE:** *If the proposed facilities, animal information, and AEU calculations differ from the most current Nutrient Management Plan (NMP), detail the differences in Appendix 5: Supporting Documentation.*

**Definitions:**

- **Proposed AEUs** are the new additional AEUs associated with the proposed regulated animal housing facility(ies).
- **Voluntary Existing AEUs** are the AEUs associated with the existing animal housing facility(ies).
- **Proposed AEUs and Voluntary Existing AEUs** are used for determining the Odor Site Index evaluation distance area.
- **Transferred Existing AEUs** are existing AEUs on the site that will be transferred into the animal housing facility being evaluated.
- **Total AEUs** are used for determining significant change of the regulated facility(ies); a significant change will require an amendment to the plan. A significant change is defined as a net increase of equal to or greater than 25% in AEUs, as measured from the time of the initial plan approval.

**9. (a) Proposed Facility OSI Animal Types: Layer**

**Proposed Animal Numbers per animal type: 0.0**

**Proposed AEU's per animal type: 0.0**

**(b) Voluntary Existing Animal Types: Layers**

**Voluntary Existing Animal Numbers: 438,404**

**Voluntary Existing AEU's per animal type: 1,346.75**

**(c) Regulated AEU's under Previous Plan(s) (Associated with Currently Regulated Facilities): 984.67 Layer AEU's**

**(d) Total AEU's Covered by this Plan: 3,071.92**

**(e) Acres for the operation associated with an approved Act 38 NMP or acres utilized for the CAO calculation: 1**

**(f) Total AEU's/ Acre for the operation: 3,407.92**

*NOTE: The AEU's per acre calculation is only used to verify CAO status. AEU's per acre calculation must reflect the calculations in the most current NMP, otherwise explain the difference and submit the calculations in Appendix 5: Supporting Documentation.*

**(g) Transferred Existing Animal Types:  Check only when Applicable**

*NOTE: Detail the following information in Appendix 5: Supporting Documentation when 0 "Proposed AEU's" are proposed due to transferring existing animals on the site into the animal housing facility being evaluated:*

- 1) The OSI Animal Type associated with the Proposed Facilities,
- 2) The numbers of animals transferred, and
- 3) The AEU's. This information will be used for determining a significant change which will require an amendment to the plan.

**10. Proposed new or expanded animal housing facility(ies):**

*Detail all proposed animal housing facilities, or portions thereof, including their dimensions and livestock capacity.*

*NOTE: If the proposed facilities differ from the most current NMP, detail the differences in Appendix 5: Supporting Documentation.*

Animal Housing Facility	<input type="checkbox"/> None Proposed	Dimensions	Livestock Capacity
Layer House B11		71' x 374'	241,056 layers

- B11 replaces existing facilities B2, B3, & B4.

**11. Proposed new or expanded manure storage facility(ies):**

*NOTE: If the proposed facilities differ from the most current NMP, detail the differences in Appendix 5: Supporting Documentation.*

**(a) Provide a narrative description detailing all manure handling systems (including all manure storage facilities, manure stacking areas, and manure treatment technology facilities) after the addition of the proposed facilities.**

- i. Existing – Manure is hauled from all existing layer houses to the main roofed storage facility (3- 8' sides with center height of 40') where it is exported and/or composted in the composting facility. The Egg Wash Water facility serves the egg processing facility.
- ii. Currently Regulated – Manure from the currently regulated caged layers houses B6 and B7 utilize an air drying system and conveyor belt system; this manure goes to the manure storage facility attached to layer house B7.
- iii. Proposed – Manure from the proposed caged layer house B11 utilize an air drying system and conveyor belt system; this manure goes to the manure storage facility attached to layer house B11.

**(b) Detail all proposed manure storage facilities, manure stacking areas, and manure treatment technology facilities.**

*NOTE: If a waiver is required, it must be attached in Appendix 5: Supporting Documentation for the plan to be administratively complete.*

Manure Storage Facility <input type="checkbox"/> None Proposed	Dimensions	Usable Capacity
Roofed Storage Attached to Layer House B11	80' x 162' x 12' (24' center – trussed roof system)	4,000 tons

**Act 38 NM Program Setback Requirements Verification**

*NOTE: When manure storage facilities are proposed, N/A cannot be detailed for both c & d*

(c) **Existing Operations**  Not Applicable.

*Select all check-boxes that apply for Existing Operations proposing manure storage facilities.*

In accordance with planning provisions of the Commission’s Nutrient Management Program regulations, the proposed manure storage(s) is part of an existing operation (operation that produced livestock or poultry on or before October 1, 1997) and will be located having a minimum setback distance of the following:

- i. 100’ minimum setback distance (in accordance with **§83.351(a)(2)(v)(A)-(E)**) from wetlands, water bodies and wells (public and private).  Yes  Not Applicable
- ii. 100’ minimum setback distance (in accordance with **§83.351(a)(2)(v)(F)**) a from the property line; otherwise an executed Manure Storage Setback Waiver from the Neighboring Landowner, must be attached.  Yes  Not Applicable
- iii. 200’ minimum setback distance (in accordance with **§83.351(a)(2)(v)(G)**) from wetlands, water bodies and wells (public and private) for a manure storage facility of 1.5 million gallons or larger capacity or that is located on slopes exceeding 8%.  Yes  Not Applicable
- iv. 200’ minimum setback distance (in accordance with **§83.351(a)(2)(v)(H)**) from the property line for a manure storage facility of 1.5 million gallons or larger capacity or that is located on slopes exceeding 8% and the slope is toward the property line; otherwise an executed Manure Storage Setback Waiver from the Neighboring Landowner, must be attached.  Yes  Not Applicable

(d) **New Operations/ New Animal Enterprises**  Not Applicable.

*Select all check-boxes that apply for New Operations/ New Animal Enterprises proposing manure storage facilities.*

If the proposed manure storage(s) is part of a new operation (operation that produced livestock or poultry after October 1, 1997), or a new animal enterprise (an existing operation that expanded after October 1, 1997, via producing different livestock or poultry than what was previously produced – see NM Tech Manual, Section III) and in accordance with planning provisions of the Commission’s Nutrient Management Program regulations the proposed storage will be located having a minimum setback distance of the following:

- i. 100’ minimum setback distance (in accordance with **§83.351(a)(2)(vi)(A)-(E)**) f from wetlands, water bodies and wells (public and private).  Yes  Not Applicable
- ii. 200’ minimum setback distance (in accordance with **§83.351(a)(2)(v)(F)**) from the property line; otherwise an executed Manure Storage Setback Waiver from the Neighboring Landowner, must be attached.  Yes  Not Applicable
- iii. 200’ minimum setback distance (in accordance with **§83.351(a)(2)(v)(G)**) from wetlands, water bodies and wells (public and private) for a manure storage facility of 1.5 million gallons or larger capacity or that is located on slopes exceeding 8%.  Yes  Not Applicable
- iv. 300’ minimum setback distance (in accordance with **§83.351(a)(2)(v)(H)**) from the property line for a manure storage facility of 1.5 million gallons or larger capacity or that is located on slopes exceeding 8% and the slope is toward the property line; otherwise an executed Manure Storage Setback Waiver from the Neighboring Landowner, must be attached.  Yes  Not Applicable

**12. Construction activities of the proposed regulated facilities:**

*NOTE: Construction activities must be started within 3 years of the plan approval date.*

- a. *Detail the proposed construction sequence timeframes for each proposed regulated facility (or portions thereof) Construction is planned to start around September 2014. The proposed facilities will be constructed simultaneously.*
- b. *Have construction activities started on any of the proposed regulated facilities?*  Yes  No *If yes, please detail: \_\_\_\_\_*

### Part B: Site Land Use Factors

*1) Select the applicable check-box below for each special agricultural land use designation, and*

*2) Provide written verification in Appendix 5: Supporting Documentation for each agricultural land use designation claimed.*

**NOTE:** *Documentation verifying each claimed land use must be attached for the plan to be administratively complete.*

Agricultural land use designations applicable to the site being evaluated:

- 1. Agricultural Security Area  Yes / No
- 2. Agricultural Zoning  Yes / No
- 3. Preserved Farm  Yes / No

### Part C: Surrounding Area Land Use Factors

**NOTE:** *Detail applicable criteria for 1 and 2 on the Operational Map in Appendix 2.*

- 1. Other Livestock Operations ( $\geq 8$  AEUs) within the evaluation distance area  Yes / No   
*If yes, then list the type of operation, the direction (N, S, E, W) and quadrant (distance range from the facility). \_\_\_\_\_*

- 2. Distance to nearest property line measurements:

**NOTE:** *Measured from nearest corner of the proposed animal housing facility and/or manure storage facility to the property line. Measurements must also be detailed on the Operational Map in Appendix 2.*

- a. Animal Housing Facility measurement 120 (ft.)  Not Applicable
- b. Manure Storage Facility measurement 237 (ft.)  Not Applicable

- 3. If nearest property (from the nearest property line measurements indicated in “2” above) is less than 300’, is this neighboring property a Preserved Farm?  Yes / No

**NOTE:** *Documentation verifying this claimed status must be attached for the plan to be administratively complete.*

- (a) *If “Yes” is indicated, detail the name and address in Appendix 5: Supporting Documentation of the nearest neighboring property owner who has a Preserved Farm.*

## Appendix 2: Operational Maps

### Topographic Map

Odor Management Plans must include a topographic map drawn to scale with a map legend, identifying:

- Operation boundaries;
- Location of existing and proposed animal housing and manure storage facilities on the operation;
- Location of operation-related neighboring facilities;
- Location of neighboring facilities (normally occupied homes, active businesses and churches) and public use facilities within the evaluation distance area;
- Local topography (as indicated by the topographic lines);
- Geographic center with concentric circles drawn at 600' intervals for the entire evaluation distance area;
- Identification of the various map quadrants to include North, South, East and West;
- Distance to nearest property line from the nearest facility;
- Road names within the evaluation distance area; and
- All neighboring facilities and public use facilities that are being given credit for the Intervening Topography and Vegetation Factor.

In order to distinguish the following criteria from the other neighboring facilities and public use facilities, the Operational Map and the associated map legend must have separate symbols detailing the following:

- All operation-related neighboring facilities, and
- All neighboring facilities and public use facilities which are being given credit for the Intervening Topography and Vegetation Factor.

**NOTE:** *The scale chosen must be reasonable and practical for use in evaluating the OMP. For example:*

- *A scale of 1" = 600' is an example of a scale that is reasonable for use in determining evaluation distances, setbacks, etc., but may not be practical for larger evaluation distance areas for fitting the map on one 8 1/2' x 11' sheet of paper.*
- *A scale of 1.37" = 267.5' is an example of a scale that may be practical for fitting on one 8 1/2' x 11' sheet of paper, but in a scale that is not reasonable or very useful.*
- *Maps need to be to a scale that shows sufficient detail to be reasonable and useful. Planners are encouraged to use a scale that can be divided evenly by, or into, 600' by a round whole number*
- *Multiple maps are encouraged to be provided for the purpose of facilitating specific details, i.e. aerial maps, etc.*

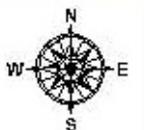
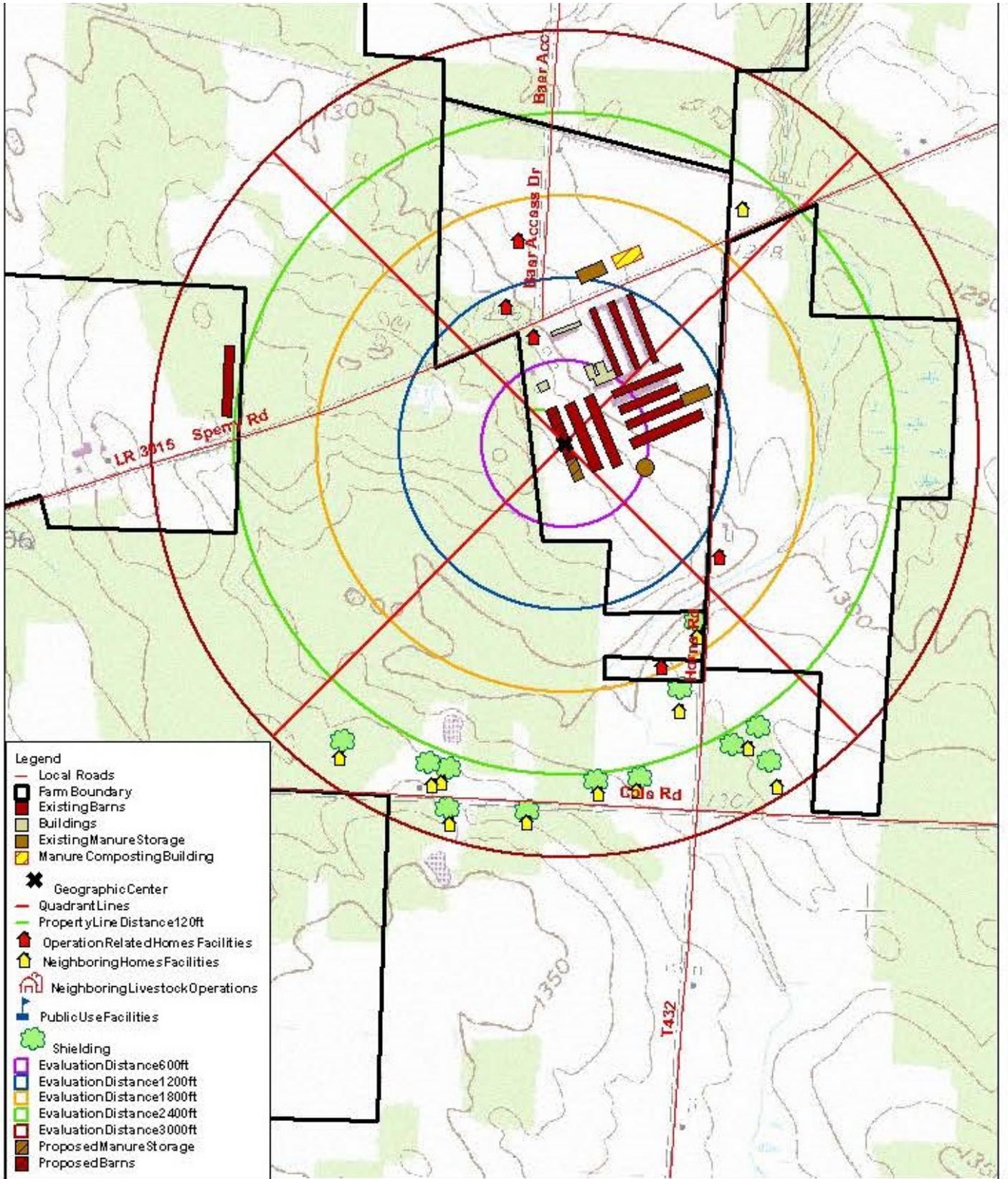
### Site Map

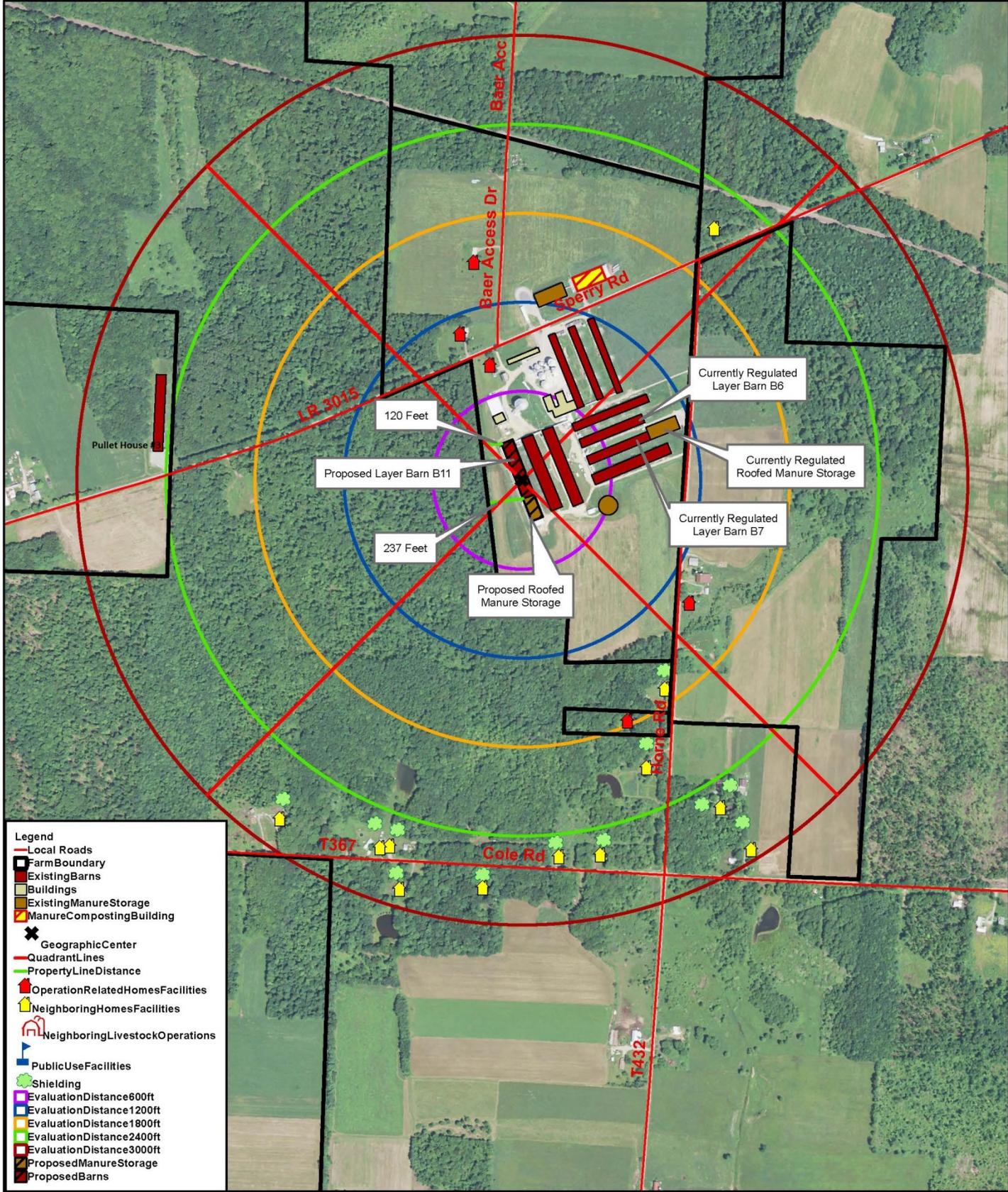
The purpose of the site map is to facilitate the plan review process of identifying specific details about the operation being evaluated. Odor Management Plans must include a site map of the operational related facilities drawn to scale with a map legend, identifying at a minimum the following:

- Operation boundaries;
- Location of existing and proposed animal housing and manure storage facilities on the operation;
- Geographic center with concentric circles drawn at 600' intervals; and
- Distance to nearest property line from the nearest facility

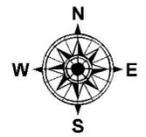
If there are multiple facilities on the site, detail the name of each of the facilities as per what the operator refers to them as, i.e. Layer #1 – Layer #5, mortality composting facility, etc.

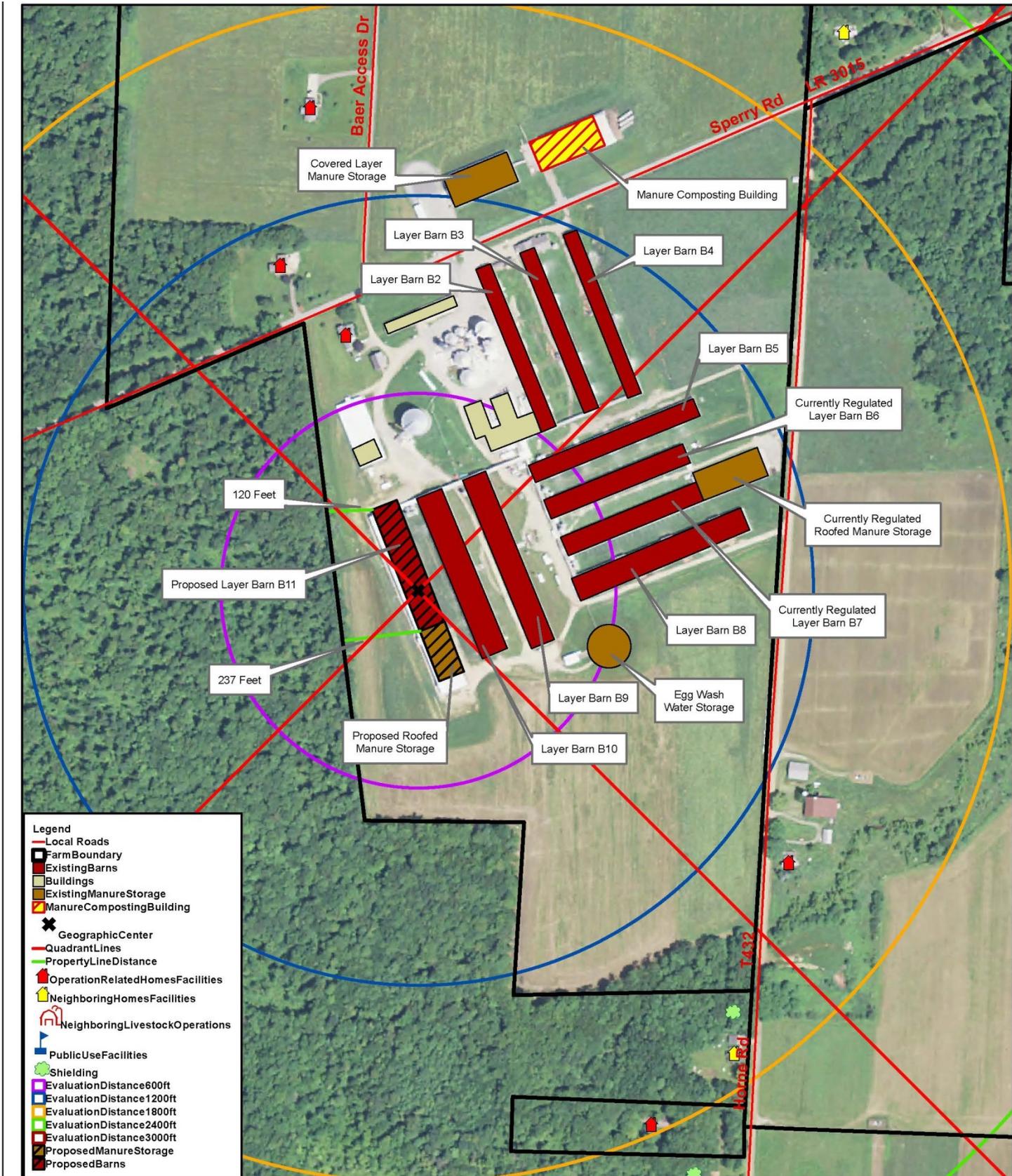
If the evaluation distance area is small enough, i.e. a 1200' evaluation distance area, to clearly identify the specific details required, then a separate map will not be required.



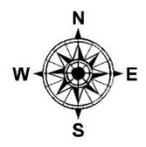
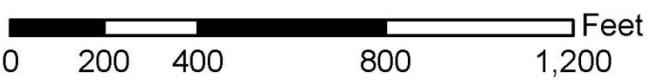


- Legend**
- Local Roads
  - Farm Boundary
  - Existing Barns
  - Buildings
  - Existing Manure Storage
  - Manure Composting Building
  - ✕ Geographic Center
  - Quadrant Lines
  - Property Line Distance
  - 🏠 Operation Related Homes Facilities
  - 🏠 Neighboring Homes Facilities
  - 🐄 Neighboring Livestock Operations
  - 🏠 Public Use Facilities
  - 🌿 Shielding
  - Evaluation Distance 600ft
  - Evaluation Distance 1200ft
  - Evaluation Distance 1800ft
  - Evaluation Distance 2400ft
  - Evaluation Distance 3000ft
  - Proposed Manure Storage
  - Proposed Barns





- Legend**
- Local Roads
  - Farm Boundary
  - Existing Barns
  - Buildings
  - Existing Manure Storage
  - Manure Composting Building
  - Geographic Center
  - Quadrant Lines
  - Property Line Distance
  - Operation Related Homes Facilities
  - Neighboring Homes Facilities
  - Neighboring Livestock Operations
  - Public Use Facilities
  - Shielding
  - Evaluation Distance 600ft
  - Evaluation Distance 1200ft
  - Evaluation Distance 1800ft
  - Evaluation Distance 2400ft
  - Evaluation Distance 3000ft
  - Proposed Manure Storage
  - Proposed Barns



## **Appendix 3: Plan Evaluation – OSI**

Act 38 Odor Management Plan - Odor Site Index

<b>Operator Name</b>	Sample Plan - Swine Operation		
<b>Planner Name</b>	Ima Planner		
<b>Type of Operation</b>	Layers		
<b>Voluntary Existing AEU's</b>	1346.75		
<b>Proposed AEU's</b>	0		
<b>Previously Approved AEU's</b>	948.67		
<b>AEU's Covered by OMP</b>	3071.92		
<b>Evaluation Distance</b>	3000'		
<b>Part A: Odor Source Factors</b>			<b>OSI Score</b>
Facility Size Covered by OMP	3071.92		10
Site Livestock History	500+ AEU's_0 pts		0
Manure Handling System	Poultry - Multi-flock litter, with or w/o external covered storage-4pts		4
			14.00
<b>Part B: Site Land Use</b>			
Ag Security Zone	No (0 pct)		0
Ag Zoning	No (0 pct)		0
Preserved Farm	No (0 pct)		0
			0.00
<b>Part C: Surrounding Land Use</b>			
Other Livestock >8 AEU in evaluation distance	Zero (5pts)		5.00
Distance to Nearest Property Line	<150' (10 pts)		10.00
If nearest property is <300', is it preserved farmland	No (0 pts)		0.00
Neighboring Homes			2.18
Public Use Facilities			0.00
			17.18
<b>Species Adjustment Factor</b>	Layers,pullets,cattle (0)		31.175
<b>Final OSI Score</b>			<b>31.175</b>
<b>Level 1 BMPs Required (Neighboring Facilities)</b>			

Act 38 of 2005, Odor Management Plan Amendment

Act 38 Odor Management Plan - Odor Site Index

<b>East Quadrant</b>	<600	600-1200	1200-1800	1800-2400	2400-3000	
# Neighboring Facilities	0	0		Select from List	Select from List	
Facility Value	15	7	3	0	0	
Home Shielding	Select from list	<b>Total Facilities 0.0</b>				
# Public Use Facilities	0	0				<b>Total Public 0.0</b>
Public Use Value	40	20	10	5	3	
Public Use Shielding	Select from list	<b>Total East 0.0</b>				
<b>South Quadrant</b>	<600	600-1200	1200-1800	1800-2400	2400-3000	
# Neighboring Facilities	0	0		Select from List	Select from List	
Facility Value	10	5	2	0	0	
Home Shielding	Select from list	<b>Total Facilities 0.0</b>				
# Public Use Facilities	0	0				<b>Total Public 0.0</b>
Public Use Value	30	15	7	4	2	
Public Use Shielding	Select from list	<b>Total South 0.0</b>				
<b>North Quadrant</b>	<600	600-1200	1200-1800	1800-2400	2400-3000	
# Neighboring Facilities	0	0		Select from List	Select from List	
Facility Value	6	3	0.5	0	0	
Home Shielding	<600 None (1)	Select from list	Select From List	Select From List	Select From List	<b>Total Facilities 0.0</b>
# Public Use Facilities	0	0				<b>Total Public 0.0</b>
Public Use Value	25	13	6	3	1	
Public Use Shielding	Select from list	<b>Total North 0.0</b>				
<b>West Quadrant</b>	<600	600-1200	1200-1800	1800-2400	2400-3000	
# Neighboring Facilities	0	0		Select from List	Select from List	
Facility Value	6	3	0.5	0	0	
Home Shielding	Select from list	<b>Total Facilities 0.0</b>				
# Public Use Facilities	0	0				<b>Total Public 0.0</b>
Public Use Value	25	13	6	3	1	
Public Use Shielding	Select from list	<b>Total West 0.0</b>				
						<b>Grand Total 0.0</b>

## Appendix 4: Biosecurity

### Biosecurity Protocol Contact Information

*Detail the point of contact for information on this operation's biosecurity protocols:*

Name: Ima Farmer, Jr Phone: (098) 765-4321  
E-mail: [ifarm@livestock.rus](mailto:ifarm@livestock.rus) Relationship: Operator

## **Appendix 5: Supporting Documentation**

This section is reserved for the plan writer when developing this plan to have a dedicated area to include supporting documentation such as for agricultural land use designation verification, Nutrient Management program setback waiver verification, AEU calculation verification when no NMP is available, etc.

*Provide a heading for each topic discussed in this Appendix.*

### **Act 38 NMP Status**

The NMP was developed simultaneously with the OMP and was submitted to the Conservation District for its review.

### **Total AEU's Covered by this Plan**

- 0 Proposed AEU's
- 1,346.75 Voluntary Existing AEU's
- 740.50 Transferred AEU's
- 984.67 Currently Regulated AEU's
- 3,071.92 AEU's Covered by the Plan

### **Transferred AEU's**

241,056 layers (740.50 AEU's) will be Transferred from the Existing Layer Houses B2, B3, and B4 to the Proposed Layer House B11.

## ***Supplement 6 – Sample Odor Management Plan – Swine Operation***

The following plan has been developed to provide a sample of what a complete odor management plan, developed for the Odor Management Program, could look like as it is submitted to the Commission or Conservation District for review and action. This sample plan does not include all the planning concerns that may be encountered when developing plans under this program but it does address a number of the major issues common to odor management planning in Pennsylvania.

This plan format contains all of the required plan elements as developed for the odor Management program. Plans submitted for review and approval must be accompanied by a table of contents indicating where the various required elements of the plan are. Planners are required to follow the format of this sample plan to assure that all elements have been completed. Planners should note that the easier the plan is to follow and check, the quicker, and more efficient, the plan review will be.

Plan reviewers will be checking figures in the plans to assure that they were detailed correctly.

# Odor Management Plan

*Prepared For:*

## **SAMPLE PLAN – Swine Operation**

**Ima Farmer, Jr.  
1 Farmer Lane  
Anywhere, PA 01010  
(098) 765-4321**

**County/ Municipality: Near Co/ My Township**

**Mailing Address (if Different from Site Address)**

*Prepared By:*

**Ima Planner  
OM Certification # 007-OMC  
1 Planner Drive  
Anywhere, PA 01010  
(123) 456-7890  
[Ima.Planner@my.co](mailto:Ima.Planner@my.co)**

For Official Use Only
<b>Date of Plan Submission:</b> _____
<b>Date of Plan Approval:</b> _____
<b>Date(s) of Plan Updates (not requiring SCC action):</b> _____

# Table of Contents

---

## Sample Plan – Swine Operation Odor Management Plan

Planner and Operator Commitments & Responsibilities .....	6-1
Plan Development Requirements.....	6-1
Planner Signature & Agreement .....	6-1
Operator Requirements .....	6-2
Odor Management Plan Signature Requirements.....	6-2
Operator Signature & Agreement .....	6-2
Plan Summary.....	6-3
A. Operation Summary (see Appendix 1 to view complete Operation Information).....	6-3
Proposed Facilities:.....	6-3
B. Odor Site Index Summary (see Appendix 3 to view complete Index).....	6-3
C. Odor BMP Implementation, Operation & Maintenance Schedule .....	6-3
Level I Odor BMPs Principles.....	6-3
Level I Odor BMPs to be Implemented.....	6-4
Level II Odor BMPs to be Implemented: .....	6-5
D. Documentation Requirements.....	6-6
Level I Odor BMP Documentation Requirements.....	6-6
Level II Odor BMP Documentation Requirements .....	6-7
Odor BMP Implementation Commitment Statement .....	6-8
Odor Management Plan Name:.....	6-8
Level I Odor BMPs Principles.....	6-8
Odor Management Plan Requirements .....	6-8
Level I Odor BMPs – Maintenance Log   YEAR .....	6-9
Level II Odor BMPs – Quarterly Observation Log   YEAR.....	6-10
LEVEL II ODOR BMP NAME:.....	6-10
Appendix 1: Operation Information.....	6-11
Part A: Odor Source Factors .....	6-11
Existing Facilities Description:.....	6-11
Proposed Regulated Facility (ies) Description: .....	6-11
Part B: Site Land Use Factors.....	6-14
Part C: Surrounding Area Land Use Factors .....	6-14
Appendix 2: Operational Maps.....	6-15
Topographic Map.....	6-15
Site Map.....	6-15
Appendix 3: Plan Evaluation – OSI.....	6-19

Appendix 4: Biosecurity ..... 6-22  
    Biosecurity Protocol Contact Information ..... 6-22  
Appendix 5: Supporting Documentation ..... 6-23

## Planner and Operator Commitments & Responsibilities

### Plan Development Requirements

This odor management plan (OMP) has been developed to meet the requirements of Pennsylvania's Nutrient and Odor Management Act, Act 38 of 2005 (Act 38), for the State Conservation Commission's (Commission) Odor Management Program for the following farm type(s): **NOTE: Select all check-boxes that apply.**

- Pennsylvania Act 38 Concentrated Animal Operation (CAO)
- Pennsylvania CAFO (Concentrated Animal Feeding Operation (CAFO) program
- Odor Management Program Volunteer Animal Operation (VAO)

### Planner Signature & Agreement

The planner's signature below certifies that this plan was developed in conjunction with, and reviewed by the operator, prior to submitting it for review. The plan cannot be submitted until the operator understands and agrees with all the provisions of the plan. If the reviewer finds that the planner has not reviewed at least the Plan Summary with the farmer, then the plan reviewer is to relay that information to the certification program staff for their consideration.

The planner's signature and below date(s) certifies that a site visit(s) was conducted **by an Act 38 Certified Odor Management Specialist** to verify the criteria within the evaluation distance area at the time of developing the plan, specifically for the odor source(s), for locating houses, churches, businesses and public use facilities within the evaluation distance, as well as for the site land use and the surrounding land use factors.

The information contained in this plan is accurate to the best of my knowledge. This plan has been developed in accordance with the criteria established for the Act 38 Odor Management Program indicated above. I affirm the foregoing to be true and correct, and make these statements subject to the penalties of 18 Pa. C.S. § 4904, relating to unsworn falsification to authorities.

Planner Name: Ima Planner Certification number: 007-OMC

Signature of Planner: Ima Planner Date: 1/1/14

Date(s) Evaluation Distance Area Site Visit Conducted: 11/12/13, 12/11/13

**Odor Management Plan Name: Sample Plan – Swine Operation**

**Operator Requirements**

**Plan Implementation & Documentation:** Odor Management Plans developed under Act 38 are required to be implemented as approved in order to maintain compliance. Implementation includes: adherence to installation of listed Odor Best Management Practices (Odor BMPs) within implementation schedule timeframes and conditions; maintenance of the Odor BMPs consistent with the operation and maintenance schedule timeframes; conditions contained in this plan; and record keeping obligations of the program. Agricultural operations are also required to keep and maintain accurate records of the Odor BMPs consistent with the schedules and are required to allow the Commission access to those records in order to determine the compliance status.

**Post Construction Inspection:** Prior to utilizing a new or expanded animal housing facility or manure storage facility addressed in this plan, the operation must receive written approval from the Commission confirming implementation of the plan. **In order to obtain this written approval the operator, upon completion of construction activities, must inform the Commission in writing via certified mail of their desire to begin using the new or expanded regulated facilities.** At that time the Commission will send out a representative to assess and verify the implementation of the approved Odor Management Plan.

**Compliance Inspections:** Plans developed under this program also require agricultural operations to allow periodic access by the Commission for status review and complaint inspections, in order to determine the status of the operation's compliance and whether a plan amendment is required. Inspections will be scheduled at least annually. Agricultural operations will provide the operation's biosecurity contact and protocols to the Commission.

**Odor Management Plan Signature Requirements**

In accordance with §83.741(i), plans shall be signed by the *Operator/ Authorized Representative* of the agricultural operation indicating concurrence with the information in the plan and acceptance of responsibilities under the plan. The following signature requirements apply:

- (i) For sole proprietorships, the proprietor.
- (ii) For partnerships, a general partner.
- (iii) For corporations, a vice president or president. For any other authorized representative, the plan must contain an attachment, executed by the secretary of the corporation, which states that the person signing on behalf of the corporation is authorized to do so.

**NOTE:** *When using a business name for the plan, the business name must be registered with the Pennsylvania Department of State.*

**Operator Signature & Agreement**

In accordance with §§83.751 (content of plans) and 83.762 (operator commitment statement), the *Signature of Operator/ Authorized Representative* below certifies that I was involved with the development of this plan, that the plan writer reviewed the plan with me, and that I am agreeable to the provisions outlined in this plan. All the information I provided in this odor management plan is accurate to the best of my knowledge and I will implement the practices and procedures outlined in the odor management plan in order to manage the potential for impacts from the offsite migration of odors associated with the operation for which this OMP is written.

Indicate business entity type: Sole Proprietor  Partnership/ LP/ LLP  Corporation/ LLC

Signature of Operator/ Authorized Representative: Ima Farmer, Jr Date: 1/1/14

Print Name of Operator/ Authorized Representative: Ima Farmer, Jr

Title of Operator/ Authorized Representative: Operator

Business Legal Name of the Operation: Sample Plan – Swine Operation

## Plan Summary

### A. Operation Summary (see Appendix 1 to view complete Operation Information)

#### Proposed Facilities:

*Detail the Animal Type associated with the Proposed Facilities and that is consistent with the Animal Type detailed in the OSI. If animal numbers (AEUs) from existing facilities are voluntarily being added to the plan, detail the AEUs number; otherwise state "None", "Zero (0)" or "Not Applicable".*

**NOTE:** *AEU calculations and AEUs per acre calculation must reflect those in the most current Act 38 NMP, otherwise explain the difference and submit the calculations in Appendix 5: Supporting Documentation.*

Proposed OSI Animal Type:	Swine
Proposed Animal Numbers:	4800 Finishing Swine
Proposed AEUs ( <i>per animal type</i> ):	713.42
Voluntary Existing Animal Type:	None
Voluntary Existing AEUs ( <i>per animal type</i> ):	None
<b>Total</b> AEUs Covered by this Plan:	713.42
AEUs per acre for the operation:	12.73 AEUs/ ac

Is there an approved Act 38 NMP for this operation?  Yes  No

**NOTE:** *If No, explain in Appendix 5: Supporting Documentation.*

### B. Odor Site Index Summary (see Appendix 3 to view complete Index)

**NOTE:** *If multiple Geographic Centers are used, you must provide scores for each geographic center. Scores listed here must match the final scores in the OSI.*

Score: 51.4

### C. Odor BMP Implementation, Operation & Maintenance Schedule

#### Level I Odor BMPs Principles

1. Steps taken to reduce dust and feed accumulation in pens, aisles, and on animals.
2. Manage ventilation to provide sufficient fresh airflow throughout the facility to keep animals and facility surfaces clean and dry.
3. Manage manure to minimize damp, exposed manure that contributes to odor generation.
4. Remove mortalities daily and manage appropriately.
5. Manage feed nutrients to animal nutrient requirements in order to avoid excess nutrient excretion.
6. Manage manure storage facility to reduce exposed surface area and off-site odor transfer.

**Definitions:**

- **Required Odor BMPs** – In accordance with §§83.771, 83.781-83.783, Required Odor BMPs are the Odor BMPs required for implementation when there is a neighboring facility or a public use facility in the evaluation distance area, or when the OSI score is 50 or more points (Level I Odor BMPs), and when the OSI score is 100 or more points (Level II Odor BMPs).
- **Voluntary Odor BMPs** – The operator has voluntarily chosen to include Odor BMPs in the plan. Voluntary Odor BMPs must meet the same program standards that Required Odor BMPs do for implementation, operation, maintenance, and documentation.
- **Supplemental Odor BMPs** – In accordance with §83.781(e), Supplemental Odor BMPs are implemented in addition to the approved Odor BMPs in the plan and are also associated with plan updates.

*NOTE: Odor BMPs must be relevant to the site specific factors and must be maintained for the lifetime of the regulated facility unless otherwise approved.*

### **Level I Odor BMPs to be Implemented**

*Select each check-box that applies; if more than one category applies, clearly detail the respective Level I Odor BMPs criteria with each respective category. Detail below all Level I Odor BMPs Principles, adapted from the PA Odor BMP Reference List, that are applicable to the site specific factors of this animal operation and the regulated facilities.*

- None Required**
- Voluntary Level I Odor BMP:**
- Required Level I Odor BMP:**
- Supplemental Level I Odor BMP:**

1. Steps taken to reduce dust and feed accumulation in pens, aisles, and on animals.
  - Feed Wastage – Aisles and pens will be kept free of accumulated feed in all phases of production via daily scraping/ sweeping.
  - Cleaning and Sanitation – The entire inside of the facility will be power washed and disinfected between groups; each of the 4 rooms will be done separately, according to their production cycle.
  - Dust Control – Drop tubes will extend from the feed delivery auger into each feeder. The feeders will be checked weekly for proper feeder adjustment (less than 2” of feed visible at the back of the tray and no spilled feed).
2. Ventilation managed to provide sufficient fresh airflow throughout the quad-facility to keep animals and facility surfaces clean and dry.
  - The mechanical ventilation system components are observed daily for functionality. The computerized ventilation system will be designed to provide appropriate ventilation per room (per age group), including the winter season. As ambient temperature increases, ventilation rate will automatically increase via staged ventilation. Inlet openings will be automatically controlled by a static pressure monitor or by temperature, which will also be integrated into the computer controls.
    - Fans (per room) are cleaned and inspected between groups.
    - Inlet openings are adjusted to provide adequate air distribution per room between groups.
    - Static pressure monitors are calibrated per room between groups.

- Curtains are controlled via the computerized controller system which is observed daily. The curtains, cables, winches and other ventilation system components are inspected per room between groups.
3. Manure managed to minimize damp, exposed conditions'
    - Controlling Accumulated Manure – Aisles will be kept free of accumulated manure in all phase of production via daily scraping/ sweeping. Manure should drop through the total slatted flooring continuously in the pens, however, any manure that accumulates will be scraped through the slats on a weekly basis.
    - Cleaning and Sanitation – The entire inside of the facility will be power washed and disinfected between groups; each of the 4 rooms will be done separately, according to their production cycle.
  4. Mortalities will be removed daily and managed via the mortality composting facility,
  5. Feed nutrients will be matched to swine nutrient requirements to avoid excess nutrient excretion.
    - Phase Feeding – Nutrient content in the diet will be closely matched to the weight and age of the pigs.
  6. Manure storage facilities managed to reduce exposed surface area.

### Level II Odor BMPs to be Implemented:

Select each check-box that applies; if more than one category applies, clearly detail the respective Level II Odor BMPs criteria with each respective category. Detail below all Level II Odor BMPs criteria addressing the following:

1. the general construction and implementation criteria
2. the corresponding timeframes of when each Odor BMP will be implemented
3. all operation and maintenance procedures for each Odor BMP along with the corresponding timeframes for carrying out those procedures
4. the lifespan of each Odor BMP.

**NOTE:** NRCS Conservation Practice Standards and Job Sheets that are in existence for the Level II Odor BMP are encouraged to be used for construction, implementation, and operation and maintenance criteria.

- None Required
- Voluntary Level II Odor BMP:
- Required Level II Odor BMP:
- Supplemental Level II Odor BMP:

**Manure Pit Additive** – Manure additives are intended to reduce the production of odorous compounds, usually by enzymatic or bacterial action.

A pit additive, named **Microbe-Lift/Hog** is being added to the hog manure to lower the odor emissions. The additive is manufactured by Ecological Laboratories, Inc. of Cape Coral, Fl. The additive is being used at the labeled rate with the following amounts: Initial application to pit = 15 gallons. First 4 weeks of pit treatment = 3 gallons per week. Maintenance treatments = 3 gallons per month. Microbe-Lift is a proprietary microbial additive with a red to purple color. Information on safety can be found in the MSDS sheets at [www.Microbelift.com](http://www.Microbelift.com).

The operation is voluntarily utilizing this product to reduce odor emissions from both the storage facility and during land application of the waste.

Lifespan for this Odor BMP will be for the lifetime of the hog facility or until the product is no longer manufactured.

## D. Documentation Requirements

*The following information will be documented by the Operator for each Odor BMP to ensure compliance with the plan. Documentation is needed to demonstrate implementation of the plan as well as for corrective actions taken for significant maintenance activities needed to return an Odor BMP back to normal operating parameters.*

### Level I Odor BMP Documentation Requirements

*Select each check-box that applies; if more than one category applies, clearly detail each documentation criterion.*

**None Required** – *(NOTE: Delete the Odor BMP Implementation Commitment Statement and the Level I Maintenance Log)*

**Level I Odor BMPs – Odor BMP Implementation Commitment Statement Only**  
*The Operator will annually complete the Odor BMP Implementation Commitment Statement.*

**Level I Odor BMPs Documentation Criteria:**

*The Operator will annually complete the Odor BMP Implementation Commitment Statement. The Operator will also complete the Level I Odor BMPs Maintenance Log upon any of the following occurrences:*

1. Feed Wastage – Document occurrences of damage to the feed delivery system, and the corrective actions taken, as well as occurrences when the accumulation of spilled feed was not able to be addressed in a timely manner.
2. Dust Cleaning and Sanitation – Document discrepancies with the cleaning and sanitation process. Document the dates of the between-groups maintenance activities actions taken.
3. Dust Control – Document any occurrences of damage to the drop tubes, and the corrective actions taken.
4. Ventilation System Management – Document any occurrences of the system components not working correctly, and the corrective actions taken. Document the between-groups maintenance activities actions taken.
5. Controlling Accumulated Manure – Document occurrences of when the accumulation of manure was not able to be addressed in a timely manner.
6. Manure Cleaning and Sanitation – Document discrepancies with the cleaning and sanitation process. Document the dates of the between-groups maintenance activities actions taken.
7. Mortality Management – Document any discrepancies with daily disposal, and the corrective actions taken. (Note for reviewer: actual mortality numbers will be documented on the integrator's required daily inspection chart; see that documentation for mortality numbers.)
8. Phase Feeding – Document any discrepancies with the phased feeding protocol, and the corrective actions taken.
9. Manure Storage Management – Document any discrepancies with proper manure storage

management, and the corrective actions taken.

### Level II Odor BMP Documentation Requirements

*Select each check-box that applies; if more than one category applies, clearly detail each documentation criterion.*

**None Required** – *(NOTE: Delete the Level II Quarterly Observation Log)*

**Level II Odor BMP Documentation Criteria:**

*The Operator will complete the Level II Odor BMPs Quarterly Observation Log, at least on a quarterly basis, detailing the proper implementation of the Odor BMPs as identified in the Implementation, Operation & Maintenance Schedule. The Operator will also complete the Level II Odor BMPs Quarterly Observation Log upon any of the following occurrences:*

1. Document any occurrences of not applying the pit additive at the manufacture's recommended application rate.
- 2.

# Odor BMP Implementation Commitment Statement

*To be completed and signed annually by operators which have a neighboring facility or a public use facility in the evaluation distance area. This form is an attestation of the operator for the daily implementation of the Odor BMPs, and in accordance with §83.791, it is to be kept on site for at least 3 years.*

**(Copy This Page For Future Use)**

**Odor Management Plan Name:** Sample Plan – Swine Operation

## Level I Odor BMPs Principles

1. Steps were taken to reduce dust and feed accumulation in pens, aisles, and on animals.
2. Ventilation was managed to provide sufficient fresh airflow throughout the facility to keep animals and facility surfaces clean and dry.
3. Manure was managed to minimize damp, exposed manure that contributes to odor generation.
4. Mortalities were removed daily and managed appropriately.
5. Feed nutrients were matched to animal nutrient requirements to avoid excess nutrient excretion.
6. Manage manure storage to reduce exposed surface area and off-site odor transfer.

## Odor Management Plan Requirements

In accordance with §§83.762 operator commitment statement), 83.771 (managing odors), 83.781 – 83.783 (Odor BMPs and schedules), 83.791 – 83.792 (documentation requirements) and 83.802 (plan implementation), I affirm that all the information I provided in the odor management plan is accurate to the best of my knowledge.

In order to manage the potential for impacts from the offsite migration of odors associated with the operation, I affirm that I have implemented the specific practices and procedures detailed in the odor management plan Odor BMP Implementation, Operation & Maintenance Schedule (principles identified above) from DATE: \_\_\_\_\_ to DATE: \_\_\_\_\_ (CY/ FY, etc.).

I affirm the foregoing to be true and correct, and make these statements subject to the penalties of 18 Pa. C.S. § 4904, relating to unsworn falsification to authorities.

*Signature of Operator:* \_\_\_\_\_ *Date:* \_\_\_\_\_

*Name of Operator:* \_\_\_\_\_

*Title of Operator:* \_\_\_\_\_

**Level I Odor BMPs – Maintenance Log** YEAR \_\_\_\_\_

*(NOTE: The operator will record occurrences of mechanically related maintenance activities or for any corrective actions taken.)*

**(Copy This Page For Future Use)**

<i>List ODOR BMPs</i>	<i>DATE</i>	<i>NOTES</i>

**Level II Odor BMPs – Quarterly Observation Log** YEAR \_\_\_\_\_

*(NOTE: The operator will record observations relating to 1) the implementation of each Level II Odor BMP at least on the first day (approximately) of each quarter of the year or in accordance with the Implementation, Operation & Maintenance Schedule, and 2,) for mechanically related maintenance activities, as soon as possible upon the observation that maintenance is needed, or upon each occurrence of any corrective actions taken.)*

**(Copy This Page For Future Use)**

*Select  
Quarter:*

<input type="checkbox"/> 1 <sup>st</sup> Quarter (January)	<input type="checkbox"/> 2 <sup>nd</sup> Quarter (April)	<input type="checkbox"/> 3 <sup>rd</sup> Quarter (July)	<input type="checkbox"/> 4 <sup>th</sup> Quarter (October)
---	--	---	---

**Chapter 3 LEVEL II ODOR BMP NAME: Pit Additive (Microbe-Lift/ Hog)**

<i>List ACTIVITIES</i>	<i>DATE</i>	<i>NOTES</i>
Initial Inoculation Application		
Weekly Inoculation Applications		
Monthly Maintenance Inoculation Application		
Application Errors		

## Appendix 1: Operation Information

### Part A: Odor Source Factors

#### 1. Site Livestock History: 21.32

*Detail the Maximum AEUs of Livestock on the site within the past 3 years.*

#### Existing Facilities Description:

*NOTE: If the facilities or animal information differ from the most current Nutrient Management Plan, detail the differences in Appendix 5: Supporting Documentation.*

*Definitions:* Existing facilities are those animal housing facilities or manure storage facilities constructed before February 27, 2009, and are not subject to Odor Management program requirements.

#### 2. List the Existing Animal Types: Beef Steers, Doe Goat, Buck Goat, Kid Goat Existing Animal

Numbers: Beef Steers = 20, Doe Goat = 11, Buck Goat = 1, Kid Goat = 22

#### 3. Existing Animal Equivalent Units (AEUs) per Animal Type: 21.32

- Beef Steers = 19.0 AEUs, Doe Goat = 1.65 AEUs, Buck Goat = 0.2 AEUs, Kid Goat = 0.47 AEUs

#### 4. Existing Animal Housing Facility(ies):

*Describe all existing animal housing facilities including their dimensions, capacity and existing Odor BMPs used to address potential impacts.*

Animal Housing Facility	Dimensions	Livestock Capacity	Existing Odor BMPs
Steer Barn	46.5'x49'	45 Adult Beef Cattle	Annual Barn Wash-down
Goat barn #1	36'x40' section of shed	15 Adult & 25 Young Goats	Annual Barn Wash-down
Goat barn #2	21'x34.5' building in pasture	15 Adult & 25 Young Goats	Annual Barn Wash-down

#### 5. Existing Manure Storage Facility(ies) and Manure Handling Systems:

- a. *Describe all existing manure storage facilities and manure treatment technology facilities, including their dimensions, capacity and existing Odor BMPs used to address potential impacts.*

Manure Storage Facility	Dimensions	Usable Capacity	Existing Odor BMPs
None			

- b. *Provide a narrative description detailing the manure handling systems, including manure storage facilities, manure stacking areas, and manure treatment technology facilities.*

Beef manure accumulates and is collected in the steer barn. Manure is loaded directly into a manure spreader from the barn and land applied to crop fields. Goat manure accumulates and is collected in each goat barn. Manure is loaded directly into a manure spreader from the barn and land applied to crop fields.

#### Proposed Regulated Facility (ies) Description:

*Detail the information below, clearly indicating:*

- 1) The animals that will be housed in the proposed animal housing facility (ies), which include expansions onto existing facilities;*
- 2) The manure type (animal type detailed in the OSI ) that will be stored in the proposed storage facility and identifying the Act 38 Nutrient Management Program requirements that must be followed for the proposed manure storage facility(ies);*
- 3) If Voluntary Existing Animal Numbers and AEUs or Transferred Existing AEUS do not apply, state "None", "Zero (0)" or "Not Applicable" for that criterion.*

**NOTE:** The Animal Type associated with the Proposed Facilities must be consistent with the Animal Type detailed in the OSI.

**NOTE:** If the proposed facilities, animal information, and AEU calculations differ from the most current Nutrient Management Plan (NMP), detail the differences in Appendix 5: Supporting Documentation.

**Definitions:**

- **Proposed AEU**s are the new additional AEU's associated with the proposed regulated animal housing facility (ies).
- **Voluntary Existing AEU**s are the AEU's associated with the existing animal housing facility (ies).
- **Proposed AEU**s and **Voluntary Existing AEU**s are used for determining the Odor Site Index evaluation distance area.
- **Transferred Existing AEU**s are existing AEU's on the site that will be transferred into the animal housing facility being evaluated.
- **Total AEU**s are used for determining significant change of the regulated facility (ies); a significant change will require an amendment to the plan. A significant change is defined as a net increase of equal to or greater than 25% in AEU's, as measured from the time of the initial plan approval.

**6. (a) Proposed Facility OSI Animal Types: Swine**

**Proposed Animal Numbers per animal type:** 4,800 Finishing Swine

**Proposed AEU's per animal type:** 713.42 Finishing Swine AEU's

**(b) Voluntary Existing Animal Types: None**

**Voluntary Existing Animal Numbers:** None

**Voluntary Existing AEU's per animal type:** None

**(c) Total AEU's Covered by this Plan: 713.42**

**(d) Acres for the operation associated with an approved Act 38 NMP or acres utilized for the CAO calculation: 57.7 acres**

**(e) Total AEU's/ Acre for the operation: 12.73 AEU's/ ac**

*NOTE: The AEU's per acre calculation is only used to verify CAO status. AEU's per acre calculation must reflect the calculations in the most current NMP, otherwise explain the difference and submit the calculations in Appendix 5: Supporting Documentation.*

**(f) Transferred Existing Animal Types:  Check only when Applicable**

*NOTE: Detail the following information in Appendix 5: Supporting Documentation when 0 "Proposed AEU's" are proposed due to transferring existing animals on the site into the animal housing facility being evaluated:*

- 1) The OSI Animal Type associated with the Proposed Facilities,
- 2) The numbers of animals transferred, and
- 3) The AEU's. This information will be used for determining a significant change which will require an amendment to the plan.

**7. Proposed new or expanded animal housing facility(ies):**

*Detail all proposed animal housing facilities, or portions thereof, including their dimensions and livestock capacity.*

*NOTE: If the proposed facilities differ from the most current NMP, detail the differences in Appendix 5: Supporting Documentation.*

<b>Animal Housing Facility</b> <input type="checkbox"/> None Proposed	<b>Dimensions</b>	<b>Livestock Capacity</b>
Swine Finishing Barn (quad)	81'x501'	4,800 Finishing Swine

**8. Proposed new or expanded manure storage facility(ies):**

*NOTE: If the proposed facilities differ from the most current NMP, detail the differences in Appendix 5: Supporting Documentation.*

- (a) *Provide a narrative description detailing all manure handling systems (including all manure storage facilities, manure stacking areas, and manure treatment technology facilities) after the addition of the proposed facilities.*

A 81' x 501' x 5' concrete under-barn manure storage will be constructed. Manure will drop through a slatted floor in the swine barn into the proposed storage. Manure will be pumped directly into a manure

spreader from the storage and land applied to crop fields. A 10' x 40' x 5', 4-bin animal mortality composter will be constructed south of the proposed finishing swine barn.

- (b) *Detail all proposed manure storage facilities, manure stacking areas, and manure treatment technology facilities.*

*NOTE: If a waiver is required, it must be attached in Appendix 5: Supporting Documentation for the plan to be administratively complete.*

Manure Storage Facility	<input type="checkbox"/> None Proposed	Dimensions	Usable Capacity
Concrete Under-Barn Storage		81'x501'x5'	1,365,956 gallons
Mortality Composting Facility (voluntary)		10'x40'x5'	2,000 cubic feet

### **Act 38 NM Program Setback Requirements Verification**

*NOTE: When manure storage facilities are proposed, N/A cannot be detailed for both c & d*

- (c) **Existing Operations**  Not Applicable.

*Select all check-boxes that apply for Existing Operations proposing manure storage facilities.*

In accordance with planning provisions of the Commission's Nutrient Management Program regulations, the proposed manure storage(s) is part of an existing operation (operation that produced livestock or poultry on or before October 1, 1997) and will be located having a minimum setback distance of the following:

- i) 100' minimum setback distance (in accordance with **§83.351(a)(2)(v)(A)-(E)**) from wetlands, water bodies and wells (public and private).  Yes  Not Applicable
- ii) 100' minimum setback distance (in accordance with **§83.351(a)(2)(v)(F)**) a from the property line; otherwise an executed Manure Storage Setback Waiver from the Neighboring Landowner, must be attached.  Yes  Not Applicable
- iii) 200' minimum setback distance (in accordance with **§83.351(a)(2)(v)(G)**) from wetlands, water bodies and wells (public and private) for a manure storage facility of 1.5 million gallons or larger capacity or that is located on slopes exceeding 8%.  Yes  Not Applicable
- iv) 200' minimum setback distance (in accordance with **§83.351(a)(2)(v)(H)**) from the property line for a manure storage facility of 1.5 million gallons or larger capacity or that is located on slopes exceeding 8% and the slope is toward the property line; otherwise an executed Manure Storage Setback Waiver from the Neighboring Landowner, must be attached.  Yes  Not Applicable

- (d) **New Operations/ New Animal Enterprises**  Not Applicable.

*Select all check-boxes that apply for New Operations/ New Animal Enterprises proposing manure storage facilities.*

If the proposed manure storage(s) is part of a new operation (operation that produced livestock or poultry after October 1, 1997), or a new animal enterprise (an existing operation that expanded after October 1, 1997, via producing different livestock or poultry than what was previously produced – see NM Tech Manual, Section III) and in accordance with planning provisions of the Commission's Nutrient Management Program regulations the proposed storage will be located having a minimum setback distance of the following:

- i) 100' minimum setback distance (in accordance with **§83.351(a)(2)(vi)(A)-(E)**) f from wetlands, water bodies and wells (public and private).  Yes  Not Applicable
- ii) 200' minimum setback distance (in accordance with **§83.351(a)(2)(v)(F)**) from the property line; otherwise an executed Manure Storage Setback Waiver from the Neighboring Landowner, must be attached.  Yes  Not Applicable
- iii) 200' minimum setback distance (in accordance with **§83.351(a)(2)(v)(G)**) from wetlands, water bodies and wells (public and private) for a manure storage facility of 1.5 million gallons or larger capacity or that is located on slopes exceeding 8%.  Yes  Not Applicable
- iv) 300' minimum setback distance (in accordance with **§83.351(a)(2)(v)(H)**) from the property line for a manure storage facility of 1.5 million gallons or larger capacity or that is located on slopes exceeding 8%

and the slope is toward the property line; otherwise an executed Manure Storage Setback Waiver from the Neighboring Landowner, must be attached.  Yes  Not Applicable

**9. Construction activities of the proposed regulated facilities:**

*NOTE: Construction activities must be started within 3 years of the plan approval date.*

- a. *Detail the proposed construction sequence timeframes for each proposed regulated facility (or portions thereof)* Excavation will begin in the summer of 2014. The under-barn manure storage will be constructed first, followed by the swine finishing barn (on top of the storage). The dual-use composter/storage facility will be constructed in the fall of 2014.
- b. *Have construction activities started on any of the proposed regulated facilities?*  Yes  No *If yes, please detail: \_\_\_\_\_*

**Part B: Site Land Use Factors**

*1) Select the applicable check-box below for each special agricultural land use designation, and*

*2) Provide written verification in Appendix 5: Supporting Documentation for each agricultural land use designation claimed.*

*NOTE: Documentation verifying each claimed land use must be attached for the plan to be administratively complete.*

Agricultural land use designations applicable to the site being evaluated:

- 1. Agricultural Security Area  Yes / No
- 2. Agricultural Zoning  Yes / No
- 3. Preserved Farm  Yes / No

**Part C: Surrounding Area Land Use Factors**

*NOTE: Detail applicable criteria for 1 and 2 on the Operational Map in Appendix 2.*

- 1. Other Livestock Operations ( $\geq 8$  AEUs) within the evaluation distance area  Yes / No   
*If yes, then list the type of operation, the direction (N, S, E, W) and quadrant (distance range from the facility). There is a beef operation located in the south 1,200' to 1,800' quadrant. There is a dairy operation located in the east 1,800' to 2,400' quadrant.*

2. Distance to nearest property line measurement:

*NOTE: Measured from nearest corner of the proposed animal housing facility and/or manure storage facility to the property line. Measurements must also be detailed on the Operational Map in Appendix 2.*

- a. Animal Housing Facility measurement 248 (ft.)  Not Applicable
- b. Manure Storage Facility measurement 248 (ft.)  Not Applicable

- 3. If nearest property (from the nearest property line measurements indicated in "2" above) is less than 300', is this neighboring property a Preserved Farm?  Yes / No

*NOTE: Documentation verifying this claimed status must be attached for the plan to be administratively complete.*

- (a) *If "Yes" is indicated, detail the name and address in Appendix 5: Supporting Documentation of the nearest neighboring property owner who has a Preserved Farm.*

## Appendix 2: Operational Maps

### Topographic Map

Odor Management Plans must include a topographic map drawn to scale with a map legend, identifying:

- Operation boundaries;
- Location of existing and proposed animal housing and manure storage facilities on the operation;
- Location of operation-related neighboring facilities;
- Location of neighboring facilities (normally occupied homes, active businesses and churches) and public use facilities within the evaluation distance area;
- Local topography (as indicated by the topographic lines);
- Geographic center with concentric circles drawn at 600' intervals for the entire evaluation distance area;
- Identification of the various map quadrants to include North, South, East and West;
- Distance to nearest property line from the nearest facility;
- Road names within the evaluation distance area; and
- All neighboring facilities and public use facilities that are being given credit for the Intervening Topography and Vegetation Factor.

In order to distinguish the following criteria from the other neighboring facilities and public use facilities, the Operational Map and the associated map legend must have separate symbols detailing the following:

- All operation-related neighboring facilities, and
- All neighboring facilities and public use facilities which are being given credit for the Intervening Topography and Vegetation Factor.

**NOTE:** *The scale chosen must be reasonable and practical for use in evaluating the OMP. For example:*

- *A scale of 1" = 600' is an example of a scale that is reasonable for use in determining evaluation distances, setbacks, etc., but may not be practical for larger evaluation distance areas for fitting the map on one 8 1/2' x 11' sheet of paper.*
- *A scale of 1.37" = 267.5' is an example of a scale that may be practical for fitting on one 8 1/2' x 11' sheet of paper, but in a scale that is not reasonable or very useful.*
- *Maps need to be to a scale that shows sufficient detail to be reasonable and useful. Planners are encouraged to use a scale that can be divided evenly by, or into, 600' by a round whole number*
- *Multiple maps are encouraged to be provided for the purpose of facilitating specific details, i.e. aerial maps, etc.*

### Site Map

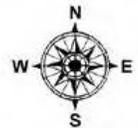
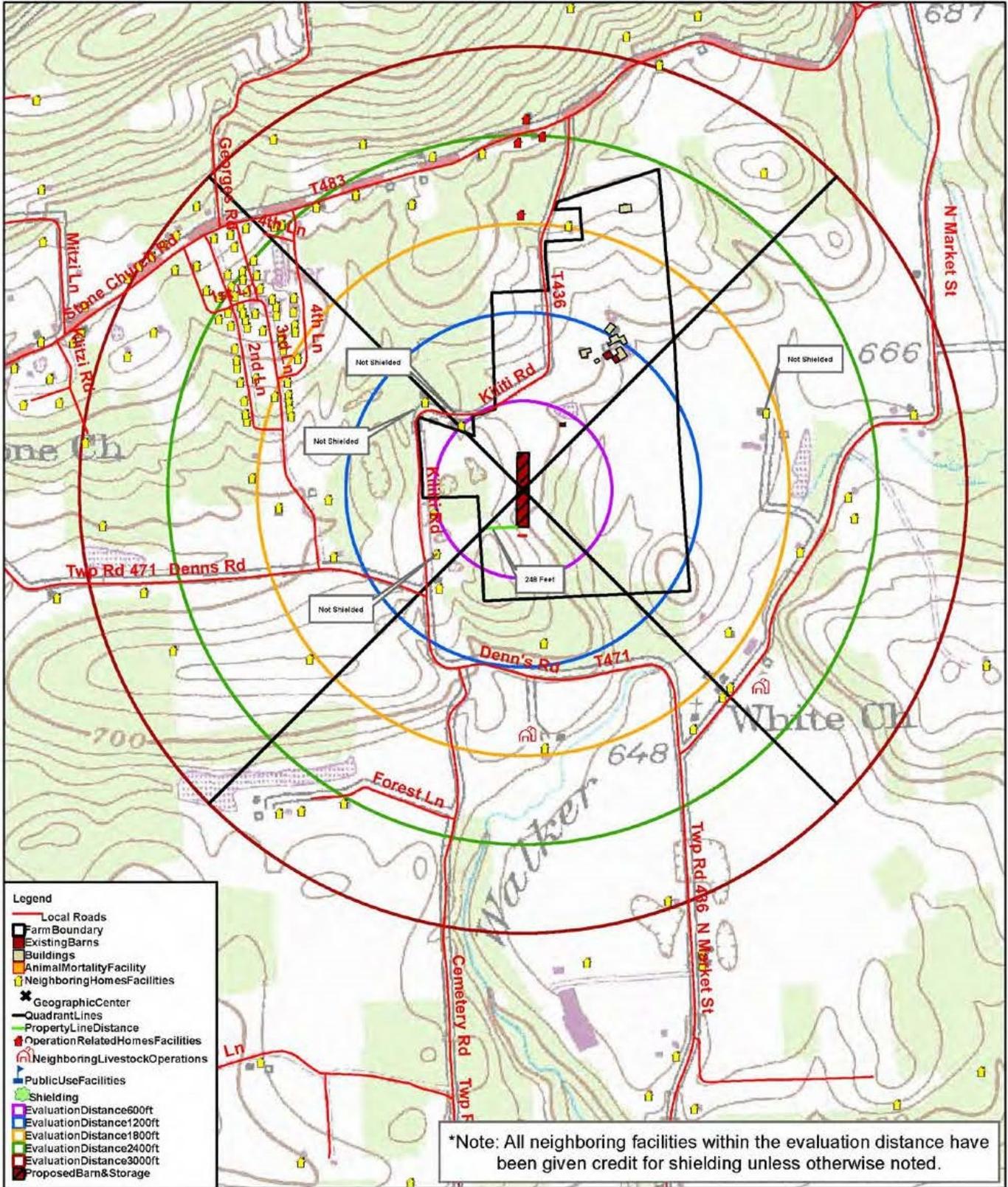
The purpose of the site map is to facilitate the plan review process of identifying specific details about the operation being evaluated. Odor Management Plans must include a site map of the operational related facilities drawn to scale with a map legend, identifying at a minimum the following:

- Operation boundaries;
- Location of existing and proposed animal housing and manure storage facilities on the operation;
- Geographic center with concentric circles drawn at 600' intervals; and
- Distance to nearest property line from the nearest facility

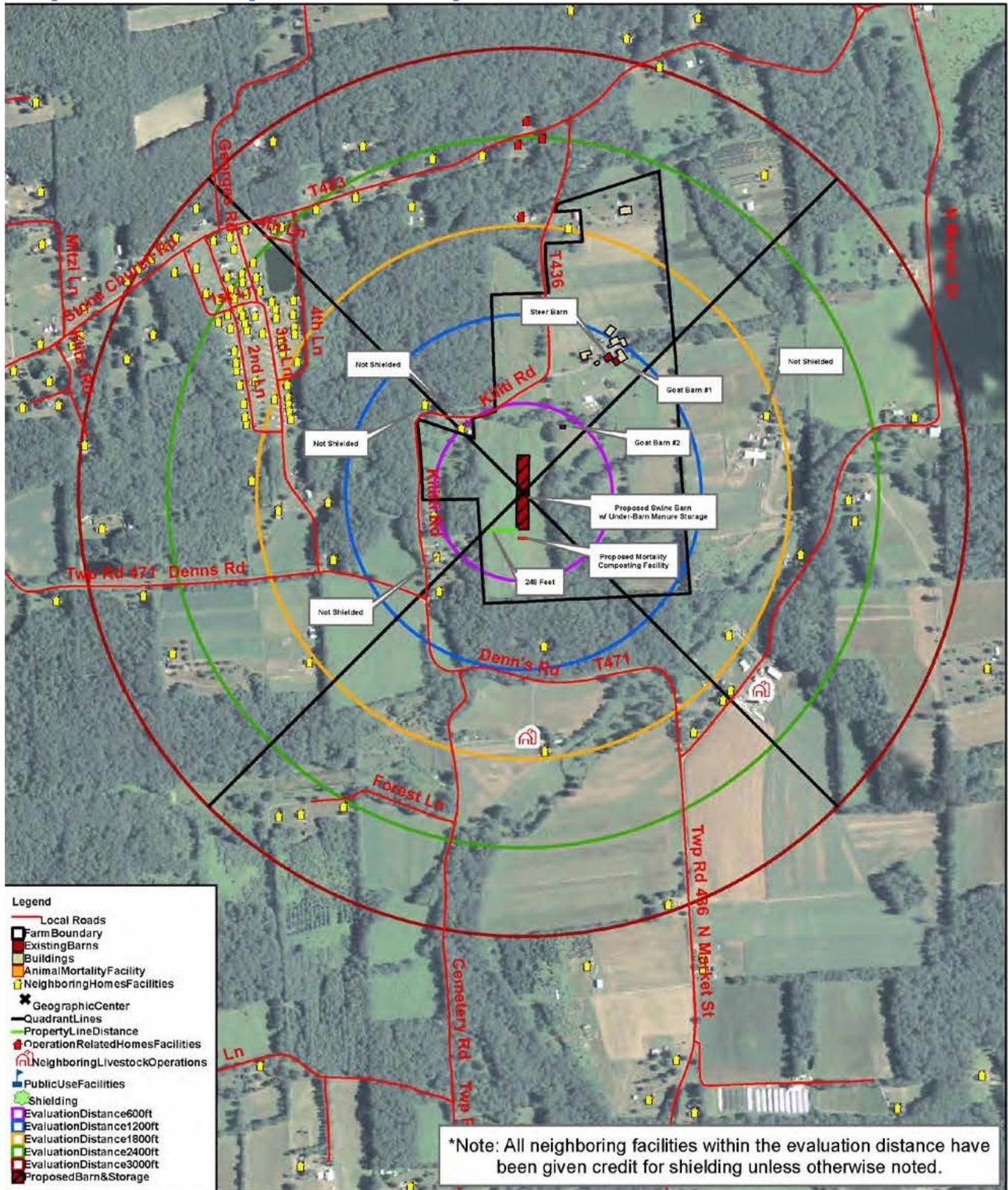
If there are multiple facilities on the site, detail the name of each of the facilities as per what the operator refers to them as, i.e. Layer #1 – Layer #5, mortality composting facility, etc.

If the evaluation distance area is small enough, i.e. a 1200' evaluation distance area, to clearly identify the specific details required, then a separate map will not be required.

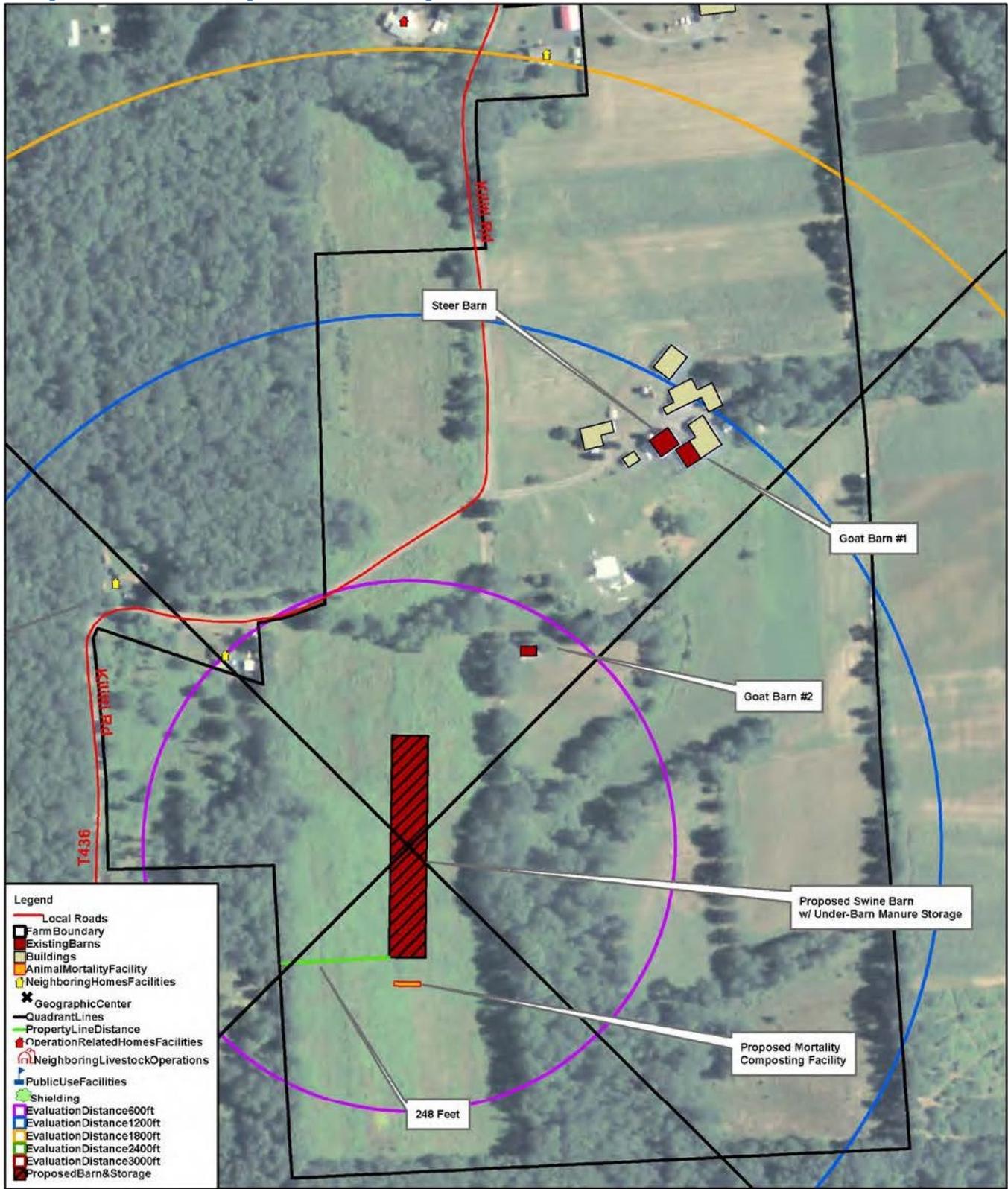
Sample Plan – Swine Operation Topographic Map



Sample Plan – Swine Operation Aerial Map



### Sample Plan – Swine Operation Site Map



## **Appendix 3: Plan Evaluation – OSI**

Act 38 Odor Management Plan - Odor Site Index

<b>Operator Name</b>	Sample Plan - Swine Operation		
<b>Planner Name</b>	Ima Planner		
<b>Type of Operation</b>	Swine		
<b>Voluntary Existing AEU's</b>	0		
<b>Proposed AEU's</b>	713.42		
<b>Previously Approved AEU's</b>	0		
<b>AEU's Covered by OMP</b>	713.42		
<b>Evaluation Distance</b>	3000'		
<b>Part A: Odor Source Factors</b>			<b>OSI Score</b>
Facility Size Covered by OMP	713.42		6
Site Livestock History	1-49 AEU's _9pts		9
Manure Handling System	Poultry/ Swine / Cattle - deep pit under building, liquid or dry _ 4pts		4
			19.00
<b>Part B: Site Land Use</b>			
Ag Security Zone	No (0 pct)		0
Ag Zoning	Yes (-10 pct)		-4.965
Preserved Farm	No (0 pct)		0
			-4.97
<b>Part C: Surrounding Land Use</b>			
Other Livestock >8 AEU in evaluation distance	1 or more (0 pts)		0.00
Distance to Nearest Property Line	151' to 300' (5 pts)		5.00
If nearest property is <300', is it preserved farmland	No (0 pts)		0.00
Neighboring Homes			25.65
Public Use Facilities			0.00
			30.65
<b>Species Adjustment Factor</b>	Swine, duck, veal (.15)		51.38775
<b>Final OSI Score</b>			<b>51.38775</b>
<b>Level 1 BMPs Required</b>			

Act 38 Odor Management Plan - Odor Site Index

<b>East Quadrant</b>	<600	600-1200	1200-1800	1800-2400	2400-3000	
# Neighboring Facilities			2	2-5	1	
Facility Value	15	7	3	6	1	
Home Shielding	Select from list	Select from list	1200-1800 Some (.5)	1800-2400 All (.25)	2400-3000 All (.25)	<b>Total Facilities 4.8</b>
# Public Use Facilities						<b>Total Public 0.0</b>
Public Use Value	40	20	10	5	3	
Public Use Shielding	Select from list	Select from list	Select from list	Select from list	Select from list	<b>Total East 4.8</b>
<b>South Quadrant</b>	<600	600-1200	1200-1800	1800-2400	2400-3000	
# Neighboring Facilities		2	1	2-5	2-5	
Facility Value	10	5	2	3	1.5	
Home Shielding	Select from list	600-1200 All (.4)	1200-1800 All (.25)	1800-2400 All (.25)	2400-3000 All (.25)	<b>Total Facilities 5.6</b>
# Public Use Facilities						<b>Total Public 0.0</b>
Public Use Value	30	15	7	4	2	
Public Use Shielding	Select from list	Select from list	Select from list	Select from list	Select from list	<b>Total South 5.6</b>
<b>North Quadrant</b>	<600	600-1200	1200-1800	1800-2400	2400-3000	
# Neighboring Facilities	1		1	2-5	6-20	
Facility Value	6	3	0.5	1	1	
Home Shielding	<600 None (1)	Select from list	1200-1800 All (.25)	1800-2400 All (.25)	2400-3000 All (.25)	<b>Total Facilities 6.6</b>
# Public Use Facilities						<b>Total Public 0.0</b>
Public Use Value	25	13	6	3	1	
Public Use Shielding	Select from list	Select from list	Select from list	Select from list	Select from list	<b>Total North 6.6</b>
<b>West Quadrant</b>	<600	600-1200	1200-1800	1800-2400	2400-3000	
# Neighboring Facilities		3	10	>20	>20	
Facility Value	6	3	0.5	5	3	
Home Shielding	Select from list	600-1200 Some (.6)	1200-1800 All (.25)	1800-2400 All (.25)	2400-3000 All (.25)	<b>Total Facilities 8.7</b>
# Public Use Facilities						<b>Total Public 0.0</b>
Public Use Value	25	13	6	3	1	
Public Use Shielding	Select from list	Select from list	Select from list	Select from list	Select from list	<b>Total West 8.7</b>
						<b>Grand Total 25.7</b>

## Appendix 4: Biosecurity

### Biosecurity Protocol Contact Information

*Detail the point of contact for information on this operation's biosecurity protocols:*

Name:	<u>Ima Farmer, Jr</u>	Phone:	<u>(098) 765-4321</u>
E-mail:	<u><a href="mailto:ifarm@livestock.rus">ifarm@livestock.rus</a></u>	Relationship:	<u>Operator</u>

## **Appendix 5: Supporting Documentation**

This section is reserved for the plan writer when developing this plan to have a dedicated area to include supporting documentation such as for agricultural land use designation verification, Nutrient Management program setback waiver verification, AEU calculation verification when no NMP is available, etc.

*Provide a heading for each topic discussed in this Appendix.*

### **Act 38 NMP Status**

Since this is a proposed operation, the NMP is currently being developed and will follow the OMP submission for its review.

### **Agricultural Zoning**

See attached Zoning Officer letter and Township Zoning Map.

# My Township

Phone (098) 765-1234

---

---

Office: 1 Township Street – Anywhere, PA 01010

December 20, 2013

Mr. Ima Farmer, Jr.  
1 Farmer Lane  
Anywhere, PA 01010

RE: Parcel No. 50-00-411A-010-000

Dear Mr. Farmer:

This letter is to confirm that the above referenced parcel is located in the A-1  
Agricultural Zoning District.

This letter does not approve any proposed use of this parcel, as formal application has not been  
submitted.

Sincerely,

*Kate E. Zerbly*

Kate E. Zerbly

Zoning/ Building Code Official



**Level I Odor BMPs – Maintenance Log YEAR \_\_\_\_\_**

*(NOTE: The operator will record occurrences of mechanically related maintenance activities or for any corrective actions taken.)*

**(Copy This Page For Future Use)**

<i>List ODOR BMPs</i>	<i>DATE</i>	<i>NOTES</i>
Feed Wastage	2/12/14	Family was sick most of the week of February 3 <sup>rd</sup> , and most maintenance related activities did not occur until the following week.
Accumulated Manure (aisles)	2/12/14	Same as above.

**This is an example of what an operator might fill in for this Level I Odor BMP Maintenance Log**

## ***Supplement 7 – Sample Odor Management Plan – Dairy Cattle Operation***

The following plan has been developed to provide a sample of what a complete odor management plan, developed for the Odor Management Program, could look like as it is submitted to the Commission or Conservation District for review and action. This sample plan does not include all the planning concerns that may be encountered when developing plans under this program but it does address a number of the major issues common to odor management planning in Pennsylvania.

This plan format contains all of the required plan elements as developed for the odor Management program. Plans submitted for review and approval must be accompanied by a table of contents indicating where the various required elements of the plan are. Planners are required to follow the format of this sample plan to assure that all elements have been completed. Planners should note that the easier the plan is to follow and check, the quicker, and more efficient, the plan review will be.

Plan reviewers will be checking figures in the plans to assure that they were detailed correctly.

# Odor Management Plan

*Prepared For:*

## **SAMPLE PLAN – Dairy Cattle Operation**

**Ima Farmer, Jr.**

**1 Farmer Lane**

**Anywhere, PA 01010**

**(098) 765-4321**

**County/ Municipality: Near Co/ My Township**

**Mailing Address (if Different from Site Address)**

*Prepared By:*

**Ima Planner**

**OM Certification # 007-OMC**

**1 Planner Drive**

**Anywhere, PA 01010**

**(123) 456-7890**

**[Ima.Planner@my.co](mailto:Ima.Planner@my.co)**

For Official Use Only
<b>Date of Plan Submission:</b> _____
<b>Date of Plan Approval:</b> _____
<b>Date(s) of Plan Updates (not requiring SCC action):</b> _____

# Table of Contents

---

## Sample Plan – Dairy Cattle Operation Odor Management Plan

Planner and Operator Commitments & Responsibilities .....	7-1
Plan Development Requirements.....	7-1
Planner Signature & Agreement .....	7-1
Operator Requirements .....	7-2
Odor Management Plan Signature Requirements.....	7-2
Operator Signature & Agreement .....	7-2
A.    Operation Summary (see Appendix 1 to view complete Operation Information) .....	7-3
Proposed Facilities:.....	7-3
B. Odor Site Index Summary (see Appendix 3 to view complete Index).....	7-3
C. Odor BMP Implementation, Operation & Maintenance Schedule .....	7-3
Level I Odor BMPs Principles .....	7-3
Level I Odor BMPs to be Implemented.....	7-4
Level II Odor BMPs to be Implemented: .....	7-4
D. Documentation Requirements.....	7-4
Level I Odor BMP Documentation Requirements.....	7-4
Level II Odor BMP Documentation Requirements .....	7-5
Appendix 1: Operation Information.....	7-6
Part A: Odor Source Factors .....	7-6
Existing Facilities Description:.....	7-6
Proposed Regulated Facility (ies) Description: .....	7-7
Part B: Site Land Use Factors .....	7-9
Part C: Surrounding Area Land Use Factors .....	7-9
Appendix 2: Operational Maps.....	7-11
Topographic Map.....	7-11
Site Map .....	7-11
Appendix 3: Plan Evaluation – OSI.....	7-15
Appendix 4: Biosecurity .....	7-18
Biosecurity Protocol Contact Information .....	7-18
Appendix 5: Supporting Documentation .....	7-19

## Planner and Operator Commitments & Responsibilities

### Plan Development Requirements

This odor management plan (OMP) has been developed to meet the requirements of Pennsylvania's Nutrient and Odor Management Act, Act 38 of 2005 (Act 38), for the State Conservation Commission's (Commission) Odor Management Program for the following farm type(s): **NOTE: Select all check-boxes that apply.**

- Pennsylvania Act 38 Concentrated Animal Operation (CAO)
- Pennsylvania CAFO (Concentrated Animal Feeding Operation (CAFO) program
- Odor Management Program Volunteer Animal Operation (VAO)

### Planner Signature & Agreement

The planner's signature below certifies that this plan was developed in conjunction with, and reviewed by the operator, prior to submitting it for review. The plan cannot be submitted until the operator understands and agrees with all the provisions of the plan. If the reviewer finds that the planner has not reviewed at least the Plan Summary with the farmer, then the plan reviewer is to relay that information to the certification program staff for their consideration.

The planner's signature and below date(s) certifies that a site visit(s) was conducted **by an Act 38 Certified Odor Management Specialist** to verify the criteria within the evaluation distance area at the time of developing the plan, specifically for the odor source(s), for locating houses, churches, businesses and public use facilities within the evaluation distance, as well as for the site land use and the surrounding land use factors.

The information contained in this plan is accurate to the best of my knowledge. This plan has been developed in accordance with the criteria established for the Act 38 Odor Management Program indicated above. I affirm the foregoing to be true and correct, and make these statements subject to the penalties of 18 Pa. C.S. § 4904, relating to unsworn falsification to authorities.

Planner Name: Ima Planner Certification number: 007-OMC

Signature of Planner: Ima Planner Date: 1/1/14

Date(s) Evaluation Distance Area Site Visit Conducted: 11/12/13, 12/11/13

**Odor Management Plan Name:** Sample Plan – Dairy Cattle Operation

### Operator Requirements

**Plan Implementation & Documentation:** Odor Management Plans developed under Act 38 are required to be implemented as approved in order to maintain compliance. Implementation includes: adherence to installation of listed Odor Best Management Practices (Odor BMPs) within implementation schedule timeframes and conditions; maintenance of the Odor BMPs consistent with the operation and maintenance schedule timeframes; conditions contained in this plan; and record keeping obligations of the program. Agricultural operations are also required to keep and maintain accurate records of the Odor BMPs consistent with the schedules and are required to allow the Commission access to those records in order to determine the compliance status.

**Post Construction Inspection:** Prior to utilizing a new or expanded animal housing facility or manure storage facility addressed in this plan, the operation must receive written approval from the Commission confirming implementation of the plan. **In order to obtain this written approval the operator, upon completion of construction activities, must inform the Commission in writing via certified mail of their desire to begin using the new or expanded regulated facilities.** At that time the Commission will send out a representative to assess and verify the implementation of the approved Odor Management Plan.

**Compliance Inspections:** Plans developed under this program also require agricultural operations to allow periodic access by the Commission for status review and complaint inspections, in order to determine the status of the operation's compliance and whether a plan amendment is required. Inspections will be scheduled at least annually. Agricultural operations will provide the operation's biosecurity contact and protocols to the Commission.

### Odor Management Plan Signature Requirements

In accordance with §83.741(i), plans shall be signed by the *Operator/ Authorized Representative* of the agricultural operation indicating concurrence with the information in the plan and acceptance of responsibilities under the plan. The following signature requirements apply:

- (i) For sole proprietorships, the proprietor.
- (ii) For partnerships, a general partner.
- (iii) For corporations, a vice president or president. For any other authorized representative, the plan must contain an attachment, executed by the secretary of the corporation, which states that the person signing on behalf of the corporation is authorized to do so.

**NOTE:** *When using a business name for the plan, the business name must be registered with the Pennsylvania Department of State.*

### Operator Signature & Agreement

In accordance with §§83.751 (content of plans) and 83.762 (operator commitment statement), the *Signature of Operator/ Authorized Representative* below certifies that I was involved with the development of this plan, that the plan writer reviewed the plan with me, and that I am agreeable to the provisions outlined in this plan. All the information I provided in this odor management plan is accurate to the best of my knowledge and I will implement the practices and procedures outlined in the odor management plan in order to manage the potential for impacts from the offsite migration of odors associated with the operation for which this OMP is written.

Indicate business entity type: Sole Proprietor  Partnership/ LP/ LLP  Corporation/ LLC

Signature of Operator/ Authorized Representative: Ima Farmer, Jr Date: 1/1/14

Print Name of Operator/ Authorized Representative: Ima Farmer, Jr

Title of Operator/ Authorized Representative: Operator

Business Legal Name of the Operation: Sample Plan – Dairy Cattle Operation

## Plan Summary

### A. Operation Summary (see Appendix 1 to view complete Operation Information)

#### Proposed Facilities:

*Detail the Animal Type associated with the Proposed Facilities and that is consistent with the Animal Type detailed in the OSI. If animal numbers (AEUs) from existing facilities are voluntarily being added to the plan, detail the AEUs number; otherwise state "None", "Zero (0)" or "Not Applicable".*

***NOTE:** AEU calculations and AEUs per acre calculation must reflect those in the most current Act 38 NMP, otherwise explain the difference and submit the calculations in Appendix 5: Supporting Documentation.*

Proposed OSI Animal Type:	Cattle	
Proposed Animal Numbers:	0	
Proposed AEUs <i>(per animal type)</i> :	0	
Voluntary Existing Animal Type:	0	
Voluntary Existing AEUs <i>(per animal type)</i> :	0	
<b>Total</b> AEUs Covered by this Plan:	0	
AEUs per acre for the operation:	2.82	

Is there an approved Act 38 NMP for this operation?     Yes     No

***NOTE:** If No, explain in Appendix 5: Supporting Documentation.*

### B. Odor Site Index Summary (see Appendix 3 to view complete Index)

***NOTE:** If multiple Geographic Centers are used, you must provide scores for each geographic center. Scores listed here must match the final scores in the OSI.*

Score:       9.0  

### C. Odor BMP Implementation, Operation & Maintenance Schedule

#### Level I Odor BMPs Principles

1. Steps taken to reduce dust and feed accumulation in pens, aisles, and on animals.
2. Manage ventilation to provide sufficient fresh airflow throughout the facility to keep animals and facility surfaces clean and dry.
3. Manage manure to minimize damp, exposed manure that contributes to odor generation.
4. Remove mortalities daily and manage appropriately.
5. Manage feed nutrients to animal nutrient requirements in order to avoid excess nutrient excretion.
6. Manage manure storage facility to reduce exposed surface area and off-site odor transfer.

**Definitions:**

- **Required Odor BMPs** – In accordance with §§83.771, 83.781-83.783, Required Odor BMPs are the Odor BMPs required for implementation when there is a neighboring facility or a public use facility in the evaluation distance area, or when the OSI score is 50 or more points (Level I Odor BMPs), and when the OSI score is 100 or more points (Level II Odor BMPs).
- **Voluntary Odor BMPs** – The operator has voluntarily chosen to include Odor BMPs in the plan. Voluntary Odor BMPs must meet the same program standards that Required Odor BMPs do for implementation, operation, maintenance, and documentation.
- **Supplemental Odor BMPs** – In accordance with §83.781(e), Supplemental Odor BMPs are implemented in addition to the approved Odor BMPs in the plan and are also associated with plan updates.

*NOTE: Odor BMPs must be relevant to the site specific factors and must be maintained for the lifetime of the regulated facility unless otherwise approved.*

### Level I Odor BMPs to be Implemented

*Select each check-box that applies; if more than one category applies, clearly detail the respective Level I Odor BMPs criteria with each respective category. Detail below all Level I Odor BMPs Principles, adapted from the PA Odor BMP Reference List, that are applicable to the site specific factors of this animal operation and the regulated facilities.*

- None Required**
- Voluntary Level I Odor BMP:**
- Required Level I Odor BMP:**
- Supplemental Level I Odor BMP:**
- 

### Level II Odor BMPs to be Implemented:

*Select each check-box that applies; if more than one category applies, clearly detail the respective Level II Odor BMPs criteria with each respective category. Detail below all Level II Odor BMPs criteria addressing the following:*

- 1. the general construction and implementation criteria*
- 2. the corresponding timeframes of when each Odor BMP will be implemented*
- 3. all operation and maintenance procedures for each Odor BMP along with the corresponding timeframes for carrying out those procedures*
- 4. the lifespan of each Odor BMP.*

*NOTE: NRCS Conservation Practice Standards and Job Sheets that are in existence for the Level II Odor BMP are encouraged to be used for construction, implementation, and operation and maintenance criteria.*

- None Required**
- Voluntary Level II Odor BMP:**
- Required Level II Odor BMP:**
- Supplemental Level II Odor BMP:**
- 

## D. Documentation Requirements

*The following information will be documented by the Operator for each Odor BMP to ensure compliance with the plan. Documentation is needed to demonstrate implementation of the plan as well as for corrective actions taken for significant maintenance activities needed to return an Odor BMP back to normal operating parameters.*

### Level I Odor BMP Documentation Requirements

*Select each check-box that applies; if more than one category applies, clearly detail each documentation criterion.*

**None Required** – *(NOTE: Delete the Odor BMP Implementation Commitment Statement and the Level I Maintenance Log)*

**Level I Odor BMPs – Odor BMP Implementation Commitment Statement Only**

*The Operator will annually complete the Odor BMP Implementation Commitment Statement.*

**Level I Odor BMPs Documentation Criteria:**

*The Operator will annually complete the Odor BMP Implementation Commitment Statement. The Operator will also complete the Level I Odor BMPs Maintenance Log upon any of the following occurrences:*

- 1.
- 2.

### **Level II Odor BMP Documentation Requirements**

*Select each check-box that applies; if more than one category applies, clearly detail each documentation criterion.*

**None Required** – *(NOTE: Delete the Level II Quarterly Observation Log)*

**Level II Odor BMP Documentation Criteria:**

*The Operator will complete the Level II Odor BMPs Quarterly Observation Log, at least on a quarterly basis, detailing the proper implementation of the Odor BMPs as identified in the Implementation, Operation & Maintenance Schedule. The Operator will also complete the Level II Odor BMPs Quarterly Observation Log upon any of the following occurrences:*

- 1.
- 2.

## Appendix 1: Operation Information

### Part A: Odor Source Factors

#### 1. Site Livestock History: 2283.75 AEUs

*Detail the Maximum AEU of Livestock on the site within the past 3 years.*

#### Existing Facilities Description:

*NOTE: If the facilities or animal information differ from the most current Nutrient Management Plan, detail the differences in Appendix 5: Supporting Documentation.*

*Definitions:* Existing facilities are those animal housing facilities or manure storage facilities constructed before February 27, 2009, and are not subject to Odor Management program requirements.

#### 2. List the Existing Animal Types: Cattle

**Existing Animal Numbers:** 1200 milking cows

and 1200 heifers and calves

#### 3. Existing Animal Equivalent Units (AEUs) per Animal Type: 2283.75

#### 4. Existing Animal Housing Facility(ies):

*Describe all existing animal housing facilities including their dimensions, capacity and existing Odor BMPs used to address potential impacts.*

Animal Housing Facility	Dimensions	Livestock Capacity	Existing Odor BMPs
Pen-pack Cow Barn	60' x 280'	120 cows	Pen-Pack
Free stall Cow Barn 1	94' x 432'	650 Cows	None
Free stall Cow Barn 2	114.5' x 420'	430 Cows & 50 Pre-fresh Heifers	None
Free stall Heifer Barn 1	108.4' x 253'	400 Heifers	None
Calf Barn 1	16' x 177'	48 Calves	None
Calf Barn 2	24' x 220'	112 Calves	None
Calf Barn 3	16' x 248'	62 Calves	None
Calf Barn 4	16' x 248'	62 Calves	None
Heifer Barn 1	44' x 192'	116 Heifers	None
Heifer Barn 2	85' x 150'	50 Heifers	None
Heifer Barn 3	50' x 115'	120 Heifers	*Will be decommissioned
Heifer Barn 4	65' x 130'	180 Heifers	*Will be decommissioned

#### 5. Existing Manure Storage Facility(ies) and Manure Handling Systems:

*a. Describe all existing manure storage facilities and manure treatment technology facilities, including their dimensions, capacity and existing Odor BMPs used to address potential impacts.*

Manure Storage Facility	Dimensions	Usable Capacity	Existing Odor BMPs
Under-barn Free stall Barn 1	94' x 432' x 8' deep	2,278,109 Gallons	None
Under-barn Free stall Barn 2	114.5' x 420' x 8' deep	2,697,849 Gallons	None
Under-barn Free stall Heifer Barn	108.4' x 253' x 8' deep	1,538,554 Gallons	None
Leachate Storage	120' x 120' x 4' deep	269,280 Gallons	None
Sluystore - circular	62' x 23 deep	485,281 Gallons	*Will be decommissioned
(2) Underground concrete tanks	32' x 12' deep (each)	138,293 Gallons (ea)	*Will be decommissioned

*b. Provide a narrative description detailing the manure handling systems, including manure storage facilities, manure stacking areas, and manure treatment technology facilities.*

All storage facilities are under-barn style, where manure falls through or is scrapped through the slatted flooring except for the leachate storage and the 3 storage facilities that will be

decommissioned. The manure is pumped out of the storages for the land application of manure.

**Proposed Regulated Facility (ies) Description:**

*Detail the information below, clearly indicating:*

- 1) The animals that will be housed in the proposed animal housing facility (ies), which include expansions onto existing facilities;
- 2) The manure type (animal type detailed in the OSI ) that will be stored in the proposed storage facility and identifying the Act 38 Nutrient Management Program requirements that must be followed for the proposed manure storage facility(ies);
- 3) If Voluntary Existing Animal Numbers and AEUs or Transferred Existing AEUS do not apply, state “None”, “Zero (0)” or “Not Applicable” for that criterion.

*NOTE: The Animal Type associated with the Proposed Facilities must be consistent with the Animal Type detailed in the OSI.*

*NOTE: If the proposed facilities, animal information, and AEU calculations differ from the most current Nutrient Management Plan (NMP), detail the differences in Appendix 5: Supporting Documentation.*

**Definitions:**

- **Proposed AEUs** are the new additional AEUs associated with the proposed regulated animal housing facility (ies).
- **Voluntary Existing AEUs** are the AEUs associated with the existing animal housing facility (ies).
- **Proposed AEUs and Voluntary Existing AEUs** are used for determining the Odor Site Index evaluation distance area.
- **Transferred Existing AEUs** are existing AEUs on the site that will be transferred into the animal housing facility being evaluated.
- **Total AEUs** are used for determining significant change of the regulated facility (ies); a significant change will require an amendment to the plan. A significant change is defined as a net increase of equal to or greater than 25% in AEUs, as measured from the time of the initial plan approval.

**6. (a) Proposed Facility OSI Animal Types: Cattle**

**Proposed Animal Numbers per animal type: 0**

**Proposed AEUs per animal type: 0**

**(b) Voluntary Existing Animal Types: None**

**Voluntary Existing Animal Numbers: 0**

**Voluntary Existing AEUs per animal type: 0**

**(c) Total AEUs Covered by this Plan: 0 AEUs**

**(d) Acres for the operation associated with an approved Act 38 NMP or acres utilized for the CAO calculation: 810.8 acres**

**(e) Total AEUs/ Acre for the operation: 2.82 AEUs/acre**

*NOTE: The AEUs per acre calculation is only used to verify CAO status. AEUs per acre calculation must reflect the calculations in the most current NMP, otherwise explain the difference and submit the calculations in Appendix 5: Supporting Documentation.*

**(f) Transferred Existing Animal Types:  Check only when Applicable**

*NOTE: Detail the following information in Appendix 5: Supporting Documentation when 0 “Proposed AUEs” are proposed due to transferring existing animals on the site into the animal housing facility being evaluated:*

- 1) The OSI Animal Type associated with the Proposed Facilities,
- 2) The numbers of animals transferred, and
- 3) The AEUs. This information will be used for determining a significant change which will require an amendment to the plan.

**7. Proposed new or expanded animal housing facility(ies):**

*Detail all proposed animal housing facilities, or portions thereof, including their dimensions and livestock capacity.*

*NOTE: If the proposed facilities differ from the most current NMP, detail the differences in Appendix 5: Supporting Documentation.*

Animal Housing Facility	<input type="checkbox"/> None Proposed	Dimensions	Livestock Capacity
Free stall Heifer Barn 2		102' x 253'	410 Heifers (6-13 mo. Age)

\*\*Note – This proposed facility will replace the existing Heifer Barns # 2- 4

**8. Proposed new or expanded manure storage facility(ies):**

*NOTE: If the proposed facilities differ from the most current NMP, detail the differences in Appendix 5: Supporting Documentation.*

- (a) *Provide a narrative description detailing all manure handling systems (including all manure storage facilities, manure stacking areas, and manure treatment technology facilities) after the addition of the proposed facilities.*

3 existing storages will be decommissioned: (1) Slurrystore and (2) underground concrete tanks. There will be no changes to the manure handling of the existing under-barn storage facilities or to the existing leachate storage. The proposed under-barn storage facility and the existing under-barn storage facilities will be pumped out in accordance with the Nutrient Management Plan timeframes for the land application of manure.

- (b) *Detail all proposed manure storage facilities, manure stacking areas, and manure treatment technology facilities.*

*NOTE: If a waiver is required, it must be attached in Appendix 5: Supporting Documentation for the plan to be administratively complete.*

Manure Storage Facility	<input type="checkbox"/> None Proposed	Dimensions	Usable Capacity
Under-barn Free stall Heifer Barn 2 Storage		102' x 253' x 8' deep	After required ½ foot freeboard – 1,447,717 Gallons

**Act 38 NM Program Setback Requirements Verification**

*NOTE: When manure storage facilities are proposed, N/A cannot be detailed for both c & d*

- (c) **Existing Operations**  Not Applicable.

*Select all check-boxes that apply for Existing Operations proposing manure storage facilities.*

In accordance with planning provisions of the Commission’s Nutrient Management Program regulations, the proposed manure storage(s) is part of an existing operation (operation that produced livestock or poultry on or before October 1, 1997) and will be located having a minimum setback distance of the following:

- i) 100’ minimum setback distance (in accordance with **§83.351(a)(2)(v)(A)-(E)**) from wetlands, water bodies and wells (public and private).  Yes  Not Applicable
- ii) 100’ minimum setback distance (in accordance with **§83.351(a)(2)(v)(F)**) a from the property line; otherwise an executed Manure Storage Setback Waiver from the Neighboring Landowner, must be attached.  Yes  Not Applicable
- iii) 200’ minimum setback distance (in accordance with **§83.351(a)(2)(v)(G)**) from wetlands, water bodies and wells (public and private) for a manure storage facility of 1.5 million gallons or larger capacity or that is located on slopes exceeding 8%.  Yes  Not Applicable
- iv) 200’ minimum setback distance (in accordance with **§83.351(a)(2)(v)(H)**) from the property line for a manure storage facility of 1.5 million gallons or larger capacity or that is located on slopes exceeding 8% and the slope is toward the property line; otherwise an executed Manure Storage Setback Waiver from the Neighboring Landowner, must be attached.  Yes  Not Applicable

- (d) **New Operations/ New Animal Enterprises**  Not Applicable.

*Select all check-boxes that apply for New Operations/ New Animal Enterprises proposing manure storage facilities.*

If the proposed manure storage(s) is part of a new operation (operation that produced livestock or poultry after October 1, 1997), or a new animal enterprise (an existing operation that expanded after October 1, 1997, via producing different livestock or poultry than what was previously produced – see NM Tech Manual, Section III) and in accordance with planning provisions of the Commission’s Nutrient Management Program regulations the proposed storage will be located having a minimum setback distance of the following:

- i) 100’ minimum setback distance (in accordance with **§83.351(a)(2)(vi)(A)-(E)**) f from wetlands, water

bodies and wells (public and private).  Yes  Not Applicable

ii) 200' minimum setback distance (in accordance with §83.351(a)(2)(v)(F) from the property line; otherwise an executed Manure Storage Setback Waiver from the Neighboring Landowner, must be attached.  Yes  Not Applicable

iii) 200' minimum setback distance (in accordance with §83.351(a)(2)(v)(G) from wetlands, water bodies and wells (public and private) for a manure storage facility of 1.5 million gallons or larger capacity or that is located on slopes exceeding 8%.  Yes  Not Applicable

iv) 300' minimum setback distance (in accordance with §83.351(a)(2)(v)(H) from the property line for a manure storage facility of 1.5 million gallons or larger capacity or that is located on slopes exceeding 8% and the slope is toward the property line; otherwise an executed Manure Storage Setback Waiver from the Neighboring Landowner, must be attached.  Yes  Not Applicable

**9. Construction activities of the proposed regulated facilities:**

*NOTE: Construction activities must be started within 3 years of the plan approval date.*

a. *Detail the proposed construction sequence timeframes for each proposed regulated facility (or portions thereof)* The new heifer barn and under-barn storage will be constructed simultaneously. Construction is proposed for the Fall of 2014. This barn will replace 3 barns and 3 manure storages; the decommissioning of the 3 barns and 3 manure storages will start before the construction activities of the proposed facilities.

b. *Have construction activities started on any of the proposed regulated facilities?*  Yes  No *If yes, please detail: \_\_\_\_\_*

**Part B: Site Land Use Factors**

*1) Select the applicable check-box below for each special agricultural land use designation, and*

*2) Provide written verification in Appendix 5: Supporting Documentation for each agricultural land use designation claimed.*

*NOTE: Documentation verifying each claimed land use must be attached for the plan to be administratively complete.*

Agricultural land use designations applicable to the site being evaluated:

- 1. Agricultural Security Area  Yes / No
- 2. Agricultural Zoning  Yes / No
- 3. Preserved Farm  Yes / No

**Part C: Surrounding Area Land Use Factors**

*NOTE: Detail applicable criteria for 1 and 2 on the Operational Map in Appendix 2.*

1. Other Livestock Operations (≥ 8 AEUs) within the evaluation distance area  Yes / No   
*If yes, then list the type of operation, the direction (N, S, E, W) and quadrant (distance range from the facility).*

2. Distance to nearest property line measurement:

*NOTE: Measured from nearest corner of the proposed animal housing facility and/or manure storage facility to the property line. Measurements must also be detailed on the Operational Map in Appendix 2.*

- a. Animal Housing Facility measurement 305 (ft.)  Not Applicable
- b. Manure Storage Facility measurement 305 (ft.)  Not Applicable

3. If nearest property (from the nearest property line measurements indicated in “2” above) is less than 300’, is this neighboring property a Preserved Farm?     Yes / No

*NOTE: Documentation verifying this claimed status must be attached for the plan to be administratively complete.*

- (a) *If “Yes” is indicated, detail the name and address in Appendix 5: Supporting Documentation of the nearest neighboring property owner who has a Preserved Farm.*

## Appendix 2: Operational Maps

### Topographic Map

Odor Management Plans must include a topographic map drawn to scale with a map legend, identifying:

- Operation boundaries;
- Location of existing and proposed animal housing and manure storage facilities on the operation;
- Location of operation-related neighboring facilities;
- Location of neighboring facilities (normally occupied homes, active businesses and churches) and public use facilities within the evaluation distance area;
- Local topography (as indicated by the topographic lines);
- Geographic center with concentric circles drawn at 600' intervals for the entire evaluation distance area;
- Identification of the various map quadrants to include North, South, East and West;
- Distance to nearest property line from the nearest facility;
- Road names within the evaluation distance area; and
- All neighboring facilities and public use facilities that are being given credit for the Intervening Topography and Vegetation Factor.

In order to distinguish the following criteria from the other neighboring facilities and public use facilities, the Operational Map and the associated map legend must have separate symbols detailing the following:

- All operation-related neighboring facilities, and
- All neighboring facilities and public use facilities which are being given credit for the Intervening Topography and Vegetation Factor.

**NOTE:** *The scale chosen must be reasonable and practical for use in evaluating the OMP. For example:*

- *A scale of 1" = 600' is an example of a scale that is reasonable for use in determining evaluation distances, setbacks, etc., but may not be practical for larger evaluation distance areas for fitting the map on one 8 1/2' x 11' sheet of paper.*
- *A scale of 1.37" = 267.5' is an example of a scale that may be practical for fitting on one 8 1/2' x 11' sheet of paper, but in a scale that is not reasonable or very useful.*
- *Maps need to be to a scale that shows sufficient detail to be reasonable and useful. Planners are encouraged to use a scale that can be divided evenly by, or into, 600' by a round whole number*
- *Multiple maps are encouraged to be provided for the purpose of facilitating specific details, i.e. aerial maps, etc.*

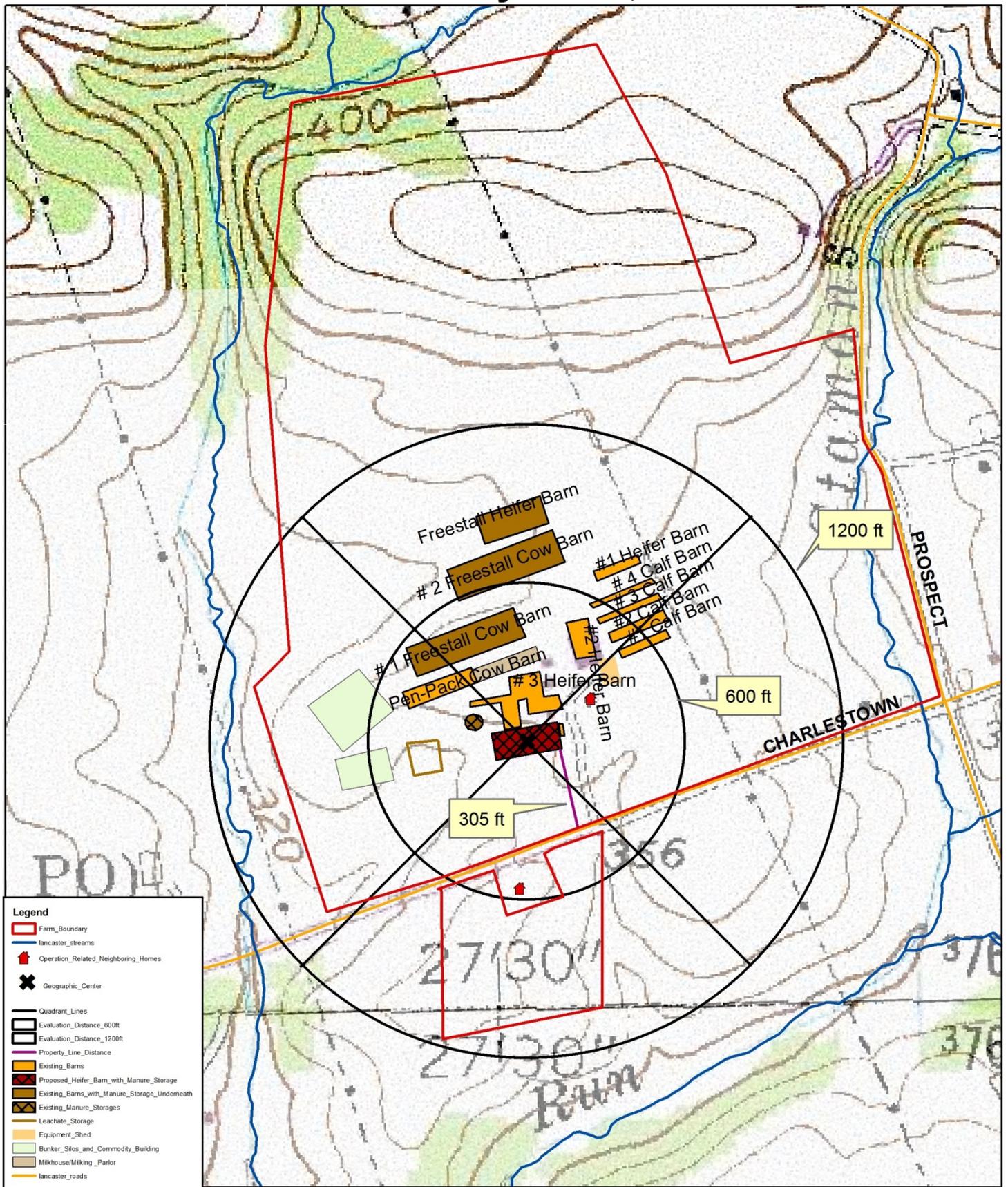
### Site Map

The purpose of the site map is to facilitate the plan review process of identifying specific details about the operation being evaluated. Odor Management Plans must include a site map of the operational related facilities drawn to scale with a map legend, identifying at a minimum the following:

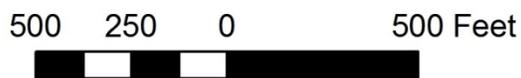
- Operation boundaries;
- Location of existing and proposed animal housing and manure storage facilities on the operation;
- Geographic center with concentric circles drawn at 600' intervals; and
- Distance to nearest property line from the nearest facility

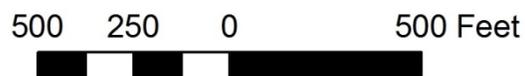
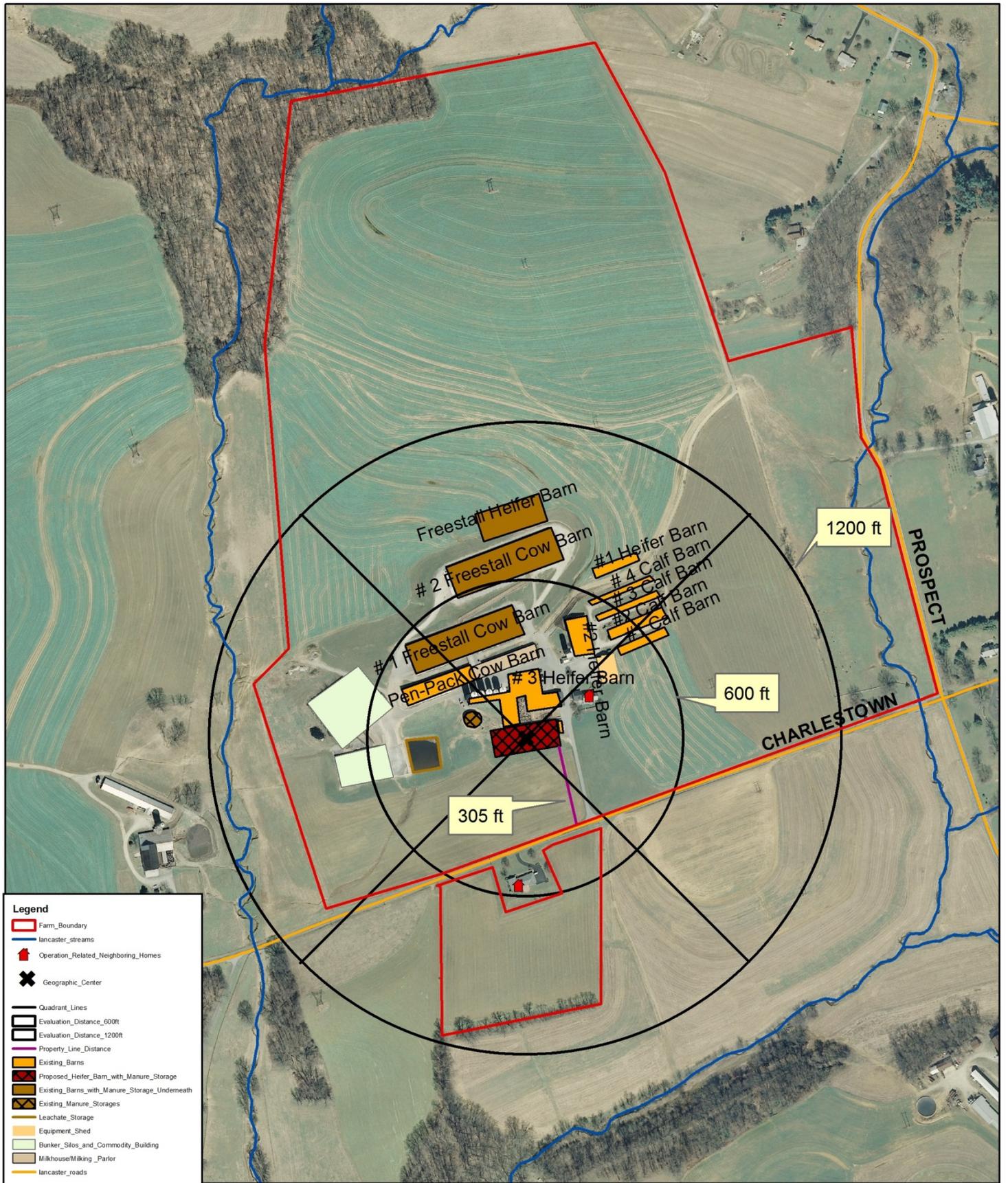
If there are multiple facilities on the site, detail the name of each of the facilities as per what the operator refers to them as, i.e. Layer #1 – Layer #5, mortality composting facility, etc.

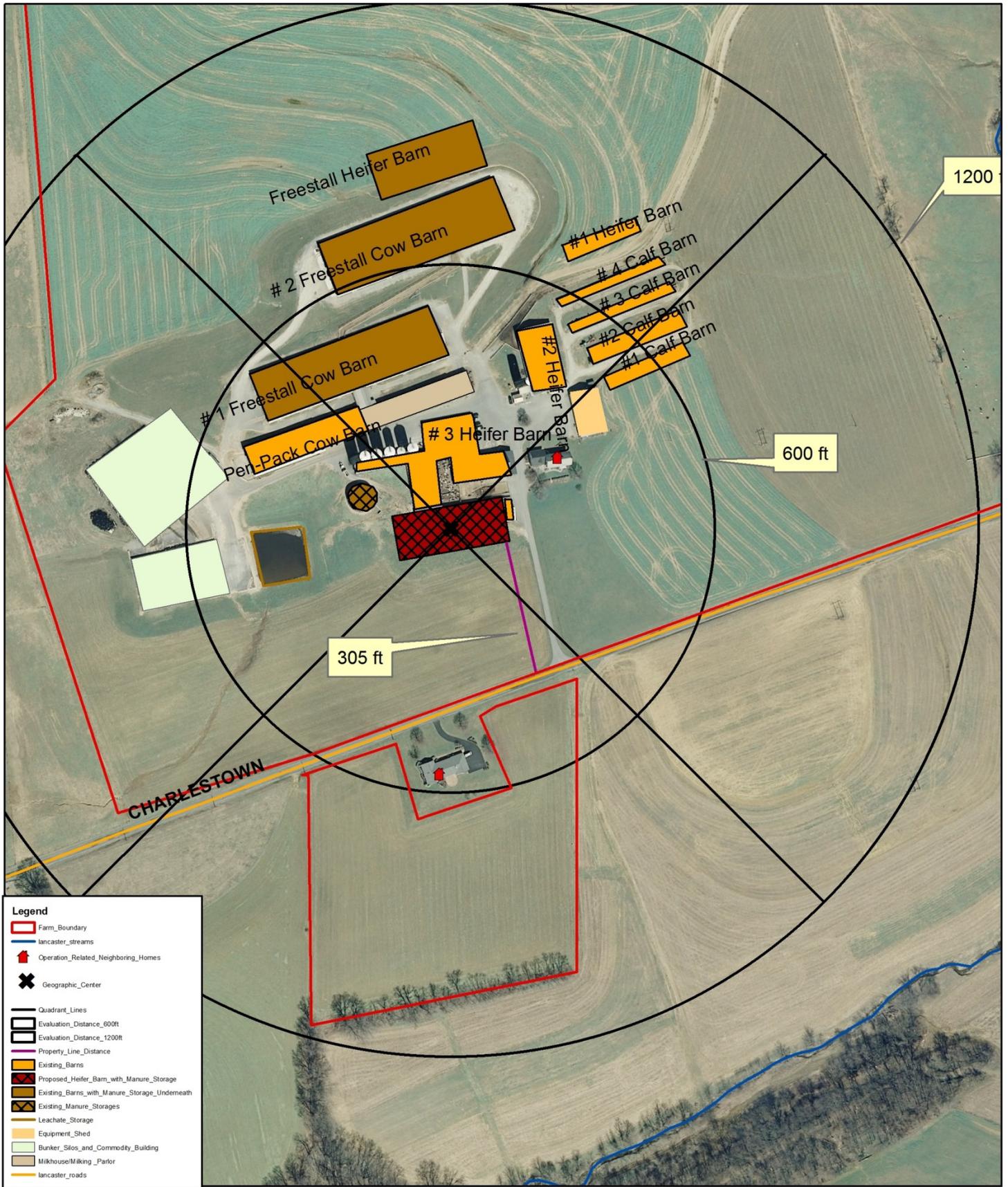
If the evaluation distance area is small enough, i.e. a 1200' evaluation distance area, to clearly identify the specific details required, then a separate map will not be required.



- Legend**
- Farm\_Boundary
  - Lancaster\_streams
  - + Operation\_Related\_Neighboring\_Homes
  - x Geographic\_Center
  - Quadrant\_Lines
  - Evaluation\_Distance\_600ft
  - Evaluation\_Distance\_1200ft
  - Property\_Line\_Distance
  - Existing\_Barns
  - Proposed\_Heifer\_Barn\_with\_Manure\_Storage
  - Existing\_Barns\_with\_Manure\_Storage\_Undereneath
  - Existing\_Manure\_Storages
  - Leachate\_Storage
  - Equipment\_Shed
  - Bunker\_Silos\_and\_Commodity\_Building
  - Milkhouse\_Milking\_Parlor
  - Lancaster\_roads

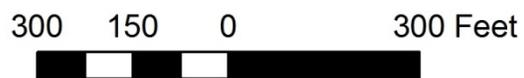






**Legend**

- Farm\_Boundary
- Lancaster\_streams
- Ⓜ Operation\_Related\_Neighboring\_Homes
- ⊗ Geographic\_Center
- Quadrant\_Lines
- Evaluation\_Distance\_600ft
- Evaluation\_Distance\_1200ft
- Property\_Line\_Distance
- Existing\_Barns
- Proposed\_Heifer\_Barn\_with\_Manure\_Storage
- Existing\_Barns\_with\_Manure\_Storage\_Undemeath
- Existing\_Manure\_Storages
- Leachate\_Storage
- Equipment\_Shed
- Bunker\_Silos\_and\_Commodity\_Building
- Milkhouse/Milking\_Parlor
- Lancaster\_roads



## **Appendix 3: Plan Evaluation – OSI**



Act 38 Odor Management Plan - Odor Site Index

<b>East Quadrant</b>	<600	600-1200	1200-1800	1800-2400	2400-3000	
# Neighboring Facilities	0	0		Select from List	Select from List	
Facility Value	15	7	3	0	0	
Home Shielding	Select from list	<b>Total Facilities 0.0</b>				
# Public Use Facilities	0	0				<b>Total Public 0.0</b>
Public Use Value	40	20	10	5	3	
Public Use Shielding	Select from list	<b>Total East 0.0</b>				
<b>South Quadrant</b>	<600	600-1200	1200-1800	1800-2400	2400-3000	
# Neighboring Facilities	0	0		Select from List	Select from List	
Facility Value	10	5	2	0	0	
Home Shielding	Select from list	<b>Total Facilities 0.0</b>				
# Public Use Facilities	0	0				<b>Total Public 0.0</b>
Public Use Value	30	15	7	4	2	
Public Use Shielding	Select from list	<b>Total South 0.0</b>				
<b>North Quadrant</b>	<600	600-1200	1200-1800	1800-2400	2400-3000	
# Neighboring Facilities	0	0		Select from List	Select from List	
Facility Value	6	3	0.5	0	0	
Home Shielding	<600 None (1)	Select from list	Select From List	Select From List	Select From List	<b>Total Facilities 0.0</b>
# Public Use Facilities	0	0				<b>Total Public 0.0</b>
Public Use Value	25	13	6	3	1	
Public Use Shielding	Select from list	<b>Total North 0.0</b>				
<b>West Quadrant</b>	<600	600-1200	1200-1800	1800-2400	2400-3000	
# Neighboring Facilities	0	0		Select from List	Select from List	
Facility Value	6	3	0.5	0	0	
Home Shielding	Select from list	<b>Total Facilities 0.0</b>				
# Public Use Facilities	0	0				<b>Total Public 0.0</b>
Public Use Value	25	13	6	3	1	
Public Use Shielding	Select from list	<b>Total West 0.0</b>				
						<b>Grand Total 0.0</b>

## Appendix 4: Biosecurity

### Biosecurity Protocol Contact Information

*Detail the point of contact for information on this operation's biosecurity protocols:*

Name:	<u>Ima Farmer, Jr</u>	Phone:	<u>(098) 765-4321</u>
E-mail:	<u><a href="mailto:ifarm@livestock.rus">ifarm@livestock.rus</a></u>	Relationship:	<u>Operator</u>

## **Appendix 5: Supporting Documentation**

This section is reserved for the plan writer when developing this plan to have a dedicated area to include supporting documentation such as for agricultural land use designation verification, Nutrient Management program setback waiver verification, AEU calculation verification when no NMP is available, etc.

*Provide a heading for each topic discussed in this Appendix.*

### **Act 38 NMP Status**

The NMP is currently being developed and will follow the OMP submission for its review.

### **Transferred Existing Animals**

410 heifers (6-13 months age; 235.8 AEU) will be transferred from Existing Heifer Barns # 2, 3, and 4 into the Proposed Free stall Heifer Barn.

## ***Supplement 8 – Penn State Cooperative Extension Agronomy Fact Sheet # 54***

This Fact sheet can be downloaded

at [http://panutrientmgmt.cas.psu.edu/pdf/bmp\\_appendix\\_g.pdf](http://panutrientmgmt.cas.psu.edu/pdf/bmp_appendix_g.pdf).

## ***Supplement 9 – Program Contacts***

Frank Schneider

Director, Nutrient Management & Odor Management Programs

2301 North Cameron St.

Harrisburg, PA 17110-9408

717-705-3895 (Fax) 717-705-3778

[fschneider@pa.gov](mailto:fschneider@pa.gov)

Karl Dymond

Odor Management Program Coordinator

PDA Region III Office,

PO Box C, S.R. 92 S.

Tunkhannock, PA 18657-0318

570-836-2181 Ext. 120 (Fax) 570-836-6266

[kdymond@pa.gov](mailto:kdymond@pa.gov)