



2023

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

Due March 1, 2024



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

Table with 2 columns: Added, Deleted. Rows for account ID updates.

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 2023.

- 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 2023. Check if Windrowed
32. _____ Tons Poultry litter removed during partial or total cleanout(s) in 2023.
33. _____ Tons of On-Farm Collected poultry litter that remained stored or stockpiled from 2022.
34. On-Farm Collected poultry litter that was land applied to your farm operation in 2023.
- _____ Tons _____ Acres
35. Tons of imported poultry litter that remained stored or stockpiled from 2022 and was applied in 2023.
- _____ 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 2022.
49. On Farm Collected manure/organics that was land applied to your farm operation in 2023.

Type of Manure/Organics	Amount	Land Application
<input type="checkbox"/> Dairy <input type="checkbox"/> Beef <input type="checkbox"/> Swine	Tons	Acres
<input type="checkbox"/> Horse <input type="checkbox"/> Sheep <input type="checkbox"/> Other: _____	Gals.	Acres
<input type="checkbox"/> Dairy <input type="checkbox"/> Beef <input type="checkbox"/> Swine	Tons	Acres
<input type="checkbox"/> Horse <input type="checkbox"/> Sheep <input type="checkbox"/> Other: _____	Gals.	Acres
<input type="checkbox"/> Dairy <input type="checkbox"/> Beef <input type="checkbox"/> Swine	Tons	Acres
<input type="checkbox"/> Horse <input type="checkbox"/> Sheep <input type="checkbox"/> Other: _____	Gals.	Acres

50. Total imported manure/organics that remained stored or stockpiled from 2022 and was applied in 2023.

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: Name of Farm/Entity:	Street: City: County: State, Zip	<input type="checkbox"/> Dairy <input type="checkbox"/> Beef <input type="checkbox"/> Poultry <input type="checkbox"/> Swine <input type="checkbox"/> Horse <input type="checkbox"/> Sheep <input type="checkbox"/> Compost <input type="checkbox"/> Biosolids Class A <input type="checkbox"/> Biosolids Class B <input type="checkbox"/> Poultry Processing DAF <input type="checkbox"/> Food Residuals <input type="checkbox"/> Other Manure or Organics: _____	Gals. Tons	Gals. Tons	Acres Acres
Name of person: Name of Farm/Entity:	Street: City: County: State, Zip	<input type="checkbox"/> Dairy <input type="checkbox"/> Beef <input type="checkbox"/> Poultry <input type="checkbox"/> Swine <input type="checkbox"/> Horse <input type="checkbox"/> Sheep <input type="checkbox"/> Compost <input type="checkbox"/> Biosolids Class A <input type="checkbox"/> Biosolids Class B <input type="checkbox"/> Poultry Processing DAF <input type="checkbox"/> Food Residuals <input type="checkbox"/> Other Manure or Organics: _____	Gals. Tons	Gals. Tons	Acres Acres
Name of person: Name of Farm/Entity:	Street: City: County: State, Zip	<input type="checkbox"/> Dairy <input type="checkbox"/> Beef <input type="checkbox"/> Poultry <input type="checkbox"/> Swine <input type="checkbox"/> Horse <input type="checkbox"/> Sheep <input type="checkbox"/> Compost <input type="checkbox"/> Biosolids Class A <input type="checkbox"/> Biosolids Class B <input type="checkbox"/> Poultry Processing DAF <input type="checkbox"/> Food Residuals <input type="checkbox"/> 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 to?	Check Type of Exported Manure/Organics	Amount Tons/Gals	Sent To:
Name of person: Name of Farm/Entity:	Street: City: County: State, Zip	<input type="checkbox"/> Dairy <input type="checkbox"/> Beef <input type="checkbox"/> Poultry <input type="checkbox"/> Swine <input type="checkbox"/> Horse <input type="checkbox"/> Sheep <input type="checkbox"/> Compost <input type="checkbox"/> Poultry Processing DAF <input type="checkbox"/> Food Residuals <input type="checkbox"/> Other Manure or Organics: _____	Gals. Tons	<input type="checkbox"/> Alternative Use Facility <input type="checkbox"/> Manure/ Organics Broker <input type="checkbox"/> Other Farm Operation
Name of person: Name of Farm/Entity:	Street: City: County: State, Zip	<input type="checkbox"/> Dairy <input type="checkbox"/> Beef <input type="checkbox"/> Poultry <input type="checkbox"/> Swine <input type="checkbox"/> Horse <input type="checkbox"/> Sheep <input type="checkbox"/> Compost <input type="checkbox"/> Poultry Processing DAF <input type="checkbox"/> Food Residuals <input type="checkbox"/> Other Manure or Organics: _____	Gals. Tons	<input type="checkbox"/> Alternative Use Facility <input type="checkbox"/> Manure/ Organics Broker <input type="checkbox"/> Other Farm Operation
Name of person: Name of Farm/Entity:	Street: City: County: State, Zip	<input type="checkbox"/> Dairy <input type="checkbox"/> Beef <input type="checkbox"/> Poultry <input type="checkbox"/> Swine <input type="checkbox"/> Horse <input type="checkbox"/> Sheep <input type="checkbox"/> Compost <input type="checkbox"/> Poultry Processing DAF <input type="checkbox"/> Food Residuals <input type="checkbox"/> Other Manure or Organics: _____	Gals. Tons	<input type="checkbox"/> Alternative Use Facility <input type="checkbox"/> Manure/ Organics Broker <input type="checkbox"/> Other Farm Operation

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 2023													
Small grains, Fall 2023													
Hay, grass													
Hay, legume													
Pasture													
Vegetables													
Tobacco													
List other crops:													

Report Certification :

54. Operator's Signature

All of the information contained within this 2023 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 2024 will be developed and implemented.

55. Operator's Printed Name: _____

56. Date signed: _____

MDA/MDE ID: _____

57. Summary of Nutrient Applications by Field (See instructions).

List all fields that received manure in 2023, 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 ₂ O ₅	Nutrients recommended for Crop & Yield Goal (in lbs/acre)		Nutrient application rates from Manure, Litter, Process Wastewater (in lbs nutrient per acre)		Commercial fertilizer, sewage sludge, and other nutrient sources (in lbs nutrient per acre)		
					N	P ₂ O ₅	N	P ₂ O ₅	Type	N	P ₂ O 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 2023.

59. Unpermitted Discharges. List all times during 2023 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.