

Web.

MARYLAND DEPARTMENT OF THE ENVIRONMENT

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

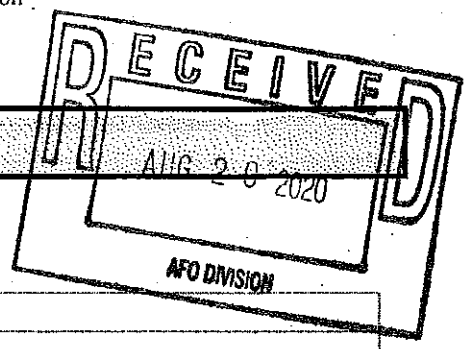
NOTICE OF INTENT

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



General Information

AI Number: 151986

1. LEGAL Name of Applicant (must match name on required plan):
Jacob Gilebons

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
<input type="checkbox"/> New owner/operator <input type="checkbox"/> Proposed operation (NO construction may begin until permit coverage is obtained) • Date of anticipated start of AFO operation: _____	<input checked="" type="checkbox"/> No changes in operation <input type="checkbox"/> There has been a change in one or more of the following (please indicate): <input type="checkbox"/> Size or number of houses <input type="checkbox"/> Animal number, resulting in change of size category <input type="checkbox"/> CAFO to MAFO, MAFO to CAFO <input type="checkbox"/> No-Land to Land, Land to No-Land <input type="checkbox"/> Conventional operation to organic	<input type="checkbox"/> Expanding <input type="checkbox"/> Change in animal number, resulting in change of size category <input type="checkbox"/> Change from CAFO to MAFO <input type="checkbox"/> Change from MAFO to CAFO <input type="checkbox"/> Change from no-land to land <input type="checkbox"/> Change from land to no-land <input type="checkbox"/> Change from conventional to organic operation

Applicant (Owner/Operator Information)

5. Mailing Address of Applicant: 5844 Worcester Highway
 City: Snow Hill State: MD Zip Code: 21863

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): C.O.D.

9. Farm Address: 5844 Worcester Highway
 City: Snow Hill County: Wor Zip Code: 21863

10. Watershed/Hydrologic Unit Code (HUC) (12-digit): 02-13-02-02-0638

11. Latitude/Longitude of Production Area (Deg/Min/Sec): _____ / _____

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)
<u>Broiler</u>	<u>200,000</u>	<u>Large</u>	<u>house</u>

*For poultry only (13-16):

13. *Number of poultry houses: 4

14. *Combined square footage of all poultry houses: 171,600

15. *Date(s) poultry houses constructed: FEB 2018

16. *Integrator (check one):

<input type="checkbox"/> Allen-Harim	<input checked="" type="checkbox"/> Mountaire	Contact Information:
<input type="checkbox"/> Amick	<input type="checkbox"/> Perdue	Phone No.: _____
<input type="checkbox"/> Coleman	<input type="checkbox"/> Tyson	Address: _____
<input type="checkbox"/> Other (please specify): _____		_____

Manure/Mortality Management

17. Total Manure/Litter/Wastewater generated annually: 1376 circle one: (tons) / lbs / gallons

18. Total Manure/Litter/Wastewater transported offsite annually: 1376 circle one: (tons) / lbs / gallons

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

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

20. Manure Storage (please list individually):

A. Type (e.g. shed, lagoon, pit)	B. Capacity (ft ³ , gal)	C. Solid/Liquid
<u>Shed</u>	<u>33,600 ft³</u>	

21. Mortality Management Method:

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

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.

Signature of Applicant / duly authorized representative

17 AUG 2020

Date

Jacob M. Gibbons

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

**C.O.D. Farm
Jacob Gibbons**

**5844 Worcester Highway
Snow Hill, Maryland 21863**

MAILING ADDRESS

5844 Worcester Highway
Snow Hill, Maryland 21863

PREPARED IN COOPERATION WITH THE



**U.S. Department of Agriculture
Natural Resources Conservation Service**

AND THE



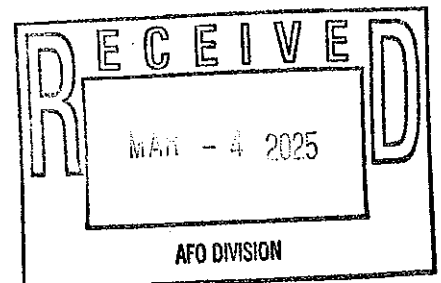
**Worcester Soil Conservation District
304 Commerce Street
Snow Hill, MD 21863**

Prepared by: Chelsea Tyson

Plan Date: May 2022

Poultry Operation (No Land Plan)

Concentrated Animal Feeding Operation (CAFO)
M.D.E. Agency Interest # 151986



COMPREHENSIVE NUTRIENT MANAGEMENT PLAN

FOR

**C.O.D. Farm
Jacob Gibbons**



LOCATION ADDRESS
**5844 Worcester Highway
Snow Hill, Maryland 21863**

MAILING ADDRESS
**5844 Worcester Highway
Snow Hill, Maryland 21863**

PREPARED BY

**Worcester Soil Conservation District
304 Commerce Street
Snow Hill, MD 21863**

**Plan Date:
May 2022**

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 Jacob Gibbons 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.



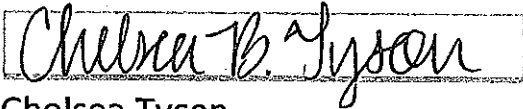
Jacob Gibbons



Date

Certified Comprehensive Nutrient Management Plan (CNMP) Planner

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



Chelsea Tyson



Date

NRCS Planner Certification # 262

Nutrient Management Certification # 4314

SECTION 2: Farmstead (Production Area)

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

Farm Locations

Farm Name	Owner	Tax Account ID	Farm #	Tract #	Account ID Acres	Watershed
C.O.D. Farm	Jacob Gibbons		2725	820	93.5	02-13-02-02-0638

Description of Operation / Additional Information

This four poultry house, c. 162, 000 roaster capacity, large size, NO-Land, CAFO poultry farm is currently owned and operated by Jacob Gibbons. The cropland portions of this property are controlled and/or managed by Lambertson Farms, Inc. of 5750 Rabbit Knaw Road, Stockton, Maryland 21864. All poultry manure generated is exported to Lambertson Farms, Inc. of 5750 Rabbit Knaw Road, Stockton, Maryland 21864. The production area of this farm is approximately 20.5 acres.

Sensitive Environmental Information

Name of nearest regulatory waterbody	Distance to nearest regulatory waterbody (ft.)	Distance to nearest regulatory wetland (ft.)
Campground Branch	1,461'	1,030'

Account ID	MD DNR 12 Digit Watershed	Watershed Name	Tier II High Quality Waters Watershed	Impairments			
				Nitrogen	Phosphorus	Bacteria (e.coli, enterocci or fecal)	Sediment
	02-13-02-02-0638	Lower Pocomoke River	No	No	Yes	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)**
Roaster	10	4	162,000	4	1,256	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

A combination of windrowing and crustouts are being used on the farm for litter management. Crustouts are generally completed twice year or as needed. If the crustout is not needed the litter is windrowed between flocks. Any manure collected from the poultry operation is stored in the manure shed until taken by the receiving farmer. Some manure is used in the composting units and removed when utilized by the receiving farmer or broker. This farm has yet had a total cleanout as it was constructed in 2018. First total cleanout is expected in 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. The existing PWSS is undersized for the current flock size of 162,000 roasters.

Current / Proposed Manure Storage Conditions

Animal Type	Storage Structure	Size of Storage Structure	Storage Capacity	Date Constructed
Poultry	PWSS	40' x 168'	33,600 CF	1/31/2018

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	Lambertson Farms, Inc.	5750 Rabbit Knaw Road, Stockton, Maryland 21864

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. Jacob Gibbons 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	24' Channel	Attached to PWSS

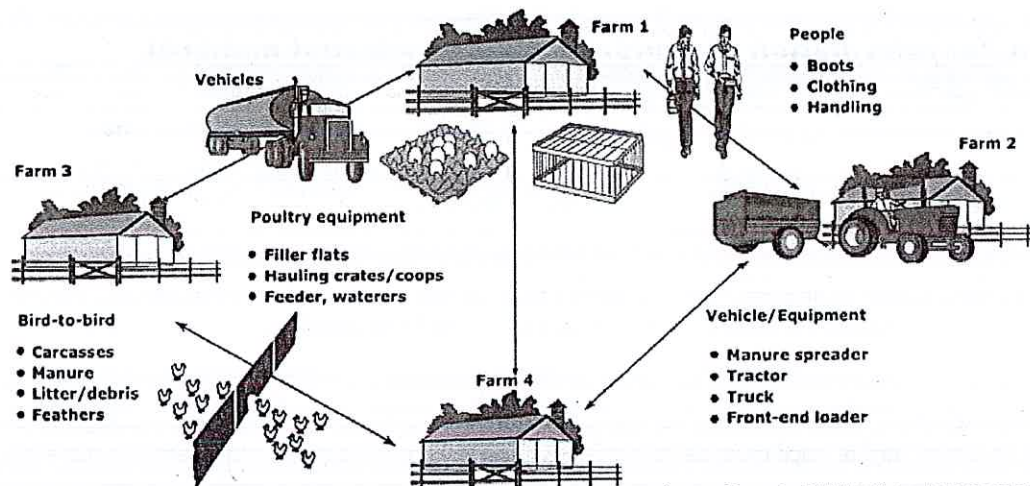
Catastrophic Mortality Management

In the event of catastrophic mortality, the operator will contact the integrator and follow an "in house" or "in PWSS" windrow method of composting as outlined in UMD-Ext fact sheets #723 and #801. For guidance on mortality disposal methods procedure, see the Animal Mortality Disposal subtitle of this section.

Biosecurity

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

How Diseases Spread (Example - Poultry Operation)



Steps to Take to Avoid Disease Spread

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

1. Permit only essential workers and vehicles on the premises.
2. Give germs the boot
 - a. Keep a pair of shoes or boots to wear only around your animals.
 - b. Clean and disinfect your shoes often.
 - c. Always ask visitors and employees to clean their boots and shoes.
3. Don't haul home disease
 - a. Always clean and disinfect vehicles used for moving animals.
 - b. Limit traffic of incoming people, products and vehicles that could bring in a disease.
 - c. Clean and disinfect all equipment that comes in contact with your animals.
4. Keep your farm secure

- a. Restrict access to your property and animals.
 - b. Keep doors and gates locked.
 - c. Have tracking records on animals.
 - d. Give germs space - Newly acquired animals should be isolated for at least two weeks to ensure you don't introduce disease to your main herd or flock. As an added protection, isolate and quarantine new animals for 30 days before putting them with your other animals. Keep show animals segregated for at least two weeks after they've been to a fair or exhibit.
5. Look for signs
- a. Unusual animal health symptoms or behavior
 - b. Sudden, unexplained death loss in the herd or flock
 - c. Severe illness affecting a high percentage of animals
 - d. Blisters around an animal's mouth, nose, teats or hooves
 - e. Staggering, falling or central nervous system disorders that prevent animals from rising or walking normally.
 - f. Large number of dead insects, rodents or wildlife
6. Don't wait - call in signs of disease immediately. Do not self-diagnose. Seek veterinary services, as early detection is your best protection. If you have animals with signs of suspect disease, call your local veterinarian, UMD extension agent () or the state veterinarian. Rapid response and investigation are the only ways to control and eliminate disease and stop large numbers of casualties or damage to our economic system.

Farm Contact Information

The following tables contain important contact information specific to this CNMP for Jacob Gibbons.

Emergency Contact Information

Farm Name	C.O.D. Farm
Farm Address	5844 Worcester Highway, Snow Hill, Maryland 21863
Mailing Address	5844 Worcester Highway, Snow Hill, Maryland 21863
Directions to the farm	From the Town of Snow Hill at the intersection of Worcester Highway (Route 113) and Market Street (Route 394) travel North on Worcester Highway for approximately 1.2 miles. The farm is located and the right, down its own private lane: 5844 Worcester Highway, Snow Hill, Maryland 21863.

Farm Contacts

	Name	Farm Phone	Cell Phone
Farm Owner	Jacob Gibbons		
Farm Operator	Jacob Gibbons		
Fire or Ambulance			

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

Worcester County Agency Contacts

	Day Phone	Emergency Number
MDA Regional Nutrient Management (Region)	410-632-5439	410-632-5439
Health Department		
Sherriff's Office		
University of Maryland Extension Office (Snow Hill)	410-632-5439	410-632-5439

Integrator Information

Name	Address	Phone
Mountaire Farms	P.O. Box 1320, Millsboro DE 19966	302-934-1100



WORCESTER COUNTY
 SERVICE CENTER
 304 COMMERCE ST
 SNOW HILL, MD 21863-1008

Conservation Plan

JACOB GIBBONS
 5844 WORCESTER HIGHWAY
 SNOW HILL, MD 21863

This farm is located on tax map 0056 and includes tax parcel 0009; totaling approximately 87.0 acres with 38.0 acres tillable cropland. Cropland is managed separately, and all manure produced by the poultry operation is exported. The poultry production area is owned and operated by Jacob Gibbons. This farm contains a large CAFO poultry operation of 162,000 roasters at four flocks per year with Mountaire. After completing an environmental evaluation of the poultry operation on 06/29/2022 it was concluded that no resource concerns have been found at this time. This conservation plan update is being completed in accordance with the Comprehensive Nutrient Management Plan also being updated for the 19AF CAFO permit.

Animal Mortality Facility (316)

A dead bird composting facility has been constructed for the economical and environmentally safe disposal of dead poultry. The structure was built according to NRCS standards and specifications and has been maintained as described in the Operation and Maintenance plan.

Tract	Field	Planned Amount	Month	Year	Applied Amount	Date
820	HQ	1.00 No	12	2017	1.00 No	01/31/2018

Comprehensive Nutrient Management Plan (102)

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

Tract	Field	Planned Amount	Month	Year	Applied Amount	Date
820	HQ	1.00 No	05	2022	--	--

Tract	Field	Planned Amount	Month	Year	Applied Amount	Date
820	HQ	1.00 No	08	2019	1.00 No	08/21/2019

Heavy Use Area Protection(561)

A heavy use area (poultry pad) has been constructed at the location(s) shown on the plan map where poultry manure and other waste products are handled. The poultry pad protects the soil from erosion and reduces nutrient contamination of surface and groundwater. The pads have been designed and installed according to NRCS standards and specifications and will continue to be maintained according to the attached Operation and Maintenance plan. EQIP cost-share utilized for these practices.

Tract	Field	Planned Amount	Month	Year	Applied Amount	Date
820	FmHQ	1600. sq ft	8	2020	1600. sq ft	04/27/2021
820	FmHQ	1600. sq ft	8	2020	1600. sq ft	04/27/2021
820	FmHQ	1600. sq ft	8	2020	1600. sq ft	04/27/2021
820	FmHQ	1600. sq ft	8	2020	1600. sq ft	04/27/2021
820	FmHQ	1600. sq ft	8	2020	1600. sq ft	04/27/2021
820	FmHQ	1600. sq ft	8	2020	1330 sq ft	04/27/2021
820	FmHQ	1600. sq ft	8	2020	1330 sq ft	04/27/2021
820	FmHQ	1600. sq ft	8	2020	1330 sq ft	04/27/2021
820	FmHQ	1600. sq ft	8	2020	1330 sq ft	04/27/2021
820	FmHQ	1600. sq ft	8	2020	1600 sq ft	04/27/2021
820	FmHQ	1600. sq ft	8	2020	1872 sq ft	04/27/2021

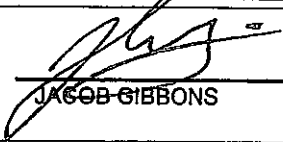
Total: 15662. sq ft

Waste Storage Facility (313)


A manure storage structure has been constructed at the location shown on the plan map. The structure has been built according to NRCS design and operated and maintained in accordance with a Comprehensive Nutrient Management Plan or Waste Management System plan developed for this operation. All necessary permits and notifications were obtained before construction.

Tract	Field	Planned Amount	Month	Year	Applied Amount	Date
820	HQ	1.00 No	12	2017	1.00 No	01/31/2018

CERTIFICATION OF PARTICIPANTS

 _____ JACOB GIBBONS	<u>29 JUN 2022</u> DATE
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CERTIFICATION OF:

CERTIFIED CNMP PLANNER	
 _____ CHELSEA TYSON	<u>6/29/22</u> DATE

PUBLIC BURDEN STATEMENT

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

PRIVACY ACT

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

USDA NON-DISCRIMINATION STATEMENT

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

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

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

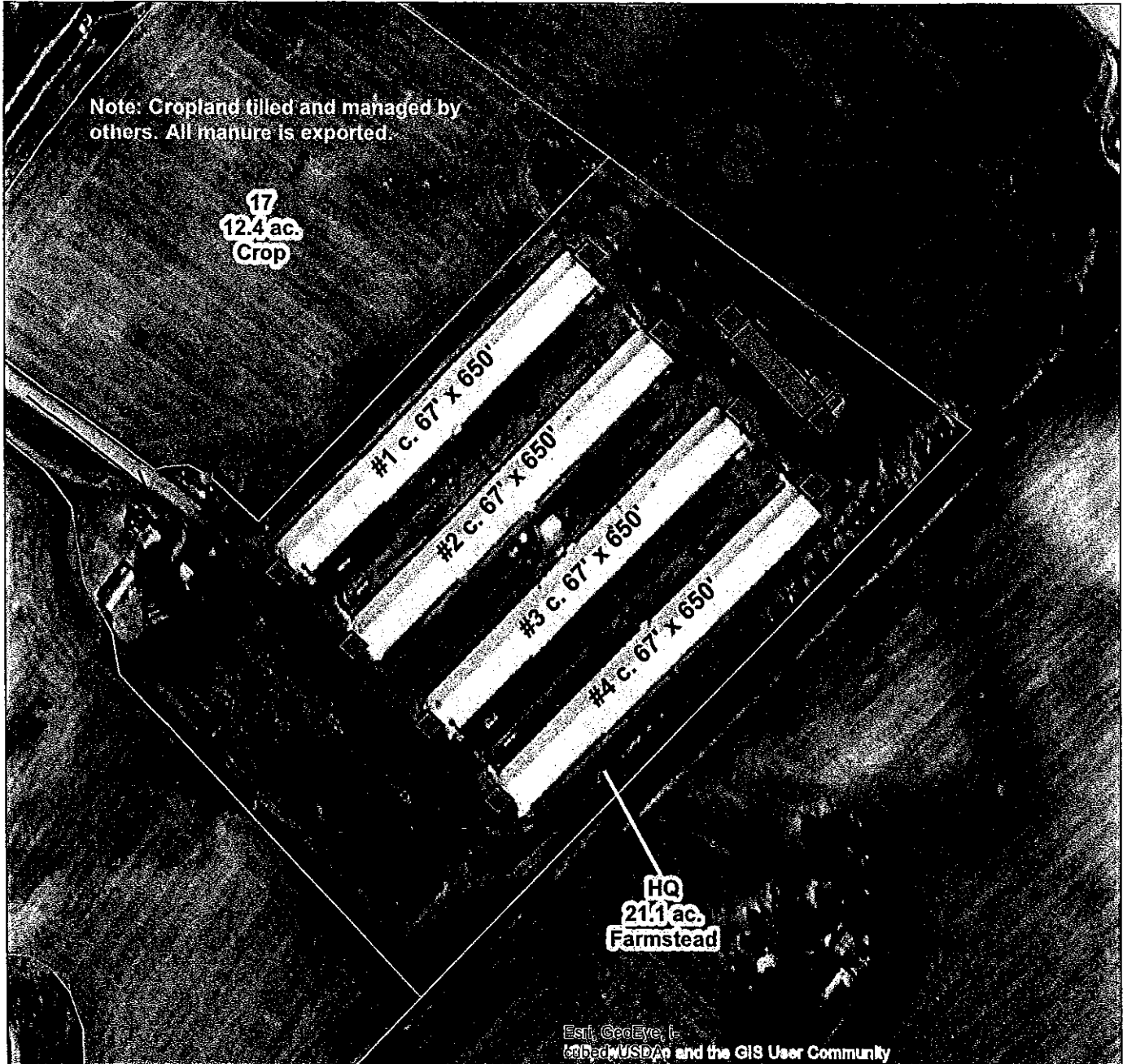
Conservation Plan Map

Date: 05/31/2022

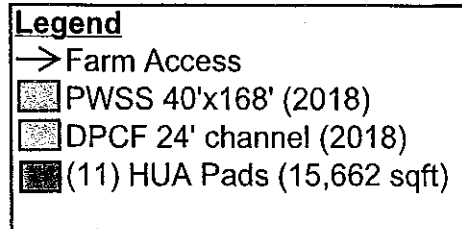
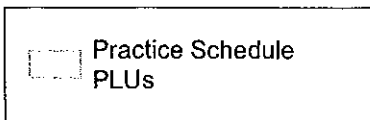
Owner: DAVID AND JACOB GIBBONS
 Operator: JACOB GIBBONS
 Approximate Acres: 87.0

OPID: 2131
 Farm: 2725
 Tract: 820

District: WORCESTER SCD
 Agency: MDA/NRCS
 Assisted by: CHELSEA TYSON



Prepared with assistance from USDA-Natural Resources Conservation Service

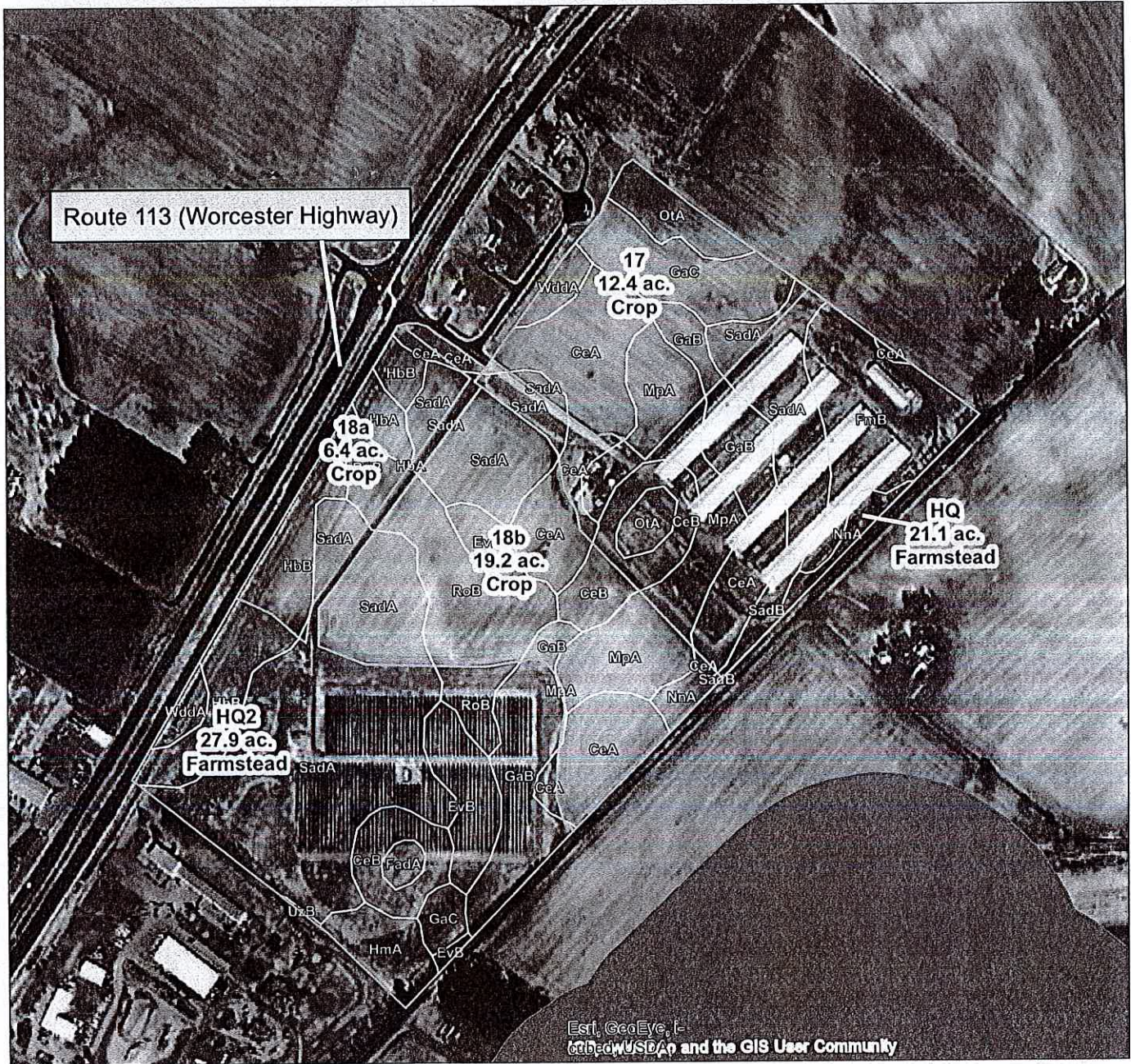


Soils Map

Owner: DAVID AND JACOB GIBBONS
Operator: JACOB GIBBONS
Approximate Acres: 87.0

OPID: 2131
Farm: 2725
Tract: 820

District: WORCESTER SCD
Agency: MDA/NRCS
Assisted by: CHELSEA TYSON



Prepared with assistance from USDA-Natural Resources Conservation Service



0 500 Feet

- Practice Schedule PLUs
- Soils**
- Soil Mapunit



Map Unit Description (Brief, Generated)

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.

Report—Map Unit Description (Brief, Generated)

Worcester County, Maryland

Map Unit: CeA—Cedartown-Rosedale complex, 0 to 2 percent slopes

Component: Cedartown (55%)

The Cedartown component makes up 55 percent of the map unit. Slopes are 0 to 2 percent. This component is on flats, uplands. The parent material consists of sandy eolian deposits and/or fluvio-marine sediments. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is somewhat excessively drained. Water movement in the most restrictive layer is high. Available water to a depth of 60 inches (or restricted depth) is low. 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 1 percent. Nonirrigated land capability classification is 3s. Irrigated land capability classification is 2s. This soil does not meet hydric criteria.

Component: Rosedale (25%)

The Rosedale component makes up 25 percent of the map unit. Slopes are 0 to 2 percent. This component is on flats, uplands. The parent material consists of sandy eolian deposits over fluvio-marine sediments. 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 low. 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 1 percent. Nonirrigated land capability classification is 2s. Irrigated land capability classification is 2s. This soil does not meet hydric criteria.

Component: Runclint (10%)



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

Component: Galestown (5%)

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

Component: Evesboro (5%)

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

Map Unit: CeB--Cedartown-Rosedale complex, 2 to 5 percent slopes

Component: Cedartown (55%)

The Cedartown component makes up 55 percent of the map unit. Slopes are 2 to 5 percent. This component is on flats, uplands. The parent material consists of sandy eolian deposits and/or fluviomarine sediments. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is somewhat excessively drained. Water movement in the most restrictive layer is high. Available water to a depth of 60 inches (or restricted depth) is low. 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 1 percent. Nonirrigated land capability classification is 3s. Irrigated land capability classification is 2s. This soil does not meet hydric criteria.

Component: Rosedale (25%)

The Rosedale component makes up 25 percent of the map unit. Slopes are 2 to 5 percent. This component is on flats, uplands. The parent material consists of sandy eolian deposits over fluviomarine sediments. 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 low. 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 1 percent. Nonirrigated land capability classification is 2s. Irrigated land capability classification is 2s. This soil does not meet hydric criteria.

Component: Runclint (10%)

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

Component: Galestown (5%)

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

Component: Evesboro (5%)

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

Map Unit: EvB--Evesboro loamy sand, 2 to 5 percent slopes

Component: Evesboro (75%)

The Evesboro component makes up 75 percent of the map unit. Slopes are 2 to 5 percent. This component is on flats, uplands. The parent material consists of sandy eolian deposits and/or fluviomarine sediments. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is excessively drained. Water movement in the most restrictive layer is high. Available water to a depth of 60 inches (or restricted depth) is low. Shrink-swell potential is low. This soil is not flooded. It is not ponded. There is no zone of water saturation within a depth of 72 inches. Organic matter content in the surface horizon is about 1 percent. Nonirrigated land capability classification is 4s. Irrigated land capability classification is 3s. This soil does not meet hydric criteria.

Component: Runclint (10%)

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

Component: Galloway (5%)

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

Component: Fort Mott (5%)

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

Component: Cedartown (5%)

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

Map Unit: EvD--Evesboro loamy sand, 5 to 15 percent slopes

Component: Evesboro (75%)

The Evesboro component makes up 75 percent of the map unit. Slopes are 5 to 15 percent. This component is on knolls, uplands. The parent material consists of sandy eolian deposits and/or fluviomarine sediments. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is excessively drained. Water movement in the most restrictive layer is high. Available water to a depth of 60 inches (or restricted depth) is low. Shrink-swell potential is low. This soil is not flooded. It is not ponded. There is no zone of water saturation within a depth of 72 inches. Organic matter content in the surface horizon is about 1 percent. Nonirrigated land capability classification is 6e. Irrigated land capability classification is 6e. This soil does not meet hydric criteria.

Component: Runclint (10%)

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

Component: Galloway (5%)

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

Component: Fort Mott (5%)

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

Component: Cedartown (5%)

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

Map Unit: FadA--Fallsington sandy loams, 0 to 2 percent slopes, Northern Tidewater Area

Component: Fallsington, undrained (48%)

The Fallsington, undrained component makes up 48 percent of the map unit. Slopes are 0 to 2 percent. This component is on flats on coastal plains. The parent material consists of loamy 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. Nonirrigated land capability classification is 5w. This soil meets hydric criteria. There are no saline horizons within 30 inches of the soil surface.

Component: Fallsington, drained (27%)

The Fallsington, drained component makes up 27 percent of the map unit. Slopes are 0 to 2 percent. This component is on flats on coastal plains. The parent material consists of loamy 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 2 percent. Nonirrigated land capability classification is 3w. Irrigated land capability classification is 3w. This soil meets hydric criteria. There are no saline horizons within 30 inches of the soil surface.

Component: Woodstown (9%)

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

Component: Othello (8%)

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

Component: Hammonton (8%)

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

Map Unit: FmB--Fort Mott loamy sand, 2 to 5 percent slopes

Component: Fort Mott (80%)

The Fort Mott component makes up 80 percent of the map unit. Slopes are 2 to 5 percent. This component is on flats, uplands. The parent material consists of Sandy eolian deposits over fluviomarine sediments 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 low. Shrink-swell potential is low. This soil is not flooded. It is not ponded. There is no zone of water saturation within a

depth of 72 inches. Organic matter content in the surface horizon is about 1 percent. Nonirrigated land capability classification is 2e. Irrigated land capability classification is 2e. This soil does not meet hydric criteria.

Component: Ingleside (5%)

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

Component: Downer (5%)

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

Component: Rosedale (5%)

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

Component: Runclint (5%)

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

Map Unit: GaB--Galestown loamy sand, 2 to 5 percent slopes

Component: Galestown (80%)

The Galestown component makes up 80 percent of the map unit. Slopes are 2 to 5 percent. This component is on flats, uplands. The parent material consists of sandy eolian deposits and/or fluviomarine sediments. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is somewhat excessively drained. Water movement in the most restrictive layer is high. Available water to a depth of 60 inches (or restricted depth) is low. Shrink-swell potential is low. This soil is not flooded. It is not ponded. There is no zone of water saturation within a depth of 72 inches. Organic matter content in the surface horizon is about 0 percent. Nonirrigated land capability classification is 3s. Irrigated land capability classification is 2s. This soil does not meet hydric criteria.

Component: Fort Mott (5%)

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

Component: Runclint (5%)

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

Component: Ingleside (5%)

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

Component: Cedartown (5%)

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

Map Unit: GaC--Galestown loamy sand, 5 to 10 percent slopes

Component: Galestown (80%)

The Galestown component makes up 80 percent of the map unit. Slopes are 5 to 10 percent. This component is on flats, uplands. The parent material consists of sandy eolian deposits and/or fluviomarine sediments. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is somewhat excessively drained. Water movement in the most restrictive layer is high. Available water to a depth of 60 inches (or restricted depth) is low. Shrink-swell potential is low. This soil is not flooded. It is not ponded. There is no zone of water saturation within a depth of 72 inches. Organic matter content in the surface horizon is about 0 percent. Nonirrigated land capability classification is 3e. This soil does not meet hydric criteria.

Component: Runclint (5%)

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

Component: Cedartown (5%)

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

Component: Fort Mott (5%)

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

Component: Ingleside (5%)

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

Map Unit: HbA--Hambrook sandy loam, 0 to 2 percent slopes

Component: Hambrook (80%)

The Hambrook component makes up 80 percent of the map unit. Slopes are 0 to 2 percent. This component is on flats,

uplands. The parent material consists of loamy fluviomarine sediments. 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 moderate. 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. Irrigated land capability classification is 1 This soil does not meet hydric criteria.

Component: Woodstown (5%)

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

Component: Cedartown (5%)

Generated brief soil descriptions are created for major soil components. The Cedartown 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: Hammonton (5%)

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

Map Unit: HbB—Hambrook sandy loam, 2 to 5 percent slopes

Component: Hambrook (80%)

The Hambrook component makes up 80 percent of the map unit. Slopes are 2 to 5 percent. This component is on flats, uplands. The parent material consists of loamy fluviomarine sediments. 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 moderate. 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 2e. Irrigated land capability classification is 2e. This soil does not meet hydric criteria.

Component: Sassafras (5%)

Generated brief soil descriptions are created for major soil components. The Sassafras 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: Cedartown (5%)

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

Component: Hammonton (5%)

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

Map Unit: HmA--Hammonton loamy sand, 0 to 2 percent slopes

Component: Hammonton (80%)

The Hammonton component makes up 80 percent of the map unit. Slopes are 0 to 2 percent. This component is on flats, uplands. The parent material consists of loamy fluviomarine sediments. 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 high. Available water to a depth of 60 inches (or restricted depth) is low. 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. Irrigated land capability classification is 2w. This soil does not meet hydric criteria.

Component: Hurlock, drained (5%)

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

Component: Ingleside (5%)

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

Component: Rosedale (5%)

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

Map Unit: MpA--Mattapex fine sandy loam, 0 to 2 percent slopes

Component: Mattapex (80%)

The Mattapex component makes up 80 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 over fluviomarine sediments. 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 low. Available water to a depth of 60 inches (or restricted depth) is moderate. Shrink-swell potential is low. This soil is not flooded. It is 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. Irrigated land capability classification is 2w. This soil does not meet hydric criteria.

Component: Nassawango (10%)

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

Component: Crosiadore (5%)

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

Component: Othello, drained (5%)

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

Map Unit: NnA--Nassawango fine sandy loam, 0 to 2 percent slopes

Component: Nassawango (80%)

The Nassawango component makes up 80 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 over fluviomarine sediments. 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 low. Available water to a depth of 60 inches (or restricted depth) is moderate. Shrink-swell potential is low. This soil is not flooded. It is not ponded. A seasonal zone of water saturation is at 45 inches during January. Organic matter content in the surface horizon is about 1 percent. Nonirrigated land capability classification is 1. Irrigated land capability classification is 1 This soil does not meet hydric criteria.

Component: Matapeake (5%)

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

Component: Crosiadore (5%)

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

Component: Othello, drained (5%)

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

Component: Mattapex (5%)

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

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

Component: Othello, drained (50%)

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

Component: Othello, undrained (30%)

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

Component: Fallsington, undrained (8%)

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

Component: Kentuck, undrained (7%)

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

Component: Mattapex (5%)

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

Map Unit: RoB--Rosedale loamy sand, 2 to 5 percent slopes

Component: Rosedale (75%)

The Rosedale component makes up 75 percent of the map unit. Slopes are 2 to 5 percent. This component is on flats, uplands. The parent material consists of sandy eolian deposits over 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 low. 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 1 percent. Nonirrigated land capability classification is 2e. Irrigated land capability classification is 2e. This soil does not meet hydric criteria.

Component: Evesboro (10%)

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

Component: Hambrook (5%)

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

Component: Galloway (5%)

Generated brief soil descriptions are created for major soil components. The Galloway 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: SadA--Sassafras sandy loam, 0 to 2 percent slopes, Northern Tidewater Area

Component: Sassafras (80%)

The Sassafras component makes up 80 percent of the map unit. Slopes are 0 to 2 percent. This component is on flats on uplands coastal plains. The parent material consists of loamy 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 moderate. Shrink-swell potential is low. This soil is not flooded. It is not ponded. There is no zone of water saturation within a depth of 72 inches. Organic matter content in the surface horizon is about 2 percent. Nonirrigated land capability classification is 1. Irrigated land capability classification is 1 This soil does not meet hydric criteria.

Component: Ingleside (9%)

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

Component: Woodstown (4%)

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

Component: Downer (4%)

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

Component: Aura (3%)

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

Map Unit: SadB--Sassafras sandy loam, 2 to 5 percent slopes, Northern Tidewater Area

Component: Sassafras (80%)

The Sassafras component makes up 80 percent of the map unit. Slopes are 2 to 5 percent. This component is on flats on uplands coastal plains. The parent material consists of loamy 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 moderate. Shrink-swell potential is low. This soil is not flooded. It is not ponded. There is no zone of water saturation within a depth of 72 inches. Organic matter content in the surface horizon is about 2 percent. Nonirrigated land capability classification is 2e. Irrigated land capability classification is 2e. This soil does not meet hydric criteria.

Component: Ingleside (9%)

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

Component: Woodstown (4%)

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

Component: Downer (4%)

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

Component: Aura (3%)

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

Map Unit: UzB--Udorthents, loamy, 0 to 5 percent slopes

Component: Udorthents, loamy (90%)

The Udorthents, loamy component makes up 90 percent of the map unit. Slopes are 0 to 5 percent. This component is on flats, Coastal Plain uplands. The parent material consists of 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 low. Available water to a depth of 60 inches (or restricted depth) is moderate. Shrink-swell potential is low. This soil is not flooded. It is not ponded. A seasonal zone of water saturation is at 45 inches during January. Organic matter content in the surface horizon is about 1 percent. Nonirrigated land capability classification is 2e. This soil does not meet hydric criteria.

Component: Urban land (10%)

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

Map Unit: WddA--Woodstown sandy loam, 0 to 2 percent slopes, Northern Tidewater Area

Component: Woodstown (80%)

The Woodstown component makes up 80 percent of the map unit. Slopes are 0 to 2 percent. This component is on flats, coastal plains. The parent material consists of loamy 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 moderate. 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. There are no saline horizons within 30 inches of the soil surface.

Component: Fallsington (6%)

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

Component: Hammonton (6%)

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

Component: Mattapex (4%)

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

Component: Hambrook (4%)

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

Data Source Information

Soil Survey Area: Worcester County, Maryland

Survey Area Data: Version 19, Aug 27, 2021



AFO RESOURCE CONCERNS EVALUATION WORKSHEET

Name:		Jacob Gibbons		Agency Interest #:	151986
Planner:		Chelsea Tyson		Farm # / Tract #:	2725 / 820
Site Visit Date:		06/29/2022		Total Acres:	93.5
County:		Worcester		Production Area Acres:	20.5
RESOURCE CONCERN		YES	NO	Assessment	
a.	Biosecurity measures	<input type="checkbox"/>	<input checked="" type="checkbox"/>	The operator is following biosecurity measures as outlined by the integrator and MDA Animal Health.	
b.	Chemical handling	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Chemicals related to poultry production are stored in the appropriate designated storage area.	
c.	Cultural resources	<input type="checkbox"/>	<input checked="" type="checkbox"/>	The production area is established and there are no proposed ground disturbance activities scheduled for the area.	
d.	Feedlot area	<input type="checkbox"/>	<input checked="" type="checkbox"/>	No feedlot resource concerns have been identified. BMPs have been constructed to mitigate the potential for discharges.	
e.	Floodplains	<input type="checkbox"/>	<input checked="" type="checkbox"/>	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	<input type="checkbox"/>	<input checked="" type="checkbox"/>	No gully erosion was identified in the production area or associated water conveyances.	
g.	Livestock travel lanes	<input type="checkbox"/>	<input checked="" type="checkbox"/>	No resource concerns have been identified.	
h.	Nutrient discharge	<input type="checkbox"/>	<input checked="" type="checkbox"/>	There are no observable nutrient discharges occurring from the production area.	
i.	Objectionable odors	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Normal poultry or livestock odors associated with this the type of operation or facility were noted.	
j.	Particulate matter emissions	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Normal particulate emissions associated with a facility of this size.	
k.	Ponding, flooding, seasonal high water table	<input type="checkbox"/>	<input checked="" type="checkbox"/>	No abnormal ponding, flooding or high water table issues were identified.	
l.	Sediment	<input type="checkbox"/>	<input checked="" type="checkbox"/>	No obvious and observable sediment discharges are occurring from the production area.	
m.	Streambank/shoreline erosion	<input type="checkbox"/>	<input checked="" type="checkbox"/>	No streambank or shoreline areas are present in the production area.	
n.	Threatened/endangered species	<input type="checkbox"/>	<input checked="" type="checkbox"/>	No geospatial indicators have been identified on the production area.	
o.	Waste storage	<input type="checkbox"/>	<input checked="" type="checkbox"/>	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	<input type="checkbox"/>	<input checked="" type="checkbox"/>	No Maryland regulated waterways have been identified on the property.	
q.	Wetlands	<input type="checkbox"/>	<input checked="" type="checkbox"/>	No Maryland regulated wetlands have been identified on the property.)	

Implementation Schedule for Farmstead

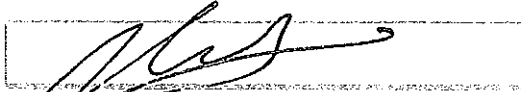
This element addresses the need for and implementation of appropriate conservation practices to meet the quality criteria for soil erosion, air and water quality.

Practice and Facility Implementation Schedule

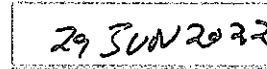
Description	Date
All resource concerns have been addressed and no additional best management practices are recommended or required at this time.	May 2022

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

I, Jacob Gibbons, 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 schedule above. Should I not be able to implement any of the above items according to the schedule, I will contact the Worcester Soil Conservation District and have this schedule revised.



Jacob Gibbons



Date

Implementation Schedule Comments

Site visit completed on 6/29/22. Farm was evaluated and found to be in satisfactory working condition. There were no resource concerns nor were there management concerns expressed by the farmer.

Operation and Maintenance for BMP's in Farmstead

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

Waste Storage Facility (313)

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

Animal Mortality Facility (316)

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

Heavy Use Area Protection (561)

- Inspect the Heavy Use Area at least twice a year and after severe storm events.
- Scrape the surface as needed to remove excess manure and/or sediment.
- Repair paved areas by repairing holes and replacement of paving materials.
- Replace loose surfacing material such as gravel, cinders, sawdust, tanbark, etc. as needed when removed by livestock, equipment traffic, or scraping.
- Repair any deteriorating areas.
- Maintain all vegetation that is part of the plan by fertilizing and liming according to soil test recommendations and reseeding or replanting as necessary.
- Inspect inlets and outlets of pipes and culverts and remove any obstructions present.
- Maintain flow into filter areas by removing accumulated solids, reconstructing waterbars, etc.

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

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

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

SECTION 4: Nutrient Management

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

Soil Sampling and Testing

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

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

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

Manure and Wastewater Testing/Analysis

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

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

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

Description of Chemical Handling:

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



**NUTRIENT MANAGEMENT PLAN
FOR
Jacob Gibbons/C.O.D. Farm
5844 Worcester Highway
Snow Hill, MD 21863**

DESCRIPTION OF OPERATION: This plan is for a poultry operation (AI# 151986) on approximately 89.3 acres in Worcester County MD. The farm includes four poultry houses on about 20.5 non-tillable acres. The farm is currently operating at a capacity of 162,000 roasters per flock as directed by the integrator.

The approximately 68.8 acres of tillable land is managed by Lambertson Farm, Inc., 5750 Rabbit Knaw Rd, Stockton, MD 21864, and should be included in their nutrient management plan.

This nutrient management plan is one of the required plans needed for a CAFO permit 19AF. It is Mr. Gibbons's responsibility to send a copy of this plan to Maryland Department of the Environment (MDE).

DATE OF PLAN: April 19, 2022

DURATION OF PLAN: April 19, 2022 – April 18, 2025

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: Mr. Gibbons crusts 2 flocks per year and windrows the other 2 flocks per year. Manure is stored in the manure sheds on site until it is taken by the receiving facility. A total cleanout is planned for 2023.

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:

Lambertson Farm, Inc.
5750 Rabbit Knaw Rd
Stockton, MD 21864

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. Gibbons 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.

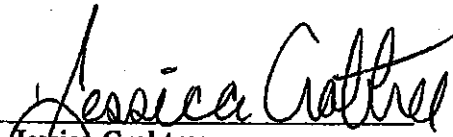
Farm Identification Summary

Farm Name	Tax Account ID Numbers	Watershed Location Code	Total Acres Farmed (Cropland and Pastures)
Jacob Gibbons/ C.O.D. Farm T820		0202	N/A

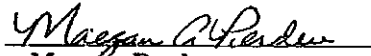
Manure Summary Table

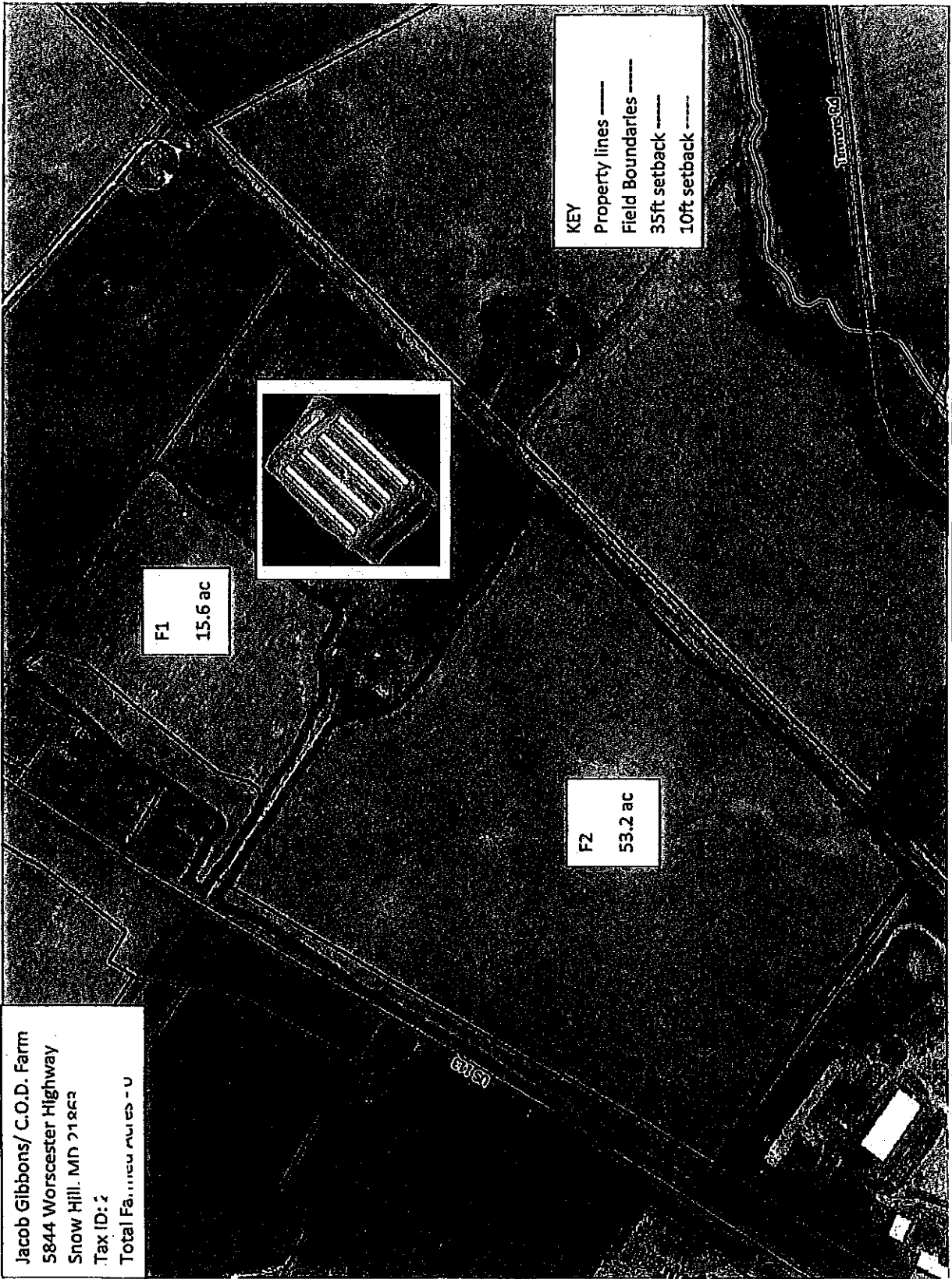
Animal Type and Number	Total Manure Generation (tons/yr)*	Manure Avail. for Utilization (tons/yr)*	Manure Storage Capacity/Conditions
Roasters: 162,000 birds per flock x 4 flocks per year = 648,000 total birds per year	1,256	2022 – 65 2023 – 7,170 2024 – 65 2025 - 65	manure shed 40' x 168' w/ 24' channel composter

*See manure generation sheets


 Jessica Crabtree
 Nutrient Management Advisor

License #: 2030


 Maegan Perdue
 Agent Associate – Agriculture
 Certification #2073
 License #2030



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
- Poultry Litter Estimation Worksheet
- Online References
- Manure Export Form
- Monthly Animal & Mortality Count
- Inspection/Monitoring Records
- Nutrient Land Application Form
- Weekly Storage Form
- Weekly Wastewater Form
- Manure Litter Storage Form
- Manure Application Form
- Manure Litter Transfer Form
- Daily Waterline Form

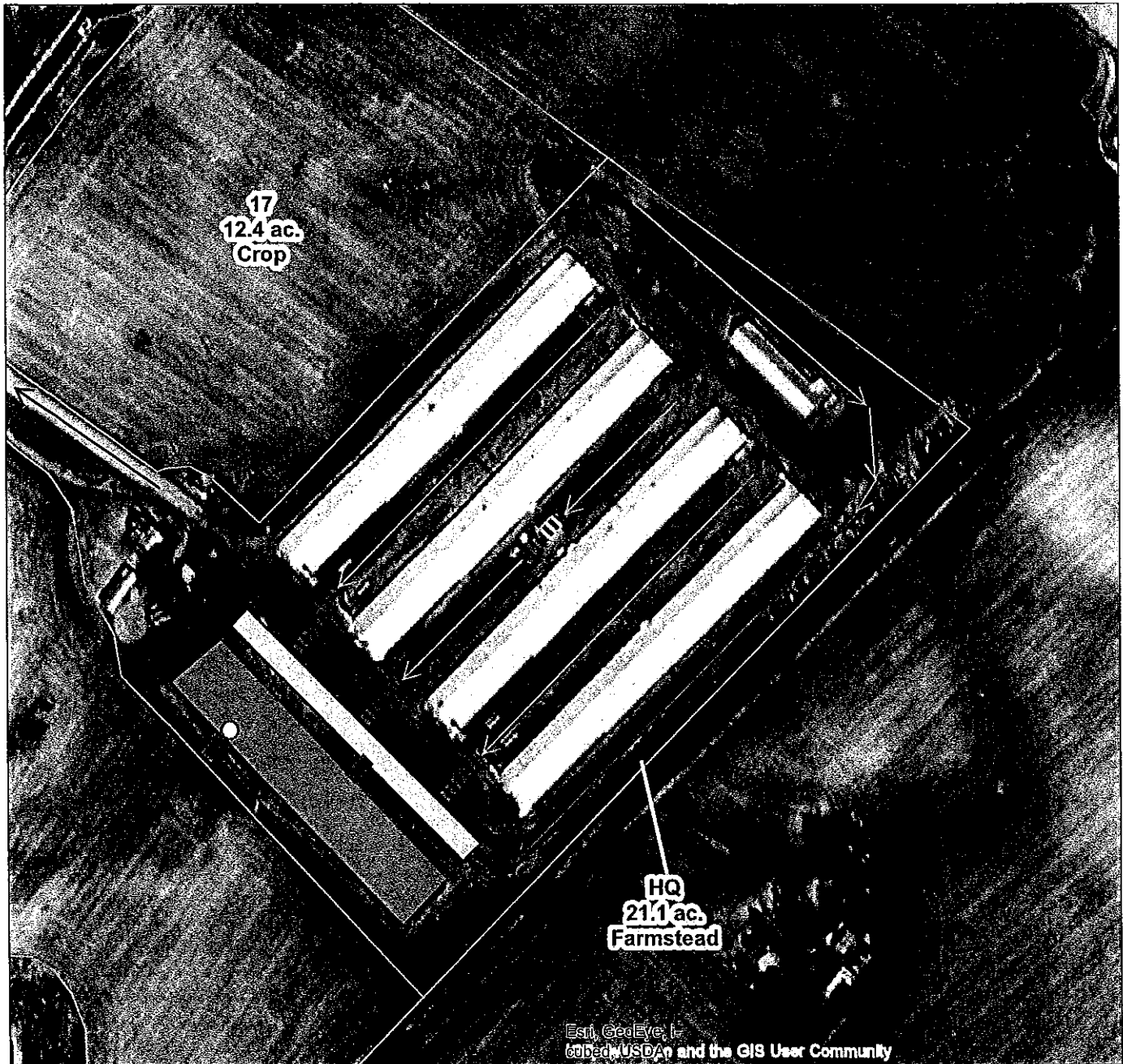
Water Conveyance Map

Date: 05/31/2022

Owner: DAVID AND JACOB GIBBONS
 Operator: JACOB GIBBONS
 Approximate Acres: 87.0

OPID: 2131
 Farm: 2725
 Tract: 820

District: WORCESTER SCD
 Agency: MDA/NRCS
 Assisted by: CHELSEA TYSON



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Prepared with assistance from USDA-Natural Resources Conservation Service



Practice Schedule
 PLUs

Legend

- Swale
- Drainage
- |||| Underground Pipe
- ▭ Forebay
- ▭ Stormwater Pond
- ▭ Stormwater Outfall
- ▭ Forebay Outfall
- Water Control Structure





POULTRY LITTER QUANTITY ESTIMATE

Name: **Jacob Gibbons** Tract / Farm: **C. O. D. Farm** Date: **4/19/2022**

Houses Included: **4** Bird type: **Roaster**
Average Bird Market Weight (lbs): 10

A.	Years between total cleanouts: Yr. next total cleanout: - Yr. last total cleanout: = Years in cleanout cycle:	2023 2017 6
B.	Total # of birds per flock (for all houses on this cleanout cycle):	162,000
C.	Flocks per year	4
D.	Number of flocks per cleanout cycle (A x C):	24
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: *	1.9379
G.	Tons cake/crust produced per flock (B x E/1000):	32
H.	Tons cake/crust produced per cycle (G x D)	778
I.	Tons litter + cake/crust produced per cycle (B x D x F/1000):	7,535
J.	Tons of litter produced per cycle (less cakeout/crustout) (I - H):	6,757
K.	Tons of litter produced per year (less cakeout/crustout) (J/A):	1,126
L.	Tons of litter + cake/crust produced per year (I/A)	1,256

* 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)
2018	0	1,126	0	0	4	130	40	40
2019	1,216	2,342	0	0	4	130	65	65
2020	2,407	3,533	0	0	4	130	65	65
2021	3,597	4,723	0	0	4	130	65	65
2022	4,788	5,914	0	0	4	130	65	65
2023	5,979	7,105	100	7,105	4	130	65	7,170
				7,105	24	778	365	7,470

*** 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.

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. **Worcester County University of Maryland Extension Office**
12. **Worcester Soil Conservation District**
13. **Mountaire Farms**
<http://www.mountaire.com/>

MANURE EXPORTS

Farm Name: C.O.D. Farm Year:

Operator: Jacob Gibbons

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

MONTHLY ANIMAL & MORTALITY COUNT

Farm Name: C.O.D. Farm Year:

Operator: Jacob Gibbons

Month	Animal Count and Weight	Mortality	Mortality %	Comments

INSPECTION / MONITORING RECORDS

Farm Name: C.O.D. Farm Year: _____

Operator: Jacob Gibbons

Date	Activity Description	Operator / Inspector	Activity Data

Source: https://www.industrydocuments.ucsf.edu/docs/...



Maryland
Department of
the Environment

Larry Hogan, Governor
Boyd K. Rutherford, Lt. Governor
Ben Grumbles, Secretary
Horacio Tablada, Deputy Secretary

Nutrient Land Application Log Sheet

Facility Name: _____ NPDES Permit No.: _____

Instructions:

For each land application for each field, provide the following information in the table below:

- Date: the date you applied the manure/litter/process wastewater to the field
- Field ID: the field where you applied manure/litter/process wastewater. Use the same field identification that is used in your nutrient management plan
- Method: how you applied the manure/litter/process wastewater (e.g. surface w/ incorporation, surface w/out incorporation, subsurface injection...)
- Application Rate: the number of tons or gallons *actually* applied per acre
- Acres Applied: the number of acres the manure/litter/process wastewater was applied to on the field
- Total N: the total amount of nitrogen you applied to the field from animal waste
- Total P: the total amount of phosphorous you applied to the field from animal waste

Date	Field ID	Method	Actual Application Rate	Acres Applied	Total N	Total P

Date	Field ID	Method	Actual Application Rate	Acres Applied	Total N	Total P

Weather and Soil Condition Documentation

When land applying manure/litter/process wastewater, you also need to document the weather and soil conditions. Please provide this information in the following table:

Date	Field ID	Weather Conditions			Soil Conditions
		24 hours before	During	24 hours after	



Weekly Storage and Containment Structure Inspections Log Sheet

Facility Name: _____ NPDES Permit No.: _____

Instructions:

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

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

Storage or Containment Structure: _____

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

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

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

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

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



Maryland

Department of
the Environment

Larry Hogan, Governor
Boyd K. Rutherford, Lt. Governor

Ben Grumbles, Secretary
Horacio Tablada, Deputy Secretary

Weekly Wastewater Facilities Inspections Log Sheet

Facility Name: _____ NPDES Permit No.: _____

Instructions:

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

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

List the items that need to be inspected below:

_____	_____
_____	_____
_____	_____
_____	_____

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

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

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

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

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



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Ben Grumbles, Secretary
Horacio Tablada, Deputy Secretary

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 ft³ 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 Application Equipment Inspection and Calibration Record

Facility Name: _____ NPDES Permit No.: _____

Instructions:

Use this form to keep records of your manure equipment inspections. For each inspection, provide the following information in the table below:

- Inspection/Calibration Date: the date of the inspection/calibration
- Calibration Method: method used for calibration (e.g. weight-area method, load-area method...)
- Inspection/Calibration Results: provide statements such as "recalibrated equipment" or "equipment in calibration"
- Date Calibration Corrected: the date that any observed deficiencies were fixed **must be corrected within 30 days*

Inspection/Calibration Date	Calibration Method	Inspection/Calibration Results	Date Re-Calibrated or Fixed*



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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		
13		

14		
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21		
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23		
24		
25		
26		
27		
28		

29		
30		
31		
February, 20____		
Day	Initials	√ if Leak Detected
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14		
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26		
27		
28		
29		
March, 20 _____		
Day	Initials	√ if Leak Detected
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27		
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29		
30		
31		
April, 20 _____		
Day	Initials	√ if Leak Detected

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28		

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30		
May, 20__		
Day	Initials	√ if Leak Detected
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31		
June, 20__		
Day	Initials	√ if Leak Detected
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30		
July, 20__		
Day	Initials	√ if Leak Detected
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31		
August, 20 _____		
Day	Initials	✓ if Leak Detected
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30		
31		
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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