

 Application Type
 Renewal

 Facility Type
 CAFO

 Permit Type
 Individual

NPDES PERMIT FACT SHEET CAFOs

 Application No.
 PA0261955

 APS ID
 797107

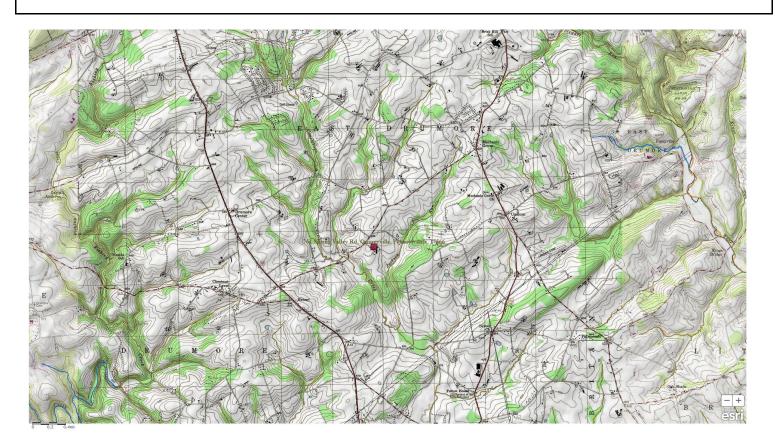
 Authorization ID
 1441408

Applicant and Facility Information

Applicant Name	S & A Kreider & Sons Inc.	Farm Name	S & A Kreider & Sons Farm CAFO
Applicant Address	761 Spring Valley Road	Farm Address	761 Spring Valley Road
	Quarryville, PA 17566-9773		Quarryville, PA 17566-9773
Applicant Contact	Scott Kreider	Farm Contact	Scott Kreider
Applicant Phone	(717) 786-4427	Farm Phone	(717) 786-4427
Client ID	220363	Site ID	660769
SIC Code	0241	Municipality	East Drumore Township
SIC Description	Agriculture - Dairy Farms	County	Lancaster
Date Application Rec	eivedMay 23, 2023	WQM Required	Yes
Date Application Accepted June 1, 2023		WQM App. No.	3607201, 3610201, 3617201, 3621201

Project Description

S & A Kreider & Sons Inc. submitted an Individual CAFO permit renewal application for their existing dairy operation.



Approve	Deny	Signatures	Date
x		Hans D. Shollenberger Hans D. Shollenberger / Environmental Engineering Specialist	October 26, 2023
x		Scott M Arwood Scott M. Arwood, P.E. / Environmental Engineer Manager	10/26/23

Description:

S & A Kreider & Sons Inc. submitted an Individual CAFO permit renewal application for their existing dairy operation located in East Drumore Township, Lancaster County.

The operation has three locations:

Main Farm Facility - 761 Spring Valley Road Quarryville, PA 17566 Stoner Farm Facility - 128 Black Bear Road Quarryville, PA 17566 Hershberger Farm Facility - 227 Center Road Quarryville, PA 17566

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 whether milked or dry.

The operation has the following animal population:

Animal Type	Number	AEUs
Lactating & Dry Cows	2,554	3,703.30
Holstein Heifer:1 -2 yr.	1,190	1,190.00
Holstein Calf: 0–1 yr.	720	302.40
	Total AEUs =	5,195.70

The nearest receiving water to the Main Farm Facility and Stoner Farm Facility is Jackson Run, designated as High Quality, Cold Water Fishes and Migratory Fishes (HQ-CWF, MF), located in Watershed 7-K. This stream is impaired by agriculture siltation, habitat modification (other than hydromodification), and habitat alterations.

The nearest receiving water to the Hershberger Farm Facility is Tributary 07186 to Conowingo Creek, designated as High Quality, Cold Water Fishes and Migratory Fishes (HQ-CWF, MF), located in Watershed 7-K. This stream is impaired by agriculture nutrients, agriculture siltation, and agriculture organic enrichment.

The Department's Individual CAFO permit is appropriate for this operation.

Manure/Nutrient Management:

The current NMP was approved on October 4, 2023, for crop years 2024, 2025, and 2026. There are 1,767.9 acres available on lands owned and rented by the applicant for manure application according to the NMP, resulting in a density of 2.94 AEUs/acre.

Manure Group Information:

	Manure Generated		Manure Exported
Manure Group	Annually	Manure Used on the Farm	(gallons or tons)
Fall Main Farm Liquid Manure	8,966,740.0 gal	9,788,600.0 gal	0.0
Spring Main Farm Liquid Manure	8,966,740.0 gal	10,442,300.0 gal	0.0
Fall Stoner Liquid Manure	1,851,960.0 gal	2,100,300.0 gal	0.0
Spring Stoner Liquid Manure	1,851,960.0 gal	2,263,500.0 gal	0.0
Fall Hershberger Big Tank	1,575,600.0 gal	1,842,000.0 gal	0.0
Spring Hershberger Big Tank	1,575,600.0 gal	1,977,000.0 gal	0.0
Fall Hershberger Small Tank	105,700.0 gal	162,000.0 gal	0.0
Spring Hershberger Small Tank	105,700.0 gal	162,000.0 gal	0.0
Fall Compost	1,910.0 tons	1,641.0 tons	288.0 tons
Spring Compost	1,910.0 tons	2,034.0 tons	92.0 tons
Fall Frey Stormwater	1,642,500.0 gal	2,852,100.0 gal	0.0
Spring Frey Stormwater	1,642,500.0 gal	2,852,100.0 gal	0.0

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Exported Manure:

	Amount and Source of Manure Exported per Season (gallons/ tons)			
Name/ Address	Spring	Summer	Fall	Winter
Clair Mull 528 Spring Valley Road, Quarryville, PA 17566	350,000 gal Dairy	0	350,000 gal Dairy	0
Dale Herr 82 Fairview Road, Kirkwood, PA 17536	300,000 gal Dairy	0	300,000 gal 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 approved in the NMP.

Manure storage facilities should have the following minimum freeboard on December 15th of each year to implement the NMP:

- Hershberger Big Tank 2: 10.6 ft
- Hershberger Small Tank: 7.3 ft
- Stoner Round Tank 2: 12.0 ft

Manure Storage Facilities:

Storage	Туре	Dimensions	Freeboard	Usable Capacity
Name	Liquid or solid	ft	Minimum regulatory	Gallons or cubic feet
Main Farm HDPE Lagoon	Liquid	195' x 338' x 11.5'	2 ft	4,000,000 gal
Digester Tank	Liquid	92' x 16'	2 ft*	696,186 gal
Influent Tanks (x2)	Liquid	22' x 22' x 10' each	2 ft	28,964 gal each
Hershberger Big Tank 1	Liquid	120' x 12'	2 ft	846,026 gal
Hershberger Big Tank 2	Liquid	120' x 12'	2 ft	846,026 gal
Hershberger Small Tank	Liquid	56' x 8'	2 ft	110,547 gal
Stoner Lagoon	Liquid	82' x 92' x 8'	2 ft	338,574 gal
Stoner Tank 1	Liquid	120' x 12'	2 ft	846,026 gal
Stoner Tank 2 (Proposed)	Liquid	120' x 12'	2 ft	846,026 gal
Separator Building	Solid	40' x 42'	N/A	8,400cuft
Old Dry Cow Barn Stack Pad	Solid	55' x 44'	N/A	12,100cuft

*According to 25 Pa. Code § 91.36(a)(6)(i) the minimum regulatory freeboard for a manure storage not exposed to rainfall and located on an operation exceeding 1,000 AEUs, is 6 inches. However, a site specific minimum freeboard of 2ft is required for the digester to implement the approved 2024-2026 Crop Year NMP for this operation.

The operation has WQM permits 3607201, 3610201, 3617201 and 3621201 covering the various storages on this operation. WQM 3617201 was recently amended and issued effective July 13, 2023 for the addition of the Stoner Round Tank 2.

This farm operates a methane digester at the Main Dairy Facility. All liquid manure from the existing barns as well as the manure from the proposed barn (at the Main Dairy Facility) will flow to mixing tanks, where food waste may be added, before entering the methane digester. This digester has an active food waste permit through the Waste Management program of DEP. After digestion, the manure will be passed through a solid's separator. Separated solids will be used as bedding in the barns. Separated liquids will be directed to the HDPE Lagoon where it will be stored until it is land applied.

This operation has a composting facility at the Stoner Farm where all mortalities, solid manure, and other solid organic waste streams (waste feed etc.) will be utilized. Some of the finished compost will be land applied but a portion will also be given to local landowners in increments less than 25 tons for garden fertilizer or exported outof-state. There are no plans to field stack manure on 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
- Mortality Management (Composting)

NRCS Practice Code 313 Waste Storage Structure is prescribed as a BMP for the Stoner Farmstead (Fall 2024) in the approved 2024 to 2026 NMP.

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

Animal Mortality:

All solid manure, mortalities, and other organic waste streams are transferred to the composting facility at the Stoner Farm and finished compost is sold as a non-manure product.

Animal Concentration Areas (Chapter 102.4a):

Animal Heavy Use Areas (AHUAs) are designated in the NMP, and will be managed according the provisions of the NMP.

Chapter 102 E&S (Conservation Plans):

Agricultural E&S or Conservation Plans have been included or verified to exist for land subjected to plowing and tilling activities.

Downstream Public Water Supplies:

The nearest downstream public water supply intake is located over 11 miles downstream across the Pennsylvania/Maryland State line. This facility is not expected to adversely impact any public water supplies.

Compliance History:

There are no open violations for this operation.

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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.