2019 Nutrient Management Annual Implementation Report (AIR) for CAFO and MAFO Operations

Due March 1, 2020

Maryland Department of the Environment

For Field Office Use

For HQ Use

1. County _____

2. MDA Op Number _____ MDE AI Number: _____

3. Operator/Owner **Legal** Name Last_____ Suffix_____

First_____ Middle Int._____

4. Farm/Operation Name _____

5. Mailing Address _____

6. City _____ **7.** State _____ **8.** Zip _____

9. E-Mail address _____

10. Telephone Number(s) Office_____ Home _____

Cell _____

11. _____ **Total Farmed Acres including Pastures**

12. Operation Type (Check all that apply)

- ☐ Crop Production
- ☐ Hay / Pasture
- ☐ Nursery/Greenhouse
- ☐ Organic
- ☐ Animal
- ☐ No-Land (0 Managed Acres)
- ☐ Other_____

13. Account ID updates - List changes to Account ID's, and check if added or deleted from operation since your previous AIR report. Attach additional pages if needed.

☐ No change of account ID(s)

Added	Deleted	
☐	☐	_____
☐	☐	_____
☐	☐	_____
☐	☐	_____

14. Nutrient Sources Used (Check all that apply)

- ☐ Commercial Fertilizers
- ☐ Biosolids/Sewage Sludge
- ☐ Animal Manure
- ☐ Food Waste
- ☐ Other_____

Nutrient Management Consultant and Plan Information

15. Name of Nutrient Management Plan Writer:

_____

16. Certificate # _____

17. License # _____

18. Date NM Plan Written: ____/____/ _____

19. Date NM Plan Expires: ____/____/ _____

20. _____ Total Acres of animal manure recommended for land application by the nutrient management plan.

Animals *other than poultry* ☐ Check if None.

21. Number of head during 2019.

_____ Beef, cows and bulls
_____ Beef, feeder cattle (500 lbs and over)
_____ Beef, young stock (less than 500 lbs)
_____ Dairy, cows
_____ Dairy, heifers
_____ Dairy, calves
_____ Swine, sows and boars
_____ Swine, growers
_____ Sheep
_____ Goats
_____ Horses
_____ Other _____

INCOMPLETE INFORMATION WILL BE DEEMED INADEQUATE AND MAY FORCE MDA TO SEEK MONETARY PENALTIES.

Crop Production

22. _____ Acres under conservation tillage with 30%-59% residue coverage at planting.

23. _____ Acres under conservation tillage with 60% or more residue coverage at planting.

24. _____ Acres of crop land under irrigation.

Nursery / Greenhouse

25. _____ Acres/sq.ft. Container nursery/ greenhouse irrigation runoff and leachate capture and reuse.

Poultry

26. Poultry (*in 1,000s per flock*)

_____ Broilers/Roasters _____ Pullets

_____ Layers _____ Turkeys

27. _____ Number of Flocks per year

28. Poultry Integrator:

_____

29. _____ Number of Poultry Houses

30. _____ Total sq.ft. of all poultry houses

Poultry Litter

31. _____ Tons Poultry litter removed during crust-outs in 2019. ☐ Check if Windrowed

32. _____ Tons Poultry litter removed during partial or total cleanout(s) in 2019.

33. _____ Tons of On-Farm Collected poultry litter that remained stored or stockpiled from 2018.

34. On-Farm Collected poultry litter that was land applied to your farm operation in 2019.

_____ Tons _____ Acres

35. Tons of imported poultry litter that remained stored or stockpiled from 2018 and was applied in 2019.

_____ Tons _____ Acres

36. _____ Acres Poultry litter incorporated within 48 hrs with vertical tillage equipment (Ex: "Turbo Till").

Commercial Fertilizer

37. _____ Acres using variable rate fertilizer application or split application.

38. _____ Acres where Nitrogen was applied based on the recommendations of the Pre-Sidress Nitrogen Test (PSNT).

39. _____ Acres where Commercial fertilizer Nitrogen was incorporated within 24 hours.

40. _____ Acres where Commercial fertilizer Phosphorus was incorporated within 24 hours.

Manure/Organics Storage

41. _____ Number of manure/organics storage structures
☐ Check if **None**

42. Total available storage capacity:

_____ Cu. Ft _____ Gals _____ Tons

43. Yes ☐ No ☐ Temporary stockpiling of manure/organics?

Manure/Organics *other than poultry litter*

44. _____ Acres Liquid manure applied with injector or other sub-surface applicator.

45. _____ Acres Liquid manure incorporated within 48 hrs with vertical tillage equipment (Ex: "Turbo Till").

46. _____ Acres Manure application applied at the crops Phosphorus Removal Rate.

47. _____ Tons Total On-Farm Collected manure/organics
_____ Gals

48. _____ Tons Total On-Farm Collected manure/organics
_____ Gals that remained stored or stockpiled from 2018.

49. On Farm Collected manure/organics that was land applied to your farm operation in 2019.

Type of Manure/Organics	Amount	Land Application
☐ Dairy ☐ Beef ☐ Swine ☐ Horse ☐ Sheep ☐ Other: _____	Tons	Acres
	Gals.	Acres
☐ Dairy ☐ Beef ☐ Swine ☐ Horse ☐ Sheep ☐ Other: _____	Tons	Acres
	Gals.	Acres
☐ Dairy ☐ Beef ☐ Swine ☐ Horse ☐ Sheep ☐ Other: _____	Tons	Acres
	Gals.	Acres

50. Total imported manure/organics that remained stored or stockpiled from 2018 and was applied in 2019.

Tons _____/ Acres _____ Gallons_____/Acres_____

51. Imported Manure, Biosolids, Food Waste or Other Organics on your farm operation. Be sure to report **COUNTY** and **STATE** from which material was imported. Use additional sheets if necessary.

☐ **Check if None**

MDA/MDE ID: _____

Name	**Address - Location where Manure/ Organics were Imported?**	**Check Type of Imported Manure/ Organics**	Amount	Amount Used	Land Application
Name of person: Name of Farm/Entity:	Street: City: County: State, Zip	☐ Dairy ☐ Beef ☐ Poultry ☐ Swine ☐ Horse ☐ Sheep ☐ Compost ☐ Biosolids Class A ☐ Biosolids Class B ☐ Poultry Processing DAF ☐ Food Residuals ☐ Other Manure or Organics: _____	Gals. Tons	Gals. Tons	Acres Acres
Name of person: Name of Farm/Entity:	Street: City: County: State, Zip	☐ Dairy ☐ Beef ☐ Poultry ☐ Swine ☐ Horse ☐ Sheep ☐ Compost ☐ Biosolids Class A ☐ Biosolids Class B ☐ Poultry Processing DAF ☐ Food Residuals ☐ Other Manure or Organics: _____	Gals. Tons	Gals. Tons	Acres Acres
Name of person: Name of Farm/Entity:	Street: City: County: State, Zip	☐ Dairy ☐ Beef ☐ Poultry ☐ Swine ☐ Horse ☐ Sheep ☐ Compost ☐ Biosolids Class A ☐ Biosolids Class B ☐ Poultry Processing DAF ☐ Food Residuals ☐ Other Manure or Organics: _____	Gals. Tons	Gals. Tons	Acres Acres

52. Exported Manure, Food Waste or Other Organics that left your farm operation. Be sure to note **COUNTY** and **STATE** to which material was exported. Use additional sheets if necessary.

☐ **Check if None**

Name	**Address - Location where Manure/Organics were Exported?**	**Check Type of Exported Manure/ Organics**	Amount Tons/Gals	Sent To:
Name of person: Name of Farm/Entity:	Street: City: County: State, Zip	☐ Dairy ☐ Beef ☐ Poultry ☐ Swine ☐ Horse ☐ Sheep ☐ Compost ☐ Poultry Processing DAF ☐ Food Residuals ☐ Other Manure or Organics: _____	Gals. Tons	☐ Alternative Use Facility ☐ Manure/ Organics Broker ☐ Other Farm Operation
Name of person: Name of Farm/Entity:	Street: City: County: State, Zip	☐ Dairy ☐ Beef ☐ Poultry ☐ Swine ☐ Horse ☐ Sheep ☐ Compost ☐ Poultry Processing DAF ☐ Food Residuals ☐ Other Manure or Organics: _____	Gals. Tons	☐ Alternative Use Facility ☐ Manure/ Organics Broker ☐ Other Farm Operation
Name of person: Name of Farm/Entity:	Street: City: County: State, Zip	☐ Dairy ☐ Beef ☐ Poultry ☐ Swine ☐ Horse ☐ Sheep ☐ Compost ☐ Poultry Processing DAF ☐ Food Residuals ☐ Other Manure or Organics: _____	Gals. Tons	☐ Alternative Use Facility ☐ Manure/ Organics Broker ☐ Other Farm Operation

53. Summary of Nutrient Applications by Crop See Instructions for help with this

TOTAL pounds of AVAILABLE nutrients applied. If you did not apply nutrients, list the crop, the crop acreage and draw a line through the rest of the boxes.

CROP Include Pastures	Acres	Commercial Fertilizer in pounds			Manure in pounds			Biosolids/Sewage Sludge in pounds			Other Organic Sources in pounds		
		N	P_2O_5	K_2O	N	P_2O_5	K_2O	N	P_2O_5	K_2O	N	P_2O_5	K_2O
Corn grain, dry land													
Corn grain, irrigated													
Corn silage													
Soybeans, full season													
Soybeans, double crop													
Small grains, Spring 2019													
Small grains, Fall 2019													
Hay, grass													
Hay, legume													
Pasture													
Vegetables													
Tobacco													
List other crops:													

Report Certification :

All of the information contained within this 2019 Nutrient Management Annual Implementation Report (AIR) is true to the best of my knowledge. A valid nutrient management plan for my operation(s) for calendar year 2020 will be developed and implemented.

MDA/MDE ID: _____

54. Operator's Signature

_____

55. Operator's Printed Name: _____

56. Date signed: _____

57. Summary of Nutrient Applications by Field (CAFO/MAFO Operations, See instructions).
List all fields that received manure in **2019**, whether generated on site or imported. Field names must correspond with the nutrient management plan field names. Use additional sheets if needed.

Field Name / Mgmt Unit	Acres	Crop & Yield Goal	Crop Yield Harvested	Soil Test results (ppm, mg/l or lbs/a) P_2O_5	Nutrients recommended for Crop & Yield Goal (in lbs/acre) N	P_2O_5	Nutrient application rates from Manure, Litter, Process Wastewater (in lbs nutrient per acre) N	P_2O_5	Commercial fertilizer, sewage sludge, and other nutrient sources(in lbs nutrient per acre) Type	N	P_2O_5
A-1	30	corn grain 150 bu	130	81 ppm	150	20	7	20	urea	150	0

58. Manure Nutrient Content. **Attach Lab Sheets**. Samples must reflect manure used or exported manure in 2019.

59. Unpermitted Discharges. List all times during **2019** that unpermitted discharges of contaminated water occurred from the production area to waters of the State (surface and ground water), along with **date, time, quantity of discharge and the source**, ex: chicken house, manure shed, swale between chicken houses, etc. ☐ Check if no known discharge(s) occurred.

_____

MDA/MDE ID: _____