MARYLAND DEPARTMENT OF THE ENVIRONMENT
Land and Materials Administration · Resource Management Program
1800 Washington Boulevard · Suite 610 · Baltimore Maryland 21230-1719
410-537-3314 · 800-633-6101 x3314 · www.mde.maryland.gov

NOTICE OF INTENT FOR COVERAGE

General Discharge Permit for Animal Feeding Operations (AFOs)

Maryland Permit Number: 25AF

National Pollutant Discharge Elimination System (NPDES) Permit Number: MDG01

Submission of this Notice of Intent (NOI) constitutes notice that the person identified in this form intends to operate under and comply with all terms and conditions of the State/NPDES General Discharge Permit for AFOs (AFO Permit). The discharge of animal waste, including manure, poultry litter, and process wastewater to waters of the State is prohibited unless an AFO has been registered under the AFO Permit by the Maryland Department of the Environment ("MDE"). A person shall hold a CAFO discharge permit issued by MDE before beginning construction on any part of a new CAFO. Incomplete Notices of Intent, including unpaid annual fees, may be rejected by MDE.

Please submit this completed NOI Form to the following email address:
cafopermits.mde@maryland.gov

Or mail to:
Maryland Department of the Environment
Land and Materials Administration/AFO Division
1800 Washington Boulevard, Suite 610
Baltimore, Maryland 21230-1719

General Information

AI Number: _____

1. **LEGAL Name of Applicant** *(must match name on required plan)*:	
AR FARM LLC	
2. **AFO Type** *(check one)*	☐ Maryland Animal Feeding Operation (MAFO) ☐ Concentrated Animal Feeding Operation (CAFO)
3. **Applying for** *(check one):*	☐ New Coverage ☑ Continuation of Coverage ☐ Modification of 25AF coverage

4. Reason for NOI *(please fill out corresponding column)*

A. New Coverage	B. Continuation of Coverage (renewal)	C. Modification of 25AF Coverage
☑ New owner/operator ☐ Proposed operation *(NO construction may begin until permit coverage is obtained)* Date of anticipated start of AFO operation:	☑ No changes in operation ☐ There has been a change in one or more of the following *(please indicate):* ○ Size or number of houses ○ Animal number, resulting in change of size category ○ CAFO to MAFO, MAFO to CAFO ○ No-Land to Land, Land to No-Land ○ Conventional to an organic operation	☐ Expanding ☐ Change in animal number, resulting in change of size category ☐ Change from CAFO to MAFO ☐ Change from MAFO to CAFO ☐ Change from no-land to land ☐ Change from land to no-land Change from conventional to an organic operation

Farm Information

5. **Mailing Address of Applicant:** 4723 STOCKTON RD		
City: POCOMOKE CITY	*State* MD	*Zip* 21851
6. **Applicant Contact Information:**	*(Hom* [redacted]	
	(Cell)	
MOHAMMAD REHMAN	*(Ema*	

Applicant (Owner/Operator Information)

Please attach a topographic map including the production area as well as the land application area (if applicable)

7. **Farm Name:** RANCHO GRANDE	*Same as Legal Name* *Other (Please Specify)*
8. **Farm Address:** 27440 HOLLAND CROSSING RD	
City MARION	*County* SOMERSET *Zip Code* 21838
9. **Watershed/Hydrologic Unit Code (HUC)** (12-digit): 02-13-02-07-0622	
10. **Latitude/Longitude of Production Area** (Deg/Min/Sec): ___-_____-_____ / _____	

11. **Animal Information**

A. Animal Type(s) *(from AFO size chart)*	**B. Maximum Number of Animals *at any given time*** *(For poultry, please indicate bird-type and number per flock)*	**C. Operation Size** *(consult AFO size chart)*	**D. Animal Confinement Type** *(e.g. house, feedlot, barn, milking parlor, pen)*
POULTRY	100,000	LARGE	

12. ****Total number of acres controlled by applicant available for land application of manure/litter/process wastewater:** *Owned:* *Leased:*

***40 CFR Parts 122.23(b)(3) and 412.2(e) define "land application area" as "all land under the control of the AFO owner/operator, whether by ownership, lease, or agreement, to which manure, litter or process wastewater from the production area is or may be applied." Land under the control of the AFO owner/operator means:*

- *Land that is owned and operated by the applicant; or*
- *Land the applicant does not own but operates, manages, or otherwise decides how nutrients from the CAFO/MAFO are to be applied, such as through a rental or lease agreement.*

*For poultry only (13-16):

13. *Number of Poultry Houses 4		
14. *Combined square footage of *all* poultry houses: 104,400 SQ FT		
15. *Date(s) poultry houses constructed:		
16. *Integrator *(check one)*:		*Contact Information*
☐ Allen-Harim	☐ Mountaire	Phone: 302-258-3567
☑ Amick	☐ Perdue	Address: 274 NEALSON ST
☐ Coleman (Organic)	☐ Tyson	HURLOCK, MD. 21643
☐ Other (Please Specify):		

Manure/Mortality Management

17. Total Manure/Litter/Wastewater generated *annually*: _____	☑	tons
	☐	lbs
	☐	gallons
18. Total Manure/Litter/Wastewater transported offsite *annually*: _____	☐	tons
	☐	lbs
	☐	gallons

19. Total Manure Storage *(please list individually)*:

A. Type *(e.g. shed, lagoon, pit)*	B. Capacity *(ft^3, gal)*	C. Solid/Liquid
40 X 76	15,200 CU FT	SOLID
40 X 84	16,800 CU FT	SOLID

20. Mortality Management Method

☑ Compost	☐ Incinerate
☐ Freeze	☐ Other *(Please Specify)*: _____
☐ Render	

MDEnviroScreen Tool EJ Score

The MDEnviroScreen EJ Score is an overall evaluation of an area's circumstances using environmental and other indicators. Under Section 1-601.1 of the Environment Article, Annotated Code of Maryland, a person applying for coverage under the General Permit for Animal Feeding Operations shall include in the application the EJ Score from the Maryland EJ tool for the census tract where the applicant is seeking a permit. MDEnviroScreen can be accessed at:

https://mde.maryland.gov/Environmental_Justice/Pages/MDEnviroScreen.aspx

21. EJ Score	54.5

CAFOs Only - Fees

- Pursuant to COMAR 26.08.04.09-1(J), the first annual fee payment shall be submitted to MDE with the NOI Form. MDE will invoice the applicant for any future permit annual fees owed pursuant to COMAR 26.08.04.09-1. The fees shall be paid annually, no later than the anniversary of the effective date of the permit.
- Annual fees will be based on the size of the operation (see AFO size chart) and are based on Table 1 under regulation 26.08.03.09(3). Medium CAFOs shall pay a $600 yearly fee and Large CAFOs shall pay a $1,200 yearly fee. The CAFO AI # and the payment code should be on the check's memo:
    - Payment Code: AF PCA 13734, Comp Object 5651, Agency Object 5651
- All fees shall be mailed to:

Maryland Department of the Environment
P.O. Box 1417
Baltimore, Maryland 21203-1417

Required Plan and Other Requirements

CAFO permit application requirements at 40 CFR §122.21(i)(1)(x) specify that applications for coverage (including NOIs) must include nutrient management plans (NMPs) that at a minimum satisfy the requirements specified in 40 §122.42(e). Comprehensive Nutrient Management Plans (CNMPs), as defined in the General Discharge Permit for Animal Feeding Operations (AFOs) (25AF, MDG01), satisfy these requirements. An application will not be processed until a completed NOI form and a current CNMP are received. A CNMP must be developed by a certified and licensed plan writer, and in addition to the federal requirements, must satisfy the nutrient management requirements in COMAR 15.20.07 and 15.20.08.

Pursuant to Section 1-202 of the Environment Article, MDE cannot issue a license or permit an employer with covered employees as defined by § 9-101 of the Labor and Employment Article. The employer shall file with MDE: (1) A certificate of compliance with the Maryland Workers' Compensation Act; or (2) The number of a workers' compensation insurance policy or binder.

Pursuant to Section 1-203(b) of the Environment Article, MDE cannot renew a license or permit to a permittee who has undisputed taxes and unemployment insurance contributions payable to the comptroller or the Secretary of Labor.

Certification

The personal information requested on this form is intended to be used in processing your NOI. This Notice is provided pursuant to Title 4 of the General Provisions Article, Annotated Code of Maryland. Your NOI may not be processed if you fail to provide all requested information. You have the right to inspect, amend, or correct this form. MDE is a public agency and subject to the Maryland Public Information Act (Md. Code Ann., Gen. Prov. §§ 4-101, et seq.). This form may be made available on the Internet via MDE's website and is subject to inspection or copying, in whole or in part, by the public and other governmental agencies, if not otherwise protected by federal or State law.

By signing this form, I, the permittee, do solemnly affirm under the penalties of perjury that the contents of this application are true to the best of my knowledge, information, and belief. I hereby authorize representatives of MDE to have access to the AFO and associated lots/facilities (farms) for inspection at all reasonable times. I further authorize representatives of MDE to have access to records relating to this application and the AFO and associated lots/facilities (farms) for review and inspection at all reasonable times. I acknowledge that depending on the type of permit applied for, other permits or approvals may be required.

Signature of Permittee: _____ **Date:** 08/13/2026

Printed Name of Permittee: MOHAMMAD REHMAN **Title:** OWNER

AFO Size Chart

Animal Type	Circumstances under which Animal Feeding Operations Require Permit Coverage		
	CAFO or MAFO Registration Required	**CAFO/MAFO Registration Required under Certain Circumstances**	**Registration Needed Only if Designated**
	Large	**Medium**	**Small**
Cattle (includes heifers)	1000 or more animals	300—999 animals	less than 300 animals
Dairy cattle	700 or more animals	200—699 animals	less than 200 animals
Horses	500 or more animals	150—499 animals	less than 150 animals
Veal	1000 or more animals	300—999 animals	less than 300 animals
Swine ≥ 55 pounds	2500 or more animals	750—2499 animals	less than 750 animals
Swine < 55 pounds	10,000 or more animals	3,000—9,999 animals	less than 3,000 animals
Sheep and lambs	10,000 or more animals	3,000—9,999 animals	less than 3,000 animals
Ducks with liquid manure handling+	5,000 or more animals	1,500—4,999 animals	less than 1,500 animals
Chickens with liquid manure handling	30,000 or more animals	9,000—29,999 animals	less than 9,000 animals
Ducks with dry manure handling	30,000 or more animals	10,000—29,999 animals	less than 10,000 animals
Laying hens with dry manure handling	82,000 or more animals	25,000—81,999 animals	less than 25,000 animals
Chickens (other than laying hens) with dry manure handling	125,000 or more animals or greater than or equal to total house size of 100,000 ft^2	37,500—124,999 animals *and* less than total house size of 100,000 ft^2	less than 37,500 animals
Turkeys	55,000 or more animals	16,500—54,999 animals	less than 16,500 animals

+A separate discharge permit is required for large category duck CAFOs

COMPREHENSIVE NUTRIENT MANAGEMENT PLAN

FOR

Rancho Grande

AR Farm LLC c/o Mohammad Rehman



LOCATION ADDRESS

27440 New Holland Crossing Rd

Marion, Maryland 21838

MAILING ADDRESS

4723 Stockton Rd

Pocomoke City, Maryland 21851

PREPARED BY

Somerset Soil Conservation District

30730 Park Drive

Princess Anne, MD 21853

Plan Date:

September 2026

COMPREHENSIVE NUTRIENT MANAGEMENT PLAN

Rancho Grande

AR Farm LLC c/o Mohammad Rehman

27440 New Holland Crossing Rd

Marion, Maryland 21838

[redacted]

MAILING ADDRESS

4723 Stockton Rd

Pocomoke City, Maryland 21851

PREPARED IN COOPERATION WITH THE

Maryland Department of Agriculture
Office of Resource Conservation

AND THE

Somerset Soil Conservation District

30730 Park Drive

Princess Anne, MD 21853

Prepared by: Mark Stavely

Plan Date: September 2026

Poultry Operation (No Land Plan)

Concentrated Animal Feeding Operation (CAFO) M.D.E. Agency Interest **# 92356**

SECTION 1: CNMP Purpose and Agreement

The Comprehensive Nutrient Management Plan (CNMP) is an important part of the conservation management system (CMS) for your Animal Feeding Operation (AFO). This CNMP documents the planning decisions and operation and maintenance for the AFO. This plan has been prepared in accordance with NRCS standards and specifications for a Comprehensive Nutrient Management Plan 102.

This CNMP is valid as long as there are no major changes to the operation. A plan revision will be needed when the numbers of animals deviates by 10% from the planned amount or when the operation changes from one type of livestock to another. Annual revisions will be necessary for the nutrient management system in order to account for crop changes and soil sample result changes.

This CNMP was developed paying special attention to the USEPA's required nine minimum practices for water quality protection. This plan when implemented by AR Farm LLC c/o Mohammad Rehman will ensure clean runoff is diverted from manure storage and production areas and livestock are prevented from making direct contact with waters.

Owner/Operator

As the owner/operator of this CNMP, I, as the decision-maker, I have been involved in the planning process and agree that the items/practices listed in each element of the CNMP are needed. I understand that I am responsible for keeping all necessary records associated with the implementation of this CNMP. It is my intent to implement/accomplish this CNMP in a timely manner as described in the plan.



09/28/2026

AR Farm LLC c/o Mohammad Rehman — Date

Certified Comprehensive Nutrient Management Plan (CNMP) Planner

As an approved Comprehensive Nutrient Management Plan (CNMP) Planner, I certify that I have reviewed the Comprehensive Nutrient Management Plan and that the elements of the documents are technically compatible, reasonable and can be implemented.



9/28/26

Mark Stavely — Date

NRCS Planner Certification # 243

Nutrient Management Certification # 4326

SECTION 2: Farmstead (Production Area)

This element addresses the components and activities associated with the production facility, feedlot or animal loafing facilities, manure and wastewater storage and treatment structures and areas, animal mortality facilities, feed and other raw material storage areas, and any areas used to facilitate transfer of manure and wastewater.

Farm Locations

Farm Name	Owner	Tax Account ID	Farm #	Tract #	Account ID Acres	Watershed
Rancho Grande	AR Farm LLC c/o Mohammad Rehman	[redacted]	2936	2190	12.0	02-13-02-07-0622
Rancho Grande	AR Farm LLC c/o Mohammad Rehman	[redacted]	2936	2190	17.0	02-13-02-07-0622

Description of Operation / Additional Information

This four poultry house, c. 100,000 bird capacity, NO-LAND CAFO poultry farm is currently owned and operated by AR Farm LLC c/o Mohammad Rehman . Of the total 29 acres approximately 10.7 acres are dedicated to the poultry operation. 7.16 acres are dedicated to cropland which is operated by Coulbourne Swift c/o swift farms Inc. (5464 Green Rd Marion, MD 21838) and included in his nutrient management plan. The remaining 11.14 acres are woods.

Sensitive Environmental Information

Name of nearest regulatory waterbody	Distance to nearest regulatory waterbody (ft.)	Distance to nearest regulatory wetland (ft.)
Jones Creek	2803.4ft	0 ft in production area

Account ID	12 Digit Watershed	Watershed Name	Tier II High Quality Waters Watershed	Impairments			
				Nitrogen	Phosphorus	Bacteria (e.coli, enterocci or fecal)	Sediment
[redacted]	02-13-02-07-0622	Big Annemessex River	No	Yes	No	Yes	No
[redacted]	02-13-02-07-0622	Big Annemessex River	No	Yes	No	Yes	No

Animal Production

Poultry

Bird Type	Average Bird Weight (lbs)	Number of Houses	Total Number of Birds (All Houses)	Number of Flocks per year
Broiler	9	4	100,000	4.5

* See poultry litter quantity estimation sheets in the "Nutrient Management" section of this plan.

Operators must keep records of the actual:

1. Quantity estimate of litter removed from production and/or storage facility; and
2. Date of removal of litter from production and/or storage facility.

Manure Collection

The poultry houses are windrowed after each flock, there are approximately 4.5 flocks per year. Any excess manure is stored in the manure sheds (40’ X 76’ and 40’ X 84’) until the receiving farm takes the litter. The last full cleanout was in 2024. The next clean out is expected in 2030

Manure Storage

All poultry manure will either remain in the poultry house or will be stored in the designated storage facility. A minor amount of manure will be used in the animal mortality facility to facilitate the composting process.

Current / Proposed Manure Storage Conditions

Animal Type	Storage Structure	Size of Storage Structure	Storage Capacity	Date Constructed
Poultry	PWSS	40' x 76'	15,200 cu ft	10/18/1995
Poultry	PWSS	40' x 84'	16,800 cu ft	12/02/2015

IMPORTANT! Manure should not be stockpiled or staged anywhere in the production area other than permanent manure storage structure for any length of time.

Transfer Information (Farm(s) receiving exported manure)

Animal Type	Name	Address
Poultry	ADH Farms	8413 Bethel Rd, Seaford, Delaware 19973

Animal Mortality Disposal

Animals die because of disease, injury, or other causes in any confined livestock operation. The mortality rate is generally highest for newborn animals because of their vulnerability.

Catastrophic mortality can occur if an epidemic infects and destroys a large portion of the herd or flock in a short time, or if a natural disaster, such as a flood or excessive heat strikes. There are also incidences when an entire herd or flock must be destroyed to protect human health or other farms in the area.

Methods for managing mortality include:

1. Rendering
2. Composting
3. Incineration*
4. Sanitary landfills
5. Burial**
6. Disposal pits**

* Incineration may only be used with proper equipment and permits must be obtained by the producer.
** Burial and Disposal pits should only be considered for catastrophic mortality if all other methods are not possible. AR Farm LLC c/o Mohammad Rehman will follow local and state guidance if it is determined that burial is an acceptable means of disposal.

Typical Mortality Management

Current Normal Mortality Disposal Method(s)

Animal Type	Disposal Method	Number of Bins/Capacity	Location of Disposal/Facility
Poultry	Composting - Bins/Channels	16ft channel/2 bin composter	Attached to 40' x 76' PWSS

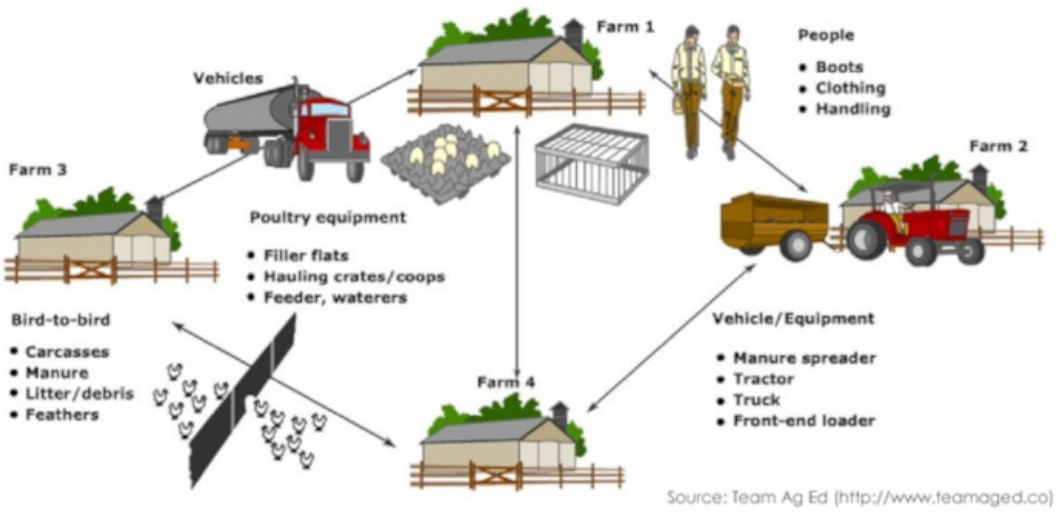
Catastrophic Mortality Management

In the event of catastrophic mortality, the operator will contact the integrator and most likely, follow an 'in house' or 'in PWSS' windrow method of composting as outlined in UMD-Ext fact sheets # 723 and # 801.

Biosecurity

Biosecurity means doing everything possible to protect the health of livestock by preventing the transmission of disease. An outbreak of animal disease could not only harm your livestock, it could affect other nearby animals and quickly spread through your area. The economic consequences of a disease outbreak could be devastating. Taking common sense precautions to prevent disease from coming onto your farm is the best investment you can make.

How Diseases Spread (Example - Poultry Operation)



Steps to Take to Avoid Disease Spread

To reduce the risk of introducing disease entering into an animal feeding operation, maintain a biosecurity barrier (physical barrier, personal hygiene, and equipment sanitation) between wildlife, animals, animal containment areas, and other commercial facilities. Some examples of good biosecurity practices include:

1. Permit only essential workers and vehicles on the premises.
2. Give germs the boot
    a. Keep a pair of shoes or boots to wear only around your animals.
    b. Clean and disinfect your shoes often.
    c. Always ask visitors and employees to clean their boots and shoes.
3. Don't haul home disease
    a. Always clean and disinfect vehicles used for moving animals.
    b. Limit traffic of incoming people, products and vehicles that could bring in a disease.
    c. Clean and disinfect all equipment that comes in contact with your animals.
4. Keep your farm secure
    a. Restrict access to your property and animals.
    b. Keep doors and gates locked.
    c. Have tracking records on animals.
    d. Give germs space - Newly acquired animals should be isolated for at least two weeks to ensure you don't introduce disease to your main herd or flock. As an added protection, isolate and quarantine new animals for 30 days before putting them with your other animals. Keep show animals segregated for at least two weeks after they've been to a fair or exhibit.
5. Look for signs
    a. Unusual animal health symptoms or behavior
    b. Sudden, unexplained death loss in the herd or flock
    c. Severe illness affecting a high percentage of animals
    d. Blisters around an animal's mouth, nose, teats or hooves
    e. Staggering, falling or central nervous system disorders that prevent animals from rising or walking normally.
    f. Large number of dead insects, rodents or wildlife
6. Don't wait - call in signs of disease immediately. Do not self-diagnose. Seek veterinary services, as early detection is your best protection. If you have animals with signs of suspect disease, call your local veterinarian, UMD extension agent () or the state veterinarian. Rapid response and investigation are the only ways to control and eliminate disease and stop large numbers of casualties or damage to our economic system.

Farm Contact Information

The following tables contain important contact information specific to this CNMP for AR Farm LLC c/o Mohammad Rehman.

Emergency Contact Information

Farm Name	Rancho Grande
Farm Address	27440 New Holland Crossing Rd, Marion, Maryland 21838
Mailing Address	4723 Stockton Rd, Pocomoke City, Maryland 21851
Directions to the farm	Start out going southeast on Ocean Hwy/US-13 S toward Stewart Neck Rd. Turn slight right onto Crisfield Hwy/Blue Crab Scenic Byway/MD-413. Turn right onto Holland Crossing Rd. 27440 HOLLAND CROSSING RD.

Farm Contacts

	Name	Farm Phone	Cell Phone
Farm Owner	AR Farm LLC c/o Mohammad Rehman		[redacted]
Farm Operator	AR Farm LLC c/o Mohammad Rehman		[redacted]
Fire or Ambulance	911		

State Agency Contacts

	Phone	Emergency
Natural Resources Conservation Service	410-757-0861	410-757-0861
MDA Nutrient Management	410-841-5959	1-800-492-5590
Maryland Department of the Environment	1-800-633-6101	1-866-633-4686
USDA Veterinary Services State Veterinarian	1-866-536-7593	301-854-5699

Somerset County Agency Contacts

	Day Phone	Emergency Number
MDA Regional Nutrient Management (Region)	410-621-9310	410-621-9310
Health Department		
Sherriff's Office		
University of Maryland Extension Office (Princess Anne)	410-621-9310	410-621-9310

Integrator Information

Name	Address	Phone
Amick Farms	274 Nealson Street, Hurlock MD 21643	410-943-3989

SOMERSET COUNTY SERVICE CENTER 30730 PARK DR
PRINCESS ANNE, MD 21853-1014
(410) 651-0370

Conservation Plan

AR Farm LLC c/o Mohammad Rehman 4723
stockton rd pocomoke md 21851

Install the conservation practices, enhancements, and activities according to the implementation requirements, designs, construction plans, or other documents that facilitate meeting the applicable NRCS technical criteria. If you do not have such information, contact your local office before starting to install your conservation practices, enhancements, and activities.

Animal Mortality Facility (316)

A dead bird composting facility for the economical and environmentally safe disposal of dead poultry has been constructed and expanded at the location shown on the plan map. The structure was built according to NRCS / MACS standards and specifications and maintained as described in the Operation and Maintenance plan. There is a 16ft channel composter and a 2bin composter on the premises

Tract	Field	Planned Amount	Month	Year	Applied Amount	Date
2190	**HQ**	**1.NO**	**8**	**2015**	**1.no**	**12/2/2015**
2190	HQ	1.00 No	12	1992	1.00 No	05/03/1993

Comprehensive Nutrient Management Plan - Written (102)

Obtain a comprehensive nutrient management plan (CNMP) that describes and documents a conservation system within a conservation plan that is unique to animal feeding operations. The CNMP addresses all aspects of the Animal Feeding Operation including manure handling, nutrient management, feed management, and other conservation practices. Maryland Department of the Environment requires that a CNMP that is developed to meet EPA/MDE CAFO regulatory requirements to control soil erosion and protect water quality must be implemented as scheduled. Any CNMP components that are funded through cost-share programs must also be implemented as scheduled.

Tract	Field	Planned Amount	Month	Year	Applied Amount	Date
324	HQ	1.00 No	09	2026		

Comprehensive Nutrient Management Plan - Written (102)

Obtain a comprehensive nutrient management plan (CNMP) that describes and documents a conservation system within a conservation plan that is unique to animal feeding operations. The CNMP addresses all aspects of the Animal Feeding Operation including manure handling, nutrient management, feed management, and other conservation practices. Maryland Department of the Environment requires that a CNMP that is developed to meet EPA/MDE CAFO regulatory requirements to control soil erosion and protect water quality must be implemented as scheduled. Any CNMP components that are funded through cost-share programs must also be implemented as scheduled.

The original CNMP was completed in 2010 with EQIP funding. The updated plan represents currnet conditions under the more
current MDE permit.

Tract	Field	Planned Amount	Month	Year	Applied Amount	Date
324	HQ	1.00 No	04	2016	1.00 No	04/08/2016

Heavy Use Area Protection (561)

Construct a Heavy Use Area pad (HUA) at the load-out doors of the poultry house. The Heavy Use Area pads will reduce erosion and improve water quality by providing a stable area for handling manure during partial or total cleanout. Follow the NRCS engineering design provided and the required Operation and Maintenance plan. A sign, provided by NRCS, will be posted so that the O&M requirements are clearly understood. Follow all EQIP contract requirements. There are a total of 10 Heavy Use Area pads on the premises. Each chicken house has one at the front and back. Both PWSS also has one pad located on the front

Tract	Field	Planned Amount	Month	Year	Applied Amount	Date
2190	HQ	1600 sq ft	08	2015	1600 sq ft	12/02/2015
2190	HQ	1600 sq ft	08	2015	1600 sq ft	12/02/2015
2190	HQ	1600 sq ft	08	2015	1600 sq ft	12/02/2015
2190	HQ	1600 sq ft	08	2015	1600 sq ft	12/02/2015
2190	HQ	1600 sq ft	08	2015	1600 sq ft	12/02/2015
2190	HQ	1600 sq ft	10	2010	1600 sq ft	09/22/2011
2190	HQ	1600 sq ft	10	2010	1600 sq ft	09/22/2011
2190	HQ	1600 sq ft	10	2010	1600 sq ft	09/22/2011
2190	HQ	1600 sq ft	10	2010	1600 sq ft	09/22/2011
2190	HQ	1600 sq ft	10	2010	1600 sq ft	09/22/2011

Waste Storage Facility (313)

A manure storage structure has been constructed at the location shown on the plan map. The structure was built and expanded according to NRCS / MACS design, and operated and maintained in accordance with a Comprehensive Nutrient Management Plan or a Waste Management System plan developed for this operation. There are two PWSS on the premises there dimensions are 40' x 76' and 40' x 84'

Tract	Field	Planned Amount	Month	Year	Applied Amount	Date
324	HQ	1.00 No	8	2015	1.00 No	12/02/2015
324	HQ	1.00 No	12	1992	1.00 No	05/03/1993

To protect soil and water quality

CERTIFICATION OF PARTICIPANTS

09/28/2026

AR Farm LLC c/o Mohammad Rehman

CERTIFICATION OF:

9/28/26

CERTIFIED PLANNER DATE

CONSERVATION DISTRICT

5-28-26

DATE

PUBLIC BURDEN STATEMENT

According to the Paperwork Reduction Act of 1995, an agency may not conduct or sponsor, and a person is not required to respond to a collection of information unless it displays a valid OMB control number. The valid OMB control number for this information collections is 0578-0013. The time required to complete this information collection is estimated to average 45/0.75 minutes per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection information.

PRIVACY ACT

The above statements are made in accordance with the Privacy Act of 1974 (5 U.S.C 522a). Furnishing this information is voluntary; however failure to furnish correct, complete information will result in the withholding or withdrawal of such technical or financial assistance. The information may be furnished to other USDA agencies, the Internal Revenue Service, the Department of Justice, or other state or federal law enforcement agencies, or in response to orders of a court, magistrate, or administrative tribunal.

USDA NON-DISCRIMINATION STATEMENT

The U.S. Department of Agriculture (USDA) prohibits discrimination against its customers. If you believe you experienced discrimination when obtaining services from USDA, participating in a USDA program, or participating in a program that receives financial assistance from USDA, you may file a complaint with USDA. Information about how to file a discrimination complaint is available from the Office of the Assistant Secretary for Civil Rights. USDA prohibits discrimination in all its programs and activities on the basis of race, color, national origin, age, disability, and where applicable, sex (including gender identity and expression), marital status, familial status, parental status, religion, sexual orientation, political beliefs, genetic information, reprisal, or because all or part of an individual's income is derived from any public assistance program. (Not all prohibited bases apply to all programs.) To file a complaint of discrimination, complete, sign, and mail a program discrimination complaint form, available at any USDA office location or online at www.ascr.usda.gov, or write to:

USDA Office of the Assistant Secretary for Civil Rights 1400 Independence Avenue, SW.
Washington, DC 20250-9410

Or call toll free at (866) 632-9992 (voice) to obtain additional information, the appropriate office or to request documents. Individuals who are deaf, hard of hearing, or have speech disabilities may contact USDA through the Federal Relay service at (800) 877-8339 or (800) 845-6136 (in Spanish). USDA is an equal opportunity provider, employer, and lender. Persons with disabilities who require alternative means for communication of program information (e.g., Braille, large print, audiotape, etc.) should contact USDA's TARGET Center at (202) 720-2600 (voice and TDD).

Date: 9/28/2026

Conservation Plan Map

Owner/Operator AR Farm LLC c/o Mohammad Rehman
Approximate Acres: 10.7

Assisted By: Mark Stavely
SOMERSET COUNTY SERVICE CENTER



Prepared with assistance from USDA-Natural Resources Conservation Service

0 188
Feet

Heavy Use Area Pad

N

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Soil Map—Somerset County, Maryland
(soils map)



Map Scale: 1:2,460 if printed on A landscape (11" x 8.5") sheet.

N

Meters
0 35 70 140 210

Feet
0 100 200 400 600

Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 18N WGS84

MAP LEGEND

Area of Interest (AOI)
- Area of Interest (AOI)

Soils
- Soil Map Unit Polygons
- Soil Map Unit Lines
- Soil Map Unit Points

Special Point Features
- Blowout
- Borrow Pit
- Clay Spot
- Closed Depression
- Gravel Pit
- Gravelly Spot
- Landfill
- Lava Flow
- Marsh or swamp
- Mine or Quarry
- Miscellaneous Water
- Perennial Water
- Rock Outcrop
- Saline Spot
- Sandy Spot
- Severely Eroded Spot
- Sinkhole
- Slide or Slip
- Sodic Spot
- Spoil Area
- Stony Spot
- Very Stony Spot
- Wet Spot
- Other
- Special Line Features

Water Features
- Streams and Canals

Transportation
- Rails
- Interstate Highways
- US Routes
- Major Roads
- Local Roads

Background
- Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:12,000.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL:
Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Somerset County, Maryland
Survey Area Data: Version 18, Aug 27, 2021

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Apr 1, 2020—Oct 1, 2020

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Minor map unit components are excluded from this report.

Somerset County, Maryland

Map Unit: OoA—Othello silt loam, loamy substratum, 0 to 2 percent slopes

Component: Othello, undrained (50%)

The Othello, undrained component makes up 50 percent of the map unit. Slopes are 0 to 2 percent. This component is on flats, lowlands. The parent material consists of silty eolian deposits and/or fluviomarine sediments. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is poorly drained. Water movement in the most restrictive layer is moderately low. Available water to a depth of 60 inches (or restricted depth) is very high. Shrink-swell potential is low. This soil is not flooded. It is occasionally ponded. A seasonal zone of water saturation is at 5 inches (depth from the mineral surface is 3 inches) during January, February, March, April. Organic matter content in the surface horizon is about 68 percent. Below this thin organic horizon the organic matter content is about 5 percent. Nonirrigated land capability classification is 4w. This soil meets hydric criteria.

Component: Othello, drained (40%)

The Othello, drained component makes up 40 percent of the map unit. Slopes are 0 to 2 percent. This component is on flats, lowlands. The parent material consists of silty eolian deposits and/or fluviomarine sediments. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is poorly drained. Water movement in the most restrictive layer is moderately low. Available water to a depth of 60 inches (or restricted depth) is very high. Shrink-swell potential is low. This soil is not flooded. It is rarely ponded. A seasonal zone of water saturation is at 14 inches during January, February, March, April. Organic matter content in the surface horizon is about 2 percent. Nonirrigated land capability classification is 3w. Irrigated land capability classification is 3w. This soil meets hydric criteria.

Component: Hurlock (5%)

Generated brief soil descriptions are created for major soil components. The Hurlock soil is a minor component.

Component: Annemessex (5%)

Generated brief soil descriptions are created for major soil components. The Annemessex soil is a minor component.

Map Unit: OtA—Othello silt loams, 0 to 2 percent slopes, Northern Tidewater Area

Component: Othello, drained (50%)

The Othello, drained component makes up 50 percent of the map unit. Slopes are 0 to 2 percent. This component is on flats, coastal plains. The parent material consists of silty eolian deposits over fluviomarine deposits. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is poorly drained. Water movement in the most restrictive layer is moderately low. Available water to a depth of 60 inches (or restricted depth) is moderate. Shrink-swell potential is low. This soil is not flooded. It is rarely ponded. A seasonal zone of water saturation is at 14 inches during January, February, March, April. Organic matter content in the surface horizon is about 2 percent. Nonirrigated land capability classification is 3w. This soil meets hydric criteria. There are no saline horizons within 30 inches of the soil surface.

Component: Othello, undrained (30%)

The Othello, undrained component makes up 30 percent of the map unit. Slopes are 0 to 2 percent. This component is on flats on coastal plains. The parent material consists of silty eolian deposits over fluviomarine deposits. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is poorly drained. Water movement in the most restrictive layer is moderately low. Available water to a depth of 60 inches (or restricted depth) is high. Shrink-swell potential is low. This soil is not flooded. It is occasionally ponded. A seasonal zone of water saturation is at 5 inches (depth from the mineral surface is 3 inches) during January, February, March, April. Organic matter content in the surface horizon is about 68 percent. Nonirrigated land capability classification is 5w. This soil meets hydric criteria. There are no saline horizons within 30 inches of the soil surface.

Component: Fallsington, undrained (8%)

Generated brief soil descriptions are created for major soil components. The Fallsington, undrained soil is a minor component.

Component: Kentuck, undrained (7%)

Generated brief soil descriptions are created for major soil components. The Kentuck, undrained soil is a minor component.

Component: Mattapex (5%)

Generated brief soil descriptions are created for major soil components. The Mattapex soil is a minor component.

Collapse Description — Map Unit Description (Brief, Generated)

Map Unit Description

The map units delineated on the detailed soil maps in a soil survey represent the soils or miscellaneous areas in the survey area. The map unit descriptions in this report, along with the maps, provide information on the composition of map units and properties of their components.

A map unit delineation on a soil map represents an area dominated by one or more major kinds of soil or miscellaneous areas. A map unit is identified and named according to the taxonomic classification of the dominant soils. Within a taxonomic class there are precisely defined limits for the properties of the soils. On the landscape, however, the soils are natural phenomena, and they have the characteristic variability of all natural phenomena. Thus, the range of some observed properties may extend beyond the limits defined for a taxonomic class. Areas of soils of a single taxonomic class rarely, if ever, can be mapped without including areas of other taxonomic classes. Consequently, every map unit is made up of the soils or miscellaneous areas for which it is named and some minor components that belong to taxonomic classes other than those of the major soils.

The Map Unit Description (Brief, Generated) report displays a generated description of the major soils that occur in a map unit. Descriptions of non-soil (miscellaneous areas) and minor map unit components are not included. This description is generated from the underlying soil attribute data.

Additional information about the map units described in this report is available in other Soil Data Mart reports, which give properties of the soils and the limitations, capabilities, and potentials for many uses. Also, the narratives that accompany the Soil Data Mart reports define some of the properties included in the map unit descriptions.

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AFO RESOURCE CONCERNS EVALUATION WORKSHEET

Name:		AR Farm LLC c/o Mohammad Rehman		**Agency Interest #:**	92356
Planner:		Mark Stavely		**Farm # / Tract #:**	2936 / 2190
Site Visit Date:		10/1/2024		**Total Acres:**	12.0
County:		Somerset		**Production Area Acres:**	10.7
RESOURCE CONCERN		**YES**	**NO**	**Assessment**	
a.	Biosecurity measures	☐	☒	The operator is following biosecurity measures as outlined by the integrator and MDA Animal Health.	
b.	Chemical handling	☐	☒	Chemicals related to poultry production are stored in the appropriate designated storage area.	
c.	Cultural resources	☐	☒	The production area is established and there are no proposed ground disturbance activities scheduled for the area.	
d.	Feedlot area	☐	☒	Not Applicable - no feedlot area.	
e.	Floodplains	☐	☒	This is an existing operation and the production area is located in the FEMA-100 Year Floodplain as per the on-line resources available. Proper Best Management Practices are in place to mitigate and excess nutrients from leaving the premises No action necessary.	
f.	Gully erosion	☐	☒	No gully erosion was identified in the production area or associated water conveyances.	
g.	Livestock travel lanes	☐	☒	Not Applicable.	
h.	Nutrient discharge	☐	☒	There are no observable nutrient discharges occurring from the production area.	
i.	Objectionable odors	☐	☒	Normal poultry or livestock odors associated with this the type of operation or facility were noted.	
j.	Particulate matter emissions	☐	☒	Normal particulate emissions associated with a facility of this size.	
k.	Ponding, flooding, seasonal high water table	☐	☒	No abnormal ponding, flooding or high water table issues were identified.	
l.	Sediment	☐	☒	No obvious and observable sediment discharges are occurring from the production area.	
m.	Streambank/shoreline erosion	☐	☒	No streambank or shoreline areas are present in the production area.	
n.	Threatened/endangered species	☐	☒	No geospatial indicators have been identified on the production area.	
o.	Waste storage	☐	☒	There are no resource concerns identified for waste storage. Existing waste storage facilities are adequately sized for the operation and are consistent with the waste management system plan.	
p.	Waterways	☐	☒	No Maryland regulated waterways have been identified on the property.	
q.	Wetlands	☒	☐	This is an existing operation and Maryland regulated wetlands have been identified on the property and are within 100 feet from the production facilities. The location of the regulated wetland is in the production area. Best management practices are in place to protect the wetlands. All ditches and swales contain proper vegetation to filter out any excess nutrients.)	

Implementation Schedule for Farmstead

This element addresses the need for and implementation of appropriate conservation practices to meet the quality criteria for soil erosion, air and water quality.

Practice and Facility Implementation Schedule

Description	Date
All resource concerns have been addressed and no additional best management practices are recommended or required at this time.	September 2026

The schedule of conservation practices presented here has been reviewed by AR Farm LLC c/o Mohammad Rehman, who is responsible for compliance with the requirements of the agricultural farm operation.

I, AR Farm LLC c/o Mohammad Rehman, certify that as the decision-maker, I have been involved in the planning process and agree that the items/practices listed in the table above are needed on my farm operation. I understand that I am responsible for implementing these practices according to the scheduled above. Should I not be able to implement any of the above items according to the schedule, I will contact the Somerset Soil Conservation District and have this schedule revised.



AR Farm LLC c/o Mohammad Rehman

9/28/2026

Date

Operation and Maintenance for BMP's in Farmstead

This section addresses the operation and maintenance for the structural, non-structural, and land treatment measures for your farm. These documented measures require effort and expenditures throughout the life of the practice to maintain safe conditions and assure proper functioning. Operation includes the administration, management, and performance of non-maintenance actions needed to keep a completed practice safe and functioning as planned. Maintenance includes work to prevent deterioration of practices, repairing damage, or replacement of the practice if one or more components fail.

Waste Storage Facility (313)

- Check backfill areas around the structure (concrete, steel, timber, etc.) frequently for excessive settlement. Determine if the settlement is caused by backfill consolidation, piping, or failure of the structure walls or floor. Necessary repairs must be made.
- Check walls and floors often - minimum of 2 times a year when facility is empty - for cracks and/or separations. Make needed repairs immediately.
- Outlets of foundations and sub-drains should be checked frequently and kept open. The outflow from these drains should be checked when the facility is being used to determine if there is leakage from the storage structure into these drains. Leakage may be detected by the color and smell of the out-flowing liquid, by lush dark-green growth of vegetation around the outlet, by the growth of algae in the surface ditch, or by the vegetation being killed by the out-flowing liquid. If leakage is detected, repairs should be planned and made to prevent the possible contamination of groundwater. To prevent erosion, a good vegetative cover should be established and maintained on berms and embankments. Plantings should be clipped 3 times a year to kill noxious weeds and encourage vigorous growth. If the vegetation is damaged, berms and embankments will need to be re-vegetated as soon as possible.
- Fences should be inspected and maintained in order to exclude livestock from the berms and embankments and to exclude unauthorized entry by people.
- Check the channels and berms of the clean water diversions around the barnyard, buildings and storage structure frequently. Channels must be protected from erosion and berms must be maintained at the proper height to ensure adequate capacity. These channels and berms should not be used as haul roads unless they are designed and constructed for this purpose.
- Check frequently for burrowing animals around buildings, structures, and in the berms and embankments. Remove them when they are found and repair any damage.
- Inspect haul roads and approaches to and from the storage facility frequently to determine the need for stone, gravel or other stabilizing material.
- Do not allow runoff from loading areas and from spills to flow into streams or road ditches.
- Examine and repair all warning and hazard signs as needed.
- Install and maintain a marking gauge post that clearly shows the design levels of one-half and full for manure storage pits, ponds, and lagoons.
- Clear blockages from roof gutters and outlets as needed.
- Notify the Soil Conservation District of any major problems or repairs needed.
- The roof must be maintained to operate as intended for the life of the practice (15 years). The function of the roof is critical because the manure storage facility is sized accordingly.

Animal Mortality Facility (316)

- Facilities for normal mortality will be operated or used on a regular basis. At each operation or use, inspect the facility to note any maintenance needs or indicators of operation problems, and promptly make repairs or adjustments to operation of the facility.
- Follow the management plan requirements for:
- The mix proportions, moisture requirements, and materials used.
- The sizing requirements.
- The timing of the disposal/utilization process including loading, unloading, and turning or aeration of the material.
- Temperature monitoring requirements, including a temperature log.
- What must be done to prevent scavenging animals and leachate problems.
- Bio-security requirements.
- If catastrophic mortality occurs, contact NRCS or the Soil Conservation District for assistance concerning proper disposal of the mortality.

Heavy Use Area Protection (561)

- Inspect the Heavy Use Area at least twice a year and after severe storm events.
- Scrape the surface as needed to remove excess manure and/or sediment.
- Repair paved areas by repairing holes and replacement of paving materials.
- Replace loose surfacing material such as gravel, cinders, sawdust, tanbark, etc. as needed when removed by livestock, equipment traffic, or scraping.
- Repair any deteriorating areas.

- Maintain all vegetation that is part of the plan by fertilizing and liming according to soil test recommendations and reseeding or replanting as necessary.
- Inspect inlets and outlets of pipes and culverts and remove any obstructions present.
- Maintain flow into filter areas by removing accumulated solids, reconstructing waterbars, etc.

SECTION 3: Land Treatment Area (Crop and/or Pasture)

This element addresses evaluation and implementation of appropriate conservation practices on sites proposed for land application of manure and organic by-products from an Animal Feeding Operation. On fields where manure and organic by-products are applied as beneficial nutrients, it is essential that runoff and soil erosion be minimized to allow for plant uptake of these nutrients.

This CNMP is considered a "No Land" plan, therefore no additional documents have been included in this section.

SECTION 4: Nutrient Management

This element addresses the Nutrient Management component of the CNMP. The nutrient management plan is developed by a Maryland Department of Agriculture certified nutrient management consultant.

Soil Sampling and Testing

Maryland Department of Agriculture regulations require up-to-date soil analyses be included in the Nutrient Management Plan. To fulfill this requirement you must follow these guidelines:

1. Soil test(s) are required to be taken every 3 years or sooner for each management unit;
2. It is recommended that soil sampling be conducted consistently at the same time of the year;
3. Soil sampling depth for P and K shall be 8 inches;
4. pH testing sampling depth for no-till is only 4 inches.

Soil testing shall include analysis for any nutrients for which specific information is needed to develop the plan. The minimum analysis for Maryland is to include: pH, organic matter, phosphorus, potassium, calcium, magnesium, and CEC.

Manure and Wastewater Testing/Analysis

Maryland Department of the Environment and the Environmental Protection Agency require an analysis of manure generated on your operation be obtained to meet conditions in a General Discharge Permit for Animal Feeding Operations under CAFO regulations. If you land-apply manure, it is a required component of your NMP according to MDA regulations. To fulfill this requirement you may do one of the following:

1. Collect a sample of manure and obtain an analysis OR
2. If exported, obtain a copy of the manure analysis from one of the farmers who will be receiving the manure from your operation

Manure should be analyzed on an annual basis from each storage structure for: % Solids or % Moisture, Total N, Organic N, NH_4 or NH_3, P_2O_5, K_2O, and pH. These analyses are part of the required Record Keeping and are stored under the Record Keeping element of this CNMP.

Description of Chemical Handling:

1. If used, most chemicals are custom applied. Minor chemicals (i.e. Bleach or Quat-A-Mone) may be stored at the operation for disinfecting purposes.

NO LAND NUTRIENT MANAGEMENT PLAN
For General Discharge Permit Coverage

Concentrated Animal Feeding Operation (CAFO) M.D.E. Agency Interest # 92356

Rancho Grande

AR Farm LLC c/o Mohammad Rehman

4723 Stockton Rd

Pocomoke City, Maryland 21851

[redacted]

PREPARED BY
SOMERSET SOIL CONSERVATION DISTRICT
30730 Park Drive • Princess Anne, MD 21853 • 410-621-9310

Plan Date: 9/28/2026

DESCRIPTION OF OPERATION

This four poultry house, c. 100,000 bird capacity, NO-LAND CAFO poultry farm is currently owned and operated by AR Farm LLC c/o Mohammad Rehman . Of the total 29 acres approximately 10.7 acres are dedicated to the poultry operation. 7.16 acres are dedicated to cropland which is operated by Coulbourne Swift c/o swift farms Inc. (5464 Green Rd Marion, MD 21838) and included in his nutrient management plan. The remaining 11.14 acres are woods.

This operation is seeking coverage under the General Discharge (GD) Permit for a Concentrated Animal Feeding Operation (CAFO) National Pollutant Discharge Elimination System (NPDES) No. MDG01 and State Discharge Permit No. 25AF for CAFOs or State Discharge Permit 25AF for Maryland Animal Feeding Operations (MAFOs).

The nutrient management plan developed for this AFO is one of the required plans that must be submitted to the Maryland Department of the Environment (MDE) by the permit applicant as part of MDE's application review process in accordance with Code of Maryland Regulations (COMAR) 26.08.04.09N, 40 Code of Federal Regulations (CFR) 122.42(e), and the conditions of the GD Permit.

PLAN DURATION: 9/28/2026 - 9/28/2031

It is the sole responsibility of the permittee to have the plan updated before its five (5) year expiration date. If this NMP is being developed for a new farm operation, a separate copy of this NMP will need to be submitted to the Maryland Department of Agriculture (MDA) to comply with Maryland's Nutrient Management Regulations under COMAR 15.20.07 and 15.20.08.

It is the sole responsibility of the permittee to obtain an immediate update to this nutrient management plan if there are any changes in the number of animals on site by 10% or more, or if the manure management changes. It is the permittee's responsibility to submit a copy of this nutrient management plan to MDE whenever there is an update or change in the plan. The permittee shall also maintain a copy of this nutrient management plan in their records to be made available upon request by MDA or MDE.

MANURE SAMPLING AND TESTING

MDE requires that the permittee shall supply the recipient of the animal waste with the most recent annual nutrient analysis of the manure and litter with samples taken within 12 months of the date of the transfer. If the recipient takes samples of the manure and litter, the permittee shall obtain a copy of the laboratory manure and litter analysis and maintain it as part of the

permittee's records.

A copy of the manure laboratory analysis must be submitted with each year's Annual Implementation Report (AIR) to MDE.

MANURE MANAGEMENT & STORAGE

The poultry houses are windrowed after each flock, there are approximately 4.5 flocks per year. Any excess manure is stored in the manure sheds (40’ X 76’and 40’ X 84’) until the receiving farm takes the litter. The last full cleanout was in 2024. The next clean out is expected in 2030 All poultry manure will either remain in the poultry house or will be stored in the designated storage facility. A minor amount of manure will be used in the animal mortality facility to facilitate the composting process.

Poultry litter and manure which is removed from the poultry houses should be placed in the waste storage structure designed specifically for this operation. Manure and litter that is collected and removed from the poultry houses is stored in the waste storage facility until it is exported by a broker to a receiving farm. If an issue should arise with manure storage and management, the permittee should contact the Somerset Soil Conservation District (SCD) or the MDE AFO program office for assistance.

Manure/litter is transferred/exported from this operation to the following:

ADH Farms
8413 Bethel Rd
Seaford, Delaware 19973

BEST MANAGEMENT PRACTICES

If there are resource concerns present on this operation, the permittee should contact the Somerset Soil Conservation District located in Princess Anne Maryland for assistance. A Comprehensive Nutrient Management Plan (CNMP) may be developed or updated to include Best Management Practices (BMPs) that follow a Natural Resources Conservation Service (NRCS) Practice Standard to address concerns such as manure and mortality management, as well as drainage issues if they should arise.

RECORD KEEPING REQUIREMENTS

MDA requires that AFO producers maintain records on manure management, animal numbers, and manure quantity. The operator is required to maintain records indicating the date, quantity and destination of litter as it is removed from the poultry houses and transported to the waste storage facility or moved off the farm. The same information is required if stored manure is transported out of the waste storage facility to other locations off the farm.

MDE requires that AFO permittees must keep records and information resulting from the monitoring, recordkeeping, reporting activities, analyses performed, calibration and maintenance of instrumentation, original recordings from continuous monitoring instrumentation, and records from the development and implementation of any CNMP or NMP and be retained for a minimum of five (5) years.

Records and information kept for the generation and management of manure and litter includes the quantity removed from the poultry houses, the date and the destination, which considers its placement in the waste storage facility, or if it is stored manure and litter being removed from the farm's waste storage facility and transferred/exported to a receiving farm site or receiver. To assist in the collection of certain records and information required by the GD Permit, the following copies of MDE's record sheets have been included with the NMP:

- Waste Storage and Containment Structure Inspection Log Sheet (MDE form)
- Manure, Litter, and Wastewater Storage Structures Documentation (MDE form)
- Manure, Litter, and Wastewater Transfer Record Keeping Form (MDE form)
- Poultry Litter Removal Data Collection Sheet (MDA form)

The GD Permit also requires the sampling of manure, litter, and process wastewater for analysis

annually, records of mortality disposal, and any additional self-inspection and recordkeeping activities as necessary.

Each registered CAFO and MAFO is required to submit to MDA by March 1 annually their AIR which includes a summary of State CAFO and MAFO and federal NPDES CAFO data collected from the previous calendar year. The data used to report to MDE annually is required to be sourced from the collected records and information kept by the permittee the previous calendar year.

Farm Identification Summary

Farm Name	Tax Account ID Numbers	Watershed Location Code	Total Acres Farmed
Rancho Grande	[redacted]	02-13-02-07-0622	0

Manure Summary Table

Animal Type and Number	Total Manure Generation (tons/yr.)*	Manure Available for Export (tons/yr.)*	Manure Storage Capacity
100,000 Broiler/flock @ 4.5/yr. = 450000 birds/yr.	794	2025 = 70 2026 = 142 2027 = 208 2028 = 266 2029 = 320 2030 = 3760	40' x 76' PWSS w/ 15,200 cu ft cubic feet of capacity 40' x 84' PWSS w/ 16,800 cu ft cubic feet of capacity



9/28/26

Date

Mark Stavely
Certified Nutrient Management Consultant
MDA Certification #4326
Somerset SCD License #4238

Poultry Litter Quantity Estimate

Name: Rancho Grande | Tract / Farm: 2190 / 2936 | Date: 9/28/2026

Houses Included: 4 | Bird Type: Broiler

		Average Bird Market Weight (lbs):	9
A.	Years between total cleanouts:	Yr. next total cleanout:	2030
		Yr. last total cleanout:	2024
		= Years in cleanout cycle:	6
B.	Total # of birds per flock (for all houses on this cleanout cycle):		100,000
C.	Flocks per year		4.5
D.	Number of flocks per cleanout cycle (A x C):		27
E.	Estimated tons of cake/crust per 1000 birds per flock: *		0.2
F.	Estimated tons of litter + cake/crust per 1000 birds per flock: *		1.765
G.	Tons cake/crust produced per flock (B x E/1000):		20
H.	Tons cake/crust produced per cycle (G x D):		540
I.	Tons litter + cake/crust produced per cycle (B x D x F/1000):		4,766
J.	Tons of litter produced per cycle (less cakeout/crustout) (I-H):		4,226
K.	Tons of litter produced per year (less cakeout/crustout) (J/A):		704
L.	Tons of litter + cake/crust produced per year (I/A):		794

* 2007 Delmarva Poultry Litter Production Estimates, George W. Malone, University of Delaware, Georgetown Delaware.

Quantity of Poultry Litter, Cake/Crust Available per Year

	M	N	O	P	Q	R	S	T
Year	Tons of litter remaining in the house from last year (N-P) + (R-S) (previous year)	Total tons of litter present in the house this year (K) + (M, this year)	% of partial or total litter to be removed this year in excess of cakeout/crustout (enter % of N removed)	Tons of litter removed this year (N x O)/100	Flocks this year	*** Tons Cake/Crust Produced this Year0 (Q x G)	Tons Cake/Crust removed this Year	Tons litter + cake/crust removed this year (P + S)
2025	0	704	10	70	4	80	0	70
2026	714	1418	10	142	5	100	0	142
2027	1376	2081	10	208	4	80	0	208
2028	1952	2657	10	266	5	100	0	266
2029	2491	3195	10	320	4	80	0	320
2030	2956	3660	100	3660	5	100	100	3760
			Total	**4666**	**27**	**540**	**100**	**4766**

*** Cake/Crust not removed due to windrowing, is added with the litter remaining in the house the following year. Windrowing may likely result in actual quantities of litter being less than the estimates shown here. The actual amount of Cake/Crust removed may also be less than the estimated amounts produced due to improved drinker systems, ventilation, etc.

SECTION 5: Additional Documentation

This section is included if there are additional documents needed for the Comprehensive Nutrient Management Plan.

The following documents are located in this section:

- Water Conveyance Map Around Production Area
- Online References
- Manure Export Form
- Monthly Animal & Mortality Count
- Inspection/Monitoring Records
- Weekly Wastewater Form
- Manure Litter Storage Form
- Manure Litter Transfer Form
- Daily Waterline Form

Date: 9/282026

Water Conveyance Map

Owner/Operator: AR Farm LLC c/o
Mohammad Rehman
Approximate Acres: 10

Assisted By: Mark Stavely
SOMERSET COUNTY SERVICE CENTER



Prepared with assistance from USDA-Natural Resources Conservation Service

0 188
Feet

Drainage

N

USDA

USDA is an equal opportunity provider, employer, and lender

MDE SELF INSPECTION AND RECORDKEEPING REQUIREMENTS FOR LAND & NO-LAND OPERATIONS

Type	Maintain Records of:	Frequency	Applicable to Liquid/Dry Manure Handling or Both
Land & No-Land	Any transfers of manure, litter, and process wastewater, will include the following information: 1.) Name and address of recipient and 2.) Date and quantity transferred. The permittee shall supply the recipient of the animal waste with the most recent annual nutrient analysis of the manure, litter, or process wastewater. If the recipient performs the analysis, the permittee shall obtain a copy and maintain it as part of the permittee's records.	Each occurrence	Both
Land	Each application event where manure, litter, or process wastewater is applied. Including 1.) Fields where animal waste is distributed, using field names consistent with those in the required plan, 2.) Application method, rate, time and date, 3.) Soil conditions, including instances of ponding or runoff, saturated soil, and frozen ground or snow covered ground and 4.) Weather conditions, including precipitation and temperature at the time of application and precipitation 24 hours prior to, and following, application.	Each land application event	Both
No-Land	Manure samples shall include the following information, 1.) Date sample taken, 2.) Test methods used to sample and analyze manure, litter, and process wastewater; and 3.) Results from manure, litter, and process wastewater sampling.	Annually	Both
Land & No-Land	Mortality disposal including date, numbers of animals, and method of disposal	As necessary	Both
Land & No-Land	Inspections conducted, including date, of the animal waste storage areas	Weekly	Both
Land	The results of manure samples and soil samples, including the following information, 1.) Date sample taken, 2.) Test methods used to sample and analyze manure, litter, process wastewater, and soil, 3.) Results from manure, litter, process wastewater, and soil sampling and 4.) Total amount of nitrogen and phosphorus actually applied to each field, including documentation of calculations for the total amount applied.	Annually for manure samples, at least once every three years for soil samples	Both
Land	Manure application equipment inspections, including the following information, 1.) Date inspection conducted and 2.) Calibration date; and iii. Maintenance of equipment used for manure application.	At least annually	Both
Land & No-Land	Inspections, including date, of the storm water routing structures	Weekly	Both
Land & No-Land	Inspections, including date, for all indoor and outdoor water lines, including drinking or cooling water lines	Daily	Both
Land & No-Land	The depth of manure and process wastewater, including date of reading, as indicated by the depth marker in all liquid animal waste impoundments	Weekly	Liquid
Land & No-Land	Inspections, including date, of all wastewater operations and pumps	Weekly	Liquid
Land & No-Land	All manure, litter, and wastewater storage structures including the following information, 1.) Date inspection conducted, 2.) Volume for solids accumulation, 3.) Design treatment volume, 4.) Total design storage volume, 5.) Days of storage capacity and 6.) Structural stability inspection of all earthen embankment structures.	As necessary	Liquid
Land & No-Land	Any additional self – inspection and recordkeeping activities required by this General Permit	As necessary	Both

Self-Inspection and Recordkeeping for CAFOs/MAFOs that DO NOT Land Apply (No-Land Operations):
The permittee that transports all and/or some of its manure, litter, or process wastewater to an area that is not under the control of the owner or operator of the no-land operation shall maintain no-land operation records on-site for five years. The records shall be available for inspection by the Maryland Department of the Environment personnel upon request. The record shall also include a notation of periods when the facility is not in operation (out of production).

Weekly Wastewater Facilities Inspections Log Sheet

Facility Name: _____ NPDES Permit No.: _____

Instructions:
Use this form to keep records of weekly visual inspections of your wastewater facilities (including pumps, storm water and runoff diversion devices, and devices used to channel contaminated storm water to a wastewater storage or containment structure).

**Any deficiencies observed must be corrected within 30 days*

List the items that need to be inspected below:

_____ _____
_____ _____
_____ _____
_____ _____

	Date	**Initials**	**OK** (√ if no problems)	**Description of any Deficiencies Observed** (put "N/A" if none observed)	**Date Deficiency Corrected***
Week 1					
Week 2					
Week 3					
Week 4					
Week 5					
Week 6					

	Date	**Initials**	**OK** (√ if no problems)	**Description of any Deficiencies Observed** (put "N/A" if none observed)	**Date Deficiency Corrected***
Week 7					
Week 8					
Week 9					
Week 10					
Week 11					
Week 12					
Week 13					
Week 14					
Week 15					
Week 16					
Week 17					
Week 18					
Week 19					
Week 20					

	Date	**Initials**	**OK** (√ if no problems)	**Description of any Deficiencies Observed** (put "N/A" if none observed)	**Date Deficiency Corrected***
Week 21					
Week 22					
Week 23					
Week 24					
Week 25					
Week 26					
Week 27					
Week 28					
Week 29					
Week 30					
Week 31					
Week 32					
Week 33					
Week 34					

	Date	**Initials**	**OK** (√ if no problems)	**Description of any Deficiencies Observed** (put "N/A" if none observed)	**Date Deficiency Corrected***
Week 35					
Week 36					
Week 37					
Week 38					
Week 39					
Week 40					
Week 41					
Week 42					
Week 43					
Week 44					
Week 45					
Week 46					
Week 47					
Week 48					

	Date	Initials	OK (√ if no problems)	Description of any Deficiencies Observed (put "N/A" if none observed)	Date Deficiency Corrected*
Week 49					
Week 50					
Week 51					
Week 52					

Manure, Litter, and Wastewater Storage Structures Documentation

Facility Name: _____ NPDES Permit No.: _____

Instructions:
For each storage structure, provide the following information in the table below:

- Structure Type: the type of storage structure (e.g. roofed storage shed, storage pond, anaerobic lagoon…)
- Total Design Storage Volume: the total capacity the storage structure was designed to hold (e.g. 100 ft^3 or 1000 gallons)
- Design Treatment Volume: (***N/A for dry manure storage)** the treatment capacity the structure was designed to treat
- Days of Storage Capacity: (***N/A for dry manure storage)** the number of days the structure can accommodate its contents at the rate the operation places waste in it
- Volume for Solids Accumulation: the capacity of the structure available to accumulate solids

Structure Type	**Total Design Storage Volume**	**Design Treatment Volume** (N/A for dry manure storage)	**Days of Storage Capacity** (N/A for dry manure storage)	**Volume for Solids Accumulation**
PWSS	40' x 76'		15,200 cu ft	
PWSS	40' x 84'		16,800 cu ft	

Manure, Litter, and Wastewater Transfer Record Keeping Form

Facility Name: _____ NPDES Permit No.: _____

Use this sheet any time that manure or poultry litter is removed from a production or storage area and transferred to other persons (not under the control of your CAFO). Use additional sheets as necessary.

Date of Transfer (indicate whether import or export)	**Manure Type** (e.g. litter, wastewater)	**Name and Address of Person(s) Received From or Transferred To**	**Quantity Transported** (tons/gallons)

Daily Water Line Inspection Log Sheet

Facility Name: _____ NPDES Permit No.:_____

Instructions:

- Initial the form *each day* after the inspection is complete
- If a leak is detected, place a check in the "leak detected" column

January, 20____		
Day	Initials	√ if Leak Detected
1		
2		
3		
4		
5		
6		
7		
8		
9		
10		
11		
12		
13		
14		
15		
16		
17		
18		
19		
20		
21		
22		
23		
24		
25		
26		
27		
28		
29		
30		
31		
February, 20____		
Day	Initials	√ if Leak Detected
1		
2		
3		
4		
5		
6		
7		
8		
9		
10		

11		
12		
13		
14		
15		
16		
17		
18		
19		
20		
21		
22		
23		
24		
25		
26		
27		
28		
29		

March, 20____		
Day	Initials	√ if Leak Detected
1		
2		
3		
4		
5		
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7		
8		
9		
10		
11		
12		
13		
14		
15		
16		
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18		
19		
20		
21		
22		
23		
24		
25		
26		
27		
28		
29		
30		
31		

April, 20____		
Day	Initials	√ if Leak Detected

1		
2		
3		
4		
5		
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7		
8		
9		
10		
11		
12		
13		
14		
15		
16		
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18		
19		
20		
21		
22		
23		
24		
25		
26		
27		
28		

29		
30		

May, 20____		
Day	Initials	√ if Leak Detected
1		
2		
3		
4		
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12		
13		
14		
15		
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19		
20		
21		
22		
23		
24		

25		
26		
27		
28		
29		
30		
31		

June, 20____		
Day	Initials	√ if Leak Detected
1		
2		
3		
4		
5		
6		
7		
8		
9		
10		
11		
12		
13		
14		
15		
16		
17		
18		
19		

20		
21		
22		
23		
24		
25		
26		
27		
28		
29		
30		

July, 20____		
Day	Initials	√ if Leak Detected
1		
2		
3		
4		
5		
6		
7		
8		
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10		
11		
12		
13		
14		
15		

16		
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19		
20		
21		
22		
23		
24		
25		
26		
27		
28		
29		
30		
31		

August, 20____		
Day	Initials	√ if Leak Detected
1		
2		
3		
4		
5		
6		
7		
8		
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10		

11		
12		
13		
14		
15		
16		
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19		
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21		
22		
23		
24		
25		
26		
27		
28		
29		
30		
31		

September, 20____		
Day	Initials	√ if Leak Detected
1		
2		
3		
4		
5		

6		
7		
8		
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10		
11		
12		
13		
14		
15		
16		
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18		
19		
20		
21		
22		
23		
24		
25		
26		
27		
28		
29		
30		

October, 20____		
Day	Initials	√ if Leak Detected
1		
2		
3		
4		
5		
6		
7		
8		
9		
10		
11		
12		
13		
14		
15		
16		
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19		
20		
21		
22		
23		
24		
25		
26		
27		
28		
29		
30		
31		

November, 20____		
Day	Initials	√ if Leak Detected
1		
2		
3		
4		
5		
6		
7		
8		
9		
10		
11		
12		
13		
14		
15		
16		
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18		
19		
20		
21		
22		
23		
24		
25		
26		
27		
28		
29		
30		

December, 20____		
Day	Initials	√ if Leak Detected
1		
2		
3		
4		
5		
6		
7		
8		
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12		
13		
14		
15		
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31		

Maryland Department of Agriculture
Maryland Agricultural Cost-Share Program (MACS)

CURRENT NUTRIENT MANAGEMENT PLAN CERTIFICATION

Participants of MACS cost-share programs must certify that the agricultural operation associated with the cost-share practice(s) is following a *current* Nutrient Management Plan (NMP), to the extent required by COMAR 15.20.07. This form must be submitted to the local Soil Conservation District (SCD) office *when applying* to the MACS Program.

The SCD shall include a copy of this form with any MACS cost-share application. Applications received without this form, or with a form that is missing information, will be considered incomplete. Exception: This form may be submitted at the claim stage for Manure Transport and Manure Injection projects.

Section I. To be filled out by the Certified Nutrient Management Plan Preparer

Farm Operator Name(s)	AR Farm LLC c/o Mohammad Rehman				
Farm Name (if applicable)	Rancho Grande				
Address	27440 New Holland Crossing Rd				
	Number Street				
	Marion	MD	21838	Somerset	
	City	State	ZIP	County	
Plan Preparer Name	Mark Stavely				
Certification No.	4326	License No. (if applicable)			
Date the NMP was prepared or updated		Total Acres Under Plan	0		
Period the plan covers: Begin Date	9/28/2026	End Date	9/28/2031		

I certify that the NMP information for the farm operation listed above is true and correct. I understand that if this information has been falsified, my certification and/or license may be revoked.

Signature		9/28/2026
	Certified NM Consultant or Certified Farm Operator	Date

Section II. Farm Operator Certification

I certify that: (1) my farm is operating under a current nutrient management plan for the time period indicated above and, (2) my nutrient management plan was developed by the plan preparer named above.

Signature		9/28/2026
	Farm Operator	Date
Print Name	AR Farm LLC c/o Mohammad Rehman	

Section III. Landowner Information

(Fill out this section only if the landowner is applying for cost-share and is ***not*** the agricultural operator of the land)

Landowner Name	AR Farm LLC c/o Mohammad Rehman			
Address	27440 New Holland Crossing Rd			
	Number Street			
	Marion	MD	21838	Somerset
	City	State	ZIP	County

Maryland Department of the Environment

Weekly Storage and Containment Structure Inspections Log Sheet

Facility Name: _____ NPDES Permit No.: _____

Instructions:
Use this form to keep records of weekly visual inspections of the structures you use to store or contain manure/litter/process wastewater. Use a separate form for each structure.

**Any deficiencies observed must be corrected within 30 days*

Storage or Containment Structure: _____

	Date	**Initials**	**Depth Marker Reading** (N/A for dry manure handling)	**OK** (√ if no problems)	**Description of any Deficiencies Observed** (put "N/A" if none observed)	**Date Deficiency Corrected***
Week 1						
Week 2						
Week 3						
Week 4						
Week 5						
Week 6						
Week 7						

	Date	**Initials**	**Depth Marker Reading** (N/A for dry manure handling)	**OK** (√ if no problems)	**Description of any Deficiencies Observed** (put "N/A" if none observed)	**Date Deficiency Corrected***
Week 8						
Week 9						
Week 10						
Week 11						
Week 12						
Week 13						
Week 14						
Week 15						
Week 16						
Week 17						
Week 18						
Week 19						

	Date	**Initials**	**Depth Marker Reading** (N/A for dry manure handling)	**OK** (√ if no problems)	**Description of any Deficiencies Observed** (put "N/A" if none observed)	**Date Deficiency Corrected***
Week 20						
Week 21						
Week 22						
Week 23						
Week 24						
Week 25						
Week 26						
Week 27						
Week 28						
Week 29						
Week 30						
Week 31						

	Date	**Initials**	**Depth Marker Reading** (N/A for dry manure handling)	**OK** (√ if no problems)	**Description of any Deficiencies Observed** (put "N/A" if none observed)	**Date Deficiency Corrected***
Week 32						
Week 33						
Week 34						
Week 35						
Week 36						
Week 37						
Week 38						
Week 39						
Week 40						
Week 41						
Week 42						
Week 43						

	Date	**Initials**	**Depth Marker Reading** (N/A for dry manure handling)	**OK** (√ if no problems)	**Description of any Deficiencies Observed** (put "N/A" if none observed)	**Date Deficiency Corrected***
Week 44						
Week 45						
Week 46						
Week 47						
Week 47						
Week 49						
Week 50						
Week 51						
Week 52						

Maryland
Department of the Environment

Wes Moore, Governor
Aruna Miller, Lt. Governor

Serena McIlwain, Secretary
Suzanne E. Dorsey, Deputy Secretary

Manure, Litter, and Wastewater Transfer Record Keeping Form

Facility Name: _____ **NPDES Permit No.:** _____

Use this sheet any time that manure or poultry litter is removed from a production or storage area and transferred to other persons (not under the control of your CAFO). Use additional sheets as necessary.

Date of Transfer (indicate whether import or export)	**Manure Type** (e.g. litter, wastewater)	**Name and Address of Person(s) Received From or Transferred To**	**Quantity Transported** (tons/gallons)

Manure, Litter, and Wastewater Storage Structures Documentation

Facility Name: _____ NPDES Permit No.: _____

Instructions:
For each storage structure, provide the following information in the table below:

- Structure Type: the type of storage structure (e.g. roofed storage shed, storage pond, anaerobic lagoon…)
- Total Design Storage Volume: the total capacity the storage structure was designed to hold (e.g. 100 ft^3 or 1000 gallons)
- Design Treatment Volume: (***N/A for dry manure storage)** the treatment capacity the structure was designed to treat
- Days of Storage Capacity: (***N/A for dry manure storage)** the number of days the structure can accommodate its contents at the rate the operation places waste in it
- Volume for Solids Accumulation: the capacity of the structure available to accumulate solids

Structure Type	**Total Design Storage Volume**	**Design Treatment Volume** (N/A for dry manure storage)	**Days of Storage Capacity** (N/A for dry manure storage)	**Volume for Solids Accumulation**

Poultry Litter Removal Data Collection Sheet

OPERATOR NAME: _____ **DATE:** _____

FARM NAME: _____

A	B	C	D	E	F	G	H
Date (mm/dd/yr)	**Removal From (house or shed)**	**Load Description***	**Load Weight (Tons)****	**Number of Loads**	**Total Removed (D) x (E) = (F) (Tons)**	**Destination (on-farm shed, on-farm field or if exported; name/address of receiving party)**	**Quantity Received (if other than total removed)**

* identify type of equipment used to remove waste (i.e. truck, spreader, etc)

** if load weight is unknown, calculate it based on the following estimates: 1 cu.ft. litter = 28 lbs; 1 bushel litter = 35 lbs

1) Measure the equipment volume in cu. ft. or bushels
2) Load weight (lbs) = equipment volume in cu. ft. or bushels X lbs per cu. ft. or bushel
3) Load weight (tons) = load weight (lbs) divided by 2,000

UMCP-ANMP
07/09

The Agricultural Nutrient Management Program is funded by the Maryland Department of Agriculture.



Poultry Operation Record Keeping Guide

& QUICK REFERENCE BOOKLET



Farm Name: _____

Operator Name: _____

NPDES Permit Number: _____

Reporting Period: _____ To: _____

2021 Edition



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Common Abbreviations Associated with Poultry Operations

AC	Acre
AFO	Animal Feeding Operation
AI#	Maryland Dept. of the Environment Agency Interest #
AIR	Annual Implementation Report
BMPs	Best Management Practices
Bu	Bushel
CAFO	Confined Animal Feeding Operation
CBWI	Chesapeake Bay Watershed Initiative
CCD	CAFO Chicken Dry Manure
CNMP	Comprehensive Nutrient Management Plan
Cu Ft or CF or Ft^3	Cubic Feet
Cu Yd or CY or Yd^3	Cubic Yard
DBCF	Dead Bird Composting Facility
DNR	Maryland Department of Natural Resources
EQIP	Environmental Quality Incentives Program
FSA	Farm Service Agency
GDP or PERMIT	General Discharge Permit
HUA	Heavy Use Area Protection
K	Potassium
K_2O	Potassium Oxide
lbs or #	Pounds
Ln Ft or LF or Ft	Linear Feet
MACS	Maryland Agricultural Water Quality Cost-Share Program
MAFO	Maryland Animal Feeding Operation
MCD	MAFO Chicken Dry Manure
MDA	Maryland Department of Agriculture
MDE	Maryland Department of the Environment
mg/L	Milligrams Per Liter
MTP	Manure Transport Program
N	Nitrogen
NH_4+	Ammonium
NM	Nutrient Management
NMP	Nutrient Management Plan
NO_3-	Nitrate
NOI	Notice of Intent
NPDES	National Pollutant Discharge Elimination System
NRCS	Natural Resources Conservation Service
O&M	Operation and Maintenance Plan
OM	Organic Matter
P	Phosphorus
P_2O_5	Phosphorus Oxide
PA	Production Area
ppm	Parts Per Million
PWSS	Poultry Waste Storage Structure
RUSLE 2	Revised Universal Soil Loss Equation 2
SCD	Soil Conservation District
SCWQP or CP	Soil Conservation and Water Quality Plan
Sq Ft or SF or Ft^2	Square Feet
T/AC	Tons Per Acre
TMDL	Total Maximum Daily Load
UME	University of Maryland Extension
USDA	United States Department of Agriculture
WIP	Watershed Implementation Plan
WMSP	Waste Management Systems Plan
WSS	Waste Storage Structure

Introduction

Poultry production is important to Maryland's economy and the Eastern Shore way of life. In addition to managing flocks and maintaining their farms, poultry growers are required to comply with a range of environmental regulations aimed at protecting water quality in Maryland's Chesapeake and Atlantic coastal bays.

Record keeping is a major aspect of a poultry grower's job. This guide is designed to assist all types of poultry operations, including Animal Feeding Operations (AFOs), Maryland Animal Feeding Operations (MAFOs) and Concentrated Animal Feeding Operations (CAFOs) in complying with record keeping requirements specified by the Maryland Department of the Environment (MDE) and the Maryland Department of Agriculture (MDA).



Included in this guide are examples of the types of records poultry growers are required to keep for MDE's programs and the National Pollutant Discharge Elimination System (NPDES) permit. In addition, record keeping examples are provided for compliance with MDA's Nutrient Management Program.

Information on best management practices (BMPs), public access, common sense approaches to biosecurity and new regulations regarding the temporary stockpiling of manure along with land application setbacks is included in this guide. Finally, this guide has contact information for local soil conservation districts, MDA Nutrient Management Program regional offices, University of Maryland Extension offices and other agencies that can assist poultry growers in complying with current and future environmental regulations.

Required Records for Poultry Growers

1 **Documentation for all manure and litter transferred**
(Importing/exporting of manure and litter)
(*MDA* & *MDE* requirement)

2 **Manure/litter land application record**
(*MDA* & *MDE* requirement)

3 **Manure application equipment inspection and calibration record**
(*MDA* & *MDE* requirement)

4 **Unpermitted nutrient discharges**
(*MDE* requirement)

5 **Weekly inspection of manure storage structure and composter**

6 **Daily water line inspection**

7 **Weekly inspection of wastewater and/or stormwater facilities**



1 Documentation for All Manure and Litter Transferred

Date (M/D/Y)	Removed From	Sent To/Receiver	Quantity Estimate (tons or cu. yds.)
Example: 2/5/21	*Houses 1 & 2 crust out*	*Waste Storage Structure*	*12 tons*
Example: 3/25/21	*Waste Storage Structure*	*Green Farms, 123 Green Farm Ln, Salisbury, MD 21801*	*100 tons*
Example: 3/25/21	*Waste Storage Structure*	*Tract 12345, Field 2*	*30 tons*
Example: 3/25/21	*Houses 3 & 4 total cleanout*	*Green Farms, 123 Green Farm Ln, Salisbury, MD 21801*	*400 tons*

Manure Estimation:
1 cu. ft. = 27-35 lbs., 27 cu. ft. = 1 cu. yd., 2,000 lbs. = 1 ton, for weight purposes, a 5 gallon bucket = 0.67 cu. ft.
Example: 1,000 cu. ft. x 31 lbs./cu. ft. x 1 ton/2,000 lbs. = 15.5 tons; 1,000 cu. ft. x 1 cu. yd./27 cu. ft. = 37 cu. yd.



Documentation for All Manure and Litter Transferred

Date (M/D/Y)	Removed From	Sent To/Receiver	Quantity Estimate (tons or cu. yds.)

Manure Estimation:
1 cu. ft. = 27-35 lbs., 27 cu. ft. = 1 cu. yd., 2,000 lbs. = 1 ton, for weight purposes, a 5 gallon bucket = 0.67 cu. ft.
Example: 1,000 cu. ft. x 31 lbs./cu. ft. x 1 ton/2,000 lbs. = 15.5 tons; 1,000 cu. ft. x 1 cu. yd./27 cu. ft. = 37 cu. yd.



Documentation for All Manure and Litter Transferred

Date (M/D/Y)	Removed From	Sent To/Receiver	Quantity Estimate (tons or cu. yds.)

Manure Estimation:
1 cu. ft. = 27-35 lbs., 27 cu. ft. = 1 cu. yd., 2,000 lbs. = 1 ton, for weight purposes, a 5 gallon bucket = 0.67 cu. ft.
Example: 1,000 cu. ft. x 31 lbs./cu. ft. x 1 ton/2,000 lbs. = 15.5 tons; 1,000 cu. ft. x 1 cu. yd./27 cu. ft. = 37 cu. yd.



Documentation for All Manure and Litter Transferred

Date (M/D/Y)	Removed From	Sent To/Receiver	Quantity Estimate (tons or cu. yds.)

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Example: 1,000 cu. ft. x 31 lbs./cu. ft. x 1 ton/2,000 lbs. = 15.5 tons; 1,000 cu. ft. x 1 cu. yd./27 cu. ft. = 37 cu. yd.



Documentation for All Manure and Litter Transferred

Date (M/D/Y)	Removed From	Sent To/Receiver	Quantity Estimate (tons or cu. yds.)

Manure Estimation:
1 cu. ft. = 27-35 lbs., 27 cu. ft. = 1 cu. yd., 2,000 lbs. = 1 ton, for weight purposes, a 5 gallon bucket = 0.67 cu. ft.
Example: 1,000 cu. ft. x 31 lbs./cu. ft. x 1 ton/2,000 lbs. = 15.5 tons; 1,000 cu. ft. x 1 cu. yd./27 cu. ft. = 37 cu. yd.

2 Manure/Litter Land Application Record

Date (M/D/Y)	Field ID	Method (surface w/ incorporation as required by MDA)	Actual Application Rate	Acres Applied	Plant Available Nitrogen (PAN) Applied (lbs.)	Total P_2O_5 Applied (lbs.)
Example: 3/30/21	*Tr12345 F2*	*surface w/ incorporation*	*2.0 t/ac*	*15.0*	*See Nutrient Management Plan*	*1,800*



Manure/Litter Land Application Record

Date (M/D/Y)	Field ID	Method (surface w/ incorporation as required by MDA)	Actual Application Rate	Acres Applied	Plant Available Nitrogen (PAN) Applied (lbs.)	Total P_2O_5 Applied (lbs.)



Manure/Litter Land Application Record

Date (M/D/Y)	Field ID	Method (surface w/ incorporation as required by MDA)	Actual Application Rate	Acres Applied	Plant Available Nitrogen (PAN) Applied (lbs.)	Total P_2O_5 Applied (lbs.)



Manure/Litter Land Application Record

Date (M/D/Y)	Field ID	Method (surface w/ incorporation as required by MDA)	Actual Application Rate	Acres Applied	Plant Available Nitrogen (PAN) Applied (lbs.)	Total P_2O_5 Applied (lbs.)



Manure/Litter Land Application Record

Date (M/D/Y)	Field ID	Method (surface w/ incorporation as required by MDA)	Actual Application Rate	Acres Applied	Plant Available Nitrogen (PAN) Applied (lbs.)	Total P_2O_5 Applied (lbs.)

3 Manure Application Equipment Inspection & Calibration Record*

Date (M/D/Y)	Inspection/Calibration Results	Re-Calibration Date (M/D/Y)
Example: 3/30/21	*Litter Spreader Calibrated at 2.0 t/ac*	*N/A*

*Local University of Maryland Extension (UME) offices can assist poultry growers in calibrating manure application equipment. Visit http://extension.umd.edu/anmp for fact sheets on how to calibrate manure application equipment.

4 Unpermitted Nutrient Discharges*

Date (M/D/Y)	Time	Quantity	Source (chicken house, manure shed, swale between chicken houses, etc.)
Example: 5/2/21	*10:00pm*	*1/2 ton*	*Manure shed*

*List all times that unpermitted discharges of contaminated water occurred from the production area to surface waters.

5 Weekly Inspection of Manure Storage Structure and Composter

Date (M/D/Y)	Visible Damage	Damage Location (if applicable)	Date of Repair
Example: 6/1/21	*Yes*	*West side – Broken board near base*	*6/1/21*
Example: 6/8/21	*Yes*	*East side – Hole in metal siding*	*6/15/21*



Weekly Inspection of Manure Storage Structure and Composter

Date (M/D/Y)	Visible Damage	Damage Location (if applicable)	Date of Repair



Weekly Inspection of Manure Storage Structure and Composter

Date (M/D/Y)	Visible Damage	Damage Location (if applicable)	Date of Repair



Weekly Inspection of Manure Storage Structure and Composter

Date (M/D/Y)	Visible Damage	Damage Location (if applicable)	Date of Repair



Weekly Inspection of Manure Storage Structure and Composter

Date (M/D/Y)	Visible Damage	Damage Location (if applicable)	Date of Repair

6 Weekly Wastewater and/or Stormwater Facilities Inspections Log Sheet

Facility Name: _____ NPDES Permit No.: _____

Instructions:
Use this form to keep records of weekly visual inspections of your wastewater facilities (including pumps, stormwater and runoff diversion devices, and devices used to channel contaminated stormwater to a wastewater storage or containment structure).

**Any deficiencies observed must be corrected within 30 days*

List the items that need to be inspected below:

_____ _____
_____ _____
_____ _____
_____ _____

	Date	**Initials**	**OK** (√ if no problems)	**Description of any Deficiencies Observed** (put "N/A" if none observed)	**Date Deficiency Corrected***
Week 1					
Week 2					
Week 3					
Week 4					
Week 5					
Week 6					

Weekly Wastewater and/or Stormwater Facilities Inspections Log Sheet

	Date	**Initials**	**OK** (√ if no problems)	**Description of any Deficiencies Observed** (put "N/A" if none observed)	**Date Deficiency Corrected***
Week 7					
Week 8					
Week 9					
Week 10					
Week 11					
Week 12					
Week 13					
Week 14					
Week 15					
Week 16					
Week 17					
Week 18					
Week 19					
Week 20					

Weekly Wastewater and/or Stormwater Facilities Inspections Log Sheet

	Date	**Initials**	**OK** (√ if no problems)	**Description of any Deficiencies Observed** (put "N/A" if none observed)	**Date Deficiency Corrected***
Week 21					
Week 22					
Week 23					
Week 24					
Week 25					
Week 26					
Week 27					
Week 28					
Week 29					
Week 30					
Week 31					
Week 32					
Week 33					
Week 34					

Weekly Wastewater and/or Stormwater Facilities Inspections Log Sheet

	Date	**Initials**	**OK** (√ if no problems)	**Description of any Deficiencies Observed** (put "N/A" if none observed)	**Date Deficiency Corrected***
Week 35					
Week 36					
Week 37					
Week 38					
Week 39					
Week 40					
Week 41					
Week 42					
Week 43					
Week 44					
Week 45					
Week 46					
Week 47					
Week 48					

Weekly Wastewater and/or Stormwater Facilities Inspections Log Sheet

	Date	**Initials**	**OK** (√ if no problems)	**Description of any Deficiencies Observed** (put "N/A" if none observed)	**Date Deficiency Corrected***
Week 49					
Week 50					
Week 51					
Week 52					

7 Daily Water Line Inspection Log Sheet

Facility Name: _____ NPDES Permit No.:_____

Instructions:

- Initial the form *each day* after the inspection is complete
- If a leak is detected, place a check in the "leak detected" column

January, 20____		
Day	Initials	√ if Leak Detected
1		
2		
3		
4		
5		
6		
7		
8		
9		
10		
11		
12		
13		
14		
15		
16		
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18		
19		
20		
21		
22		
23		
24		
25		
26		
27		
28		
29		
30		
31		
February, 20____		
Day	Initials	√ if Leak Detected
1		
2		
3		
4		
5		
6		
7		
8		
9		
10		

Daily Water Line Inspection Log Sheet

11		
12		
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21		
22		
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26		
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28		
29		

March, 20____		
Day	Initials	√ if Leak Detected
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April, 20____		
Day	Initials	√ if Leak Detected

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Daily Water Line Inspection Log Sheet

29		
30		
May, 20____		
Day	Initials	√ if Leak Detected
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June, 20____		
Day	Initials	√ if Leak Detected
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July, 20____		
Day	Initials	√ if Leak Detected
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Daily Water Line Inspection Log Sheet

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31		

August, 20____		
Day	Initials	√ if Leak Detected
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31		

September, 20____		
Day	Initials	√ if Leak Detected
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Daily Water Line Inspection Log Sheet

October, 20____		
Day	Initials	√ if Leak Detected
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November, 20____		
Day	Initials	√ if Leak Detected
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December, 20____		
Day	Initials	√ if Leak Detected
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Daily Water Line Inspection Log Sheet

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GENERAL DISCHARGE PERMIT FOR ANIMAL FEEDING OPERATIONS
MARYLAND PERMIT NO. 19AF, NPDES PERMIT NO. MDG01 Effective Date: 7.8.2020 Expiration Date: 7.7.2025

Table 3: Self - Inspection and Recordkeeping Requirements for Land Operations:

Parameter **Maintain Records of:**	Frequency	Applicable to Liquid/Dry Manure Handling or Both
a) Any transfers of manure, litter, and process wastewater, including the following information: i. Name and address of recipient ii. Date and quantity transferred The permittee shall supply the recipient of the animal waste with the most recent annual nutrient analysis of the manure, litter, or process wastewater. If the recipient performs the analysis, the permittee shall obtain a copy and maintain it as part of the permittee's records.	Each occurrence	Both
b) Each application event where manure, litter, or process wastewater is applied: i. Fields where animal waste is distributed, using field names consistent with those in the required plan; ii. Application method, rate, time and date; iii. Soil conditions, including instances of ponding or runoff, saturated soil, and frozen ground or snow covered ground; and iv. Weather conditions, including precipitation and temperature at the time of application and precipitation 24 hours prior to, and following, application	Each land application event	Both
c) Mortality disposal including date, numbers of animals, and method of disposal	As necessary	Both
d) Inspections conducted, including date, of the animal waste storage areas	Weekly	Both
e) The results of manure samples and soil samples, including the following information: i. Date sample taken; ii. Test methods used to sample and analyze manure, litter, process wastewater, and soil; iii. Results from manure, litter, process wastewater, and soil sampling; and iv. Total amount of nitrogen and phosphorus actually applied to each field, including documentation of calculations for the total amount applied	Annually for manure samples, at least once every three years for soil samples	Both
f) Manure application equipment inspections, including the following information: i. Date inspection conducted; ii. Calibration date; and	At least annually	Both

iii. Maintenance of equipment used for manure application		
g) Inspections, including date, of the storm water routing structures	Weekly	Both
h) Inspections, including date, for all indoor and outdoor water lines, including drinking or cooling water lines	Daily	Both
i) The depth of manure and process wastewater, including date of reading, as indicated by the depth marker in all liquid animal waste impoundments	Weekly	Liquid
j) Inspections, including date, of all wastewater operations and pumps	Weekly	Liquid
k) All manure, litter, and wastewater storage structures including the following information: i. Date inspection conducted; ii. Volume for solids accumulation; iii. Design treatment volume; iv. Total design storage volume; v. Days of storage capacity; and vi. Structural stability inspection of all earthen embankment structures	As necessary	Liquid
l) Any additional self – inspection and recordkeeping activities required by this General Permit	As necessary	Both

6. Self-Inspection and Recordkeeping for CAFOs/MAFOs that DO NOT Land Apply (No-Land Operations): The permittee that transports all and/or some of its manure, litter, or process wastewater to an area that is not under the control of the owner or operator of the no-land operation shall maintain no-land operation records on-site for five years. The records shall be available for inspection by Department personnel upon request. The record shall include a notation of periods when the facility is not in operation (out of production), and shall describe the following information (indicated in Table 4 below) for all periods when the CAFO/MAFO is operating, with records of operational data for each day that the facility maintains animals:

GENERAL DISCHARGE PERMIT FOR ANIMAL FEEDING OPERATIONS
MARYLAND PERMIT NO. 19AF, NPDES PERMIT NO. MDG01 Effective Date: 7.8.2020 Expiration Date: 7.7.2025

Table 4: Self - Inspection and Recordkeeping Requirements for No - Land Operations:

Parameter **Maintain Records of:**	**Frequency**	**Applicable to Liquid/Dry Manure Handling or Both**
a) All transfers of manure, litter, and process wastewater, including the following information: iii. Name and address of recipient iv. Date and quantity transferred The permittee shall supply the recipient of the animal waste with the most recent annual nutrient analysis of the manure, litter, or process wastewater. If the recipient performs the analysis, the permittee shall obtain a copy and maintain it as part of the permittee's records.	Each occurrence	Both
b) Manure samples shall include the following information: i. Date sample taken; ii. Test methods used to sample and analyze manure, litter, and process wastewater; and iii. Results from manure, litter, and process wastewater sampling	Annually	Both
c) Mortality disposal including date, number of animals, and method of disposal	As necessary	Both
d) Inspections conducted, including date, of the animal waste storage areas	Weekly	Both
e) Inspections, including date, for all indoor and outdoor water lines, including drinking or cooling water lines	Daily	Both
f) Inspections, including date, of the storm water routing structures	Weekly	Both
g) The depth of manure and process wastewater, including date of reading, as indicated by the depth marker in all liquid animal waste impoundments	Weekly	Liquid
h) Inspections, including date, of all wastewater operations and pumps	Weekly	Liquid
i) All manure, litter, and wastewater storage structures including the following information: i. Date inspection conducted; ii. Volume for solids accumulation; iii. Design treatment volume; iv. Total design storage volume; v. Days of storage capacity; and vi. Structural stability inspection of all earthen embankments structures	As necessary	Liquid
j) Any additional self – inspection and recordkeeping activities required by this General Permit	As necessary	Both



OPERATION AND MAINTENANCE OF BEST MANAGEMENT PRACTICES

Poultry Waste Storage Structure



- Keep wet manure separate from dry manure. Keep composted material separate from manure. Avoid compaction of the manure. Avoid stacking manure against the side walls. These activities will reduce the risk of fires. (see page 49).
- The maximum suggested stacking height is *eight feet* in the center of the pile.
- Schedule manure removal from the structure at proper times (usually spring when it can be used for crop production) to allow for adequate storage during the winter and the growing season.
- Check backfill areas around structure often for excessive settlement. Make repairs as necessary.
- Check walls and floors often – at least after each flock – for broken or missing boards, rusted or damaged metal sheeting and/or low spots in the floor and along the walls. Make needed repairs *immediately*.
- Remove any woody vegetation and/or noxious weeds growing around the structure.
- Check frequently for burrowing animals around buildings, structures, berms and backfill. Remove the animals and repair any damage.
- Inspect haul roads and approaches to and from the storage facility frequently to determine the need for stone, gravel or other stabilizing material.
- Do not allow runoff from loading areas or spills to flow into streams or drainage or road ditches.
- Mobile farm equipment may be *temporarily* stored within the structure as long as no manure is located outside the structure. No other equipment or items (hay, straw, boats, recreational vehicles, buses, etc.) are permitted in the structure at any time.
- No composting of mortalities is permitted in the structure except for a catastrophic loss. *MDE permitted MAFO/CAFO operations must notify MDE when composting a catastrophic loss in the waste storage structure.* Other requirements apply. See page 38.
- No manure may be stockpiled outside of the structure in the production area. Operators should contact their local soil conservation district for guidance on where to locate the stockpile.
- Manure added to or removed from the waste storage structure is required to be documented by origination, amount, date and destination (see page 5).
- Any modifications, changes or additions to the structure require prior approval of the local soil conservation district, the Natural Resources Conservation Service, and MDA if state cost-share funds were used in its construction.
- Landowners should notify the local soil conservation district of any major problems or repairs that are needed.

Dead Bird Composting Facility – DBCF

Normal Mortality - Animal mortality facilities will normally be operated or used on a daily basis. At each operation or use, the facility shall be inspected to note any maintenance needs (repair or replace any broken/damaged boards, metal sheeting and guttering) or indicators of operation problems (improper temperatures, black liquid seepage, varmints, flies, odors, etc.). See page 41.

- Daily mortalities should be covered as they are placed in the facility and a composting recipe should be followed. See page 39.
- Temperatures should be monitored daily with a composting thermometer. A temperature log is recommended.
- The bin/pile should be turned following the recipe. The second turn can be placed in the secondary alleyway of the facility or the waste storage structure. Do not place composted material against stored litter. This decreases the risk of fire.
  - Composted material, mortalities, manure, bulking agent, etc. spilling outside of the bins/channels of the facility must be cleaned up immediately.
  - Nothing is permitted to be stored in the facility with the exception of straw or other bulking agent used in the composting process.
  - Any modifications, changes or additions to the facility require prior approval from the local soil conservation district, Natural Resources Conservation Service, and MDA if state cost-share funds were used in its construction.
  - Landowners should notify the local soil conservation district when major problems or repairs are made or needed.





Catastrophic Mortality* – Composting catastrophic mortality due to heat, mechanical failure or weather events should be conducted in the waste storage structure. Any MDE permitted MAFO/CAFO operation must notify MDE when composting a catastrophic loss in the waste storage structure.

**Any catastrophic mortality caused by disease shall be composted within the poultry house. Your poultry company should contact the Maryland Department of Agriculture's Animal Health Office.*

Recipe for Composting Mortalities



Recipe

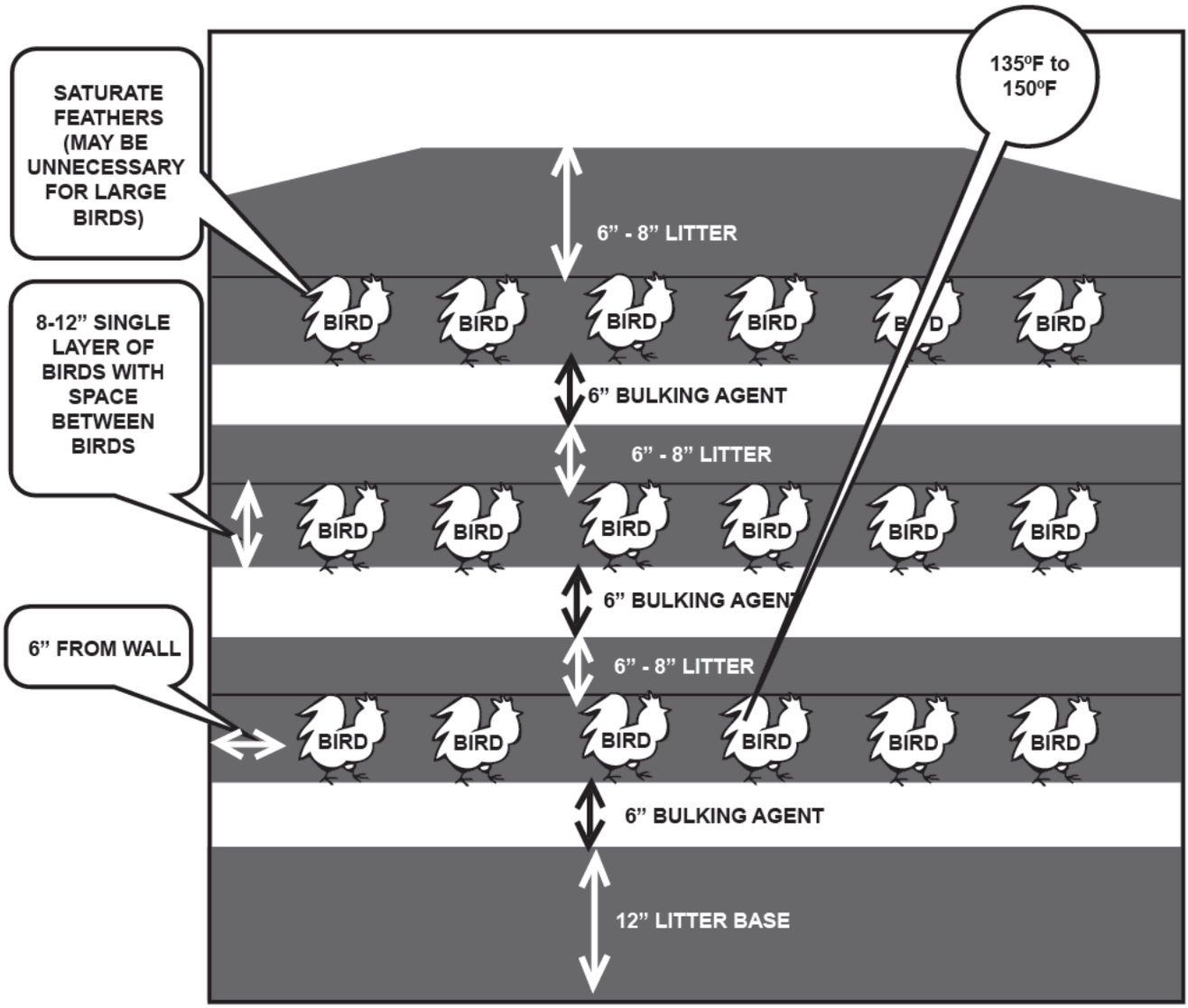
Ingredients:
One 5-gallon bucket of birds
Two 5-gallon buckets of litter
One 5-gallon bucket of bulking agent (sawdust, shavings, straw, grass clippings, leaves, etc.)
Water (saturate feathers)
36" composting thermometer (temperature should reach 135°F to 150°F within 3 to 4 days)

Instructions:

- Turn pile when temperature drops in 10 to 15 days by moving compost to a secondary bin or pile
- Mix the compost (most of the flesh should be composted with only bones and feathers remaining)
- Add litter to cover carcasses
- Raise temperature to 135ºF to 150ºF
- Compost should be complete in 10 to 15 more days
- Place composted material in waste storage structure
- To prevent fire risk, do not store finished compost with dry litter



Daily Mortality Composting Diagram





Common Problems

Improper temperatures can be caused by a pile that is too wet or dry, inactive litter (lack of microbes) or lack of oxygen.

- Add an additional carbon source (bulking agent) for a pile that is too wet.
- Add water to a pile that is too dry.
- Add fresh litter if the current litter is inactive.
- Turn the pile or add more bulking agent to increase oxygen content.

Black liquid seepage can be caused by several factors.

- Carcasses may have been layered too deep or too close to the edge of the pile.
- Too much water may have been added to the mix. The litter used may have been too wet.

Odors, flies and varmints are common problems associated with poor management of composted mortalities.

- Improper mixes or mixes that are too wet can contribute to these problems.
- Follow the recipe and cover the carcasses with litter daily to alleviate this problem.

Catastrophic Mortality Events

Catastrophic mortality events should be handled as stated in the operation's CNMP. The most common method for handling catastrophic mortalities is to windrow compost in the waste storage structure. For permitted operations, any composting within the waste storage structure MUST have prior approval of MDE. To receive approval, please call MDE at 410-537-4423 or MDA at 410-677-0802, ext. 6. Additional reporting requirements apply. See page 38.

Composting Fact Sheets

- UME FS 717 *Composting Animal Mortalities on the Farm*
- UME FS 723 *Composting Catastrophic Event Poultry Mortalities*
- UME FS 801 *Guidelines for In-House Composting of Catastrophic Poultry Mortality*
- UME MEP 324 *In-House Composting of Poultry Mortalities Due to Catastrophic Disease*

Heavy Use Area Protection – HUA

- Scrape or sweep the surface after each live haul or manure removal event to remove excess manure and/or sediment. Use of a power washer or blower is not permitted.
- Inspect the heavy use area after each live haul or manure removal event.
- Repair paved areas by patching holes and replacing paving materials.
- Replace loose surfacing material such as gravel, cinders, stone, clam shells, etc., as needed, around the area when removed by equipment traffic or by scraping.
- Maintain all vegetation that is established as part of the HUA by fertilizing and liming according to soil test recommendations and reseeding or replanting as necessary.
- No manure may be stockpiled on the heavy use area at any time.
- Any modifications, changes or additions to the structure require prior approval of the local soil conservation district, the Natural Resources Conservation Service, and MDA if state cost-share funds were used in its construction.
- Landowners should notify the local soil conservation district concerning major problems.







Roadways, Swales, Grass and Vegetative Buffers

- *Roadways* should be maintained. Any puddles and potholes should be filled and graded to decrease the possibility of manure coming in contact with ponded water.
- *Swales* should be well vegetated and have a positive grade to allow stormwater to be filtered as it leaves the site. Swales should be mowed at a height that allows the grass to act as a filter during dry spells. Herbicides should not be used in the swales, however, they may be used around the houses, fuel tanks and other structures.
- *All other grass* on site should be mowed to a height that allows it to filter stormwater.
- *Vegetative buffers* around the perimeter of the site and near the fans should be maintained to act as a visual barrier and to collect exhaust from the poultry house fans. Any trees or grasses in the buffer that die should be replaced as soon as the planting season allows.









REFERENCE MATERIAL

Maryland Department of the Environment
NOI and Fee Reminder

According to state law and regulation, MDE is legally required to collect fees for Concentrated Animal Feeding Operations (CAFOs). In September 2019, MDE proposed draft regulations that would have reduced GD Permit fees for CAFOs, however, the Office of the Attorney General and a committee within the Maryland General Assembly recently informed MDE that it may not adopt its lower fee proposal. Due to these actions, the following fees will be applicable to CAFOs applying for the GD Permit:

CAFOs with Total House Capacity of 350,000 ft^2 or More:

- A proposed new CAFO or modification of an existing CAFO to expand its house capacity to 350,000 ft^2 or more must pay a one-time application fee of $2,000 upon submission of the Notice of Intent (NOI) form.
- An existing CAFO must pay an annual permit fee of $1,200

CAFOs with Total House Capacity of LESS than 350,000 ft^2:

- A CAFO must pay an annual permit fee in the amount below, based upon the size category:

CAFO Size	Fee
Small	$120
Medium	$600
Large	$1200

As notified previously, the deadline to submit a NOI and Comprehensive Nutrient Management Plan (CNMP) for coverage under the new GD Permit was September 6, 2020. CNMPs only need to be submitted with the NOI if MDE does not already have a current one on file. If you have not yet submitted your NOI and CNMP, please do so promptly. After these items are received, MDE will send you an invoice for the appropriate fee amount.

MDE is prohibited from issuing permit coverage under the new GD Permit until the applicable fee is paid. Please keep in mind, if you are an existing operation that was registered under the prior (14AF/AFA) GD Permit, and you submitted the Notice of Continued Operation (NOCO) form as well as your NOI and CNMP within the designated timeframes- you are still covered under the prior GD Permit

Biosecurity Guidelines for Poultry Farms

- Maintain lockable gates or barriers and post *Restricted Entry, Authorized Personnel Only,* or *Do Not Enter – Biosecurity in Effect* signs at driveway entrances.
- Keep poultry houses locked; secure from the inside when working inside.
- The resident flock manager should have protective clothing (including shoes, boots, hat and gloves) when caring for flocks separate from clothing worn off the farm.
- The flock manager and other caretakers should not visit other poultry farms/ flocks without taking adequate biosecurity measures.
- Do not allow visitors in or near the poultry houses.
- Essential visitors such as poultry catchers, repairmen and service personnel must put on protective outer clothing, including boots and head gear, before they are allowed near the flocks. Tools and equipment carried into the poultry houses should be cleaned and disinfected before entering or leaving.
- Keep a record (log) of visitors, indicating their names, company or affiliation, address, telephone and last place visited.
- After caring for the flock, change clothes and wash hands and arms before leaving premises.
- Monitor vehicles entering the premises for poultry pickup or delivery, feed delivery, fuel delivery, etc., to determine if they have been scrubbed down and the undercarriage and tires spray-disinfected. If the vehicle does not appear to be properly sanitized, do not admit it to the property.



- Do not go to auctions or sales where chickens and other poultry species are being displayed or sold. These birds could carry AI, LT, MG, MS and other infectious and economically devastating diseases.
- Avoid contact with wild waterfowl and backyard chicken flocks.
- All coops, crates and poultry containers or equipment must be cleaned and disinfected before and after use.
- Sick or dying birds should be submitted to a state/university laboratory for diagnosis. Contact your flock supervisor.
- Dead birds must be properly disposed of by composting or incineration.
- When attending essential grower meetings or seminars:
  - If you have had poultry house contact, shower and change your clothing and footwear before attending the meeting.
  - Travel to the seminar in a vehicle that is not used on your farm.
  - After returning from the meeting, disinfect footwear and vehicle floor mats and change your clothing. Use different clothing, footwear and vehicle to re-enter your poultry operation.

Source: University of Maryland Extension
"Poultry Perspectives: Volume 2, Number 1; Table 2"

Public Access

- Post "No Trespassing" signs at all farm entrances.
- Ask all trespassers to leave. If they do not agree to leave after the first request, write down their names and/or license plate numbers and report them to the sheriff's department. You can use your cell phone camera to take a picture of the trespasser or license plate.
- Have all visitors provide identification. If visitors cannot produce identification, ask them to leave and schedule a time when they can come back with identification, if their reasons are valid.
- Have all visitors sign in. Write down the date and nature of their visits and whether or not they will be entering the poultry house(s).
- Have all visitors practice biosecurity measures. See page 46.
- ***Don't be afraid to ask questions.***





MDA's Nutrient Management Regulations for Organic Nutrient Sources

- **Manure, biosolids and other organic nutrient sources** must be injected or incorporated into the soil within 48 hours of application. There are exceptions for spray irrigation on a growing crop, permanent pastures, hay production fields and highly erodible fields. Exceptions and guidance can be found at **mda.maryland.gov**. Click on Nutrient Management under the "Quick Links" menu.
- **Nutrient applications** are prohibited between December 16 through February 28. This requirement applies to all poultry operations, regardless of size. See MDA's publication, *Farming with Your Nutrient Management Plan,* for more details.

Temporary Manure Stockpiling

MDA'S TEMPORARY MANURE STOCKPILING REGULATIONS

- Available manure storage shall be fully used prior to field stockpiling.
- Temporary stockpiles shall be land applied by the first spring season following the placement of the stockpile.
- Stockpile area:
  - Must be 100 feet from any surface water and irrigation or treatment ditches, or 35 feet away if a vegetative buffer is in place.
  - Must be 150 feet from wells, springs and wetlands.
  - Must be 300 feet away if a well is downhill from the stockpile.
  - Must be at least 200 feet from homes not on the operator's property.
  - Must be outside flood prone areas and areas prone to ponding.
  - Must be no farther than 150 feet from the top of a 3 percent slope with no diversion.
- Spread stockpiled manure on fields no earlier than March 1 the first spring after the stockpile was created. Follow your nutrient management plan.
- After the stockpile is removed, thoroughly scrape or clean the ground and restore the area to its original condition.
- Reseed the area with grass or a crop.



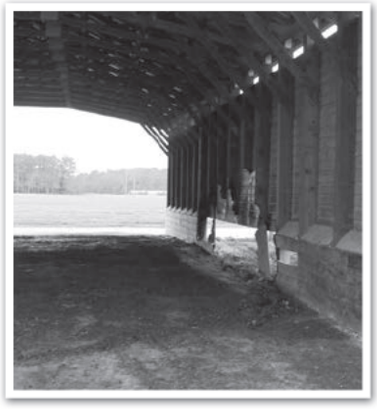


Preventing Fires in Manure Storage Structures

Fires in poultry waste storage structures are a major risk. Fires are caused by heat and methane gas produced from microbial action within the litter. If the temperature of the litter reaches 190ºF, spontaneous combustion may occur. Four main factors contribute to this risk: moisture, layering, compaction and pile size. When dry litter comes into contact with wet litter, the dry litter absorbs moisture and heat is released. This may cause overheating of the litter. When wetter, new litter is pushed against dry, old litter, a heat producing zone is created. When litter is compacted from driving over it, heat becomes trapped within the pile. The larger the pile, the greater the chance of excessive heat buildup.

Recommendations for preventing fires:

- Never mix moist litter with dry litter.
- Protect litter in the structure from wind driven rain.
- Do not wet down litter.
- Do not add composted birds to old or dry litter.
- Avoid compaction. Never drive equipment over poultry litter piles.
- Limit the pile height to 5 to 7 feet peaked in the middle of the pile and 4 feet against the walls.
- Do not permanently store equipment in the structure.
- Monitor the temperature within the pile. If the temperature reaches 190ºF or smoldering occurs, remove the manure from the pile or structure. The fire company should always be called when removing suspected burning litter because when the litter is exposed to air, it may burst into flames.





Source: University of Maryland Extension Fact Sheet 820



Soil Conservation District Field Offices

Caroline SCD 9194 Legion Road, Suite 3 Denton, Maryland 21629 410-479-1202 ext. 3	**Somerset SCD** 30730 Park Dr., Howard H. Anderson Bldg. Princess Anne, Maryland 21853 410-621-9310
Cecil SCD 105 Chesapeake Blvd., Suite B-3 Elkton, MD 21921 410-398-4411 ext. 3	**Talbot SCD** 28577 Mary's Court, Suite 3 Easton, Maryland 21601 410-822-1577 ext. 5
Dorchester SCD 204 Cedar Street, Suite 200 Cambridge, Maryland 21613 410-228-5640 ext. 3	**Wicomico SCD** 2322-B Goddard Parkway Salisbury, Maryland 21801 410-546-4777 ext. 3
Kent SCD 122 Speer Road, Suite 4 Chestertown, Maryland 21620 410-778-5150 ext. 3	**Worcester SCD** 304 Commerce Street Snow Hill, Maryland 21863 410-632-5439 ext. 3
Queen Anne's SCD 211 East Water Street Centreville, Maryland 21617 410-758-3136 ext. 3	



University of Maryland Extension Offices

Caroline 9194 Legion Road, Suite 4 Denton, Maryland 21629 410-479-4030	**University of Maryland Poultry Specialist** 27664 Nanticoke Road Salisbury, Maryland 21801-1648 410-742-1178
Cecil 200 Chesapeake Blvd., Suite 1500 Elkton, MD 21921 410-996-5280	**Somerset** 30730 Park Dr., Howard H. Anderson Bldg. Princess Anne, Maryland 21853 410-651-1350
Dorchester 501 Court Lane, Room 208 Cambridge, Maryland 21613 410-228-8800	**Talbot** 28577 Mary's Court, Suite 1 Easton, Maryland 21601 410-822-1244
Kent 709 Morgnec Road, Suite 202 Chestertown, Maryland 21620 410-778-1661	**Wicomico** 28647 Old Quantico Road Salisbury, Maryland 21801 410-749-6141
Queen Anne's 505 Railroad Avenue, Suite 4 Centreville, Maryland 21617 410-758-0166	**Worcester** P.O. Box 219, 305 Bank Street Snow Hill, Maryland 21863 410-632-1972



Maryland Department of Agriculture

50 Harry S. Truman Parkway
Annapolis, Maryland 21401
410-841-5700
mda.maryland.gov

Office of Resource Conservation Regional Nutrient Management Offices

Kent, Queen Anne's and Talbot Counties
P.O. Box 549
Cordova, MD 21625
410-279-4003

Caroline and Dorchester Counties
P.O. Box 340
Marydel, MD 21649
410-353-5660

Somerset, Wicomico and Worcester Counties
27722 Nanticoke Road, Unit 2
Salisbury, Maryland 21801
410-507-4949

Animal Health Labs

410-841-5810 or 800-492-5590 or
emergency after hours 410-841-5971

Salisbury Office
27722 Nanticoke Road
Salisbury, Maryland 21801
410-543-6610

Frederick Office
1840 Rosemount Avenue
Frederick, Maryland 21702
301-600-1548

Office of Resource Conservation Financial and Technical Assistance

Maryland Agricultural Water Quality Cost-Share (MACS) Program
50 Harry S. Truman Parkway
Annapolis, Maryland 21401
410-841-5864

Manure Transport Program
50 Harry S. Truman Parkway
Annapolis, Maryland 21401
410-841-5864

Eastern Shore Regional Office
27722 Nanticoke Road, Unit 2
Salisbury, Maryland 21801
Regional Coordinator 410-677-0802 ext. 1
CAFO/MAFO Coordinator 410-677-0802 ext. 6



Maryland Department of the Environment

CAFO/MAFO Program
1800 Washington Boulevard, Suite 610
Baltimore, Maryland 21230-1719
mde.maryland.gov
410-537-3314 or 800-633-6101 x3314



Important Dates and Deadlines

	Date
MDA & MDE Annual Reports Due	March 1
Nutrient Management Plan Expires	
Comprehensive Nutrient Management Plan Expires	
CAFO Permit Registration Date	
MDE CAFO Inspection Date	
MDE CAFO Inspection Date	
MDE CAFO Inspection Date	
MDE CAFO Inspection Date	



Numbers to Know

Emergency	911
Poultry Company	
Service Person	
Feed Mill	
Fire Company	
Ambulance	
County Sheriff's Department	
Poison Control	800-222-1222
Electric Company	
Gas Company	
County Health Department	
Electrician	
Plumber	
Clean Out Operator	
Crust Out Operator	
Nutrient Management Consultant	
Manure Receiver(s)	



Maryland
Department of Agriculture

Office of Resource Conservation

50 Harry S. Truman Parkway
Annapolis, MD 21401

410-841-5865 | mda.maryland.gov

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