UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION III
FOUR PENN CENTER – 1600 JOHN F. KENNEDY BLVD.
PHILADELPHIA, PENNSYLVANIA 19103-2852

Report Title:	Animal Feeding Operation Assessment Report
Assessment Date(s):	04/19/2023
Regulatory Program(s):	National Pollutant Discharge Elimination System (NPDES)
Type of Activity:	Animal Feeding Operation
Site/Facility Name:	Swarey Farm
Site/Facility Operator:	Jacob Swarey
Site/Facility Address:	420 Little Britain Road, Peach Bottom, PA 17563
Latitude/Longitude:	39.73773, -76.149403
County/Parish:	Lancaster
General Permit #:	N/A
Site Specific Permit #:	N/A
NAICS Code:	112120
SIC Code:	0241
Unique Project #:	3E23WN035A

Farm Representative(s): **Point of Contact**

Jacob Swarey ☒
Phone: (717) 548-2122 Email: Not Provided

EPA Inspectors:

Peter Gold
Phone: (215) 814-5236 Email: Gold.Peter@epa.gov
Michael Greenwald
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State/Local Inspectors:

Greg Heigel – Lancaster County Conservation District
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Report Preparer Signature/Date

PETER GOLD Digitally signed by PETER GOLD Date: 2023.06.20 13:27:48 -04'00'

Peter Gold, Enforcement Officer Date
NPDES Enforcement Section 1 (3ED32)

Supervisor Signature/Date

MARK ZOLANDZ Digitally signed by MARK ZOLANDZ Date: 2023.06.22 08:56:06 -04'00'

Mark Zolandz, Section Chief Date
NPDES Enforcement Section 1 (3ED32)

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List of Attachments

I. Introduction

On April 19, 2023, an assessment team composed of staff from the U.S. Environmental Protection Agency (EPA) Region III (hereinafter, "EPA Assessment Team") met with representatives of the Lancaster County Conservation District (LCCD) at Jacob Swarey's farm (hereinafter, "the Farm") at 420 Little Britain Road, Peach Bottom, PA 17563. The assessment was one of several assessments of Animal Feeding Operations (AFO) in Lancaster County, PA to better understand sources of nutrient loadings to local streams and the Chesapeake Bay watershed. The Farm was not a permitted operation at the time of the assessment.

A. Assessment Opening Conference

The EPA Assessment Team arrived at the Farm at approximately 8:00 AM for the announced assessment. The EPA Assessment Team identified themselves to LCCD Representatives and Jacob Swarey (Farm Representative). The EPA Assessment Team displayed their credentials, described the purpose of the assessment, and completed the AFO Assessment On-Site Form prior to walking the entire production area of the Farm. The EPA Assessment Team's observations are listed later in this document. The EPA Assessment Team was composed of two groups: Peter Gold, Michael Greenwald and Joel Blanco-Gonzalez assessed the farm production area and spoke with Mr. Swarey regarding farm practices, and John Epps, Kelly Krock and Leah Martino conducted aquaeous sampling in the Unnamed Tributary to Conowingo Creek.

Table 1: Assessment Attendee List

Name	Affiliation	Telephone	Email
EPA Region III			
Peter Gold	EPA Region III	(215) 814-5236	Gold.Peter@epa.gov
Michael Greenwald	EPA Region III	(215) 814-2398	Greenwald.Michael@epa.gov
Kelly Krock	EPA Region III	(304) 234-0242	Krock.Kelly@epa.gov
John Epps	EPA Region III	(215) 814-3144	Epps.John@epa.gov
Joel Blanco-Gonzalez	EPA Region III	(215) 814-2768	Blanco-Gonzalez.Joel@epa.gov
Leah Martino	EPA Region III	(215) 814-3262	Martino.Leah@epa.gov
State or County Representatives			
Greg Heigel	LCCD	(717) 299-5361	GregHeigel@lancasterconservation.org
Farm Representatives			
Jacob Swarey	Swarey Farm	(717) 548-2122	Not provided

B. Weather and Precipitation Conditions

During the assessment, weather was sunny. National Oceanic and Atmospheric Administration (NOAA) National Weather Service precipitation data for the date of the assessment and five days prior are provided in the Table 2 below:

Table 2. Precipitation Data

Station Name	Date	Precipitation Amount (inches)[1]
ADAMSTOWN 2.5 SSE, PA US US1PALN0003	04/14/2023	0.00
ADAMSTOWN 2.5 SSE, PA US US1PALN0003	04/15/2023	0.00
ADAMSTOWN 2.5 SSE, PA US US1PALN0003	04/16/2022	0.02
ADAMSTOWN 2.5 SSE, PA US US1PALN0003	04/17/2022	0.39
ADAMSTOWN 2.5 SSE, PA US US1PALN0003	04/18/2022	0.00
ADAMSTOWN 2.5 SSE, PA US US1PALN0003	04/19/2022	0.00

II.Site/Facility Activity

The Swarey Farm is a dairy farm. The Farm has two large barns for cows. The facility also has a calf barn and two horse barns. There is an uncovered lot in the rear of the dairy barn. There is one manure storage structure, a 414,000 gallon 12' x 80' circular concrete pit. Manure, bedding and washwater from the dairy barn and the uncovered lot go into the pit. The larger cow barn has a slatted floor and an underbarn storage pit measuring 10'x12'x114' with a capacity of 102,000 gallons of manure. Only half of the larger cow barn has a slatted floor.

Based on conversations with Mr. Swarey, the Farm at the time of the assessment had 80 dairy cows, ten of which were dry. The facility housed 76 heifers (cows that have not had a calf). 38 of the heifers were over a year old and 38 were under a year old. The farm had nine horses, eight draft horses, and one driving horse. An additional 5 driving horses from a tenant were housed on the farm. The farm currently owned 42.5 acres of crop land and 8 acres of pasture land; the farm rented an additional 36 acres of crop land.

An Unnamed Tributary (UT) to Conowingo Creek runs in the rear of the property. There is an unnamed tributary to the UT to the Conowingo that runs through the Farm property.

Mr. Swarey needed to leave the assessment early to tend to the farm, and the On Site AFO Assessment Form was therefore not completed. Mr. Swary allowed the EPA Assessment Team and LCCD Representatives to walk the farm without him. The EPA Assessment Team was unable to verify the farm's Agriculture Erosion and Sediment Control Plan (Ag E&S Plan) or Manure Management Plan (MMP) during the assessment. The LCCD confirmed and documented the plans after the assessment.

During the assessment, water samples were taken at different locations in the streams in proximity to the Farm. The sampling data will be collected in a different report.

[1] Source: NOAA National Climatic Data Center (http://www.ncdc.noaa.gov/).

Photographs were taken during the assessment by Michael Greenwald and are provided in Attachment A.

III. Observations

Potential Concentrated Animal Operation (CAO)

Section 83.201 of Pennsylvania Act 38 (Definitions) defines "Concentrated Animal Operation – Agricultural operations with eight or more animal equivalent units [AEU] where the animal density exceeds two AEUs per acre on an annualized basis."

Section 83.201 of Pennsylvania Act 38 (Definitions) defines "AEU – Animal Equivalent Unit – One thousand pounds live weight of livestock or poultry animals, on an annualized basis, regardless of the actual number of individual animals comprising the unit."

Section 83.201 of Pennsylvania Act 38 (Definitions) defines: "AEU per acre – An animal equivalent unit per acre of cropland or acre of land suitable for application of animal manure."

Section 83.202 of Pennsylvania Act 38 states: "Nutrient management plans are required under the act for CAOs, …."

Observation #1:

At the time of assessment, Mr. Swarey informed the EPA Assessment Team that the farm had 86.5 acres of crop and pasture lands and that the farm housed 80 cows, 76 heifers split evenly between 1 and 2 years of age and under 1 year of age, and 14 horses. It appears that the farm may have more than two AEUs per acre of land at the time of the assessment. An AEU worksheet is in Attachment B.

Mortality Disposal

Pennsylvania Domestic Animal Act of 1996 Subchapter E 2352(a)(2) "Persons caring for or owning domestic animals that have died shall prevent exposure of the carcasses of such dead domestic animals to other living animals, domestic animals, domestic animals and the public and shall dispose of the carcass within 48 hours after the domestic animal dies. Disposal shall be accomplished in accordance with the requirements of this chapter."

Observation #2:

At the time of the assessment, the EPA Assessment Team were told by Mr. Swarey that there is not a composting shed onsite, that the Farm does not have composting procedures for animal mortalities, and that the Farm was burying mortalities. At the time of the assessment, a horse carcass from the Farm was observed uncovered on the ground in the woods in proximity to the fields.

Erosion and Sediment Control

Appendix A- Erosion and Sediment Control Regulations 25 Pa. Code 102.1 and 102.4 definitions Animal Heavy Use Area "Barnyard, feedlot, loafing area, exercise lot, or other similar area on an agricultural operation where due to concentration of animals it is not possible to establish and maintain vegetative cover of a density capable of minimizing accelerated erosion and sedimentation by usual planting methods."

Section 102.4(a)(4) The E&S Plan must include cost-effective and reasonable BMPs designed to minimize the potential for accelerated erosion and sedimentation from agricultural plowing or tilling activities and animal heavy use areas

Observation #3:

The EPA Assessment Team observed what appeared to be erosion channels forming behind the Farm. There appeared to be channels forming from the gutters of the large cow barn and maintenance shed (Photograph 9). The channels continued into a field (Photograph 10). A channel had formed in proximity to the UT (Photograph 11).

Manure Management

Section 83.201 of Pennsylvania Act 38 (Definitions) defines "Animal concentration areas – (i) barnyards, feedlots, loafing areas, exercise lots or other similar animal confinement areas that will not maintain a growing crop, or where deposited manure nitrogen is in excess of crop needs…"

Section 83.311(c)(ii) of Pennsylvania Act 38 states that Animal Concentration Areas "shall be located and managed to eliminate the direct discharge of storm water runoff commingled with manure from a storm event of up to and including a 25-year 24- hour storm intensity…"

Observation #4:

The EPA Assessment Team observed what appeared to be manure just outside the gate of the lot behind the main barn where it was exposed to precipitation and/or stormwater (Photograph 2).

Diesel Generator

Observation #5:

The EPA Assessment Team observed what appeared to be a diesel generator between two silos that appeared to be causing petroleum or exhaust staining on the silos and the ground (Photograph 4 and Photograph 5).

IV. Records Review

The EPA Assessment Team was not able to access the farm's full Ag E&S Plan or the Manure Management Plan at the time of the assessment. The LCCD provided EPA with photos of the plans cover sheets and a couple of pages after the assessment.

V. Closing Conference

At the conclusion of the onsite assessment, the EPA Assessment Team met with Mr. Swarey for a closing conference. The EPA Assessment Team shared preliminary observations with Mr. Swarey. The EPA Assessment Team reiterated to Mr. Swarey that all preliminary observations discussed were not compliance determinations. Any and all preliminary observations shared were subject to further review by EPA upon the additional review of records and documentation. Additional observations may be contained in this assessment report that were not identified at the time of the closing conference after EPA reviewed additional materials following the assessment.

The assessment concluded at approximately 10:30 AM (EDT).