

Animal Feeding Operations & Concentrated Animal Feeding Operations

Albemarle County Board of Supervisors

Wednesday, October 7, 2026

Caroline Vanterve, AICP, Principal Planner, Berkley Group

Today's Presentation

1. Report Purpose and Scope
2. What is an Animal Feeding Operation (AFO) / Concentrated Animal Feeding Operation (CAFO)?
3. *Code of Virginia* and the Right to Farm Act
4. State Agencies and Industry Oversight
5. Comparison Localities
6. Conclusion
7. Questions

Report Purpose and Scope

- ✓Identify a consistent definition for AFOs and CAFOs based on applicable state and/or federal regulations
- ✓Analyze the Right to Farm Act, relevant *Code of Virginia* requirements, and the impact on local zoning authority
- ✓Review of Virginia locality zoning ordinances
- ✓Interview comparison locality staff and state agency representatives

What is an Animal Feeding Operation?

A lot or facility where **BOTH** of the following conditions are met:

1. Animals have been, are, or will be stabled or confined and fed or maintained for a total of 45 days or more in any 12-month period; and
2. Crops, vegetation, forage growth, or post-harvest residues are not sustained in the normal growing season over any portion of the lot or facility.

What is a Concentrated Animal Feeding Operation?

- A CAFO is **an AFO that has met certain size and/or waste discharge criteria** established under federal and state law
  - *Large:* Certain animal threshold is met regardless of waste discharge conditions
  - *Medium:* Certain animal threshold is met AND certain waste discharge conditions are present
  - *Small:* Certain waste discharge conditions and contamination potential are met
- Considered point sources of pollution
- Regulated under the Clean Water Act; subject to permitting through DEQ

What is a Concentrated Animal Feeding Operation?

Animal Category	Large CAFO Minimum Thresholds	Medium CAFO Minimum Threshold	Small CAFO Minimum Threshold
Mature Dairy Cows (Milked or Dry)	700	200 – 699	Anything under medium CAFO threshold **AND** Designated as a CAFO based on waterway contamination potential
Veal Calves	1,000	300 – 999	
Cattle (Heifers, Steers, Bulls, and Cow/Calf Pairs)	1,000	300 – 999	
Swine, each weighing 55+ pounds	2,500	750 – 2,499	
Swine, each weighing less than 55 pounds	10,000	3,000 – 9,999	
Horses	500	150 – 499	
Sheep or Lambs	10,000	3,000 – 9,999	
Turkeys	55,000	16,500 – 54,999	
Laying Hens or Broilers (if AFO uses liquid manure handling system)	30,000	16,500 – 29,999	
Chickens (if AFO uses other than liquid manure handling system)	125,000	37,500 – 124,999	
Laying Hens (if AFO uses other than liquid manure handling system)	82,000	25,000 – 81,999	
Duck (if AFO uses liquid manure handling system)	5,000	1,500 – 4,999	
Ducks (if AFO uses other than liquid manure handling system)	30,000	10,000 – 29,999	

CAFO Waste Management: Understanding Terminology

- **Sewage Sludge**
  - Any solid, semisolid, or liquid residues which contain materials removed from municipal or domestic wastewater during treatment including primary and secondary residues
  - Virginia law does NOT exempt sewage sludge application or storage from regulation
- **Biosolids**
  - Sewage sludge that has undergone additional treatment to reduce pathogens / pollutants
  - Land application regulated under two types of DEQ permits: VPA and VPDES
- **Manure or Poultry Litter**
  - NOT a biosolid under Virginia law
  - Can be applied to land with a Nutrient Management Plan and/or VPA permit

Virginia's Right to Farm Act

The Right to Farm Act accomplishes three main purposes:

1. Defines agriculture
2. Limits localities from prohibiting or conditionally approving agriculture in an agricultural zoning district, but allows adoption of supplemental zoning standards **if reasonably connected to public health, safety, and general welfare**
3. Protects legitimate agricultural operations from nuisance claims

Code of Virginia § 3.2-300 et seq.

Additional *Code of Virginia* Considerations

- **§ 15.2-2288:** Requires legitimate agricultural operations to be permitted by-right on property zoned for agricultural use
  - Protections do not extend to processing; storage of excavation waste; or above-ground storage or application of sewage sludge
- **§ 15.2-2288.1:** Requires small-scale biomass conversions to be permitted by-right
- **§§ 15.2-2288.3 - 15.2-2288.3:2**: Limit local regulation of licensed farm breweries, wineries, and distilleries
- **§ 15.2-2288.6:** Limits local regulation of agritourism

Code of Virginia § 15.2-2200 et. seq.

Local Authority to Regulate Agriculture

Virginia Localities CAN…	Virginia Localities CANNOT…
✓ Establish agricultural zoning districts and determine dimensional standards for uses in the district	X Require special approval for a legitimate agricultural or forestry operation in an agricultural zoning district
✓ Adopt objective and consistent requirements for agricultural districts	X Unreasonably restrict agricultural and forestry practices or adopt standards without a direct relationship to public health, safety, and general welfare
✓ Apply reasonable supplemental requirements for certain agricultural operations and agritourism	X Treat the same or similar agricultural operations differently within the same zoning district or classification
✓ Separately regulate activities that are *not* protected agricultural operations, such as commercial processing of agricultural products, the aboveground storage of sewage sludge, and the storage or disposal of excavation material, waste, or debris	X Use an ordinance to declare or stop a legitimate agricultural operation as a nuisance

State Agencies and Industry Oversight

Agency	Role
Virginia Department of Environmental Quality (DEQ)	- Administers permits for AFOs and CAFOs - Inspects facilities for alleged violations - Requires and reviews nutrient management plans
Virginia Department of Agriculture and Consumer Services (VDACS)	Administers the Agricultural Stewardship Act
Soil and Water Conservation District (SWCD)	- Mostly non-regulatory; may take on a regulatory role to assist with enforcement of erosion & sediment control - Provide education and technical assistance to conserve and protect soil and water
Virginia Cooperative Extension (VCE)	**NON-REGULATORY** Advises farmers and citizens on industry best practices

DEQ Regulation of Agriculture

- DEQ regulates animal waste generated or used by AFOs and CAFOs
- Permit coverage is generally required for:
  - Livestock operations with more than 300 animal units that handle liquid manure
  - Poultry operations with more than 20,000 chickens or 11,000 turkeys
- Permits address waste storage and use; soil and groundwater monitoring; and livestock and poultry litter tracking
- Permits primarily protect water quality and do not explicitly regulate dust, odor, or noise

DEQ Regulation of Agriculture

Nutrient Management Plan

- Mandatory, site-specific documents that detail how the amount, placement, timing, and application of fertilizers, manure, and biosolids will be managed
- Required for a variety of land uses in Virginia
- Intended to improve and protect water quality
- Must be prepared by a certified nutrient management planner and demonstrate how minimum standards will be achieved
- DEQ permits are the mechanism to enforce compliance

DEQ Regulation of Agriculture

Other DEQ Regulations and Criteria

- Operations on different parcels are treated as one facility when they:
  - Are under common ownership;
  - Adjoin one another; or
  - Share a waste-disposal area or system.
- Existing permits must be modified if additional poultry houses are constructed or if the number of animals is increased over 10%
- Setback and buffer criteria established for waste storage and application specifically
- Common violations tend to be informal corrective actions

VDACS Agricultural Stewardship Act

- The **Agricultural Stewardship Act** (ASA):
  - Identifies water quality problems and helps farmers correct them practically
  - Offers education to the public about best practices and agricultural stewardship
- ASA applies to agricultural operations that are NOT already subject to DEQ permits
- ASA is enforced primarily on a complaint basis
- In 2025, most complaints were associated with bacteria/nutrients/sediment; **44%** of complaints were determined to be **founded**

Comparison Localities

- 13 localities included in analysis
  - Preference given to geographic proximity to Albemarle County
  - Four localities interviewed for additional context/information
- No formal database or list of locality ordinances regulating intensive agriculture
- No recognized model ordinance for intensive agriculture regulation

Comparison Localities

County	Site Plan, Plat, and/or Facility Plan	Facility Density	Facility Limit	Enhanced Setbacks	Vegetative Screening / Buffering	Minimum Lot Area / Acreage	DEQ NMP Reiterated	Waste Storage or Disposal
Accomack	X	X[1]	X[1]	X	X	X	X[2]	
Amelia	X			X	X		X	X
Brunswick	X			X	X		X	X
Buckingham	X			X		X	X	
Dinwiddie	X			X		X	X	
Franklin	X			X				
New Kent	X			X		X		
Orange	X			X			X	
Page				X		X		X
Pittsylvania	X			X		X	X	X
Prince Edward	X			X	X	X	X	X
Rockingham	X			X			X	
Shenandoah	X			X			X	

Comparison Localities

County	Site Plan, Plat, and/or Facility Plan	Facility Density	Facility Limit	Enhanced Setbacks	Vegetative Screening / Buffering	Minimum Lot Area / Acreage	DEQ NMP Reiterated	Waste Storage or Disposal
Accomack	X	X[1]	X[1]	X	X	X	X[2]	
Amelia	X			X	X		X	X
Brunswick	X			X	X		X	X
Buckingham	X			X		X	X	
Dinwiddie	X			X		X	X	
Franklin	X			X				
New Kent	X			X		X		
Orange	X			X			X	
Page				X		X		X
Pittsylvania	X			X		X	X	X
Prince Edward	X			X	X	X	X	X
Rockingham	X			X			X	
Shenandoah	X			X			X	

Comparison Localities
Locality Staff Insight

Accomack, Amelia, New Kent, and Rockingham Counties

- Current Ordinance standards generally work well
- Most public complaints are associated with traffic and odor
- DEQ handles complaints associated with pollution and water quality
- Recent Ordinance amendments in Accomack and Rockingham developed with industry stakeholders
- What is the future of the industry and the rise in “industrialization” of agriculture? Will state law recognize these growing nuances?

Conclusion

- AFOs and CAFOs defined consistently under Virginia and federal law; some nuances for permitting purposes
- State law restricts the extent to which localities can regulate agricultural uses
- Localities can adopt additional regulations if proven to have a direct relationship with public health, safety, and welfare
- Locality ordinance standards generally require increased setbacks, reiterate Nutrient Management Plan requirements, and provide specific guidelines for waste disposal

Conclusion

IF pursued, zoning standards for any agricultural use should:

- ✓Be directly connected to clearly identified local impacts
- ✓Complement and not duplicate state and federal oversight
- ✓Apply consistently to similarly situated agricultural operations
- ✓Remain within the enabling authority established in Virginia law



Questions

Questions for the Board

- Is additional information needed?
- What are the key areas of focus?

Thank You

BERKLEY GROUP

Caroline Vanterve, AICP
Principal Planner



Bart Svoboda
Director of Community Development