MARYLAND DEPARTMENT OF THE ENVIRONMENT AI-139965 19AF Revised

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

General Discharge Permit for Animal Feeding Operations (AFOs) (19AF, MDG01)
Land and Materials Administration – Resource Management Program
Issued Pursuant to Title 9, Environment Article, *Annotated Code of Maryland*, and Code of Maryland Regulations (COMAR) 26.08.04

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.

Please submit this completed NOI Form to the following address:

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

RECEIVED
MAY 18 2021
AFO DIVISION

General Information

AI Number: 139965

1. **LEGAL Name of Applicant** *(must match name on required plan)*:
Tiny Angels LLC c/o Hien Nguyen

2. **AFO Type** *(circle one)*: (CAFO) / MAFO

3. **Applying for** *(check one)*:
☐ New Coverage *see column 'A' in Question 4*
☐ Continuation of Coverage (renewal) *see column 'B' in Question 4*
☐ Modification of 19AF Coverage *see column 'C' in Question 4*

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

A. New Coverage	B. Continuation of Coverage (renewal)	C. Modification of 19AF 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)*: o Size or number of houses o Animal number, resulting in change of size category o CAFO to MAFO, MAFO to CAFO o No-Land to Land, Land to No-Land o Conventional operation to organic	☐ 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 organic operation

Applicant (Owner/Operator Information)

5. **Mailing Address of Applicant:** 31700 Mitchell rd.
City: Princess Anne **State:** MD **Zip Code:** 21853

6. **Telephone Number(s) of Applicant:** (Home)
(Cell)

7. **Email of Applicant:**

Farm Information

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

8. **Farm Name:** ☐ Same as Legal Name
☒ Other *(please specify)*: TINY ANGELS FARM

9. **Farm Address:** 31700 Mitchell Rd.
City: Princess Anne **County:** MD **Zip Code:** 21853

10. **Watershed/Hydrologic Unit Code (HUC)** (12-digit): 021302080243

11. **Latitude/Longitude of Production Area** (Deg/Min/Sec): 39°-9"-(17S-39° 11

12. **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)*
CHICKEN WITH DRY MANURE	270,000 per flock BROILERS	LARGE	HOUSE

**For poultry only (13-16):*

13. ***Number of poultry houses:** 8

14. ***Combined square footage of *all* poultry houses:** 218,800 SF

15. ***Date(s) poultry houses constructed:** 91', 93', 95', 2015

16. ***Integrator** *(check one)*:
☐ Allen-Harim ☒ Mountaire
☐ Amick ☐ Perdue
☐ Coleman ☐ Tyson
☐ Other *(please specify)*: _____

Contact Information:
Phone No.: _____
Address: _____
_____

Manure/Mortality Management

17. Total Manure/Litter/Wastewater generated *annually*: 1869 *circle one:* (tons) / lbs / gallons)

18. Total Manure/Litter/Wastewater transported offsite *annually*: 1869 *circle one:* (tons) / lbs / gallons)

19. **Total number of acres controlled by applicant available for land application of manure/litter/process wastewater: *Owned:* (1) *Leased:* (0)

***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 is or may be applied.*

20. Manure Storage *(please list individually)*:

A. Type *(e.g. shed, lagoon, pit)*	B. Capacity (ft³) gal)	C. Solid/Liquid
SHED #1	16,000	SOLID
SHED #2	16,000	SOLID
SHED #3	35,200	SOLID

21. Mortality Management Method:

- ☑ Compost
- ☐ Freeze
- ☐ Render
- ☐ Incinerate
- ☐ Other *(please specify)*: _____

CAFOs Only - Fees

Once a completed NOI is received by MDE and processed, MDE will invoice the applicant for any permit fees owed pursuant to COMAR 26.08.04.09-1.

Required Plan

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) (19AF, 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.

Certification

By signing this form, I the applicant or duly authorized representative, 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 the representatives of MDE to have access to the AFO and associated lots/facilities (farms) for inspection and to records relating to this application at any reasonable time. I acknowledge that depending on the type of permit applied for, other permits or approvals may be required. 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.

Tiny Angels LLC Hien V Ngo — 5/18/21

Signature of Applicant / duly authorized representative — **Date**

Tiny Angels LLC c/o Hien Nguyen — owner/operator

Printed Name of Applicant / duly authorized representative — **Title**

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

CNMP WEB TOOL

Version 4.0

COMPREHENSIVE NUTRIENT MANAGEMENT PLAN

Tiny Angels Farm
Hien Nguyen

31700 Mitchell Road
Princess Anne, Maryland 21853

MAILING ADDRESS
31700 Mitchell Road
Princess Anne, Maryland 21853

PREPARED IN COOPERATION WITH THE

NRCS

U.S. Department of Agriculture
Natural Resources Conservation Service

AND THE

Somerset Soil Conservation District
30730 Park Drive
Princess Anne, MD 21853

Prepared by: Mark Stavely

Plan Date: May 2021

Poultry Operation (No Land Plan)

Concentrated Animal Feeding Operation (CAFO)
M.D.E. Agency Interest # 139965

COMPREHENSIVE NUTRIENT MANAGEMENT PLAN

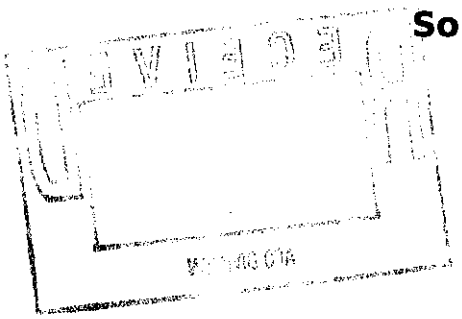
FOR

Tiny Angels Farm
Hien Nguyen

LOCATION ADDRESS
31700 Mitchell Road
Princess Anne, Maryland 21853

MAILING ADDRESS
31700 Mitchell Road
Princess Anne, Maryland 21853

PREPARED BY



Somerset Soil Conservation District
30730 Park Drive
Princess Anne, MD 21853

Plan Date:
May 2021

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 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 Hien Nguyen 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.

Hien Nguyen — 5-18-21

Hien Nguyen — Date

Certified Comphrensive 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.

5/18/2021

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	Farm Operator	Tax Account ID	Farm #	Tract #	Account ID Acres	Watershed
Moon Lighting / Sansa	Tiny Angels Farm c/o Hien C. Nguyen ETAL & Yen Hong Pham		2629	1939	50.1	02-13-02-08-0660

Description of Operation / Additional Information

Tiny Angels Farm c/o Hien Nguyen is a 8 house c. 275,500 bird, NO-LAND poultry operation, located on Mitchell Road in Somerset County. Poultry Houses 1-5 are under contract as Moon Lighting (1-5 = 40' x 500') and Poultry houses 6-8 are under contract as Sansa (6-8 = 66' x 600'). Of the 50.08 acres approximately 20.2 acres are dedicated to the Poultry Operation. The remaining 29.88 acres are dedicated to CREP program with the Farm Service Agency.

Sensitive Environmental Information

Name of nearest regulatory waterbody	Distance to nearest regulatory waterbody (ft.)	Distance to nearest regulatory wetland (ft.)
Moore Branch	168.6 ft	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
	02-13-02-08-0660	Manokin 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	Manure Generated/Produced (tons/year)*	Manure Available for Utilization/Removed (tons/year)**
Broiler	7	8	275,500	5.5	2,150	Varies see NMP

* 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 manure that is collected from the poultry houses after each flock is stored in the manure shed until it is taken by the receiving farm. The client removes cakeout after each flock. The last complete cleanout was completed in July 2020. The next complete cleanout is not scheduled, but expected to occur after 2023.

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 80'	16,000 cubic ft.	2/27/1987
Poultry	PWSS	40' x 80'	16,000 cubic ft.	11/27/1990
Poultry	PWSS	40' x 176'	35,200 cubic ft.	10/21/2015

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	C & S Farms Inc.	31509 Dogwood Lane, Laurel, Delaware 19956

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. Hien Nguyen 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	4 bins	attached to PWSS
Poultry	Composting - Bins/Channels	24' channel	attached to PWSS

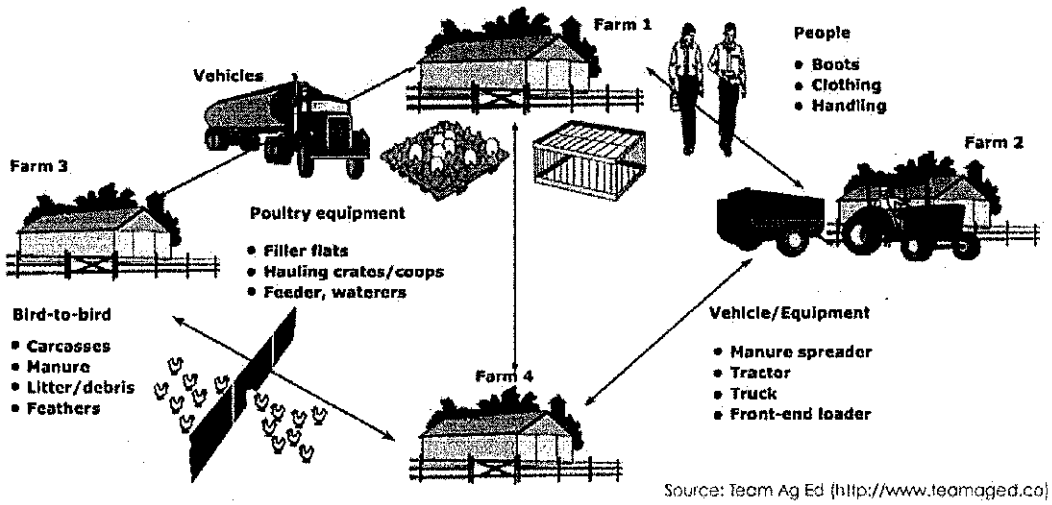
Catastrophic Mortality Management

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)



Source: Team Ag Ed (http://www.teamaged.co)

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 Hien Nguyen.

Emergency Contact Information

Farm Name	Tiny Angels Farm
Farm Address	31700 Mitchell Road, Princess Anne, Maryland 21853
Mailing Address	31700 Mitchell Road, Princess Anne, Maryland 21853
Directions to the farm	From Ocean Highway/US-13 head northeast on Arden Station Road. Continue for approximately 300 ft. and cross over Curtis Chapel Road to continue on Arden Station Road. Drive about 1.9 miles and make a left turn onto Mitchell Road. Follow Mitchell Road for about 0.7 miles. Farm will on the left.

Farm Contacts

	Name	Farm Phone	Cell Phone
Farm Owner	Hien Nguyen		
Farm Operator	Hien Nguyen		
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
Mountaire Farms	P.O. Box 1320, Millsboro DE 19966	302-934-1100

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

NELSON BRICE
DISTRICT CONSERVATIONIST

Conservation Plan

HIEN CHI NGUYEN
31700 MITCHELL ROAD
PRINCESS ANNE, MD 21853

OBJECTIVE(S)

Obtain a CNMP to help aid in the process of protecting water and soil quality while maintaining a productive and profitable poultry operation.

Farmstead

Tract: 1939

Amendments for the Treatment of Agricultural Waste

A litter amendment will be applied to the poultry house/s to reduce ammonia volatilization and to increase the proportion of nitrogen in the litter, making a more valuable and balanced fertilizer. Some amendments are also effective at reducing phosphorus solubility. Litter amendments can include the following: AL+, liquid AL+, Dry Alum, PLT, and Poultry Guard. See attached check sheet for the proper timing and application of the amendment.

Field	Planned Amount	Month	Year	Applied Amount	Date
HQ	288 ani	9	2014		
HQ	288 ani	9	2014		
HQ	288 ani	9	2015		
Total:	864 ani				

Animal Mortality Facility

Maintain existing 4 bin dead poultry composting facility (DPCF) for the economical and environmentally safe disposal of dead poultry. The structure was built according to NRCS design, and operated and maintained in accordance with a Comprehensive Nutrient Management Plan or a Waste Management System plan developed for this operation. All necessary permits and notifications will be obtained before construction. DPCF must be maintained for 15 years from installation date and while farm is actively growing poultry.

Field	Planned Amount	Month	Year	Applied Amount	Date
HQ	1 no	6	1992	1 no	2/18/1993
Total:	1 no			1 no	

Animal Mortality Facility

Construct a 24' channel dead poultry composting facility (DPCF) for the economical and environmentally safe disposal of dead poultry. The structure will be built according to NRCS design, and operated and maintained in accordance with a Comprehensive Nutrient Management Plan or a Waste Management System plan developed for this operation. All necessary permits and notifications will be obtained before construction. DPCF must be maintained for 15 years from installation date and while farm is actively growing poultry.

Field	Planned Amount	Month	Year	Applied Amount	Date
HQ	1 no	4	2015	1no	10/21/2015
Total:	1 no				

Comprehensive Nutrient Management Plan - Applied

All planned practices contained in the written Comprehensive Nutrient Management Plan are applied according to NRCS standards and specifications.

Field	Planned Amount	Month	Year	Applied Amount	Date
HQ	1 no	4	2012	1 no	5/4/2012
HQ	1 no	10	2015		
Total:	2 no			1 no	

Comprehensive Nutrient Management Plan - Written

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.

Field	Planned Amount	Month	Year	Applied Amount	Date
HQ	1 no	12	2010	1 no	12/8/2010
HQ	1 no	10	2014	1 no	10/16/2014
Total:	2 no			2 no	

Heavy Use Area Protection

Maintain heavy use area (HUA Pad) at the location(s) shown on the Conservation Plan Map (HQ only) where poultry manure and other waste products are handled. The HUA pad will protect the soil from erosion and reduce nutrient contamination of surface and groundwater. The structure was built according to NRCS design, and operated and maintained in accordance with a Comprehensive Nutrient Management Plan or a Waste Management System plan developed for this operation. All necessary permits and notifications were obtained before construction. Make repairs as needed to maintain effectiveness. HUA pads must be maintained for 10 years from installation date and while farm is actively growing poultry.

Field	Planned Amount	Month	Year	Applied Amount	Date
HQ	0.1 ac	6	2009	0.1 ac	9/29/2009
HQ	0.1 ac	6	2009	0.1 ac	9/29/2009
HQ	0.1 ac	6	2009	0.1 ac	9/29/2009
HQ	0.1 ac	6	2009	0.1 ac	9/29/2009
HQ	0.1 ac	6	2009	0.1 ac	9/29/2009
HQ	0.1 ac	1	2014	0.1 ac	8/13/2013
HQ	0.1 ac	1	2014	0.1 ac	8/13/2013
HQ	0.1 ac	1	2014	0.1 ac	8/13/2013
HQ	0.1 ac	1	2014	0.1 ac	8/13/2013
HQ	0.1 ac	1	2014	0.1 ac	8/13/2013
HQ	0.1 ac	1	2014	0.1 ac	8/13/2013
Total:	1.1 ac			1.1 ac	

Heavy Use Area Protection

Construct heavy use area (HUA Pad) at the location(s) shown on the Conservation Plan Map (HQ only) where poultry manure and other waste products are handled. The HUA pad will protect the soil from erosion and reduce nutrient contamination of surface and groundwater. The structure will be built according to NRCS design, and operated and maintained in accordance with a Comprehensive Nutrient Management Plan or a Waste Management System plan developed for this operation. All necessary permits and notifications will be obtained before construction. Make repairs as needed to maintain effectiveness. HUA pads must be maintained for 10 years from installation date and while farm is actively growing poultry.

Field	Planned Amount	Month	Year	Applied Amount	Date
HQ	0.1 ac	4	2015	0.1 ac	10/21/2015
HQ	0.1 ac	4	2015	0.1ac	10/21/2015
HQ	0.1 ac	4	2015	0.1ac	10/21/2015
HQ	0.1 ac	4	2015	0.1ac	10/21/2015
HQ	0.1 ac	4	2015	0.1ac	10/21/2015
HQ	0.1 ac	4	2015	0.1ac	10/21/2015
HQ	0.1 ac	4	2015	0.1ac	10/21/2015
Total:	0.7 ac			0.7ac	

Waste Storage Facility

Maintain both existing 40' x 80' poultry waste storage structure (PWSS) at the location shown on the Conservation Plan Map (HQ only). The structure was built according to NRCS design, and operated and maintained in accordance with a Comprehensive Nutrient Management Plan or a Waste Management System plan developed for this operation. All necessary permits and notifications were obtained before construction. PWSS must be maintained for 15 years from installation date and while farm is actively growing poultry.

Field	Planned Amount	Month	Year	Applied Amount	Date
HQ	1 no	11	1985	1 no	2/27/1987
HQ	1 no	3	1990	1 no	11/27/1990
Total:	2 no			2 no	

Waste Storage Facility

Construct a 40' x 176' poultry waste storage structure (PWSS) at the location shown on the Conservation Plan Map (HQ only). The structure will be built according to NRCS design, and operated and maintained in accordance with a Comprehensive Nutrient Management Plan or a Waste Management System plan developed for this operation. All necessary permits and notifications will be obtained before construction. PWSS must be maintained for 15 years from installation date and while farm is actively growing poultry.

Field	Planned Amount	Month	Year	Applied Amount	Date
HQ	1 no	4	2015	1 no	10/21/2015
Total:	1 no				

If interested in implementing any other Best Management Practices (BMPs), technical assistance and cost-share programs are available. Feel free to contact the Somerset County USDA Service Center at 410-651-0370 for more information.

CERTIFICATION OF PARTICIPANTS

HIEN CHI NGUYEN	DATE	Certified Planner	Date
			5/18/21

CERTIFICATION OF:

DISTRICT CONSERVATIONIST	DISTRICT MANAGER
DATE	SOMERSET SCD 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

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

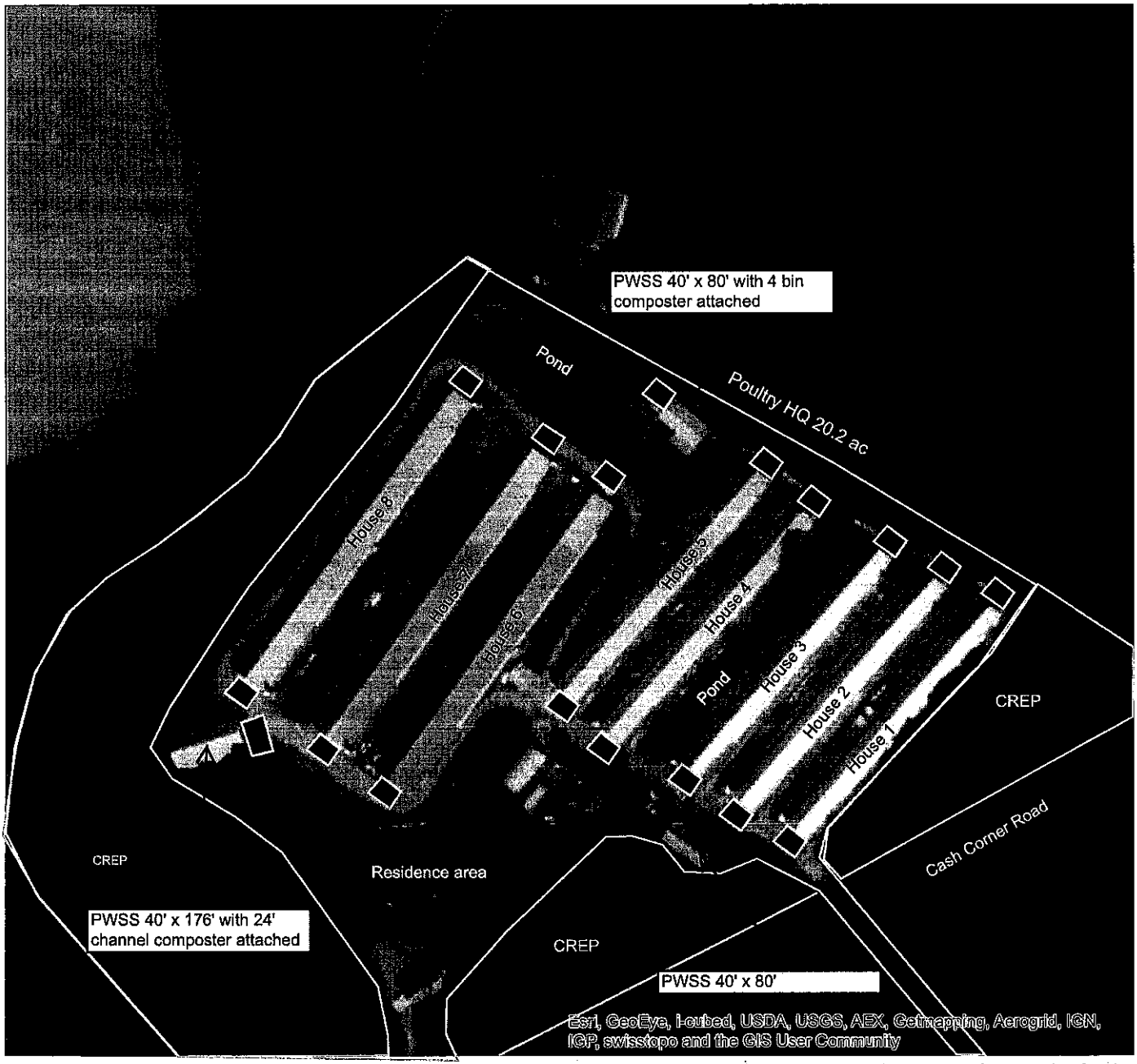
Or call toll free at (866) 632-9992 (voice) to obtain additional information, the appropriate office or to request documents. Individuals who are deaf, hard of hearing, or have speech disabilities may contact USDA through the Federal Relay service at (800) 877-8339 or (800) 845-6136 (in Spanish). USDA 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: 5/13/2021

Conservation Plan Map

Owner: HIEN NGUYEN
Operator: HIEN NGUYEN
Approximate HQ Acres: 20.2

Assisted By: Mark Stavely
SOMERSET COUNTY SERVICE CENTER



Prepared with assistance from USDA-Natural Resources Conservation Service

0 250
Feet

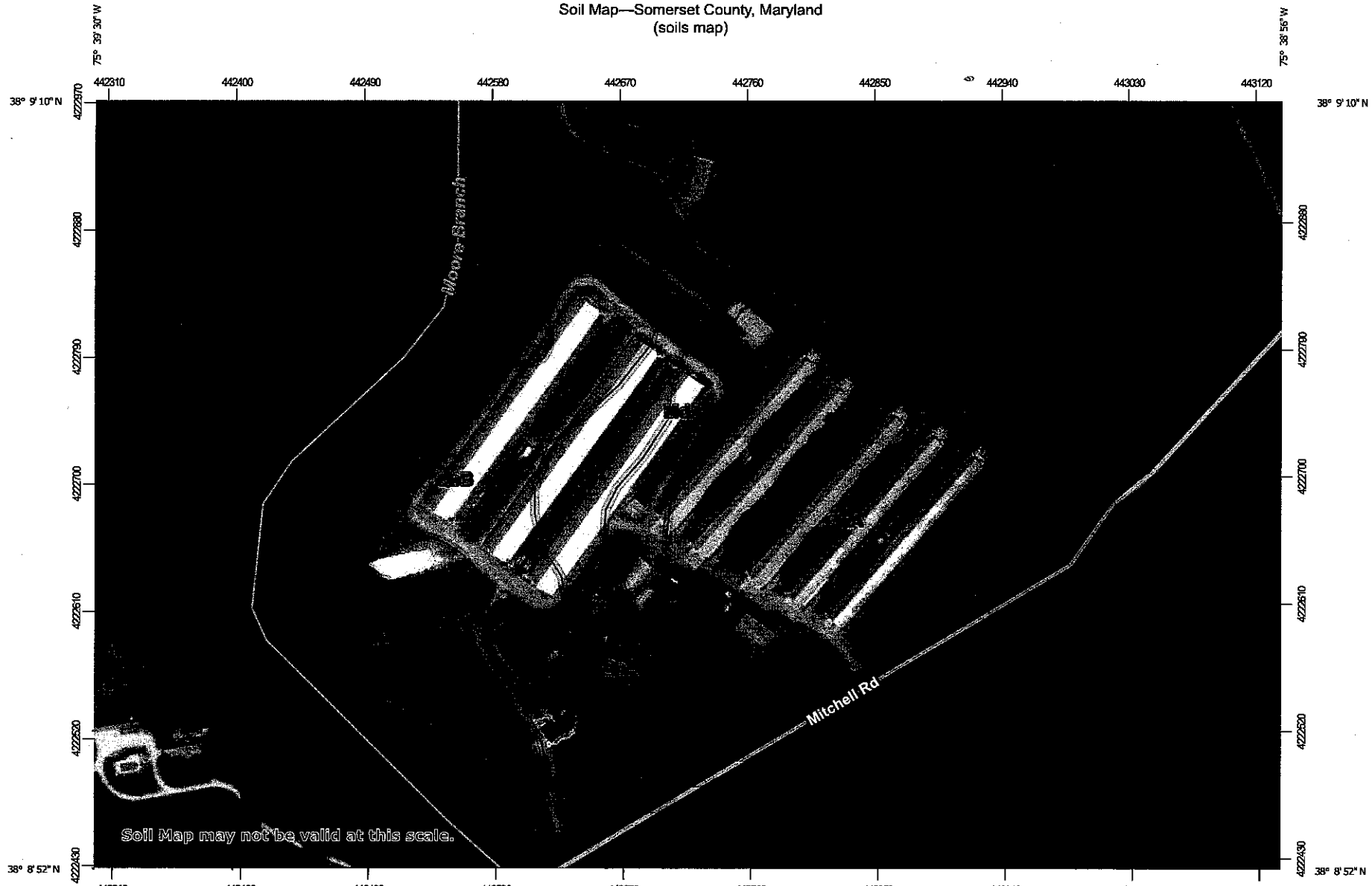
Heavy Use Area Pad

USDA

Notice All Acreage and Boundaries are Approximate!

N

Soil Map—Somerset County, Maryland
(soils map)



Map Scale: 1:3,830 if printed on A landscape (11" x 8.5") sheet.

N

Meters
0 50 100 200 300

Feet
0 150 300 600 900

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 17, Jun 11, 2020

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

Date(s) aerial images were photographed: Dec 31, 2009—Sep 24, 2017

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: LO—Longmarsh and Indiantown soils, frequently flooded

Component: Longmarsh (43%)

The Longmarsh component makes up 43 percent of the map unit. Slopes are 0 to 1 percent. This component is on flood plains, coastal plains. The parent material consists of loamy alluvium. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is very poorly drained. Water movement in the most restrictive layer is moderately high. Available water to a depth of 60 inches (or restricted depth) is moderate. Shrink-swell potential is low. This soil is frequently flooded. It is frequently ponded. A seasonal zone of water saturation is at 5 inches (depth from the mineral surface is 3 inches) during January, February, March, April, May, June, July, August, September, October, November, December. Organic matter content in the surface horizon is about 68 percent. Below this thin organic horizon the organic matter content is about 13 percent. Nonirrigated land capability classification is 5w. This soil meets hydric criteria.

Component: Indiantown (37%)

The Indiantown component makes up 37 percent of the map unit. Slopes are 0 to 1 percent. This component is on flood plains, coastal plains. The parent material consists of loamy alluvium. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is very poorly drained. Water movement in the most restrictive layer is moderately high. Available water to a depth of 60 inches (or restricted depth) is high. Shrink-swell potential is low. This soil is frequently flooded. It is frequently ponded. A seasonal zone of water saturation is at 5 inches (depth from the mineral surface is 3 inches) during January, February, March, April, May, June, July, August, September, October, November, December. Organic matter content in the surface horizon is about 68 percent. Below this thin organic horizon the organic matter content is about 12 percent. Nonirrigated land capability classification is 5w. This soil meets hydric criteria.

Component: Zekiah (10%)

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

Component: Manahawkin (5%)

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

Component: Klej (5%)

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

Map Unit: MdA—Manokin silt loam, 0 to 2 percent slopes

Component: Manokin (80%)

The Manokin component makes up 80 percent of the map unit. Slopes are 0 to 2 percent. This component is on flats, lowlands. The parent material consists of loamy eolian deposits over fluviomarine deposits. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is moderately well drained. Water movement in the most restrictive layer is moderately high. 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 not ponded. A seasonal zone of water saturation is at 24 inches during February. Organic matter content in the surface horizon is about 2 percent. Nonirrigated land capability classification is 2w. This soil does not meet hydric criteria.

Component: Glassboro (7%)

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

Component: Elkton (6%)

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

Component: Fallsington (4%)

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

Component: Hammonton (3%)

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

Map Unit: QbB—Queponco loam, 2 to 5 percent slopes

Component: Queponco (70%)

The Queponco component makes up 70 percent of the map unit. Slopes are 0 to 2 percent. This component is on flats, uplands. The parent material consists of silty eolian deposits and/or loamy eolian deposits and/or fluviomarine deposits. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is well drained. Water movement in the most restrictive layer is moderately high. 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 not ponded. A seasonal zone of water saturation is at 45 inches during January. Organic matter content in the surface horizon is about 2 percent. Nonirrigated land capability classification is 1. This soil does not meet hydric criteria.

Component: Manokin (19%)

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

Component: Woodstown (5%)

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

Component: Sassafras (3%)

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

Component: Ingleside (3%)

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

Map Unit: QeA—Queponco silt loam, 0 to 2 percent slopes

Component: Queponco (76%)

The Queponco component makes up 76 percent of the map unit. Slopes are 0 to 2 percent. This component is on flats. The parent material consists of silty eolian deposits and/or loamy eolian deposits and/or fluviomarine deposits. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is well drained. Water movement in the most restrictive layer is moderately high. 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 not ponded. A seasonal zone of water saturation is at 45 inches during January. Organic matter content in the surface horizon is about 2 percent. Nonirrigated land capability classification is 1. This soil does not meet hydric criteria.

Component: Manokin (13%)

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

Component: Sassafras (5%)

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

Component: Woodstown (3%)

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

Component: Ingleside (3%)

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

Map Unit: QuA—Quindocqua silt loam, 0 to 2 percent slopes

Component: Quindocqua, drained (46%)

The Quindocqua, drained component makes up 46 percent of the map unit. Slopes are 0 to 2 percent. This component is on flats. The parent material consists of silty eolian deposits and/or loamy eolian deposits and/or 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 high. 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 3 percent. Nonirrigated land capability classification is 3w. This soil meets hydric criteria.

Component: Quindocqua, undrained (44%)

The Quindocqua, undrained component makes up 44 percent of the map unit. Slopes are 0 to 2 percent. This component is on flats. The parent material consists of silty eolian deposits and/or loamy eolian deposits and/or 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 high. 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 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 3 percent. Nonirrigated land capability classification is 5w. This soil meets hydric criteria.

Component: Kentuck (3%)

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

Component: Glassboro (2%)

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

Component: Annemessex (2%)

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

Component: Woodstown (1%)

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

Component: Corsica (1%)

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

Component: Hurlock (1%)

Generated brief soil descriptions are created for major soil components. The Hurlock 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.

AFO RESOURCE CONCERNS EVALUATION WORKSHEET

Name:	Hien Nguyen	**Agency Interest #:**	139965
Planner:	Mark Stavely	**Farm # / Tract #:**	2629 / 1939
Site Visit Date:	5/13/2021	**Total Acres:**	50.1
County:	Somerset	**Production Area Acres:**	20.2

	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 not located in the FEMA-100 Year Floodplain as per the on-line resources available.
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	☐	☑	Maryland regulated waterways have been identified on the property and are greater than 100 feet from the production facilities. This is an existing facility with all required BMPs. No further action is required.
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 between houses 1-2. properly vegetated swales prevent any excess nutrients from harming the wetlands. Other best management practices are in place to protect the wetlands.)

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.

Note: The table below is your Conservation Practice and Facility Implementation Schedule. The practices listed in this schedule **must** be implemented according to the dates indicated. If these practices are not implemented according to schedule, please contact Mark Stavely.

Practice and Facility Implementation Schedule

Identify Resource Concern	Practice Name (NRCS Code)	Description of Practice	Date to be Implemented
PWSS with 4 bin composter has possibility to discharge excess nutrients out of the backside of the shed.		To prevent the possibility of any excess nutrients being discharged out of the backside of the PWSS add additional dirt and stone to build up area.	7/30/2025

The schedule of conservation practices presented here has been reviewed by Hien Nguyen, who is responsible for compliance with the requirements of the agricultural farm operation.

I, Hien Nguyen, 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.

Hien Nguyen

5-18-21

Date

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. All chemicals are custom applied and no chemicals are stored at the operation.
2. 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.

UNIVERSITY OF MARYLAND EXTENSION

Somerset County
30730 Park Drive
Princess Anne, MD 21853
Phone: (410) 651-1350
Fax: (410) 651-0806
amw99@umd.edu

NUTRIENT MANAGEMENT PLAN
for

Hien Nguyen
Tiny Angels Farm
31700 Mitchell Rd
Princess Anne, MD 21853

DESCRIPTION OF OPERATION: This broiler farm, growing for MountAire Farms, is located in Princess Anne, Somerset County, MD. It consists of 8 poultry houses with a total capacity of 219,000 broilers per flock. There is no land associated with this plan.

This nutrient management plan is one of the required plans needed for a CAFO permit 19AF. **It is Mr. Nguyen's responsibility to send a copy of this plan to Maryland Department of the Environment (MDE) and Maryland Department of Agriculture (MDA). New operators must also include the New Plan Reporting Form along with the nutrient management plan.**

DATE OF PLAN: August 30, 2023

DURATION OF PLAN: August 30, 2023 – August 29, 2026
An immediate update will be needed if a change in average annual number of **animal units** of 10 percent or greater occurs and if resultant manure production will require significant management adjustments.

MANURE SAMPLING AND TESTING: Maryland Department of the Environment and the Environmental Protection Agency require that CAFO operations have a copy of an analysis of the manure generated on the operation in their records. Operator may either collect a sample of manure before it is transported off-farm and obtain an analysis or obtain a copy of the manure analysis from one of the farmers who will be receiving the manure from the operation. A copy of each year's manure analysis must be submitted with each year's Annual Implementation Report (AIR).

MANURE MANAGEMENT: There are five flocks per year per flock. The houses are crusted out 4 times per year and windrowed once per year. Any excess manure is stored in the manure sheds (2 – 40'X80', 1 – 40'X176') until taken by the receiving farm. The five older houses were cleaned out to the ground in 2021. The next clean out is unknown at this time. The three newer houses were cleaned out to the ground in 2018. The next clean out is unknown at this time. For the purpose of this plan 2027 will be used as the next clean out date for all of the houses.

The operator must keep records of the quantity, date, and destination of manure removed from the houses and off the farm. **Manure is exported to the following receiving facility or farm as available: C & S Farms**

31509 Dogwood Lane
Laurel, DE 19956

FIELD STORAGE OF LITTER: Refer to the *General Discharge Permit for Animal Feeding Operations* for information for the requirements for field storage or stacking of litter.

BEST MANAGEMENT PRACTICES: Mr. Nguyen must consult the USDA-Comprehensive Nutrient Management Plan (CNMP) for this information.

RECORD KEEPING REQUIREMENTS: The Water Quality Improvement Act requires that producers maintain records on manure management, animal numbers, and manure quantity.

The operator must keep records of the quantity, date, and destination of litter as it is removed from the production houses to either storage sheds or off-farm locations. Maryland Department of Agriculture (MDA) requires operators to report this information in their Annual Implementation Report (AIR) due to MDA March 1 each year. The *Litter Removal Data Sheet* in the **Recordkeeping** section of this plan can be used for tracking movement of litter

Refer to the *General Discharge Permit for Animal Feeding Operations* for information for the type of records that are required by MDE and EPA.

Farm Identification Summary

Farm Name	Tax Account ID Numbers	Watershed Location Code	Total Acres Farmed (Cropland and Pastures)
Tiny Angels		0243	0

Manure Summary Table

Animal Type and Number	Total Manure Generation (tons/yr)*	Manure Avail. for Utilization (tons/yr)*	Manure Storage Capacity/Conditions
219,000 broilers/flock X 5 flocks/yr = 1,095,000 broilers/yr	1,554	2023 – 172 2024 – 172 2025 – 172 2026 – 172	2 – 40' X 80' sheds w/ 4 – bin composters 40' X 176' shed w/ 24' channel composter

*See manure generation sheets

Anne-Meredith Webster
Anne-Meredith Webster
Nutrient Management Advisor
Certification # 1294
License #2030

Sarah Hirsh
Sarah Hirsh
Agent - Agriculture
Certification # 4380
License # 2030

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)	Hien Nguyen			
Farm Name (if applicable)	Tiny Angels			
Address	31700 Mitchell Rd			
	Number Street			
	Princess Anne	MD	21853	Som
	City	State	ZIP	County
Plan Preparer Name	Anne-Meredith Webster			
Certification No.	1294	License No. (if applicable)		2030
Date the NMP was prepared or updated	8/30/23	Total Acres Under Plan		0
Period the plan covers: Begin Date	8/30/23	End Date		8/29/26

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	Anne-Meredith Webster	8/30/23
	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		
	Farm Operator	Date
Print Name		

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				
Address				
	Number Street			
	City	State	ZIP	County


Mitchell Rd
Mitchell Rd
Mitchell Rd
Mitchell Rd
Mitchell Rd
Mitchell Rd
Mitchell Rd
Moore Branch
Hien Nguyen
Tiny Angels Farm
Farm Address:
31700 Mitchell Road
Princess Anne, MD 21853
Tax Acct IDs:
Total Ac

UNIVERSITY OF MARYLAND EXTENSION

POULTRY LITTER QUANTITY ESTIMATE

Name: **H. Nguyen** Tract / Farm: **Tiny Angels** Date: **8/30/2023**

Houses included: **5** **Bird type:** **Broiler**

Average Bird Market Weight (lbs): **7**

A.	Years between total cleanouts: Yr. next total cleanout:	**2027**
	- Yr. last total cleanout:	**2021**
	= Years in cleanout cycle:	6
B.	Total # of birds per flock (for all houses on this cleanout cycle):	**136,875**
C.	Flocks per year	**5**
D.	Number of flocks per cleanout cycle (A x C):	30
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: *	**1.4192**
G.	Tons cake/crust produced per flock (B x E/1000):	27
H.	Tons cake/crust produced per cycle (G x D)	821
I.	Tons litter + cake/crust produced per cycle (B x D x F/1000):	5,828
J.	Tons of litter produced per cycle (less cakeout/crustout) (I - H):	5,006
K.	Tons of litter produced per year (less cakeout/crustout) (J/A):	834
L	Tons of litter + cake/crust produced per year (I/A)	971

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

Quantity of Poultry Litter, Cake/Crust Available per Year

Year	M Tons of litter remaining in the house from last year (N-P) + (R-S) (previous year)	N Total tons of litter present in the house this year (K) + (M, this year)	O % of partial or total litter to be removed this year in excess of cakeout/crustout (enter % of N removed)	P Tons of litter removed this year (N x O)/100	Q Flocks this Year	R *** Tons Cake/Crust Produced this Year (Q x G)	S Tons Cake/Crust removed this Year	T Tons litter + cake/crust removed this year (P + S)
2022	0	834	**0**	0	5	137	108	108
2023	863	1,698	**0**	0	5	137	108	108
2024	1,727	2,561	**0**	0	5	137	108	108
2025	2,590	3,424	**0**	0	5	137	108	108
2026	3,453	4,287	**0**	0	5	137	108	108
2027	4,316	5,151	**100**	5,151	5	137	137	5,288
				5,151	30	821	677	5,828

*** 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.

UNIVERSITY OF MARYLAND EXTENSION

POULTRY LITTER QUANTITY ESTIMATE

Name: **H. Nguyen** Tract / Farm: **Tiny Angels** Date: **8/30/2023**

Houses included: **3** **Bird type:** **Broiler**

Average Bird Market Weight (lbs): **7**

A.	Years between total cleanouts: Yr. next total cleanout:	**2027**
	- Yr. last total cleanout:	**2018**
	= Years in cleanout cycle:	9
B.	Total # of birds per flock (for all houses on this cleanout cycle):	**82,125**
C.	Flocks per year	**5**
D.	Number of flocks per cleanout cycle (A x C):	45
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: *	**1.4192**
G.	Tons cake/crust produced per flock (B x E/1000):	16
H.	Tons cake/crust produced per cycle (G x D)	739
I.	Tons litter + cake/crust produced per cycle (B x D x F/1000):	5,245
J.	Tons of litter produced per cycle (less cakeout/crustout) (I - H):	4,506
K.	Tons of litter produced per year (less cakeout/crustout) (J/A):	501
L	Tons of litter + cake/crust produced per year (I/A)	583

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

Quantity of Poultry Litter, Cake/Crust Available per Year

Year	M Tons of litter remaining in the house from last year (N-P) + (R-S) (previous year)	N Total tons of litter present in the house this year (K) + (M, this year)	O % of partial or total litter to be removed this year in excess of cakeout/crustout (enter % of N removed)	P Tons of litter removed this year (N x O)/100	Q Flocks this Year	R *** Tons Cake/Crust Produced this Year (Q x G)	S Tons Cake/Crust removed this Year	T Tons litter + cake/crust removed this year (P + S)
2019	0	501	**0**	0	5	82	64	64
2020	519	1,019	**0**	0	5	82	64	64
2021	1,038	1,538	**0**	0	5	82	64	64
2022	1,556	2,057	**0**	0	5	82	64	64
2023	2,075	2,576	**0**	0	5	82	64	64
2024	2,594	3,094	**0**	0	5	82	64	64
2025	3,113	3,613	**0**	0	5	82	64	64
2026	3,631	4,132	**0**	0	5	82	64	64
2027	4,150	4,651	**100**	4,651	5	82	82	4,733
				4,651	45	739	594	5,245

*** 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.

MARYLAND DEPARTMENT OF THE ENVIRONMENT
1800 Washington Boulevard • Suite 605 • Baltimore, Maryland 21230-1719
410-537-3375 • 800-633-6101 x3375 • http://www.mde.state.md.us
Land Management Administration • Solid Waste Program

Maryland Setback Standards and Approved Alternatives Consistent with CAFO/MAFO Requirements

Introduction:
The Maryland Department of the Environment (MDE) current Regulations Governing the Control of Water Pollution to address permit requirements for Concentrated Animal Feeding Operations (CAFOs) and Maryland Animal Feeding Operations (MAFO) include options for manure application setback standards in the Code of Maryland Regulations (COMAR) 26.08.03.09b(1). These setbacks for CAFOs are also included in 40 CFR Part 412.4(c)(5).

As written in Part IVB8 of the General Discharge (GD) Permit for Animal Feeding Operations (NPDES Permit No. MDG01, Maryland Permit No 09AF), the current "Protocols for the Land Application of Manure and Wastewater" include, for both CAFOs and MAFOs, the following setback provisions:

a. A **setback** of at least 100' from waters of the State, including field ditches, other conduits, intermittent streams, and drinking water wells, shall be maintained; or an **approved alternative** may be substituted for the 100' setback.
b. A setback of at least 100' from property lines shall be maintained, unless an approved alternative setback for property lines is established with the consent of the adjacent property owner.

I. Alternative Setback Option Applicable to Poultry MAFOs ONLY which is included in the GD Permit:

For slopes of 2% or less, a MAFO may satisfy the land application setback and buffer requirements of this permit by maintaining: 1) a vegetated filter strip at least 10 feet wide along field ditches and in the final 35 feet of the field ditches (applicable to ditch embankments and, to the maximum extent practicable, the channel) adjoining the receiving waters or the facility boundary, whichever occurs first, 2) a 35' vegetated filter strip or 3) a 50' setback from all other surface waters of the State.

II. Approved Alternative Setback Options to the Requirement in COMAR 26.08.03.09B(1)(a) for all CAFOs and MAFOs.

The following are the approved alternatives to the 100-foot setback, which have been established by MDE in consultation with the Maryland Department of Agriculture (MDA), Natural Resources Conservation Service (NRCS) and the University of Maryland Extension (UME).

Option 1: A 35-foot vegetative buffer strip established in accordance with the NRCS Practice Standards 390, 391, or 393, or systems as approved by MDE in coordination with the MDA, NRCS and UME which is included in the GD Permit.

The buffer strip shall consist of a permanent vegetative planting that is not part of a cropland or pasture rotation. The location, layout, and density of the buffer strip shall reflect the intended purpose of the practice, conditions of the site, and the objectives of the land user. Site preparation and planting to establish the buffer strip shall be done at a time and manner to insure survival and growth of the selected species. Select plant species that are native to Maryland, or are introduced and are non-invasive (i.e., not likely to spread beyond the planted area and displace native species). See Maryland NRCS 390, 391, and 393 Conservation Practice Standards for more details. Existing naturally vegetated areas may also qualify as buffers if they meet the criteria in the applicable standard.

Date: March 30, 2011
TTY Users: 800-201-7165

Note: For any fields with slopes 8% or above, the NRCS approved soil loss prediction tool shall be used to determine risk. If significant risk (above tolerable soil loss) is determined, the appropriate Best Management Practices to reduce soil loss risk will be implemented according to NRCS standards.

Option 2: 10-foot no nutrient application zone from Surface Waters Plus One of Three Land Treatment Practices

The producer (CAFO or MAFO) shall maintain a minimum 10-foot setback from surface waters on which no manure, chemical fertilizer or any other nutrient containing soil amendments are applied AND must implement at least ONE additional of the following Best Management Practices:

Option 2A: Winter crop establishment including small grains, brassicas, or other species in accordance with MDA Nutrient Management Plan (NMP) requirements with no nitrogen or phosphorus applications before March 1st.

Such crops shall be planted during the fall in the year manure application took place. The winter crop shall be applied to the entire field that received manure.

Option 2B: Subsurface injection or surface application of manure with incorporation within three days (72 hours) of manure or wastewater surface application.

If vertical tillage is used to minimally incorporate manure with surface residue, soil loss needs to be "T" or less as determined by RUSLE 2. Plug or spike aerators (such as Aerway®), seed bed conditioners and vertical till (such as Turbotill ™) may be used for incorporation.

Option 2C: Dry Manure Injection.

Injection of poultry litter and dry manure application (Subsurfer®).

Option 3: Other – Must be approved in writing by MDE in coordination with NRCS, UME and MDA. Applicant must demonstrate to the satisfaction of MDE and the other agencies that this option conserves and protects public health, natural resources, and the environment of the State, and controls water and land pollution to at least the same extent as would be obtained by compliance with the applicable requirements.

Policy for Part IV B(8b) of the GD Permit for Animal Feeding Operations

In accordance with 40 CFR Part 412.4(c)(5), and Part IV B(8b) of the GD Permit for Animal Feeding Operations, which states: "Protocols for the Land Application of Manure and Wastewater ... the following requirements for setbacks shall be maintained: ... b. A setback of at least 100' from property lines shall be maintained, unless an approved alternative setback for property lines is established with the consent of the adjacent property owner."

Policy: If the property line is coincident with a hydrologic conveyance to the waters of the State, then the setback requirements of Part IV B(8a) apply: A setback of at least 100' from waters of the State, including field ditches, other conduits, intermittent streams, and drinking water wells shall be maintained; or an approved alternative including options 1 through 5 may be substituted for the 100' setback."

Maryland
Department of Agriculture

Agriculture | Maryland's Leading Industry

Office of Resource Conservation

Nutrient Management Program

Larry Hogan, Governor
Boyd K. Rutherford, Lt. Governor
Joseph Bartenfelder, Secretary
Steven A. Connelly, Deputy Secretary

The Wayne A. Cawley, Jr. Building
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800.492.5590 Toll Free

Plan Implementation Review Process for Operators

(September 2007, updated January 2020)

This document explains the process of a nutrient management plan implementation review and provides the operator with information about preparing for a review.

Selection Method

Nutrient management specialists either randomly select an operation for a review, arrange a review in response to a complaint, schedule a follow-up to a previous review, and/or to discuss questions /concerns with submitted AIRs or other non-compliance issues.

Notification

Nutrient management specialists notify the selected operator by letter or telephone to schedule a plan implementation review. The letter may propose a given date and time to visit at the operation site. MDA may provide the operator the option to confirm or reschedule the meeting date and/or location for the operator's convenience.

Operator Requirements

A specialist from the MDA nutrient management program will conduct the review. The operator must make available for review the current **and** two prior years' nutrient management plans and any records associated with these plans. The specialist will randomly select one or more years' worth of plans and associated records, and compare them against nutrient application records and fertilizer receipts. The specialist will examine several fields or management units representative of the operation. Phosphorus Management Tool (PMT) calculations and implementation of any resulting best management practices will be verified. Following the review, the specialist will give the operator a copy of the plan implementation evaluation report which will include any necessary follow-up action.

Use these checklists to prepare for your Nutrient Management Plan Implementation Review.

Necessary Records (retain for 3 years):

From All Nutrient Management Plans for the Operation

- ☐ Updated operation information used for required reporting to MDA
- ☐ Operation map or aerial photo
- ☐ Soil analysis results (original lab test results)
- ☐ Manure analysis and management information (if applicable, original lab test results)
- ☐ Summary nutrient recommendations (by field and specific to the crop)
- ☐ Phosphorus Management Tool calculations (if applicable)
- ☐ Required Best Management Practices (for PMT only)

From Actual Implementation Records

- ☐ **Nutrient Type(s)** Type of nutrients applied such as fertilizer, animal manure, biosolid, etc.
- ☐ **Analysis/Nutrient content** N-P-K analysis of nutrients applied
- ☐ **Rates & Quantity** Pounds, gallons, or tons applied per acre and total amount applied per total crop acres per timing period
- ☐ **Application Timing & Method** Date(s) applied and method such as banded, sidedress, topdress, etc.
- ☐ **Manure Management Information**: Manure type, date of removal from production and/or storage facility, location stored, where applied, name and location of receiver if moved off-site, and quantity estimate
- ☐ **Actual Yield**: Specific field or management unit yield information **for the last 5 years**
- ☐ **Applicator voucher or certificate number**: Individual(s) applying or supervising application of nutrients on the operation
- ☐ **Receipts for nutrients purchased:** Receipts for all nutrients purchased and applied (all organic and inorganic sources)

Management Changes and Plan Modifications during Implementation
Management changes or unforeseen circumstance in an agricultural operation may require the operator to modify or update a plan before its expiration. Any revisions to the plan by a certified consultant or certified operator must be justified, documented and included in the records.

Questions?

Contact your local MDA regional office.

REGIONAL OFFICES

Region 1: ALLEGANY, GARRETT, and WASHINGTON COUNTIES
Keith Potter, Nutrient Management Specialist
Tel: 410-279-3506
P.O. Box 459, Hancock, MD 21750 keith.potter@maryland.gov

Region 2a: CARROLL, and FREDERICK COUNTIES
Moana Himes, Nutrient Management Specialist
Tel: 410-353-4320
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Region 2b: ANNE ARUNDEL, HOWARD, and MONTGOMERY COUNTIES
Kenny Favorite, Nutrient Management Specialist
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Region 3: CALVERT, CHARLES, PRINCE GEORGE'S, and ST. MARY'S COUNTIES
Weylin Anderson, Nutrient Management Specialist
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Region 4: BALTIMORE, CECIL, and HARFORD COUNTIES
Nick Miller, Nutrient Management Specialist
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Region 5a: KENT, QUEEN ANNE'S, and TALBOT COUNTIES
Howard Callahan, Nutrient Management Specialist
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Region 5b: CAROLINE, and DORCHESTER COUNTIES
Steve Szelestei, Nutrient Management Specialist
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Region 6: WICOMICO, SOMERSET, and WORCESTER COUNTIES
Robin Culver, Nutrient Management Specialist
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www.anmp.umd.edu

General Principles of Nutrient Management

Both farm profitability and water quality can be improved through efficient nutrient use. Manure and biosolids should be considered valuable fertilizer materials and managed in the same manner as commercial fertilizers. Soil testing is very important for the development of nutrient application rates.

Please refer to the appropriate issue of the *Nutrient Manager* (the newsletter of the ***University of Maryland Extension Agricultural Nutrient Management Program***) for more information on soil testing, nitrogen, phosphorus, potassium, sulfur, and pH and liming.

I. Nutrient Recommendations

A) *Nitrogen*:

1) Nitrogen recommendations for many crops are based on yield goals for those crops. It is important to establish realistic yield goals for each field based upon historical yield data (the average yield for the best 3 out of the last 5 years, 6 of 10, etc.).

2) Recommended application rates for nitrogen should not be exceeded.

3) The use of the Pre-Sidedress Nitrogen Test (PSNT) is recommended in the early summer after forage legumes or manure and biosolids applications to corn in order to determine if additional nitrogen is needed.

4) Residual values for nitrogen available from legumes in rotation or previous applications of manure or sludge are deducted from gross nitrogen recommendations.

5) Growing a winter cover crop is a very effective practice for reducing nitrate losses from cropland during a time of the year when leaching potential is high.

B) *Phosphorus and other nutrients*:

1) Recommendations for phosphorus, potassium and micronutrients are based on soil test values, yield goals and crop rotation. When soil test levels are high, additional nutrients, other than an in-row starter fertilizer, are not recommended for most crops.

2) Soil pH influences nutrient availability, particularly phosphorus. Soil pH should be adjusted to the level recommended for the crop to be grown.

II. Recommendations for application of all nutrient sources

A) Proper timing of nutrient applications is important. Apply nutrient sources as close to planting or nutrient demand as possible so that nutrients are taken up by plants quickly and not allowed to runoff into surface water or leach into ground water.

B) Avoid application of nutrient sources to frozen ground and during periods of high potential for leaching and runoff. Application in late fall or winter of any nitrogen source for a spring-planted crop should be avoided whenever possible.

C) Avoid application of nutrient sources to sensitive areas, wetlands, sinkholes, and steep slopes.

D) Calibrate nutrient application equipment accurately to insure that recommended rates are applied. Accurate and uniform applications of nutrients are necessary to maximize the nutrient potential of the fertilizer materials.

III. Recommendations for Manure Applications

A) *Testing*:

1) Manures vary tremendously in nutrient content depending upon animal species, rations, and storage conditions. The nutrient content of manure can be determined through laboratory testing.

2) Whenever possible manure should be sampled at least 6 weeks before planned application to allow time for analysis and plan development.

3) A consistent baseline for nutrient content may be established and based on analyses taken at least twice a year until a uniform value is confirmed, and then every second year thereafter to verify its consistency. If significant changes occur, including feed, management, animals, or storage, new samples should be collected for nutrient analysis.

B) *Application of manure*:

1) Nutrient applications should be made at times of the year that will minimize N and P losses to water and N volatilization loss to the atmosphere. Crop utilization of nutrients in manure and biosolids is maximized if these materials are applied in synchrony with periods of crop uptake. Storage of manure may be necessary to facilitate appropriate timing of nutrient applications.

2) **Nitrogen-based applications of manure will cause phosphorus soil test levels to increase over time.**

3) Winter application of manure is complicated. See the section on *MDA's Nutrient Application Guidelines*, which has information from Part I-D of the **Maryland Nutrient Management Manual** for details.

4) Application recommendations for daily haul operations include consideration of slope, crop and vegetative cover.

C) *Storage capacity:*

1) Optimal utilization of nutrients in manure and other nutrient sources is difficult without the ability to store manure for part of the year. Improving storage capacity available will minimize the potential for nutrient loss or runoff and will improve the possibility of proper timing of manure applications.

2) Contact your ***Soil Conservation District*** for advice on design and cost share programs for storage structures if you do not have manure storage capacity or if you need additional storage capacity.

IV. Erosion and Runoff Control

A) *Best Management Practices* should be used to minimize soil erosion and runoff, which can carry nutrients to surface waters. Advice on soil erosion control can be obtained from your ***Soil Conservation District***.

B) *Best Management Practices* around the barnyard area may need to be updated based on current regulations to reduce likelihood of nutrient loss from the area. Consult with your ***Soil Conservation District*** for details.

C) *Phosphorus Site Index*

The addition of any P-bearing material (fertilizer or manure) to fields whose P soil test levels are greater than or equal to FIV 150 will require evaluation of the risk of P movement.

The *Phosphorus Site Index* is a tool that is used to evaluate potential risk for phosphorus movement from agricultural land to surface waters. The *Phosphorus Site Index* includes determination of the limiting nutrient (nitrogen or phosphorus) and may also require additional restrictions of P fertilizer usage.

For a *Phosphorus Site Index* evaluation of your fields or for more information on the *Phosphorus Site Index* contact your Nutrient Management Advisor.

V. Record Keeping

The **Water Quality Improvement Act of 1998** legislation requires producers to keep the following records for at least 3 years (except for #2, crop yields).

1) Nutrient management plans
2) Record of crops planted and actual yield (**5** years of records needed in order to determine average)
3) Record of the timing, location and crop acreage of all nutrient applications
4) Analysis of the nutrient content of any fertilizer applied
5) Receipts related to the purchase of nutrients
6) Animal waste generation measurements and estimations
7) Documentation to justify any changes from the nutrient management plan as written

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 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)

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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.

Combined NLP

Final Audit Report 2023-08-30

Created:	2023-08-30
By:	Anne-Meredith Webster (amw99@umd.edu)
Status:	Signed
Transaction ID:	CBJCHBCAABAAYSeVknsIiY4KhLpfp3xl95UwiTSrtB-i

"Combined NLP" History

Document created by Anne-Meredith Webster (amw99@umd.edu)
2023-08-30 - 4:07:12 PM GMT- IP address: 96.68.236.5

Document emailed to Sarah Hirsh (shirsh@umd.edu) for signature
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Document e-signed by Sarah Hirsh (shirsh@umd.edu)
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Agreement completed.
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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:

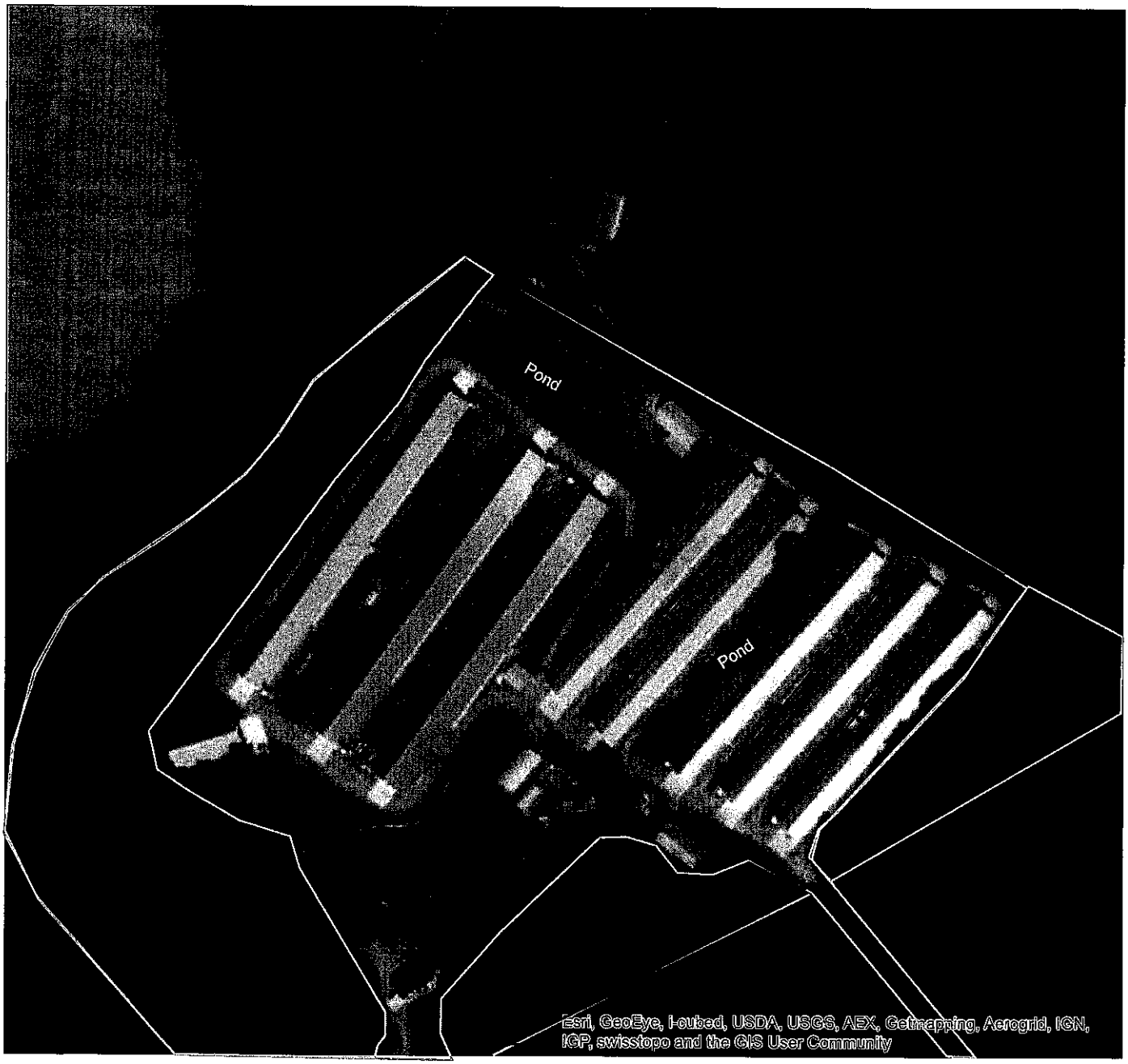
- Water Conveyance Map Around Production Area
- Online References
- Manure Export Form
- Monthly Animal & Mortality Count
- Inspection/Monitoring Records
- Weekly Storage Form
- Manure Litter Storage Form
- Manure Litter Transfer Form
- Daily Waterline Form

Date: 5/13/2021

Water Conveyance Map

Owner: HIEN NGUYEN
Operator: HIEN NGUYEN
Approximate HQ Acres: 20.2

Assisted By: Mark Stavely
SOMERSET COUNTY SERVICE CENTER



Prepared with assistance from USDA-Natural Resources Conservation Service

0 250
Feet

Drainage

Drainage flows through well vegetated ditches/swales to filter out any excess nutrients

Notice All Acreage and Boundaries are Approximate!

N

USDA

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).

Online References

1. **MDE Regulations and General Permit for Animal Feeding Operations (AFO)**
   http://www.mde.state.md.us/programs/Land/SolidWaste/CAFOMAFO/
   Pages/Programs/LandPrograms/Solid_Waste/cafo/index.aspx
2. **Environmental Protection Agency (EPA) Concentrated Animal Feeding Operations (CAFO) - Final Rule**
   http://cfpub.epa.gov/npdes/afo/cafofinalrule.cfm
3. **Crop Fertilizer Recommendations**
   "Soil Fertility Management," Maryland Cooperative Extension, SFM-1, Oct. 2002
   http://www.anmp.umd.edu/Pubs/Pubs_Crops.cfm
4. **Nutrient Management Information Sheets**
   http://www.anmp.umd.edu/Pubs/index.cfm
5. **Manure Nutrient Availability**
   Maryland Department of Agriculture, COMAR 15.20.08.05
   http://mda2.maryland.gov/ resource_conservation/ Documents/consultant_information/
   2009%20I-C%20p1-3%20s6.pdf
6. **Calibrating Manure Spreaders**
   University of Maryland Extension Fact Sheet 416 and Worksheets
   http://www.anmp.umd.edu/Pubs/Pubs_Manure.cfm
   http://www.anmp.umd.edu/Pubs/Pubs_Equip.cfm
7. **Phosphorus Assessment**
   "The Maryland Phosphorus Site Index: An Overview," Maryland Cooperative Extension SFM-6, April 2005
   http://www.anmp.umd.edu/files/SFM-6.pdf
   "The Maryland Phosphorus Site Index: Technical Users Guide," Maryland Cooperative Extension SFM-7, March 2008
   http://www.anmp.umd.edu/files/SFM-7.pdf
8. **Mid-Atlantic Nutrient Management Handbook**
   http://www.mawaterquality.org/Publications/pubs/manhcomplete.pdf
9. **Maryland Pesticide Regulation**
   http://www.mda.state.md.us/plants-pests/pesticide_regulation/index.php
10. **Maryland Practice Standards**
    eFOTG Section IV - Practice Standards and Specifications
    http://www.nrcs.usda.gov/technical/efotg/
11. **Somerset County University of Maryland Extension Office**
12. **Somerset Soil Conservation District**
13. **Mountaire Farms**
    http://www.mountaire.com/

MANURE EXPORTS

Farm Name:	Tiny Angels Farm	Year:	
Operator:	Hien Nguyen		

Manure Source	Date	Amount (Gal or Ton)	Receiving Operation	Address	Contact	Phone

MONTHLY ANIMAL & MORTALITY COUNT

Farm Name:	Tiny Angels Farm	Year:	
Operator:	Hien Nguyen		

Month	Animal Count and Weight	Mortality	Mortaliy %	Comments

INSPECTION / MONITORING RECORDS

Farm Name:	Tiny Angels Farm	Year:	
Operator:	Hien Nguyen		

Date	Activity Description	Operator / Inspector	Activity Data

Maryland
Department of
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Boyd K. Rutherford, Lt. Governor

Ben Grumbles, Secretary
Horacio Tablada, Deputy Secretary

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						

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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**

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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)

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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		
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31		
February, 20____		
Day	Initials	√ if Leak Detected
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March, 20____		
Day	Initials	√ if Leak Detected
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April, 20____		
Day	Initials	√ if Leak Detected

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May, 20____

Day	Initials	√ if Leak Detected
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30		
31		

June, 20____

Day	Initials	√ if Leak Detected
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July, 20____

Day	Initials	√ if Leak Detected
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August, 20____		
Day	Initials	√ if Leak Detected
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September, 20____		
Day	Initials	√ if Leak Detected
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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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