

A. Permit Provisions and Program Elements

Virginia



Nutrient Management Inspector Qualifications

Virginia AFOs covered under Virginia Pollutant Abatement (VPA) general and individual permits and CAFOs with Virginia Pollutant Discharge Elimination System Permits (VPDES) must implement an NMP developed by a certified nutrient management planner in accordance with § 10.1-104.2 of the Code of Virginia. NMPs are approved by Virginia Department of Conservation and Recreation (DCR) and maintained on-site by the permittee. Virginia Department of Environmental Quality (DEQ) staff who inspect VPA-permitted AFOs and VPDES-permitted CAFOs must be DCR-certified nutrient management planners.

During VPA and VPDES permit inspections DEQ inspectors review the AFO's or CAFO's NMP and conduct an in-depth review of a minimum of two land application fields. DEQ's inspector compares NMP recommendations with the farmer's actual fertilizer/manure application rates, timing, method, etcetera to see whether the farmer is following the NMP. DEQ inspectors also conduct a walk-through of the same land application fields to determine whether the actual crops planted, tillage methods, incorporation method, setbacks, and other observable factors are consistent with the NMP and thereby consistent with the permit covering the facility.

DEQ inspections, conducted by certified nutrient management planners, go beyond simply checking whether a farmer has a current NMP to evaluate whether the farmer is complying with and fully implementing the NMP ([EPA Region 3 2015](#)).

Frameworks

The statutory authority for the [VPA Regulation and General Permit for Animal Feeding Operations and Animal Waste Management](#) (9VAC25-192-10), the [VPA Regulation and General Permit for Poultry Waste Management](#) (9VAC25-630-10), and the [VPDES Permit Regulation](#) (9VAC25-31-20) is § [62.1-44.15](#) (State Water Control Law) of the Code of Virginia.

Code of Virginia

Title 62.1. Waters of the State, Ports, and Harbors

Chapter 3.1. State Water Control Law

§ [62.1-44.15](#). Powers and duties; civil penalties

(5a) ... Department [of Environmental Quality] personnel performing inspections of confined animal feeding operations shall be certified under the voluntary nutrient management training and certification program established in § 10.1-104.2 [Voluntary nutrient management training and certification program]...

Implementation

DEQ reported four certified nutrient management planners working in the Central Office and 28 certified nutrient management planners working in the DEQ Regional Offices. Certified nutrient management planners working in the DEQ central office coordinate with DCR about required operator training and program specific nutrient management issues, and work to ensure that DEQ regulations do not conflict

with nutrient management regulations. DEQ regional office certified nutrient management planners conduct inspections of VPA and VPDES permitted animal agriculture operations ([EPA Region 3 2015](#)).

Results

EPA reviewed 273 compliance inspection reports from 60 VPA-permitted AFO files provided by DEQ's Valley and Tidewater regional offices. These inspection reports, covering a period from FY 2008 through FY 2013, demonstrate the emphasis DEQ places on conducting an extensive review of nutrient management practices and recordkeeping. A total of 228 compliance deficiencies were identified on these 273 inspections reports. Of the 228 identified deficiencies, [EPA Region 3 \(2015\)](#) reported approximately 58 percent (133 out of 228) were related to NMP implementation, including:

- Failure to maintain manure/litter transfer records (44 recorded deficiencies)
- Expired manure/litter nutrient analysis (31 recorded deficiencies)
- Over-application of organic nutrients (18 recorded deficiencies)
- NMP not up-to-date (16 recorded deficiencies)
- Expired soil analysis (10 recorded deficiencies)
- Incomplete field equipment calibration records (4 recorded deficiencies)
- Manure applied to a field not included in the NMP (4 recorded deficiencies)
- Incomplete nutrient application records (3 recorded deficiencies)
- No NMP on-site (3 recorded deficiencies)

DEQ estimates that approximately 33 percent of all VPA AFO and Poultry inspections result in informal corrections; however, if the permittee does not return to compliance within 30 days of an informal correction DEQ issues a warning letter.

In FY 2013, for example, DEQ conducted 87 inspections at VPA AFO permitted operations, which resulted in two notices of violation (NOVs) and six warning letters. NOVs were issued for inadequate freeboard in liquid manure storage structures, inadequate maintenance of vegetation around manure storage, manure sample results older than one year, land application fields not included in the NMP, site conditions needing to be addressed, and improper mortality disposal. Warning letters were issued for not maintaining the required buffer zones between manure application fields and surface waters, dwellings, water supply wells, and other protected areas defined in the VPA permit regulations.

In FY 2013, DEQ conducted 411 inspections at VPA Poultry Waste General Permit operations, which resulted in two NOVs and nine warning letters. NOVs were issued for failure to have poultry waste transfer records on site at the time of inspection. Warning letters were issued for over application of nutrients and farm expansion without required neighbor notification. In addition, DEQ held one show cause hearing, issued one administrative fine, and required one compliance schedule for a poultry waste broker for failure to register as a poultry waste broker, inadequate storage of poultry waste, incomplete transfer records, and inadequate land application records. As a result, DEQ required the poultry waste broker to obtain permit coverage under the VPA Poultry Waste Management General Permit.

Virginia's first two VPDES CAFO permits were issued in February 2015. DEQ inspected both CAFOs in 2105 and 2016, neither CAFO had adverse findings or areas for improvement from either DEQ inspection. The DEQ inspectors checked to make sure NMP recommendations were followed for each field, including land application limited to targeted fields, maximum application rates were followed, cutting schedules were followed, and realized crop yields were in the NMP range. During these CAFO inspections, the DEQ inspector conducted an in depth evaluation of between 6 and 13 land application

fields, including crop, crop condition, application rates, nutrients from waste, supplemental nutrients, total nutrients to field, NMP allowable loading, and field conditions.

References

EPA Region 3 (U.S. Environmental Protection Agency, Region 3). 2015, February. *Virginia Animal Agriculture Program Assessment*. <http://www.epa.gov/sites/production/files/2015-07/documents/virginia_animal_agriculture_program_assessment_final_2.pdf>. Accessed February 11, 2016.