pennsylvania
DEPARTMENT OF ENVIRONMENTAL PROTECTION

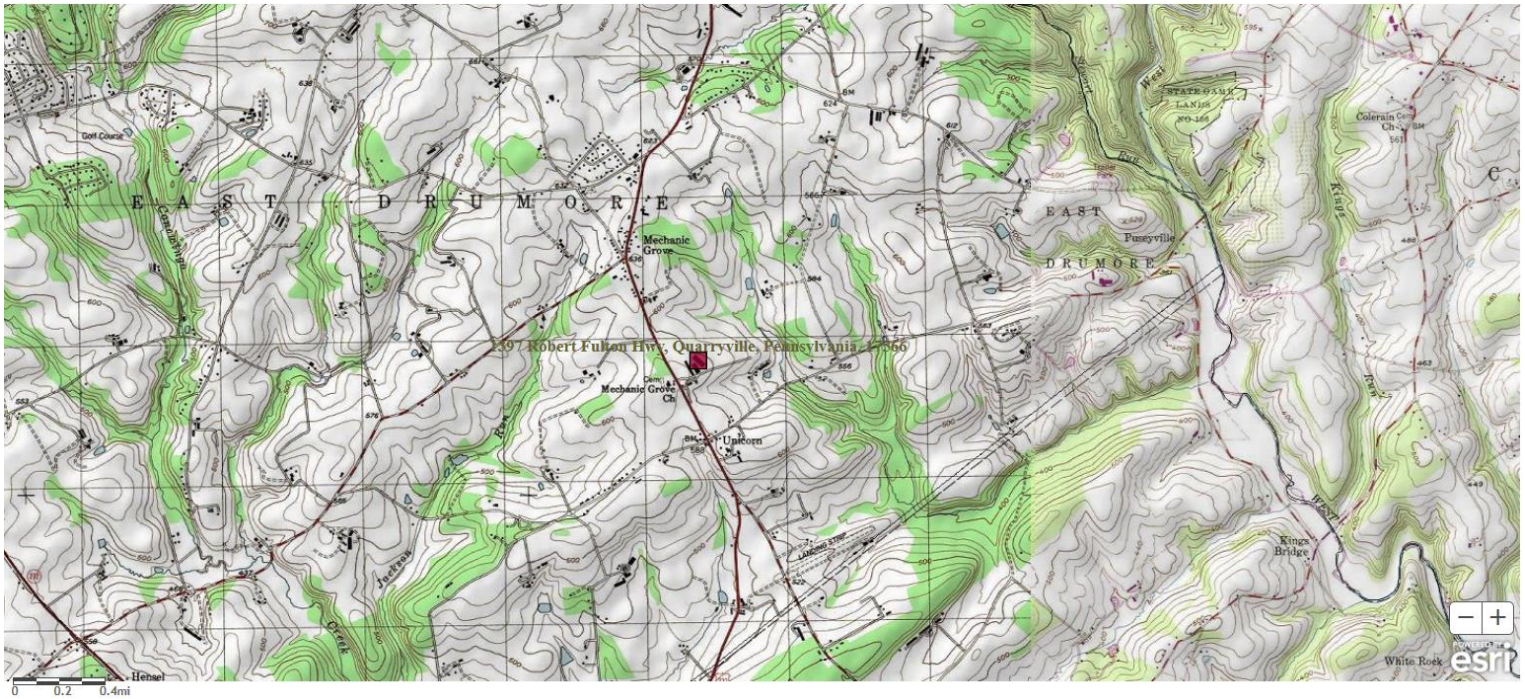
SOUTHCENTRAL REGIONAL OFFICE
CLEAN WATER PROGRAM

NPDES PERMIT FACT SHEET
CAFOs

Application Type	**Renewal**	Application No.	**PA0246964**
Facility Type	**CAFO**	APS ID	**461295**
Permit Type	**Individual**	Authorization ID	**1300576**

Applicant and Facility Information

Applicant Name	**Kenneth R Martin**	Farm Name	**Ken Martin Farm CAFO**
Applicant Address	1397 Robert Fulton Highway Quarryville, PA 17566-9630	Farm Address	1397 Robert Fulton Highway Quarryville, PA 17566-9630
Applicant Contact	Kenneth Martin	Farm Contact	Kenneth Martin
Applicant Phone	(717) 989-6197	Farm Phone	(717) 989-6197
Client ID	202545	Site ID	604808
SIC Code	0213,0241,0251	Municipality	East Drumore Township
SIC Description	Agriculture - Broiler, Fryer, And Roaster Chickens, Agriculture - Dairy Farms, Agriculture - Hogs	County	Lancaster
Date Application Received	December 30, 2019	WQM Required	Yes
Date Application Accepted	May 5, 2020	WQM App. No.	3604202
Project Description	Kenneth Martin Farm has submitted an application for a renewal of an individual CAFO permit for their existing pullet, dairy, and swine operation.		



Approve	Deny	Signatures	Date
x		*Hans D. Shollenberger* Hans Shollenberger / Environmental Engineering Specialist	June 25, 2021
X		*Scott M Arwood* Scott M. Arwood, P.E. / Environmental Engineer Manager	8/11/2021

Description:

The Ken Martin farm CAFO is an existing pullet, dairy, and swine operation located in East Drumore Township, Lancaster County. The farm submitted an individual NPDES CAFO permit renewal application to the Department on December 30, 2019. The Ken Martin Farm CAFO operation consists of two farms. Farm 1 located at 1397 Robert Fulton Hwy has two wean to finish swine barns with a capacity of 3,000 and 3,600 head respectively. Also located at Farm 1 is a dairy herd with 80 milk cows, 12 dry cows, and 25 calves along with a 170,000-bird pullet house. Farm 2 located at 289 Maxwell Dr. has 2 wean to finish swine barns with a capacity of 1,700 and 2,100 head. Combining Farm 1 and Farm 2, the operation has a total of 1,749.63 AEUs with 255.2 spreadable acres giving an animal density of 6.86 AEUs/Acre. Since the animal density exceeds 2 AEU/Acre and the operation exceeds 1,000 AEUs, the operation is both a CAO and a CAFO requiring a NPDES CAFO permit. The operation is also a CAFO for exceeding the EPA threshold of 2,500 swine with an average weight greater than 55 lbs. The operation also exceeds the EPA CAFO threshold of 125,000 chickens when using storage practices other than liquid manure handling. The farm will be permitted under an Individual Permit due to its location in a high-quality watershed.

The closest stream to the site is UNT to Conowingo Creek, located in high-quality watershed 7-K and designated for Cold Water Fishes (HQ-CWF, Watershed 7-K). The stream is impaired by Department standards with agriculture siltation as the source cause.

Manure/Nutrient Management:

The NMP was approved on February 5, 2020. There are 255.2 acres available on lands owned and rented by the applicant for manure application according to the NMP.

Manure Group Information:

Manure Group	Manure Generated Annually	Manure Used on the Farm	Manure Exported (gallons or tons)
Spring Dairy	300,000.0 gal	220,750.0 gal	0.0
Fall Dairy	300,000.0 gal	208,250.0 gal	0.0
Spring Dry Cow and Calf	20.0 tons	21.0 tons	0.0
Spring Dry Cow and Calf-uncollected	22.2 tons	22.2 tons	0.0
Fall Dry Cow and Calf	15.0 tons	14.5 tons	0.0
Fall Dry Cow and Calf-uncollected	81.2 tons	81.2 tons	0.0
Spring Pullet	600.0 tons	0.0 tons	600.0 tons
Fall Pullet	600.0 tons	0.0 tons	600.0 tons
Spring Hog Barn 1	396,396.0 gal	8,700.0 gal	0.0
Fall Hog Barn 1	396,396.0 gal	12,600.0 gal	0.0
Spring Hog Barn 2	475,675.2 gal	0.0 gal	0.0
Fall Hog Barn 2	475,675.2 gal	0.0 gal	0.0
Spring Hog Barn 3	277,477.2 gal	0.0 gal	0.0
Fall Hog Barn 3	277,477.2 gal	0.0 gal	0.0
Spring Hog Barn 4	286,615.4 gal	113,700.0 gal	0.0
Fall Hog Barn 4	236,212.4 gal	0.0 gal	0.0
Compost	33.0 tons	55.0 tons	0.0
Field Pasture - Grazing Calculator	103.4 tons	103.4 tons	0.0

Exported Manure:

	Amount and Source of Manure Exported per Season (gallons/ tons)			
Name/ Address	Spring	Summer	Fall	Winter
Merle Kurtz 538 Adamstown Rd Reinholds, PA 17569 (broker)	481,000 Gallons Swine	0	541,000 Gallons Swine	0

Ben Flahart 176 Puseyville Rd Quarryville, PA 17566 (importer)	80,000 Gallons Dairy & 587,000 Gallons Swine	0	92,000 Gallons Dairy & 587,000 Gallons Swine	0
Daniel P. Hershberger 132 Center Rd Quarryville, PA 17566 (importer)	246,000 Gallons Swine	0	246,000 Gallons Swine	0

Winter Manure Management:

The application of manure during the winter period is not approved in the NMP. The minimum required freeboard for winter (December 15) liquid manure storage is shown in the table below.

Manure Storage	Minimum Freeboard Needed for Winter Storage on Dec. 15
Liquid Dairy Circular Storage	4.51’
Swine Barn 1 Pit	1.52’
Swine Barn 2 Pit	1.55’
Swine Barn 3 Pit	2.18’
Swine Barn 4 Lagoon	**4.3’ ***

*Note: The calculations included in the NMP incorrectly reference a 25-year/24-hour storm event instead of the correct 100-year/24-hour storm event as required by 25 Pa. Code § 91.36. Also, it does not appear the NMP listed value of 3.62 feet includes any rainfall added to the manure generated. Therefore, the minimum required freeboard for winter will be approximately 8 inches more than that listed in the NMP.

Manure Storage Facilities:

Swine Barn #1:
Swine Barn 1 has an underbarn deep pit storage measuring 100' x 245' x 8' deep. Accounting for exhaust fans and 6" freeboard, 6 1/2' is available for manure giving a usable storage capacity of 1,191,000 gallons. This pit is not agitated. The manure sample is taken from various levels of the storage while being emptied. The storage is emptied in the Spring and Fall. The facility was constructed in 1994 by King Construction of New Holland, PA. No subsurface drain or leak detection system was installed beneath the structure. **This storage is included on WQM permit number 3604202, issued by the Department in June 2004.**

Storage Location – Latitude: 35° 50' 29.7" N, Longitude: 76° 9' 13.8" W

Swine Barn #2:
Swine Barn 2 has an underbarn deep pit storage measuring 100' x 275' x 6' deep. Accounting for exhaust fans and a 6” freeboard gives 4' depth available for manure giving a usable storage capacity of 822,800 gallons. This pit is not agitated. The manure sample is taken from various levels of the storage while being emptied. The storage is emptied in the Spring and Fall. The facility was constructed in 1994 by King Construction of New Holland, PA. No subsurface drain or leak detection system was installed beneath the structure. **This storage is included on WQM permit number 3604202, issued by the Department in June 2004.**

Storage Location – Latitude: 39° 50' 30.8" N, Longitude: 76° 9' 12.1" W

Swine Barn #3:
Swine Barn 3 has an underbarn deep pit storage measuring 50' x 200' x 6' deep. Accounting for a 6” freeboard, there is 5½’ available for manure giving a usable storage capacity of 411,400 gallons. This pit is not agitated. The manure sample is taken from various levels of the storage while being emptied. The storage is emptied in the Spring and Fall. The barn has no leak detection system or perimeter drain as the barn was built in 1996.

Storage location – Latitude: 39° 49' 44.6874" N, Longitude: 76° 9' 29.3004" W

Swine Barn #4 Earthen Lagoon:
Swine Barn 4 is a converted high-rise layer house measuring 50' x 260'. Manure is stored in an open top earthen lagoon with dimensions 56' x 223' x 6' deep. The NMP and application lists the usable storage capacity at 330,000 gallons at a 1 foot freeboard. However, the minimum 2-foot regulatory freeboard has been specified in the permit. This pit is agitated, and sampled while being emptied. The storage is emptied in the Spring and Fall. The barn is a shallow pit pull plug design flowing to the earthen lagoon. The lagoon has no leak detection system or perimeter drain as the barn was built sometime in the 1980s.

Storage location – Latitude: 39° 49' 39.972" N, Longitude: 76° 9' 32.7738" W

Dairy Circular Storage:
Located at Farm 1 is an open top circular concrete dairy manure storage structure. The storage has dimensions 110' x 12'. A storage capacity of 746,000 gallons is given in the NMP and application at a freeboard of 18 inches. However, the minimum 2-foot regulatory freeboard has been specified in the permit. Manure enters this facility from the dairy barn by gravity flow through a covered concrete inlet channel. A leak detection/perimeter drainage system was installed beneath the storage. The perimeter drain/leak detection system flows toward daylight and outlets down slope of the structure in a grassed field. The pipe does not outlet near any surface waters. The runoff contribution to the storage from the compost area is 40'x100'. This facility was constructed in 2004 by Precise Concrete Walls of New Holland, PA under **WQM permit number 3604202**, issued by the Department in June 2004.

Storage Location – Latitude: 39° 50' 25.3" N, Longitude: 76° 9' 12.2" W
Leak Detection System Outlet – Latitude: 39° 50' 24.7" N, Longitude: 76° 9' 10.6" W

Dry Cow & Calf manure is stored on an open stacking area and handled as penpack. The Dry Cow & Calf manure sample is a representative sample of various places in the stack. This manure is spread in the Spring and Fall.

Pullet manure is stored in a 60'x100' roofed dry manure storage area at the north end of the pullet house and has a storage capacity of 3,000 tons. The pullet house has belts below each deck of cages which convey the manure to the storage. The pullet manure sample is a representative sample of various places in the stack.

There are no proposed storages for this operation. There is no in-field stacking done on this operation.

Animal Mortality:

Animal mortality is composted on site and is then applied cropland. No direct discharge to surface waters is expected.

Animal Concentration Areas (Chapter 102.4a):

The operation does not include any Animal Heavy Use Areas (AHUAs).

Chapter 102 E&S (Conservation Plans):

Plans have been verified to exist for all lands (owned and rented) associated with the application of manure from this facility including farms located in EV, HQ or impaired watersheds.

Downstream Public Water Supplies:

The nearest downstream public water intake is located over 10 miles downstream on the Octoraro Creek, from the Chester Water Authority in Lower Oxford Township, Chester County. This farm is not expected to adversely impact any public water supplies.

Compliance History:

There are no outstanding violations for this operation.

Public Participation:

DEP will publish notice of the receipt of the NPDES permit application and a tentative decision to issue the individual NPDES permit in the *Pennsylvania Bulletin* in accordance with 25 Pa. Code § 92a.82. Upon publication in the *Pennsylvania Bulletin*, DEP will accept written comments from interested persons for a 30-day period (which may be extended for one additional 15-day period at DEP's discretion), which will be considered in making a final decision on the application. Any person may request or petition for a public hearing with respect to the application. A public hearing may be held if DEP determines that there is significant public interest in holding a hearing. If a hearing is held, notice of the hearing will be published in the *Pennsylvania Bulletin* at least 30 days prior to the hearing and in at least one newspaper of general circulation within the geographical area of the discharge.