

Application Type

Renewal

Facility Type

CAFO

Permit Type

Individual

Application No.

PA0088889

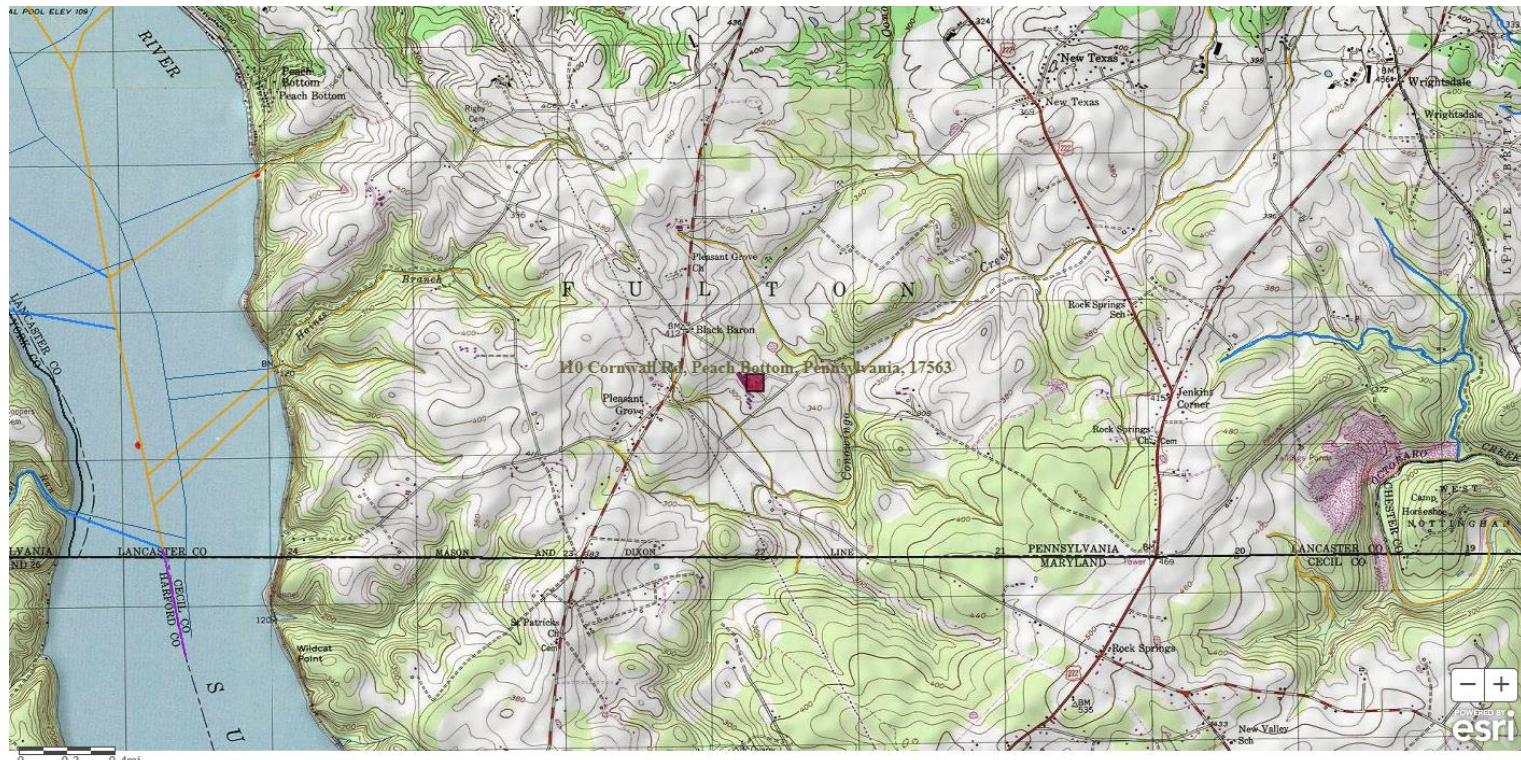
APS ID

1112249

Authorization ID

1494525
 NPDES PERMIT FACT SHEET
CAFOs

Applicant and Facility Information			
Applicant Name	PennMar Dairy LLC	Farm Name	PennMar Dairy LLC
Applicant Address	176 Puseyville Road	Farm Address	110 Cornwall Road
	Quarryville, PA 17566-9693		Peach Bottom, PA 17563-9767
Applicant Contact	Benjamin Flahart	Farm Contact	Benjamin Flahart
Applicant Phone	(717) 629-7244	Farm Phone	(717) 629-7244
Client ID	385404	Site ID	547198
SIC Code	0291	Municipality	Fulton Township
SIC Description	Agriculture - General Farms, Primarily Animal	County	Lancaster
Date Application Received	<u>August 2, 2024</u>	WQM Required	Yes
Date Application Accepted	<u>August 12, 2024</u>	WQM App. No.	3602204, 3601203, 3616204, 3618202
Project Description	PennMar Dairy LLC submitted an Individual CAFO permit renewal application for their existing dairy operation.		



Approve	Deny	Signatures	Date
<input checked="" type="checkbox"/>		<i>Hans D. Shollenberger</i> Hans D. Shollenberger / Project Manager	11/27/2024
<input checked="" type="checkbox"/>		<i>Scott M Arwood</i> Scott M. Arwood, P.E. / Environmental Engineer Manager	11/27/2024

Description:

PennMar Dairy LLC submitted an Individual CAFO permit renewal application for their existing dairy operation located in Fulton Township, Lancaster County. The operation has the following animal population:

Animal Type	Number	AEUs
Holstein Lactating Cow	1,600	2,320.00
Holstein Heifer: 1 -2 yr.	280	280.00
Total AEUs =		2,600.00

The operation is considered a CAO for exceeding 8 AEUs while exceeding an animal density of 2 AEUs/Acre. The operation is considered a large CAFO for being a CAO that exceeds 300 AEUs, for exceeding 1,000 AEUs, and for exceeding the EPA large CAFO threshold of 700 mature dairy cows.

The nearest receiving stream to the Dairy Headquarters is Tributary 07168 To Conowingo Creek, designated for High Quality-Cold Water Fishes and Migratory Fishes (HQ-CWF, MF), located in Watershed 7-K. The stream is impaired by agriculture siltation.

The nearest potential receiving stream to the Heifer Farm circular storage is Conowingo Creek, designated for Cold Water Fishes and Migratory Fishes (CWF, MF), located in Watershed 7-K. The receiving stream is impaired by agriculture nutrients and siltation as well as habitat modification and alterations.

The nearest potential receiving stream to the proposed Long Farm circular storage is Tributary 07240 to Puddle Duck Creek, designated for High Quality-Warm Water Fishes and Migratory Fishes (HQ-WWF, MF), located in Watershed 7-K. The receiving stream is impaired by agriculture E. Coli, habitat modification (other than hydromodification), and habitat alterations.

Since the operation is located in a High Quality Watershed, the Department's Individual CAFO permit is appropriate for this operation.

Manure/Nutrient Management:

The current NMP was approved on October 2, 2024, for crop years 2025, 2026, and 2027. There are 0 acres available on lands owned/rented by the applicant for manure application according to the NMP, resulting in a density of 2,600.00 AEUs/acre.

Manure Group Information:

Manure Group	Manure Generated Annually	Manure Used on the Farm	Manure Exported (gallons or tons)
HDPE Liquid Spring	2,881,625.8 gal	0.0	2,881,625.8 gal
HDPE Liquid Fall	3,218,920.8 gal	0.0	3,218,920.8 gal
Dairy Separated solids	1,591.1 tons	0.0	1,591.1 tons
Dairy Separator Pit Spring	2,493,754.6 gal	0.0	2,493,754.6 gal
Dairy Separator Pit Fall	2,390,627.0 gal	0.0	2,390,627.0 gal
Old Barn Liquid Spring	1,808,131.0 gal	0.0	1,808,131.0 gal
Old Barn Liquid Fall	1,589,234.6 gal	0.0	1,589,234.6 gal
Pen Pack	1,285.0 tons	0.0	1,285.0 tons
Heifer Liquid Spring	648,709.1 gal	0.0	648,709.1 gal
Heifer Liquid Fall	549,718.8 gal	0.0	549,718.8 gal

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Exported Manure:

Name/ Address	Amount and Source of Manure Exported per Season (gallons/ tons)			
	Spring	Summer	Fall	Winter
Terra Gro Facility Hartland Farms 309 Mason Dixon Road, Peach Bottom, PA 17563	750 tons Dairy & 100,000 gallons Dairy	750 tons Dairy & 100,000 gallons Dairy	750 tons Dairy & 100,000 gallons Dairy	750 tons Dairy & 100,000 gallons Dairy
Kilby Farms LLC 785 Fire Tower Road, Colora, MD 21917	2,855,344 gallons Dairy	0	2,855,344 gallons Dairy	0
Hartland Farms Inc. 176 Puseyville Road, Quarryville, PA 17566	1,200,000 gallons Heifer Dairy & 8,700,000 gallons Milk Cow Dairy	1,200,000 gallons Heifer Dairy & 8,700,000 gallons Milk Cow Dairy	1,200,000 gallons Heifer Dairy & 8,700,000 gallons Milk Cow Dairy	0

The following requirements must be met when transferring manure to other persons:

40 CFR 122.42(e)(3) - Requirements relating to transfer of manure or process wastewater to other persons.

Prior to transferring manure, litter, or process wastewater to other persons, Large CAFOs must provide the recipient of the manure, litter or process wastewater with the most current nutrient analysis. The analysis provided must be consistent with the requirements of 40 CFR part 412. Large CAFOs must retain for five years records of the date, recipient name and address, and approximate amount of manure, litter or process wastewater transferred to another person.

Winter Manure Management:

Application of manure during the winter period is not approved in the NMP.

The following minimum required freeboards must be met by December 15th of each year to implement the NMP:

- HDPE-lined Lagoon 8.5ft
- Old Barn Concrete Round Pit 4.6 ft
- Heifer Concrete Round Pit 6.9 ft
- Long Farm Circular Storage 3.3 ft

Excess manure from the separator pit goes to the HDPE-lined lagoon.

Manure Storage Facilities:

Storage	Dimensions	Minimum Required Regulatory Freeboard	Usable Capacity (@ freeboard)
HDPE-lined Lagoon	140' x 565' x 14'	2'	4,000,000 gallons
Separator Pit (L-Shaped Storage)	50' x 50' x 10' & 60' x 18' x 10' Ramp	2'	392,710 gallons
Old Barn Concrete Round Pit	72' x 12'	2'	304,394 gallons

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Heifer Concrete Round Pit	80' x 14'	2'	450,954 gallons
Proposed Concrete Circular Storage (Long Farm Pit)	180' x 16'	2'	2,663,448 gallons
Concrete Silage Leachate Reception Pit	160' x 20' x 10'	2'	N/A (Reception Pit)

Silage leachate is pumped from the reception pit to the old barn concrete round pit. The manure from the main barn, new barn, and old barn are all collected and then pumped through the solid's separator, before flowing into the HDPE lagoon. When the HDPE lagoon begins to fill, manure will be moved to the proposed satellite circular Long Farm Pit.

The operation was issued WQM 3602204 A-1 on November 20, 2024 for the construction and operation of the proposed Long Farm concrete circular storage. With the addition of that storage, the total operational usable capacity will be 7.82 MG.

Prior to the final issuance of this CAFO permit renewal, the design engineer will be required to submit PE Certification for the construction of the proposed Long Farm Pit.

There are no plans to field stack manure, and no planned alternative manure technology practices for this operation.

BMPs Applicable to the Chesapeake Bay TMDL:

DEP has evaluated the information included in the application materials; as well as the effluent limitations, BMPs, and other requirements included in the draft permit. This would include the approved Act 38 compliant Nutrient Management Plan, which includes Best Management Practices to meet Pennsylvania nutrient and manure management regulations, as well as Nutrient Balance Sheets for manure importers, applicable manure storage and manure spreading setback requirements, and Emergency Response Plan. Applicable Conservation Plans and/or Agricultural Erosion & Sediment Control Plans were also evaluated, which includes Best Management Practices to meet Pennsylvania erosion and sediment control regulations.

The applicant is implementing the following BMPs within the production area:

- Manure Storage Facilities (Lagoon, Separator Pit and Circular Storages)
- Mortality Management (Composting)

NRCS Practice Code 313 Waste Storage Facility is prescribed as a BMP in the approved 2025 to 2027 NMP for this operation at the Long Farm HQ with an implementation time of Fall 2025. The operation was issued WQM 3602204 A-1 as part of this project.

Based upon this evaluation, DEP believes no additional BMPs will be required at this time to protect water quality criteria. This determination will be reevaluated through review of self-inspection reporting, annual reporting, and regular compliance inspections.

Animal Mortality:

Mortalities are composted and exported to Terra Gro.

Animal Concentration Areas (Chapter 102.4a):

There are no ACAs on this operation.

Chapter 102 E&S (Conservation Plans):

An agricultural E&S plan is not applicable to this operation, as there are no lands available for manure application.

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Downstream Public Water Supplies:

The nearest downstream public water supply intake is located over 19 miles downstream on the Susquehanna River by the Bainbridge Naval Training Center in Maryland. This facility is not expected to adversely impact any public water supplies.

Compliance History:

There are no open 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.