

## Other Unique Components

### Situation Overview:

- A. *Please detail additional areas that were part of the farm's project.* As part of the project, we needed to approximately double our herd size. We were blessed to be able to find a herd for sale with owners who were willing and able to continue taking care of the herd until the barn was complete and ready for move-in.
- B. *How was the team instrumental in helping you think through available options?* Some of the team members were familiar with the previous herd owners and highly recommended the acquisition because of the known herd health history. This option was preferred over buying animals (most likely heifers) from various herds and hoping that no new herd health issues would be introduced to our farm/herd.
- C. *Did any of these additional components result in added profitability or a change in management style?* The additional cows were required for the cash flow to work. The additional cows increased the number of calves and heifers on the farm. We remodeled the old bank barn and had to change the ages of animals that the existing pens held. Raising our own replacements helps to control introduction of herd health issues into the herd.
- D. *Before and After the Project:*
- 48+ cows milking plus dry cows for a total of approximately 55 before the project plus heifers to equal 100 animals.
  - 105+ cows milking plus dry cows for a total of 120 cows with potential to milk 120 and total up to 135 cows plus 100 heifers kept on farm with potential to sell excess heifers.
  - Acres before project is 110 acres rented plus 25 acres grass rented nearby. Raised corn for silage and grain, soybeans double cropped with barley, and alfalfa for haylage/dry hay.
  - After project, own 110 acres and still rent 25 acres of grass nearby. We have an agreement with a neighbor to haul excess manure per NMP and able to purchase corn for grain. We now double crop farm with corn for silage and a cereal grain silage, with approximately 10 acres of soybeans after direct cut barley.
  - Total forage before filled a 20x60 silo with corn silage and a 8x100 bag with corn silage. Haylage filled a 20x70 structure during the year from 1st to 5th cuttings, and HMSC filled a 20x50 structure half full. Grass hay was about 60 tons.
  - After the project approximately 1,600 tons of corn silage, 250 tons of small grain silage, and now 125 tons of grass hay are produced.
  - Storage structures before and after 20x70, 20x60 and 20x50 silos. The use has changed for the 20\*70 from haylage only to small grain silage and topped off with corn silage in the fall. The 20\*60 remains corn silage. The 20x50 converted from HMSC to corn silage and/or small grain silage. In 2014, we made two ag bags of corn silage, 10 x 300 and one 8x150.

## Other Unique Components...continued

### Odor Management Plan

SCC Odor Management Program Technical Manual / December 3, 2008 Act 38 of 2005, Odor Management Plan

## Odor Management Plan

*Prepared For:*

**Jeffrey Balmer**

572 Millway Road

Lititz, PA 17543

717-629-6601

*Prepared By:*

**Devin Gerlach**

Certification #12 OMC

**TeamAg Incorporated**

120 Lake Street

Ephrata, PA 17522

717-721-6795



Date of Plan Submission: \_\_\_\_\_

Date of Plan Approval: \_\_\_\_\_

Date(s) of Plan Updates (not requiring board action): \_\_\_\_\_

# Other Unique Components...continued

## Odor Management Plan

SCC Odor Management Program Technical Manual / December 3, 2008 Act 38 of 2005, Odor Management Plan

### Table of Contents

---

Planner and Operator Commitments & Responsibilities .....	1
Plan Implementation Requirements .....	1
Planner Signature .....	1
Operator Signature Addendum .....	2
Plan Summary .....	3
A. Operation Summary (see Appendix 1 to view complete Operation Information) .....	3
B. Odor Site Index Summary (see Appendix 3 to view complete Index) .....	3
C. Odor BMP Implementation, Operation & Maintenance Schedule .....	3
Level I Odor BMPs to be Implemented .....	3
Level II Odor BMPs to be Implemented: .....	4
D. Documentation Requirements .....	5
Level I Odor BMP Documentation Requirements .....	5
Level II Odor BMP Documentation Requirements .....	5
Level I Odor BMPs – Quarterly Observation Log   YEAR .....	6
Level II Odor BMPs – Quarterly Observation Log   YEAR .....	7
LEVEL II ODOR BMP NAME .....	7
Appendix 1: Operation Information .....	8
General Information: .....	8
Part A: Odor Source Factors .....	8
Part B: Site Land Use Factors .....	9
Part C: Surrounding Area Land Use Factors .....	9
Appendix 2: Operational Maps .....	10
Appendix 3: Plan Evaluation – OSI .....	11

## Other Unique Components...continued

### Odor Management Plan

SCC Odor Management Program Technical Manual / December 3, 2008 Act 38 of 2005, Odor Management Plan

#### Planner and Operator Commitments & Responsibilities

##### *Plan Implementation Requirements*

This odor management plan has been developed to meet the requirements of the following programs addressing the following farm type:

- ☒ Pennsylvania Act 38 of 2005 Concentrated Animal Operation (CAO)
- ☐ Pennsylvania CAFO (Concentrated Animal Feeding Operation (CAFO) program
- ☐ Volunteer Animal Operation (VAO)
- ☐ Other program (explain): \_\_\_\_\_

Plans developed under these this Act 38 of 2005 (Nutrient and Odor Management Act) programs are required to be implemented as approved in order to maintain compliance with the specific law or program. Implementation includes adherence to installation of listed Odor BMPs within implementation schedule timeframes and conditions; maintenance the Odor BMPs consistent with the operation and maintenance schedule timeframes and conditions contained in this plan; and record keeping obligations of the program.

Plans developed under this program also require agricultural operations to allow access by the Commission for status reviews and inspections for complaints. Agricultural operations will commit to providing the operation's biosecurity protocols to the Commission.

Prior to Utilizing a new or expanded animal housing 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 must inform the Commission upon completion of construction activities, of their desire to begin using the new or expanded facilities, and at that time the Commission will send out a representative to assess the implementation of the approved Odor Management Plan.

##### *Plan Implementation Documentation Requirements*


Plans developed under this program require agricultural operations to keep and maintain accurate records of the Odor BMPs consistent with the implementation, operation and maintenance schedule and require agricultural operations to allow access by the Commission to those records in order to determine the compliance status.

##### *Planner Signature*

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 of 2005 Odor Management Program indicated above.

Planner Name: Devin Gerlach

Certification number: 12 OMC

Signature of Planner: 

Date: 4-7-11

Date(s) Evaluation Distance Area Site Visit Conducted: 12-1-2010

Please note that the Planner's Signature and above date(s) certifies that a site visit(s) was conducted to verify the criteria within the evaluation distance area, at the time of developing the plan, specifically for the odor source(s) to locate houses, businesses and public use facilities within the evaluation distance, as well as, the site land use and the surrounding land use factors, and that the plan was not merely developed from an aerial map.

## Other Unique Components...continued

### Odor Management Plan

SCC Odor Management Program Technical Manual / December 3, 2008 Act 38 of 2005, Odor Management Plan

#### *Operator Signature Addendum Section*

##### **Odor Management Plan Prepared for:**

Operator's Name: Jeffrey Balmer

Site Address: 572 Millway Road

Lititz, PA 17543

Municipality: Warwick Township

County: Lancaster County

##### **Odor Management Plan Signature Requirements**

In accordance with §83.741(i), plans shall be signed by the operator 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.

##### **Operator Agreement**

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.

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

Signature of Operator: Jeffrey C. Balmer

Date: 4/2/2011

Name of Operator: Jeffrey Balmer

Title of Operator: Owner / Operator

## Other Unique Components...continued

### Odor Management Plan

SCC Odor Management Program Technical Manual / December 3, 2008 Act 38 of 2005, Odor Management Plan

#### Plan Summary

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

Animal Type(s): Milk Cows

Additional AEUs (per animal type): 82 Milk Cows – 107 AEUs

AEUs per acre for the operation: 3.01

48 Milk Cows – 62

\*Transferred AEUs: AEUs ☐ N/A

*\*Note: "Additional AEUs" are used for determining the Odor Site Index evaluation distance area. "Transferred AEUs" are used for determining significant change of the regulated facility(ies) for plan amendments. 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, which will require a plan amendment.*

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

Score: 10.5

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

###### Describe Odor BMPs

- All Odor BMPs will be maintained for the lifetime of the livestock facility unless otherwise noted.
- All employees will be instructed at least two times per year on operation and maintenance of the various Odor BMPs listed in this plan and required documentation for each of the practices.

###### Level I Odor BMPs to be Implemented

List below all Level I Odor BMPs from the PA Odor BMP Reference List that are applicable to this animal operation.

☒ *N/A (None Required)*

☐ *Level I Odor BMP Requirements:*



## Other Unique Components...continued

### Odor Management Plan

SCC Odor Management Program Technical Manual / December 3, 2008 Act 38 of 2005, Odor Management Plan

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

List below all Level II Odor BMPs detailing the following:

1. the general construction and implementation criteria
2. the corresponding timeframes of when each Odor BMP will be implemented in
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.

Please 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.

☒ *N/A (None Required)*

☐ *Level II Odor BMP Requirements:*

## Other Unique Components...continued

### Odor Management Plan

SCC Odor Management Program Technical Manual / December 3, 2008 Act 38 of 2005, Odor Management Plan

#### **D. Documentation Requirements**

Describe what information will be documented by the Operator for each Odor BMP to ensure compliance with the plan.

##### **Level I Odor BMP Documentation Requirements**

☒ *N/A (None Required) – If N/A, the Level I Quarterly Observation Log can be deleted*

☐ **Level I Odor BMP Documentation Requirements:**

The Operator will complete the Level I 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 I Odor BMPs Quarterly Observation Log upon any of the following occurrences:

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

☒ *N/A (None Required) – If N/A, the Level II Quarterly Observation Log can be deleted*

☐ **Level II Odor BMP Documentation Requirements:**

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:





## Other Unique Components...continued

## Odor Management Plan

SCC Odor Management Program Technical Manual / December 3, 2008 Act 38 of 2005, Odor Management Plan

[illegible]

(The operator will record observations relating to each Level II BMP on the first day (approximately) of each quarter of the year).

**(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)
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## LEVEL II ODOR BMP NAME

Document the following activities:

- *List any activities here that are to be documented.*
- **Note:** All Maintenance activities should be completed as soon as possible upon the observation that maintenance is needed.

[illegible]

# Other Unique Components...continued

## Odor Management Plan

SCC Odor Management Program Technical Manual / December 3, 2008 Act 38 of 2005, Odor Management Plan

### Appendix 1: Operation Information

#### General Information:

Operator's Name: Jeffrey Balmer

Site Address: 572 Millway Road

Lititz, PA 17543

Municipality: Warwick Township

County: Lancaster County

#### *Farm Description*

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

##### Existing / Non-Regulated Facilities Description:

1. Existing Species/ Animal Types: Milk Cows (48) / Dry Cows (7) / Heifers (22) / Calves (18)
2. Existing Animal Equivalent Units per Species or Type: Milk Cows – 62 / Dry Cows – 9.1 / Heifers – 19.8 / Calves – 6.8
3. Site Livestock History (Maximum AEUs of Livestock at the site within the past 3 years): 97
4. Existing Animal Housing Facility(ies):  
 Tie-stall Barn (will become calf barn) – 90' x 55'  
 Box Stall Barn – 55' x 20'  
 Calf Barn – 60' x 30'  
 Heifer / Calf Barn – 70' x 30'  
 Heifer / Dry Cow Barn – 100' x 40'
5. Existing Manure Storage Facility(ies):  
 Circular Concrete Storage – 77' x 10'  
 Rectangular Barnyard Pit – 71' x 12' x 10'

##### Proposed / Regulated Facility(ies) (or portions thereof) Description:

6. Additional Animal Types: Milk Cows  
 Additional Animal Numbers: 82  
 and Additional AEUs/ Type: 107

☐ *N/A*

Transferred Animal Types: Milk Cows

Transferred Animal Numbers: 48

and Transferred AEUs/ Type: 62

## Other Unique Components...continued

### Odor Management Plan

SCC Odor Management Program Technical Manual / December 3, 2008 Act 38 of 2005, Odor Management Plan

*Note: "Additional AEUs" are used for determining the Odor Site Index evaluation distance area. "Transferred AEUs" are used for determining significant change of the regulated facility(ies) for plan amendments. 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, which will require a plan amendment.*

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

A new dairy free stall barn (300' x 70') with robotic milkers will be built to house a total of 130 milk cows. Approximately 48 of the cows in the new barn will be transferred from the current dairy tie stall barn. The current dairy barn will be used to house additional youngstock.

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

Manure from the proposed dairy barn will gravity flow in two gutters and be temporarily collected in a covered reception pit/manhole (6' x 10'). From the manhole the manure will be pumped into the existing circular concrete manure storage.

Is a Nutrient Management program setback waiver attached? ☒ N/A ☐ Yes ☐ No

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

(Indicate if this Agricultural Operation has any of the following status:)

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

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

1. Indicate the types of other Livestock Operations ( $\geq 8$  AEUs) within the evaluation distance (list the type of operation, the direction (N, S, E, W) and quadrant (distance from the facility). Also locate the operation(s) on the map in Appendix 3):
  - In the east quadrant (1200-1800') there is a beef operation with more than 8 AEUs.
2. Distance to nearest property line (measured from nearest corner of the animal housing facility or manure storage facility to the property line): 100'
3. If nearest property is less than 300' (as indicated in "2" above), is this neighboring property a Preserved Farm? ☒ Yes / No ☐ N/A ☐

# Other Unique Components...continued

## Odor Management Plan

SCC Odor Management Program Technical Manual / December 3, 2008 Act 38 of 2005. Odor Management Plan

### Appendix 2: Operational Maps

Odor Management Plans must include a topographic map drawn to scale, identifying: the land included in the plan; operation boundaries; location of existing and proposed animal housing and manure storage facilities on the operation; location of neighboring homes, businesses, churches and public use facilities within the evaluation distance; local topography (as indicated by the topographic lines); concentric circles drawn at 600' intervals for the entire evaluation distance; identification of the various map quadrants to include North, South, East and West; the distance to nearest property line from the nearest facility; road names within the evaluation distance area; all neighboring facilities and public use facilities that are being given credit for the Intervening Topography and Vegetation Factor; and a map legend. Multiple maps may be provided to facilitate specific details.

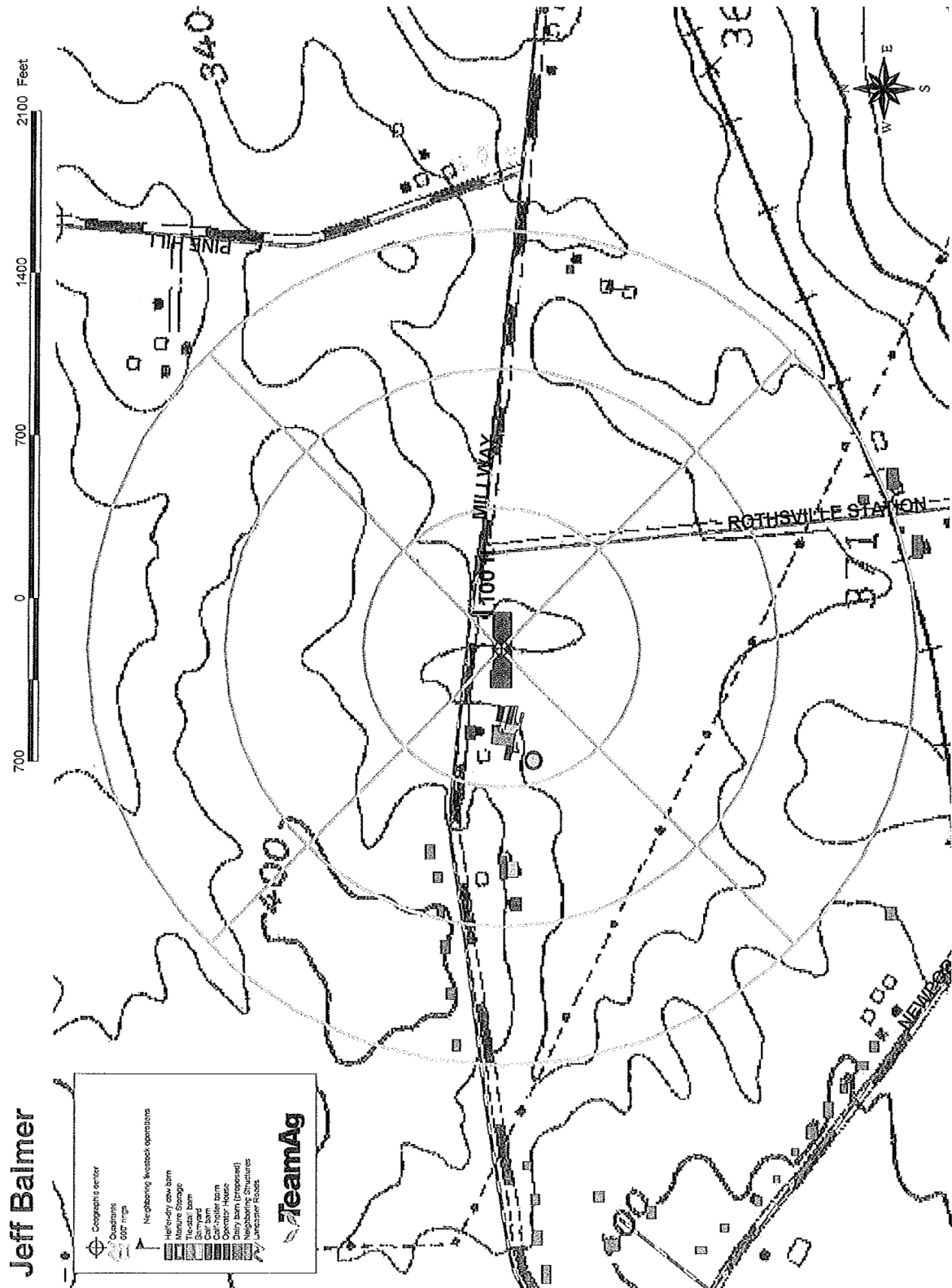
page 10

May 7, 2010

OMP Version 1.3

## Other Unique Components...continued

### Odor Management Plan



## Other Unique Components...continued

### Odor Management Plan

SCC Odor Management Program Technical Manual / December 3, 2008 Act 38 of 2005, Odor Management Plan

### Appendix 3: Plan Evaluation – OSI



# Other Unique Components...continued

## Odor Management Plan

SCC OSI V.1

<b>Operator Name:</b> <b>Planner Name:</b> <b>Type of Operation:</b> <b>Number of AEUs Proposed:</b> <b>Evaluation Distance:</b>		<b>Jeffrey Balmer</b> <b>Devon Gerlach</b> <b>Dairy</b> <b>107</b> <b>1800</b>		<b>OSI Score</b>	
<b>Part A: Odor Source Factors</b> Facility Size (AEUs) covered by OMP Site Livestock History (AEUs) Species/Type Manure Storage Type		200-499 = 4 points 1-49 = 9 points Layers, Veal, Pullets, Cattle = 12 points Outdoor covered wet or dry = 3 points In or under building = 2 points	500-749 = 6 points 50-199 = 6 points Broilers, Turkeys, Horses = 10 points Outdoor uncovered wet (crust expected) or uncovered dry = 5 points Outdoor uncovered wet (no crust expected) or feedlot = 10 points	1000+ = 10 points 750-999 = 8 points 200-499 = 3 points Other = Call SCC	2 5 12 10
		<b>TOTAL PART A</b>			
<b>Part B: Site Land Use Factors</b> Ag Security Area Ag Zoning Preserved Farm		Yes = (-) 5 points; No = 0 points Yes = (-) 10 points; No = 0 points Yes = (-) 20 points; No = 0 points		5 10 20	
		<b>TOTAL PART B</b>			
<b>Part C: Surrounding Land Use Factors</b> Other livestock >8AEUs within evaluation distance Distance to nearest property line If nearest property <300', is it preserved farmland? Neighboring Homes Public Use Facilities		Zero = 5 points 1 to 4 = 0 points 5 or more = (-5) points 151' to 300' = 5 points >300' = 0 points Yes = (-) 5 points No = 0 points Total from Appendix A Total from Appendix B		0 0 5 17.5 10	
		<b>TOTAL PART C</b>			
		<b>FINAL ODOR INDEX SCORE</b>		10.5	

# Other Unique Components...continued

## Odor Management Plan

**Appendix A: Neighboring Home Multiplication Factors**

	A <sup>1</sup>	B <sup>2</sup>	C <sup>3</sup>	T <sup>4</sup>	A	B	C	T	A	B	C	T	A	B	C	T	A	B	C	T
					600-1200'				1200-1800'				1800-2400'				2400-3000'			
East	Number (<1800')	0	15	1	0	0	7	1	0	1	3	1	3							
	1-5 homes (>1800')													6		0	3		0	
	6-20 homes (>1800')													14		0	7		0	
	>20 homes (>1800')													40		0	20		0	
South	Number (<1800')	0	10	1	0	0	5	1	0	2	2	1	4							
	1-5 homes (>1800')													3		0	0.6		0	
	6-20 homes (>1800')													2.3		0	1.4		0	
	>20 homes (>1800')													10		0	4		0	
North	Number (<1800')	0	6	1	0	0	2	1	0	0	0.5	1	0							
	1-5 homes (>1800')													0.8		0	0.3		0	
	6-20 homes (>1800')													1.8		0	0.7		0	
	>20 homes (>1800')													5		0	2		0	
West	Number (<1800')	0	6	1	0	3	3	1	9	3	0.5	1	1.5							
	1-5 homes (>1800')													0.8		0	0.3		0	
	6-20 homes (>1800')													1.8		0	0.7		0	
	>20 homes (>1800')													5		0	2		0	
<b>TOTAL (GT)</b>																				

**Appendix C: Intervening Topography and Vegetation Factors for Homes and Public Use Facilities**

	<600'	600-1200'	1200-1800'	1800-2400'	2400-3000'
All Shielded	0.5	.4	.25	.25	.25
Some Shielded	0.75	.6	.5	.5	.5
None Shielded	1	1	1	1	1

### Footnotes

<sup>1</sup> Number of homes, etc, in the distance/direction section.

<sup>2</sup> Point value assigned to each home, etc, in the distance/direction section.

<sup>3</sup> Factor from Appendix C to adjust for intervening topography and / or vegetation

<sup>4</sup> Total score for the distance/direction section.

## Other Unique Components...continued

### Odor Management Plan

**Appendix B: Public Use Facility Multiplication Factors**

Number of:	<600'				600-1200'				1200-1800'				1800-2400'				2400-3000'			
	A <sup>1</sup>	B <sup>2</sup>	C <sup>3</sup>	T <sup>4</sup>	A	B	C	T	A	B	C	T	A	B	C	T	A	B	C	T
East Public Use Facilities	0	40	1	0	0	20	1	0	0	10	1	0	5	0	0	0	3	0	0	0
South Public Use Facilities	0	30	1	0	0	15	1	0	0	7	1	0	4	0	0	0	2	0	0	0
North Public Use Facilities	0	25	1	0	0	13	1	0	0	6	1	0	3	0	0	0	1	0	0	0
West Public Use Facilities	0	25	1	0	0	13	1	0	0	6	1	0	3	0	0	0	1	0	0	0
<b>TOTAL (GT)</b>																				

#### Footnotes

- <sup>1</sup> Number of public use facilities in the distance/direction section.
- <sup>2</sup> Point value assigned to each Public Use Facility in the distance/direction section.
- <sup>3</sup> Factor from Appendix C to adjust for intervening topography and / or vegetation
- <sup>4</sup> Total score for the distance/direction section.

Public use facility definition - Public schools, hospitals, public nursing homes/elder care facilities and apartment buildings with greater than four dwelling units.

**Appendix C: Intervening Topography and Vegetation Factors for Homes and Public Use Facilities**

	<600'	600-1200'	1200-1800'	1800-2400'	2400-3000'
All Shielded	1	.4	.25	.25	.25
Some Shielded	0.75	.6	.5	.5	.5
None Shielded	1	1	1	1	1