



2020

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

Due March 1, 2021



Maryland
Department of
the Environment

For Field Office 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 _____

For HQ Use

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 2020.

- _____ 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 _____

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 2020. ☐ Check if Windrowed
32. _____ Tons Poultry litter removed during partial or total cleanout(s) in 2020.
33. _____ Tons of On-Farm Collected poultry litter that remained stored or stockpiled from 2019.
34. On-Farm Collected poultry litter that was land applied to your farm operation in 2020.

_____ Tons _____ Acres

35. Tons of imported poultry litter that remained stored or stockpiled from 2019 and was applied in 2020.

_____ 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 2019.

49. On Farm Collected manure/organics that was land applied to your farm operation in 2020.

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

50. Total imported manure/organics that remained stored or stockpiled from 2019 and was applied in 2020.

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

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

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

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 ₂ O ₅	K ₂ O	N	P ₂ O ₅	K ₂ O	N	P ₂ O ₅	K ₂ O	N	P ₂ O ₅	K ₂ O
Corn grain, dry land													
Corn grain, irrigated													
Corn silage													
Soybeans, full season													
Soybeans, double crop													
Small grains, Spring 2020													
Small grains, Fall 2020													
Hay, grass													
Hay, legume													
Pasture													
Vegetables													
Tobacco													
List other crops:													

Report Certification :

All of the information contained within this 2020 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 2021 will be developed and implemented.

54. Operator's Signature

55. Operator's Printed Name: _____

56. Date signed: _____

MDA/MDE ID: _____

List all fields that received manure in **2020**, whether generated on site or imported. Field names must correspond with the nutrient management plan field names. Use additional sheets if needed.

58. Manure Nutrient Content. Attach Lab Sheets. Samples must reflect manure used or exported manure in 2020.

☐ Check if no known discharge(s) occurred.