



**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
REGION 3  
FOUR PENN CENTER – 1600 JOHN F. KENNEDY BLVD.  
PHILADELPHIA, PENNSYLVANIA 19103**

**Report Title:** Clean Water Act Compliance Inspection Report  
**Inspection Date(s):** August 21, 2024  
**Regulatory Program(s):** National Pollutant Discharge Elimination System (NPDES)  
**Type of Activity:** CAFO Inspection  
**Facility Name:** Teabow, Inc.  
**Facility Address:** 10311 Glade Road, Walkersville, Maryland 21793  
**Facility Latitude:** 39 30' 46.9"  
**Facility Longitude:** -77 20' 50"  
**County/Parish:** Frederick County  
**Permit No:** MDG010002  
**NAICS Code:** 112111  
**SIC:** 0212  
**Unique Project #:** ECAD-5632

**Facility Representative(s):** John Stup, Owner  
 Email: [jstup@gmail.com](mailto:jstup@gmail.com) **Point of Contact**

**Inspectors:**  
 Peter Gold, EPA  
 Email: [gold.peter@epa.gov](mailto:gold.peter@epa.gov)  
 Sam Magro, EPA  
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**Report Preparer**  
**Signature/Date** \_\_\_\_\_ Peter Gold, 3ED32 \_\_\_\_\_ Date

**Supervisor**  
**Signature/Date** \_\_\_\_\_ Mark Zolandz, Section Chief \_\_\_\_\_ Date  
 NPDES Enforcement Section (3ED32)

## **Attachments**

Attachment A Photo Log

Attachment B Comprehensive Nutrient Management Plan

## MARYLAND CAFO INSPECTION REPORT

### GENERAL INFORMATION

Facility ID #: <u>MDG010002</u> Facility Name: <u>Teabow, Inc.</u> Facility Owner: <u>John (Jimmy) Stup</u> Facility Operator: <u>Jimmy Stup</u> Mailing Address: <u>10311 Glade Road, Walkersville, MD 21793</u> Physical Address: <u>10311 Glade Road, Walkersville, MD 21793</u> County: <u>Frederick</u> Contact Person: <u>Jimmy Stup</u> Phone (office): _____ (fax): _____ (cell): <u>240-674-6507</u> E-mail: <u>jstup@gmail.com</u> Persons Present During Inspection: <u>Pamela Harris (MDE), Bradley Baker (MDE), David Bramble (MDE), Jimmy Stup (Teabow, Inc.), Sam Magro (EPA), Peter Gold (EPA), David Kahn (NMP Writer)</u>	Inspector: <u>Peter Gold and Sam Magro</u> Inspection Date: <u>8/21/2024</u> Time in: <u>2:00 p.m.</u> Time out: <u>4:30 p.m.</u> Weather: <u>Sunny</u> GPS Reading (at gate) North: _____ <sup>1</sup> West: _____ Does the facility owner/operator own and/or operate any other animal feeding operations? <u>No</u> If yes provide name(s) and address(es) and indicate whether the facility is an AFO or a CAFO: _____ _____ _____		
Max. Animals Confined per Month: <u>2,156</u> Max. Capacity of Facility: <u>2,156</u>	Location and name of nearest surface water <sup>2</sup> and description of flow path: <u>Glade Creek in the Upper Monocacy Watershed</u>		
Number of animals today (all animals in production area):			
	# confined		# confined
Cattle	N/A	Sheep	N/A
Dairy mature	1,127	Heifers Calves	848
Swine (≥55#)	N/A	Swine (<55#)	N/A
Turkeys	N/A	Laying hens	N/A
Other chickens	N/A	Other (specify)	N/A
X	Presented credentials? (check if yes)		
X	Inspection photos attached? (check if yes)		
X	Potential compliance issues? (check if yes and summarize below)		

*Note: The federal regulations cited throughout the checklist are included as reference for discharging CAFOs.*

<sup>1</sup> Longitude reading should be a negative number (i.e., -105.2356).

<sup>2</sup> Surface water means all waters of the United States.

## **I. Introduction**

On August 21, 2024, an inspection team composed of staff from the U.S. Environmental Protection Agency (“EPA”) Region 3 (hereinafter, “EPA Inspection Team”) conducted a National Pollutant Discharge Elimination System (“NPDES”) inspection of the Teabow, Inc. Concentrated Animal Feeding Operation (“CAFO”) (hereinafter, “the Operation”). The purpose of the inspection was to observe compliance with the Clean Water Act (CWA) and to verify compliance with the Operation’s permit coverage under the Maryland Department of the Environment’s NPDES General Discharge Permit for Animal Feeding Operations (MDG01) (hereinafter, the “Permit”) and applicable State and Federal regulations. The EPA Inspection Team followed EPA Biosecurity Protocols.

### **A. Summary of the Operation**

Teabow, Inc. is a dairy farm located in Walkersville, Maryland in Frederick County. The Operation’s Notice of Intent (NOI) indicates its maximum capacity is 2,156 dairy cattle while the Comprehensive Nutrient Management Plan that was signed in 2024 indicates that the operation had 1,125 cows and 750 replacements. At the time of the EPA inspection, the operation had 1,127 cows and 848 heifers and calves. The operation has two locations that are located across from each other on Glade Road.

The main farm houses cows, dry cows, pre-fresh cows, and heifers and has several barns and manure storage structures. The dairy cow manure is handled through the 3-stage manure storage which can handle approximately 10 million gallons. The in-ground storage #6 and #7 handles the rest of the dairy manure and acts as a receiving area before pumping to the 33’x 106’ slurry store tank. Pre-fresh cow manure is handled by storage #1 & #2; manure is stacked in storage #2 and liquid storage happens in storage #1 before being pumped to the 62’x19’ slurry store. Additionally, there is an 88’x10’ ramped concrete circular tank that handles manure from the heifer barn. There are 4 large terminal manure structures at this location; lagoons 1 & 2, and the large and small slurry stores. There are also circular concrete storage structures. The operation has several manure reception facilities that hold manure on a more temporary basis and feed it to the slurry tanks or lagoons. The main farm area has one compost pad that takes all the mortalities from the main farm. The compost pad is pitched, and stormwater would drain to a curb/berm which would channel stormwater flow to an inlet that flows into manure reception for the lagoons.

The smaller (Marpat) farm has three barns that houses heifers and calves. This location has one 410,000-gallon manure storage structure that collects waste from two of the barns. The third barn does not have a manure storage structure; bedded pack from this barn are field stacked for land application when field and weather conditions are favorable. There is a composting area next to the manure/bed pack field stack which receives mortalities from all three barns at the site. The composting and field stacking in this area are not done on pads.

The operation is a land application operation and has 667 acres for small grain silage and corn production. The operation has an additional 104 acres of pasture. Glade Creek runs through the operation, and there are two stream crossings that cows can use when going to pasture from the barns. The stream crossings are fenced on each side to limit the cows’ access area to the Glade Creek.

### **B. Inspection Opening Conference**

The EPA Inspection Team arrived at the Operation at est. 2:00pm for the inspection. Table 1 identifies the people on-site during the inspection.

**Table 1: Inspection Attendee List**

Name	Affiliation	Telephone	Email
<b>EPA Region 3</b>			
Peter Gold	EPA Region 3	(215) 814-5236	<a href="mailto:Gold.Peter@epa.gov">Gold.Peter@epa.gov</a>
Sam Magro	EPA Region 3	(215) 814-3158	<a href="mailto:Magro.Samuel@epa.gov">Magro.Samuel@epa.gov</a>
<b>State or County Representatives</b>			
Bradley Baker	MDE	(410) 537-3332	Bradley.Baker1@maryland.gov
Pamela Harris	MDE		Pamela.Harris@maryland.gov
David Bramble	MDE		Bramble.David@maryland.gov
<b>Operation Representatives</b>			
Jimmy Stup	Teabow, Inc	(240) 674-6507	<a href="mailto:jstup@gmail.com">jstup@gmail.com</a>
David Kahn	Agronomics Plus (CNMP Writer)	717-792-1274	<a href="mailto:agplanner@comcast.net">agplanner@comcast.net</a>

Peter Gold displayed their credentials to the Operation representatives at the outset of the inspection, and explained the purpose of the inspection was to observe compliance with its Permit. A copy of the Permit is provided in Appendix A. The EPA Inspection Team informed the Operation representatives that any information that the Operation deemed to be confidential business information (“CBI”) should be identified to EPA representatives during the inspection and it would be handled as CBI according to EPA’s CBI procedures.

### C. Weather and Precipitation Conditions

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

**Table 2. Precipitation Data**

Station Name	Date	Precipitation Amount (inches) <sup>3</sup>
Frederick 8.4 ENE, MD US US1MDFR0047	08/16/2024	0.00
Frederick 8.4 ENE, MD US US1MDFR0047	08/17/2024	0.00
Frederick 8.4 ENE, MD US US1MDFR0047	08/18/2024	0.02
Frederick 8.4 ENE, MD US US1MDFR0047	08/19/2024	Trace
Frederick 8.4 ENE, MD US US1MDFR0047	08/20/2024	0.01
Frederick 8.4 ENE, MD US US1MDFR0047	08/21/2024	0.00

<sup>3</sup> Source: NOAA National Climatic Data Center (<http://www.ncdc.noaa.gov/>).

### **III. Observations:**

#### **Depth Markers in Manure Storage Systems**

Part II.B of the permit defines Animal Waste as "...liquid and/or solid waste from animal feeding, milking, holding, or other animal operations. Animal waste includes all manure, poultry litter, offal, and process wastewater."

Part IV.A.2 of the permit requires "Any impoundment storing liquid animal waste shall be equipped with a depth measuring device visible from the outside or bank of the storage area which indicates the maximum depth at which the 25 year, 24-hour storm can be contained."

##### **Observation #1**

Depth markers were observed and clearly visible in the circular concrete manure storage tanks. Several of the manure "reception" facilities that held manure prior to terminal storage did not contain an observed depth marker. Manure depth was read from the two large slurry tanks by climbing a ladder to the upper lip/rim of the structure and seeing how many rings of steel were visible. These structures were greater than 30 feet off the ground and the depth could not be ascertained from the outside the tanks. Photos 2, 4, 5, 6, 18, 19 and 35 of Attachment A document some of the manure storage structures that did not appear to have depth markers.

#### **Collection of Process Wastewater**

Part 1.B.2 of the permit states that, for existing CAFOs, "No discharge of pollutants, including, litter, or process wastewater, to surface waters of the state from CAFO production areas shall be permitted unless the discharge results from a storm event greater than the 25-year, 24-hour storm, ...."

Part II.AA of the permit defines "Process Wastewater" and states "...Process wastewater also includes any water which comes into contact with any raw materials, products, or byproducts including manure, litter, feed, milk, eggs or bedding."

##### **Observation #2**

Feed and silage were observed on the ground in the production area around silage storage, animal confinement areas and drainage paths between these areas. The feed and silage were exposed to stormwater and were not being captured by manure storage structure and may drain to Glade Creek which ran through portions of the farm by the production area. There was a small hole in the ground around the silage area that may capture some of the process wastewater and send the wastewater to a manure "reception" containment. Feed and silage were observed bypassing this inlet towards a drainage ditch between the slurry store and #6 and #7 in ground storage. This drainage ditch led directly to Glade Creek Photographs 15, 16, 17, 21 and 23 - 28 of the photo log document this condition.

Calf gang feeders were being washed in the production area, and the inspection team was unable to document any collection of this process wastewater. Photograph 30 of Attachment A documents this condition.

#### **Stockpiling of Manure**

Part IV.B.6.iii of the permit states "...temporary field stockpiling for CAFOs and MAFOs shall be consistent with MDA's Nutrient Application Requirements (COMAR 15.20.07.02) where these regulations do not conflict with the requirements in this permit."

Part IV of MDA's Nutrient Application Requirements (COMAR 15.20.07.02) states that "When other immediate use options and alternatives are not available, temporary field stockpiling (staging) of organic nutrient sources is allowed."

Part IV.D. of with MDA's Nutrient Application Requirements (COMAR 15.20.07.02) states "Materials shall be field stockpiles (Staged) temporarily in a manner that prevents nutrient runoff."

COMAR 15.20.07.02 Part IV.A.3 states "Existing storage shall be fully used prior to stockpiling material in the field."

COMAR 15.20.07.02 Part IV.F-G states "All nutrients shall be removed from the temporary field (staged) stockpile and the ground are thoroughly scraped or cleaned when the application of nutrients takes place. Temporary field stockpile (staged) areas shall be restored to its original condition and, if necessary, reseeded with grass or an agronomic crop to facilitate nutrient uptake."

### **Observation #3**

Manure and manure bed pack from a calf/heifer barn at the Marpat farm across the street from the main farm were being stored via field stacking on a permanent basis. There was no permanent storage facility associated with this barn. The stacked manure and bed pack was on a flat piece of land bordering cropland and greater than 100 feet from a surface water. The material in the stacked pile was being removed and replaced so that it appears manure and bed pack were staged here most of the year and it was not a temporary operation. No existing storage is available to be used fully prior to temporary stockpiling and the area is not being scraped, cleaned, or restored to its original condition. Photographs 42 through 44 of Attachment A document the field stacking.

The field stack area on the Marpat farm does not appear to be identified on the map on page 79 (handwritten page number) of the NMP nor does it appear as a manure storage area within the CNMP.

### **Diverting Clean Water**

Part IV.B.3. of the permit states "Divert clean water as appropriate from the production area to keep it separate from process wastewater."

### **Observation #4**

There was a downed gutter at one of the barns that would allow clean water into the production area where it may circumvent process wastewater collection and come in contact with the production area. Photograph 36 of Attachment A documents this condition.

### **Mortality Storage**

Part IV.B.2 of the permit "Ensure proper management of mortalities to prevent the discharge of pollutants into waters of the state."

Page 28 of the Comprehensive Nutrient Management Plan states in regard to composting that "Carcasses are covered with a 6-inch layer of manure or finished compost."

### **Observation #5**

Neither of the operations two mortality compost areas were roofed. The Marpat farm compost area was on the ground and without a concrete pad. The compost area was located by the barns and at a

distance from the nearest surface waterbody. Stormwater and/or process wastewater from this compost area drains to surrounding cropland. Photograph 43 of Attachment A documents this condition.

The home farm compost area was on a cement pad that drained away from Glade Creek toward chamber 1 of the 3-stage manure storage system. At the time of the inspection, the EPA Inspection Team observed bones at the surface of the compost pile, where they would not be subject to the high temperatures that build beneath the surface. The bones were free of any flesh which were broken down via composting and may have been exposed due to turning. It appeared that the compost pile may have slightly extended beyond the curbing/berming potentially circumventing collection of stormwater and/or process wastewater for treatment. The curbing at the rear of the compost pile directed compost pile runoff/process wastewater to an inlet, which sends the runoff/process wastewater to manure and process wastewater storage. Drainage from a portion of this pile may circumvent treatment capture and go to cropland (see photos 7-9 of Attachment A).

### **Water Lines**

Part IV.A.b.3 of the permit states “...the logbook shall also include: a record of daily inspections for all outdoor water lines, and those located inside buildings with grated floors;”

Part IV. B.3 of the permit states “Divert clean water, as appropriate, from the production area to keep it separate from process wastewater. For CAFOs, conduct daily inspections of all outdoor water lines, and those located inside buildings with grated floors, on all days the CADO is in operation. Correct any deficiencies found as a result of the inspections as soon as possible and maintain a log of deficiencies found and corrected. The log must contain records of any deficiencies not corrected within 30 days and an explanation of the factors preventing immediate correction.

#### **Observation #6**

An exposed water line was located outside of the pre-fresh barn. The exposed line was in close proximity to a weep hole at the base of the pre-fresh barn and had a potential to be exposed to process wastewaters. At the time of the inspection, Mr. Stup stated the water line had been fixed but was kept exposed to monitor the repair for any additional leaks before being buried. The exposed area was inundated with water. Photograph 31 of Attachment A documents this condition.

### **Application Rates Based on CNMP**

Part I.B.1 of the permit authorizes “Discharges to waters of the State via application of animal waste to the soil are authorized under this General Discharge Permit provided such application is performed in accordance with an approved Required Plan as required herein.

#### **Observation #7**

In 2023, Field #1 had manure from the small liquid slurry applied twice at a rate of 9,000 gallons per acre. The Fall application occurred on October 20<sup>th</sup>. Page 152 of 245 of the CNMP calls for an application rate of 6,800 gallons per acre and 26 pounds of Nitrogen and 106 pounds of Phosphorous per acre. The manure analysis from dairy liquid sample collected on December 13<sup>th</sup> showed a Total Nitrogen concentration of 0.15% and 13.0 pounds per 1,000 gallons applied. The same sample had a Phosphorous concentration of 0.06% and 5.3 pounds per 1,000 gallons. At 9,000 gallons per acre a total

of 117 pounds of Nitrogen and 47.7 pounds of Phosphorous appear to have been applied to Home Field #1.

Number of animals today (all animals in production area): 53,333			
	# confined		# confined
Cattle		Sheep	
Dairy mature (milking and dry cows)	1,127	Dairy heifers and calves	848
Swine (≥55#)		Swine (<55#)	
Turkeys		Laying hens	
Pullets		Other (specify)	
<p>If the facility has made any of the following significant or substantial changes to the approved facility plans, has the permittee submitted a new NOI, revised approved plan, and any required fee? [MDG01A Part IV.F.1]</p> <ul style="list-style-type: none"> <li>• Changes in ownership or control of the permitted operation except operations subject to Part VII.Q of this General Discharge Permit</li> <li>• Increases in animal numbers resulting in change from medium to large operation</li> <li>• Change from MAFO to CAFO or CAFO to MAFO</li> <li>• Change from a no-land to a land operation</li> </ul> <p>Has the permittee notified the Department, in writing, of any permanent modifications to the operation, including? [MDG01A Part IV.F.2]</p> <ul style="list-style-type: none"> <li>• Addition of new land application areas that will receive manure, litter, or process wastewater</li> <li>• Any changes to the field-specific maximum annual rates for land application</li> <li>• Addition of any crop or other uses not included in the terms of the AFO's required plans</li> <li>• Changes to site-specific components of the AFO's required plans, where such changes are likely to increase the risk of nitrogen and phosphorus transport to waters of the state</li> </ul> <p>Has the permittee notified the Department, in writing, before making any changes that have the potential to result in a violation of this permit?</p>			
✓	Presented credentials? (check if yes)		
✓	Inspection photos attached? (check if yes)		
✓	Potential compliance issues? (check if yes and summarize below)		

## INSPECTION OBSERVATIONS

### Nutrient Management Plan (NMP)

Required NMP Element [Part 122.42(e)(1)] [MDG01A Part C.I.A]

- Yes** 1. Is the facility's NMP available on-site? Does it reflect the current operational characteristics and practices? [Part 122.42(e)(2)(ii)] [MDG01A Part IV.A.1]
- Date developed or last revised: **04/28/2023**
- Yes** a. Was the NMP prepared by a certified or licensed nutrient management consultant or a certified operator in accordance with the requirements of COMAR 15.20.04? [MDG01A Part IV.A.1.a.(3)] **David Kahn (Agronomics Plus) Certification PA-134 CCP:259 and TSP-04-4509**
- Yes** 2. Ensure adequate storage of manure and process wastewater, including operation and maintenance procedures. Store dry manure in a way that prevents polluted runoff. [MDG01A Part IV.A.1.b.(1)] **Pages 15-17 describe the capacities of manure storage structures.**
- Yes** 3. Ensure proper management of animal mortalities. [MDG01A Part IV.A.1.b(5)] **Page 27 of the CNMP states "The farm operation will use composting for normal mortality and rendering for catastrophic mortality."**
- Yes** 4. Ensure that clean water is diverted, as appropriate, from the production area. [MDG01A Part IV.A.1.b(3)] **Page 20 of the CNMP states "Rainwater from the roofs of most buildings is directed via gutters and downspouts to a stable outlet. This stormwater is routed away and flows away from production areas." There was a downed gutter at one of the cow barns (Prefresh) barn.**
- Yes** 5. Prevent direct contact of confined animals with surface waters. [MDG01A Part IV.A.1.b(4)] **Page 23 of the CNMP states "All production areas, manure storage, manure cleanup-heavy use areas and mortality management is at least 100' from any public drainage ditches (PDAs) and/or Streams, Creeks, or Rivers.**
- Yes** 6. Ensure proper disposal of chemicals and other contaminants. No pesticides, cleaning agents, or fuels shall be stored in any animal operation area, unless necessary for animal care and public health. These products shall not be allowed to enter waters of the State. [MDG01A Part IV.A.1.b(5)] **Pages 36 & 37 of the CNMP addresses chemical handling. The Plan states "All chemicals are custom applied, and no chemicals are stored at the operation. Equipment wash areas are designed and constructed to prevent contamination of surface waters and waste waters and storm water storage and treatment systems."**
- Yes** 7. Identify site-specific conservation practices to control runoff of pollutants, including setback requirements. [MDG01A Part IV.A.1.b(6)] **Page 6 of the NMP discusses the setbacks associated with farm practices.**
- Yes** 8. Identify protocols for manure, process wastewater, and soil sampling and testing. [MDG01A Part IV.A.1.b(7)] **Page 24 of the CNMP identifies procedures for manure sampling.**
- Yes** 9. Establish protocols to land apply manure or process wastewater in accordance with site-specific nutrient management practices that ensure appropriate agricultural utilization of the nutrients in the manure, litter, or process wastewater. [MDG01A Part IV.A.1.b(8)]

Yes	10. Identify specific records that will be maintained to document the implementation and management of the minimum NMP elements (#2-#9 above). <b><u>Page 7 of the NMP identifies the records that need to be maintained.</u></b>
Yes	11. If the operation is land applying animal waste, does the NMP or CNMP note each field that contains one or more sinkholes? [MDG01A Part IV.A.1.e]
N/A	12. Includes a 100-foot setback or a 25-foot vegetated filter strip between stored poultry litter and manure and waters of the State, as well as field ditches? <ul style="list-style-type: none"> <li>• If an existing production area is fewer than 35 feet from surface water, the use of a filter strip or water control structure, in accordance with NRCS Practice Standard 393 or 587.</li> <li>• For a poultry CAFO, if poultry manure is stored for more than 14 calendar days in the field, where manure may be applied as nutrients for crop growth under a NMP, shall be separated from ground water and stormwater to prevent leaching or runoff of pollutants through the use of both a plastic liner and cover, at least 6 mils thick, or an equivalent method approved by NRCS.</li> </ul>

*Additional NMP Requirements for Large Dairy Cow, Cattle, Swine, Poultry, and Veal Calf CAFOs*

Yes	13. Application rates are calculated as required by Part 412.4(c)(2)
Yes	14. Specifies the manure, process wastewater, and soil sampling at the required frequencies and for the required parameters? [Part 412.4(c)(3)] <i>(soil tests at least every three years; at least annually for nitrogen and phosphorus content of animal waste sample)</i> [MDG01A Part IV.B.7] <b><u>Page 59 of the CNMP states “Soil tests are required to be taken every 3 years or sooner for each management unit.”</u></b>
Yes	15. Includes periodic inspection of land application equipment? [Part 412.4(c)(4)] [MDG01A Part IV.D.1] <b><u>The NMP and CNMP discuss calibration not necessarily checking for leaks.</u></b>
Yes	16. Includes 100-foot setback or 35-foot vegetated buffer? [Part 412.4(c)(5)] [MDG01A Part IV.B.8] <b><u>Setbacks are identified in page 6 of the NMP, some of the setbacks are less since the application via injection.</u></b>

**Monitoring, Documentation and Recordkeeping**

Does the facility maintain records of the following for 5 years?

Yes	17. The completed permit application? [Part 412.37(b)]
Yes	18. The current design of manure storage structures, including volume of solids accumulation, design treatment volume, total design volume, and approximate number of days of storage capacity? [Part 412.37(b)(5)] [MDG01A Part IV.A.6.c(5); Part IV.A.7.a(4)] <b><u>Waste Storage Structures Documentation documented the total design storage, days of storage capacity and volume of solids accumulation. The design treatment volume was not provided.</u></b>
N/A	19. The date, time, and estimated volume of any overflow? [Part 412.37(b)(6)] <b><u>There have been no overflows within memory.</u></b>

**Monitoring, Documentation and Recordkeeping (continued)**

- N/A 20. If the permittee exports all manure, litter, or process wastewater, does the operator maintain a no-land operation logbook onsite? [MDG01A Part IV.A.7] **The operation exports and land apply manure.**
- Yes 21. Manure and process wastewater transfers, including the most current nutrient analysis of the manure or wastewater that was provided to the recipient, the date and approximate amount transferred, and the name and address of the recipient? [Part 122.42(e)(3)] [MDG01A Part IV.A.7.a(1)]
- Yes a. Name of recipient
- Yes b. Address of recipient **(Address provided in 2023 Annual Report not documented on Manure, Litter and Wastewater Transfer Record Keeping Form)**
- Yes c. Date of transfer
- Yes d. Approximate amount transferred (tons/gallons)
- Yes e. Recent (12 months or less) manure nutrient analysis provided

*Additional Production Area Records for Large Dairy Cow, Cattle, Swine, Poultry, and Veal Calf CAFOs*

- Yes 22. Documentation of daily and weekly visual inspections of the production area, including:
- Yes a. Weekly inspection of stormwater diversions, waste storage structures, and process wastewater channeling devices? [Part 412.37(b)(1)] [MDG01A Part IV.A.3; Part IV.A.6.b(4) and (5); Part IV.A.7.a(5) and (6)]
- Yes b. Daily inspection of water lines? [Part 412.37(b)(1)] (outdoor water lines or those located inside buildings with grated floors) [MDG01A Part IV.B.3; Part IV.A.6.b(3)] **Daily inspections for first four months of 2024 were copied by inspection team; documentation went back many years.**
- Yes c. Weekly inspection of impoundments and tanks? [Part 412.37(b)(1)] [MDG01A IV.A.3] **Weekly inspections for first six months of 2024 were copied by inspection team; documentation went back many years.**
- Yes 23. Weekly records of the depth of manure and process wastewater in liquid impoundments and terminal tanks? [Part 412.37(b)(2)] [MDG01A Part IV.A.3; Part IV.A.6.b(1)] **Depth marker readings documented in weekly inspections.**
- Yes 24. Documentation of actions taken to correct deficiencies found as a result of production area inspections? [Part 412.37(b)(3)] [MDG01A IV.A.3]
- Yes a. Were deficiencies corrected within 30 days? **The Inspection Team observed a sinkhole formed by a break in an underground waterline. The waterline was replaced but the sinkhole was not backfilled at the time of inspection as it was being monitored to ensure the repair held and there were no additional issues.**
- N/A b. If not, does the file contain an explanation of factors preventing immediate correction?
- Yes 25. Documentation of mortalities management? [Part 412.37(b)(4)] [MDG01A Part IV.B.2; Part IV.A.6.a(5); Part IV.A.7.a(2)] **Mortalities are composted in compost areas in each farm site.**

*Land Application Area Records for Large Dairy Cow, Cattle, Swine, Poultry, and Veal Calf CAFOs*

- Yes** 26. Expected crop yields? [Part 412.37(c)(1)] **Yield goals are provided in the CNMP pages 147-155 of 245.**
- Yes** 27. Date(s) manure or process wastewater is applied to each land application site? [Part 412.37(c)(2)] [MDG01A Part IV.A.6.a(1) and (2)]
- Yes** 28. Weather conditions at the time of, and for 24 hours prior to and following, land application? [Part 412.37(c)(3)] [MDG01A Part IV.A.6.a(4)]
- Yes** 29. Test methods used to sample and analyze manure, process wastewater, and soil? [Part 412.37(c)(4)] [MDG01A Part IV.A.6.c(1); Part IV.A.7.a(3)] **It did not appear that either the CNMP or the NMP identified which test methods would be used for analysis. A description of how to collect a sample was in the CNMP.**
- Yes** 30. Results from manure, process wastewater, and soil analyses? [Part 412.37(c)(5)] [MDG01A Part IV.A.6.c(2)]
- Yes** 31. Manure and process wastewater application rates determined in accordance with the NMP? [Part 412.37(c)(6)] [MDG01A Part IV.A.6.a(2)] **It appears the farm may not have complied with the rates in the CNMP.**
- Yes** 32. Calculations showing the total N and P to be applied to each land application site, including sources other than manure or process wastewater? [Part 412.37(c)(7)] [MDG01A Part IV.A.6.c(3)] **The amount of nutrients to be applied to each land application site are documented in the CNMP. The underlying calculations were not observed.**
- Yes** 33. Total amount of N and P actually applied to each land application site, including calculations? [Part 412.37(c)(8)] [MDG01A Part IV.A.6.c(3)] **The annual reports document the amount of nutrients applied to each application site. The underlying calculations are not included.**
- No** 34. Method used to apply manure and process wastewater? [Part 412.37(c)(9)] [MDG01A Part IV.A.6.a(2)] **The application method was not found by the inspection team in the NMP, though page 6 infers the farm is using injection or directed spray application based on the setback. The application method is documented in the annual report.**
- Yes** 35. Date(s) of manure application equipment calibration, inspections for leaks, and maintenance (must be conducted at least annually)? [Part 412.37(c)(10)] [MDG01A Part IV.D.1]
- Partial** 36. Soil conditions, including instances of ponding or runoff, saturated soil, and frozen ground or snow-covered ground. [MDG01A Part IV.A.6.a(3)] **The Field Log had a column to note if there was ponding; there is only emergency winter applications, and that has only occurred once in last 10 years with the notification and with permission of Maryland Department of Environment (MDE).**

*Monitoring, Documentation and Recordkeeping comments:*

None.

**Land Application Sites**

**Yes** 37. Does the facility apply manure or wastewater to land owned by or under the operational control of the CAFO?

- Number of land application sites:
- Irrigation type(s):
- Furrow/flood irrigation sites – what is fate of applied wastewater and tailwater?:

**Yes** 38. Was manure/wastewater applied in accordance with the procedures and protocols identified in the NMP? (*spot check records for one field to complete the information below.*) If no, describe:

**Yes** 39. If the facility is land applying process wastewater, is the CNMP consistent with Part IV.C.1 - 3 of the General Permit?

- a. The annual average hydraulic loading rate shall not exceed two inches per week, and process wastewater applied shall not exceed the long-term soil infiltration rate or result in surface runoff or ponding.
- b. Distribution of process wastewater shall not take place during periods of precipitation or high winds, or on frozen ground or snow covered ground or saturated soil and shall be consistent with COMAR 15.02.07 and 15.20.08.
- c. The permittee shall provide adequate means to prevent spray droplets from entering adjacent properties, either by direct application or wind carry-over. These means shall include a setback that is:
  - 200 feet from the wetted perimeter of the spray irrigation site to property lines in an open area or 100 feet in an area with a vegetated filter strip;
  - 500 feet from the wetted perimeter of the spray irrigation site to houses or other occupied structures in an open area or 250 feet in an area with a vegetated filter strip; and
  - 100 feet from down gradient surface waters of the State, including intermittent streams; or
  - Approved by the Department as suitable to control the movement of spray onto adjacent land

**Rarity** 40. Is the operation land applying on frozen ground or snow-covered ground? [MDG01A Part IV.A.4] **The operation has only winter applied once in over 10 years as a result of a need for an emergency drawdown. It was conducted after notification and approval from MDE.**

**Yes** a. If so, does the operation have written permission from the Department? **Only occurred once in over 10 years.**

**No** 41. Is animal waste applied within 100 feet of a sinkhole, or directly onto an outcropping? [MDG01A Part IV.A.5]

*Land application site comments:* **In 2023, Field #1 had manure from the small liquid slurry applied twice at a rate of 9,000 gallons per acre. The Fall application occurred on October 20<sup>th</sup>. Page 152 of 245 of the CNMP calls for an application rate of 6,800 gallons per acre and 26 pounds of Nitrogen and 106 pounds of Phosphorous per acre. The manure analysis from dairy liquid sample collected on December 13<sup>th</sup> showed a Total Nitrogen concentration of 0.15% and 13.0 pounds per 1,000 gallons applied. The same sample had a Phosphorous concentration of 0.06% and 5.3 pounds per 1,000 gallons. At 9,000 gallons per acre a total of 117 pounds of Nitrogen and 47.7 pounds of Phosphorous appear to have been applied to Home Field #1**

<b>Production Area</b>						
42. List impoundments (attach additional sheet(s), if needed)						
Impoundment ID	Wastewater Type	Wastewater Source(s)	Pumping level <sup>4</sup>	Wastewater below pumping level?	Max. recorded level	Date of max. recorded level
Small Slurry Store	x process generated runoff	Barns	Depth Marker Not Visible from Ground	Yes	18'	5/1/2024
Big Slurry Store	x process generated runoff	Barns	Depth Marker Not Visible from Ground	Yes	28'	5/1/2024
Circular Concrete Marpat	x process generated runoff	Calf Barns	Depth Marker Present	Yes		
Lagoon #1	x process generated runoff	Barns	Depth Marker Present	Yes		
Lagoon #2	x process generated runoff	Barns	Depth Marker Present	Yes		
Lane Barn Concrete	x process generated runoff	Barns	Depth Marker Present	Yes	7'	5/1/2024
43. Impoundment(s) collect all runoff from:						
<b>Yes</b>	Animal confinement areas? <sup>5</sup> <b><u>There was a gutter that was off around the prefresh barns.</u></b>					
<b>Yes</b>	Manure storage areas? <sup>6</sup>					
<b>Yes</b>	Raw material storage areas? <sup>7</sup>					

<sup>4</sup> The pumping level represents the minimum capacity necessary to contain runoff and direct precipitation from the 25-year, 24-hour rainfall event (40 CFR Part 412.37(a)(2)) [MDG01A Part IV.A.2]

<sup>5</sup> Animal confinement area includes but is not limited to open lots, housed lots, feedlots, confinement houses, stall barns, free stall barns, milkrooms, milking centers, cowyards, barnyards, medication pens, walkers, animal walkways, and stables (40 CFR Part 122.23(b)(8)).

<sup>6</sup> Manure storage area includes but is not limited to lagoons, runoff ponds, storage sheds, stockpiles, under house or pit storages, liquid impoundments, static piles, and composting piles (40 CFR Part 122.23(b)(8)).

<sup>7</sup> Raw materials storage area includes but is not limited to feed silos, silage bunkers, and bedding materials (40 CFR Part 122.23(b)(8)).

Yes	Waste containment areas? <sup>8</sup>
N/A	Egg washing or egg processing facility?
Yes	Mortality storage, handling, treatment or disposal area? <b><u>At the home farm, runoff from mortality compost area is collected. At the Marpat farm, runoff from mortality compost area goes into cropland.</u></b>
N/A	Other? (describe): _____ <ul style="list-style-type: none"> <li>If no, describe non-retained areas:</li> </ul>
<b>Production Area (continued)</b>	
No	44. Was manure or wastewater observed in a waterway? If yes, describe:
Yes	45. Adequate storage available for manure, litter, and process wastewater, and procedures are in place to ensure proper operation and maintenance of the storage facilities? [Part 122.42(e)(1)(i)] [MDG01A Part IV.B.1] (12 inches of freeboard for any impoundment storing liquid animal waste [MDG01A Part IV.A.2]) <b><u>Depth markers were not observed in some manure storage structures mostly "reception" facilities which held manure more temporarily prior to manure being moved to the end (terminal) storage structure.</u></b>
Yes	46. Confined animals do not have direct contact with waters of the United States? [Part 122.42(e)(1)(iv)] [MDG01A Part IV.B.4] <b><u>There were two stream crossings which were fenced on both sides, that allowed cattle with access to the Glade Run to cross to pasture.</u></b>
Yes	47. Clean water is diverted from the production area? [Part 122.42(e)(1)(iii)] [MDG01A Part IV.B.3]

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<sup>8</sup> The waste containment area includes but is not limited to settling basins, and areas within berms and diversions which separate uncontaminated storm water (40 CFR Part 122.23(b)(8)).

**Yes** 48. Chemicals and other contaminants handled on-site are not disposed of in any manure, litter, process wastewater, or storm water storage or treatment system? [Part 122.42(e)(1)(v)] [MDG01A Part IV.B.5]

*Additional Production Area Requirements for Large Dairy Cow, Cattle, Swine, Poultry, and Veal Calf CAFOs (Subparts C and D)*

**Yes** 49. All open surface impoundments and terminal storage tanks have depth markers which clearly indicate the minimum capacity necessary to contain the runoff and direct precipitation of the 25-year, 24-hour rainfall event? [Part 412.37(a)(2)] [MDG01A Part IV.A.2] **Some open manure reception facilities did not have depth markers. Manure was transferred from these facilities to lagoons or slurry tanks.**

**Yes** 50. Mortalities remain in the production area until disposal, are not disposed in liquid manure or process wastewater treatment systems, and are handled to prevent discharge of pollutants to surface waters? [Part 412.37(a)(4)] [MDG01A Part IV.B.2] **Mortalities are stored in dedicated compost areas.**

**Yes** 51. Are field-stacked piles of litter formed in accordance with NRCS Practice Standard 318? If so, does the CNMP map identify the location of all temporary storage areas, access roads to these areas, setbacks, slopes, surfaces to be graded, necessary cuts and fills, and location of sites subject to pollution? [MDG01A Part IV.A.1.a(1)] **Field stacked manure was located near its source and land application as described in NRCS Practice Standard for Short Term Storage of Animal Waste and By-Products. The stockpile may have been greater than 7' in height.**

**N/A** 52. New and modified operations: if lagoon bottoms and inner slopes of embankments were designed, constructed, or modified after the effective date of the permit [August 1, 2016], are they designed and built in accordance with a CNMP and all applicable NRCS standards and lined with impervious material? (the permeability of the liner shall be  $10^{-7}$  cm/sec or less, and for materials other than synthetic liners, the liner shall be a minimum thickness of two feet) [MDG01A Part IV.E.1]

***Production Area (continued)***

*Production area comments:*