

**Department of Environmental Quality
VIRGINIA POLLUTION ABATEMENT PERMIT APPLICATION
GENERAL INSTRUCTIONS**

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VIRGINIA POLLUTION ABATEMENT PERMIT APPLICATION
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INTRODUCTION

The following is designed to provide the applicant information regarding the requirements for obtaining a Virginia Pollution Abatement (VPA) Permit and guidance for the preparation of the application. The VPA Permit application is comprised of four parts (Forms A-D) to be submitted in accordance with the following instructions:

1. **Form A** must be submitted when an owner makes application to the Department of Environmental Quality (DEQ) for approval of any pollutant management activity, including facilities that manage pollutants, where there is reasonable potential for an adverse water quality impact should a discharge occur from that activity. This includes potential or actual discharges, but not point source discharges of pollutants to surface waters authorized by a Virginia Pollutant Discharge Elimination System (VPDES) Permit.
2. The following forms must also be completed, as applicable, based on the type of pollutants being managed:
 - FORM B:** Animal Feeding Operations (AFO)
 - FORM C:** Industrial Waste
 - FORM D:** Municipal Effluent and Biosolids
 - ADDENDUM:** Water Reclamation and Reuse Addendum to an Application for a VPDES Permit or a VPA Permit
3. An original **Water Division Permit Application Fee Form** and appropriate payment must be submitted to the DEQ – Office of Receipts Control at the time of permit application; except when applying for a permit pertaining to a farming operation engaged in production for market (ex: an AFO). In accordance with § 62.1-44.15:6 of the Code of Virginia, no application or maintenance fees will be assessed for permits pertaining to a farming operation engaged in production for market. See **Water Division Permit Application Fee Form** for further instructions and address.
4. A preliminary meeting between the applicant and the DEQ staff may be arranged prior to completing the application for a VPA Permit. The applicant is advised to first contact the Regional Office to determine if a meeting is necessary. During or after the preliminary meeting, DEQ staff will advise the applicant if a permit is required and, as applicable, which forms must be completed. In some cases, it may be necessary for the applicant to complete Form A before DEQ staff can determine what additional forms will be necessary.

APPLICATION SUBMITTAL

A completed hard copy of the application with original signatures on the certification statements and an electronic copy of the completed application are to be submitted to the DEQ RO covering the location of the pollution management activity to be permitted. A copy of the Fee Form must accompany the application submitted to the RO. Applicants that are unable to submit an electronic copy of the application should contact the DEQ RO to determine the number of hard copy applications to submit in lieu of an electronic copy. (See the **DEQ Regional Office Contact Information** section of these instructions)

A permit application to authorize biosolids land application must include the land application site booklets in both hard and electronic copies. After submission of the application, the DEQ RO may request additional hard copies in order to process the application in a timely manner. An application for water reclamation and reuse must contain, at a minimum, Form A and the Water Reclamation and Reuse Addendum to an Application for a VPDES Permit or a VPA Permit.

APPLICATION FORMAT

General

Fill in all blanks of the applicable application forms and attach other information as needed to complete the application. Insert "N/A" in all blanks which do not apply.

An application is to be submitted on the latest official forms available electronically at DEQ's website or the Virginia's Legislative Services or may be requested in hard copy from a DEQ Regional Office (RO). (See the **DEQ Regional Office Contact Information** section of these instructions)

The hard copy application may be bound either on the left side or at the top using a paper clip or binder clip (do not use staples). Additional sheets or pages may be attached to the application forms, as necessary, and should clearly identify the part/question of the application form to which they pertain. Additional sheets submitted with a

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hard copy application should be submitted on pages 8-1/2" x 11" in size or if submitted on larger size paper, they are to be folded to 8-1/2" x 11" with a minimum of fold-ins. Fold-ins from more than one side should be avoided. The size limitation does not apply to construction drawings.

Illustrative Materials

It is important that illustrative materials, including but not limited to drawings, diagrams, charts, photographs, and maps be clear originals or reproductions. Reductions of large-size illustrative material to fit 8-1/2" x 11" paper size are acceptable provided the information and details of the reduced document remain legible or clear without magnification. Each item of illustrative material should be clear and labeled to identify it as part of the application. For photographs, the label must include the project name, the applicant's name and a brief description of the photograph. Pages of narrative information, calculations and illustrative materials are to be numbered to facilitate making references to the application, or to sections of it.

All maps should be clear and legible with site boundaries marked, and must include a North arrow and map scale. Hard copy maps should be of sufficient scale, preferably 1" = 660", to clearly show the required features and should be provided on 8-1/2" x 11" or folded 11" x 17" paper. The requirement for a site plan map and topographic map may be met with one combined map if the topography of the site is relatively flat and the landscape features can be clearly shown. The symbols or designators used to show the locations of different landscape features or delineations of different soil series should be as similar to USGS and USDA standards as possible.

DCR APPROVAL LETTERS FOR NUTRIENT MANAGEMENT PLANS

A DCR approved nutrient management plan (NMP) and a copy of a DCR approval letter for the NMP must be submitted in the permit application for the following pollutant management activities:

1. **Animal Feeding Operations** that involve the land application of animal waste for agricultural production.
2. **Biosolids land application** where the application site:
 - a. Is operated by an owner or lessee of a confined animal feeding operation as defined in subsection A of § 62.144.17.1, or a confined poultry feeding operation as defined in subsection A of § 62.1-44.17.1.1 of the Code of Virginia;
 - b. Will receive applications of biosolids more frequently than once every three years at greater than 50 percent of the annual agronomic rate;
 - c. Has been mined or disturbed and land application is proposed at greater than agronomic rates; and
 - d. Has site-specific conditions that may increase the risk of adverse impacts to state waters resulting from biosolids land application.
3. **Bulk irrigation reuse** (i.e., irrigation of an area > 5 acres with reclaimed water) where:
 - a. A wastewater treatment works, a reclamation system, satellite reclamation system or reclaimed water distribution system and the irrigation reuse site or sites are under common ownership or management, **and**
 - b. In addition to irrigation reuse:
 - (1) There is no option to dispose of the reclaimed water through a VPDES* permitted discharge, **or**
 - (2) There is an option to dispose of the reclaimed water through a VPDES* permitted discharge, but the VPDES* permit does not allow discharge of the full nutrient load under design flow (e.g., a treatment works with a VPDES* permitted discharge implements water reclamation and reuse in lieu of providing treatment to meet nutrient effluent limits at design flow).

* A VPDES permit refers to a type of water permit that regulates effluent point source discharges to surface waters.

APPLICATION PROCESSING

DEQ staff shall review the application for completeness. Applicants, who have failed to submit a complete application, including the Fee Form and payment of the appropriate permit application fee, will be requested by DEQ staff in writing to furnish such items or information, as necessary, to complete the application. **If this information is not provided by the applicant, processing of the application may be suspended and the incomplete application returned to the applicant.**

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Submission of Additional Information: In accordance with 9VAC25-32-60 D 2, the board may require the submission of additional information (such as groundwater monitoring plans, background monitoring data, sampling regimes, etc., not directly requested by the applications) after an application has been filed, and may suspend processing of any application until such time as the owner has supplied missing or deficient information and the board considers the application complete. Further, when the owner becomes aware that he omitted one or more relevant facts from a VPA permit application, or submitted incorrect information in a VPA permit application or in any report to the department, he shall promptly submit such facts or the correct information.

DEQ REGIONAL OFFICE CONTACT INFORMATION

<p>TIDEWATER REGIONAL OFFICE 5636 Southern Blvd. Virginia Beach, VA 23462 Phone: (757) 518-2000 Fax: (757) 518-2103</p>	<p>NORTHERN REGIONAL OFFICE 13901 Crown Court Woodbridge, VA 22193 Phone: (703) 583-3800 Fax: (703) 583-3821</p>		
<p>PIEDMONT REGIONAL OFFICE 4949-A Cox Road Glen Allen, VA 23060 Phone: (804) 527-5020 Fax: (804) 527-5106</p>	<p>SOUTHWEST REGIONAL OFFICE 355 Deadmore St. Mailing address: P.O. Box 1688 Abingdon, VA 24212 Phone: (276) 676-4800 Fax: (276) 676-4899</p>		
<p>VALLEY REGIONAL OFFICE 4411 Early Road Mailing address P.O. Box 3000 Harrisonburg, VA 22801 Phone: (540) 574-7800 Fax: (540) 574-7844</p>	<p>BLUE RIDGE REGIONAL OFFICE (2 locations)</p> <table border="1" style="width: 100%;"> <tr> <td> <p>LYNCHBURG OFFICE 7705 Timberlake Road Lynchburg, VA 24502 Phone: (434) 582-5120 Fax: (434) 582-5125</p> </td> <td> <p>ROANOKE OFFICE 3019 Peters Creek Road Roanoke, VA 24019 Phone: (540) 562-6700 Fax: (540) 562-6725</p> </td> </tr> </table>	<p>LYNCHBURG OFFICE 7705 Timberlake Road Lynchburg, VA 24502 Phone: (434) 582-5120 Fax: (434) 582-5125</p>	<p>ROANOKE OFFICE 3019 Peters Creek Road Roanoke, VA 24019 Phone: (540) 562-6700 Fax: (540) 562-6725</p>
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LIST OF ACRONYMS

AFO	Animal Feeding Operation	PN	Public Notice
CCE	Calcium Carbonate Equivalency	POTW	Publicly Owned Treatment Works
CEC	Cation Exchange Capacity	PVOTW	Privately Owned Treatment Works
CFR	Code of Federal Regulations	RCRA	Resource Conservation and Recovery Act
CWA	The Clean Water Act, The Act	RO	Regional Office of DEQ (ROs - plural)
DCR	Department of Conservation and Recreation	SIC	Standard Industrial Classification
DEQ	Department of Environmental Quality	STP	Sewage Treatment Plant
DWM	DEQ, Division of Waste Management	SWCB	State Water Control Board
EPA	U.S. Environmental Protection Agency	TOD	Total Oxygen Demand
MBAS	Methylene Blue Active Substances	UIC	Underground Injection Control
NMP	Nutrient Management Plan	USDA	U.S. Department of Agriculture
NRCS	Natural Resource Conservation Service- USDA	VDH	Virginia Department of Health
O&M	Operations and Maintenance	VPA	Virginia Pollution Abatement
PAN	Plant Available Nitrogen	VPDES	Virginia Pollutant Discharge Elimination System
PCB	Polychlorinated Biphenyls	VPI & SU	Virginia Polytechnic Institute and State University

GLOSSARY

ACTIVITY - see Facility and Pollutant management activity.

ADMINISTRATIVELY COMPLETE - an application is considered to be administratively complete when it is verified that an original and one copy of the appropriate VPA application forms have been submitted with all necessary blanks accurately filled in and the proper signature applied; and the SCC Certificate and/or the DCR approved NMP and DCR NMP approval letter is attached, if respectively required.

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AGRONOMIC RATE - the rate of land application of wastewater or waste based upon the Plant Available Nitrogen (PAN) requirement of the crops on site.

ANIMAL FEEDING OPERATION (AFO) - means a lot or facility where 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 operation of the lot or facility.

Two or more animal feeding operations under common ownership are a single animal feeding operation for the purposes of determining the number of animals at an operation, if they adjoin each other, or if they use a common area or system for the disposal of wastes.

ANIMAL WASTE - means liquid, semi-solid, and solid animal manure and process wastewater, compost, or sludges associated with animal feeding operations including the final treated wastes generated by a digester or other manure treatment technologies.

CLEAN WATER ACT (CWA) - (formerly referred to as the Federal Water Pollution Control Act or Federal Water Pollution Control Act Amendments of 1972) Pub. L. 92-500, as amended by Public Laws 95-217, 96-483, 97-117, 33 U.S.C. 1251, et seq.

CONCENTRATED ANIMAL FEEDING OPERATION (CAFO) - means an AFO that is defined as a Large CAFO or as a Medium CAFO, or that is designated as a Medium CAFO or a Small CAFO. Any AFO may be designated as a CAFO by the director in accordance with the provisions of 9VAC25-31-130 B.

1. **LARGE CAFO** - An AFO is defined as a Large CAFO if it stables or confines as many or more than the numbers of animals specified in any of the following categories:

- a. 700 mature dairy cows, whether milked or dry;
- b. 1,000 veal calves;
- c. 1,000 cattle other than mature dairy cows or veal calves. Cattle includes but is not limited to heifers, steers, Bulls and cow/calf pairs;
- d. 2,500 swine each weighing 55 pounds or more;
- e. 10,000 swine each weighing less than 55 pounds;
- f. 500 horses;
- g. 10,000 sheep or lambs;
- h. 55,000 turkeys;
- i. 30,000 laying hens or broilers, if the AFO uses a liquid manure handling system;
- j. 125,000 chickens (other than laying hens), if the AFO uses other than a liquid manure handling system;
- k. 82,000 laying hens, if the AFO uses other than a liquid manure handling system;
- l. 30,000 ducks, if the AFO uses other than a liquid manure handling system; or
- m. 5,000 ducks if the AFO uses a liquid manure handling system.

2. **MEDIUM CAFO** - The term Medium CAFO includes any AFO with the type and number of animals that fall within any of the ranges below that has been defined or designated as a CAFO. An AFO is defined as a Medium CAFO if:

- a. The type and number of animals that it stables or confines falls within any of the following ranges:
 - (1) 200 to 699 mature dairy cattle, whether milked or dry;
 - (2) 300 to 999 veal calves;
 - (3) 300 to 999 cattle other than mature dairy cows or veal calves. Cattle includes but is not limited to heifers, steers, bulls and cow/calf pairs;
 - (4) 750 to 2,499 swine each weighing 55 pounds or more;
 - (5) 3,000 to 9,999 swine each weighing less than 55 pounds;
 - (6) 150 to 499 horses;
 - (7) 3,000 to 9,999 sheep or lambs;
 - (8) 16,500 to 29,999 laying hens or broilers, if the AFO uses a liquid manure handling system;
 - (9) 37,500 to 124,999 chickens (other than laying hens), if the AFO uses other than a liquid manure handling system;
 - (10) 25,000 to 81,999 laying hens, if the AFO uses other than a liquid manure handling system;

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(11) 10,000 to 29,999 ducks, if the AFO uses other than a liquid manure handling system;

(12) 1,500 to 4,999 ducks, if the AFO uses a liquid manure handling system; and

b. Either one of the following conditions are met:

(1) Pollutants are discharged into surface waters of the state through a manmade ditch, flushing system, or other similar manmade device; or

(2) Pollutants are discharged directly into surface waters of the state that originate outside of and pass over, across, or through the facility or otherwise come into direct contact with the animals confined in the operation.

3. **SMALL CAFO** - An AFO that is designated as a CAFO and is not a Medium CAFO.

CONSENT DECREE - a unilateral instruction by a judge to the parties involved (this may or may not involve DEQ).

CONSENT ORDER - an administrative action of DEQ directed to a permittee.

DRAFT PERMIT - a document indicating the tentative decision to issue, modify or reissue a VPA permit. A notice of intent to deny is a type of draft permit which must follow the same procedures as any draft permit.

EXCEPTIONAL QUALITY BIOSOLIDS - biosolids that have received an established level of treatment for pathogen control and vector attraction reduction and contain known levels of pollutants, such that they may be marketed or distributed for public use in accordance with this regulation.

FACILITY OR ACTIVITY - any VPA facility (including land or appurtenances thereto) or activity subject to regulation under the VPA program.

FREQUENT APPLICATION - land application of wastewater or sludge in excess of 70% the agronomic rate at a frequency greater than once in a 3 year (1/3) period.

INDUSTRIAL FACILITY - an establishment engaged as an economic unit, generally at a single location, where business is conducted, services or industrial operations performed and in which raw materials are changed into useful products.

INDUSTRIAL WASTE - liquid or other wastes resulting from any process of industry, manufacture, trade or business, or from the development of any natural resources.

INFREQUENT APPLICATION - land application of wastewater or sludge up to the agronomic rate at a frequency of once in a 3 year period.

LAND APPLICATION - the introduction of animal waste, wastewaters or sludge into or onto the ground for treatment or reuse.

MUNICIPAL FACILITIES - Publicly Owned Treatment Works (POTW), a house, store, school, subdivision or other entity with a treatment facility that receives and treats wastewater from primarily domestic sources.

MUNICIPALITY - a city, town, county, district, association, authority, other public body created by or under State law and having jurisdiction over disposal of sewage, industrial, or other wastes; an Indian tribe or an authorized Indian tribal organization; a designated and approved management agency under section 208 of CWA.

MUNICIPAL WASTE - effluent or sewage sludge from a municipal facility.

NITROGEN - an element of matter and an essential nutrient often present in wastewater as ammonia, nitrate, nitrite and organic nitrogen.

NON-PROCESS WASTEWATER - water that does not come in contact with products, by-products, waste, or wastewater (e.g. non-contact cooling water).

NUTRIENTS - any substance used by organisms that promotes growth; generally applied to nitrogen and phosphorus in wastewater.

OTHER WASTE - decayed wood, sawdust, shavings, bark, lime, garbage, refuse, ashes, offal, tar, oil, chemicals and all other substances, except industrial wastes and sewage, which may cause pollution in any State waters.

PERSON - any firm, corporation, association or partnership, one or more individuals, or any governmental unit or agency thereof.

PLANT AVAILABLE NITROGEN (PAN) - the amount of nitrogen available to the crop for the current growing

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season. The PAN is based upon the characteristics of the nitrogen source applied to the crops and the method of application to the cropping site.

pH - a measure of the hydrogen ion concentration in a solution. On the pH scale of 0 to 14, a value of 7 at 25 degrees Celsius represents a neutral condition.

PHOSPHORUS - an element of matter and an essential nutrient found in orthophosphate, pyrophosphate, tripolyphosphate and organic phosphate forms.

POLLUTANT - any substance, radioactive material or heat which causes or contributes to, or may cause or contribute to pollution.

POLLUTANT MANAGEMENT ACTIVITY - any activity under the Law and the VPA Permit Regulation, including storage and recycle, which involves a pollutant and is not a point source discharge to surface waters.

POLLUTION - such alteration of the chemical, physical or biological properties of any state waters as will or is likely to create a nuisance or render such waters (a) harmful or detrimental or injurious to the public health, safety or welfare, or to the health of animals, fish or aquatic life; (b) unsuitable with reasonable treatment for use as present or possible future sources of public water supply; or (c) unsuitable for recreational, commercial, industrial, agricultural, or other reasonable uses.

PRIVATELY OWNED TREATMENT WORKS (PVOTW) - any sewage treatment works not publicly owned.

PROCESS WASTEWATER - any water which, during manufacturing or processing, comes into direct contact with or results from the production or use of any raw material, intermediate product, finished product, by-product or waste product.

PUBLICLY OWNED TREATMENT WORKS (POTW) - any sewage treatment works that is owned by a State or municipality. Sewers, pipes, or other conveyances are included in this definition only if they convey wastewater to a POTW providing treatment.

REISSUANCE - internal DEQ term that refers to the process by which a VPA permit is issued again to the permittee.

SEWAGE - water-carried and nonwater-carried human excrement, kitchen, laundry, shower, bath or lavatory wastes, separately or together with such underground, surface, storm and other water and liquid industrial wastes as may be present from residences, buildings, vehicles, industrial establishments or other places.

SHALL - indicates a mandatory requirement.

SHOULD OR MAY - indicates a recommendation.

STANDARD INDUSTRIAL CLASSIFICATION (SIC) - is the classification of establishments by type of activity in which they are engaged. The SIC codes are listed in the Standard Industrial Classification (SIC) Manual published by the U.S. Department of Labor, Occupational Safety and Health Administration. The SIC Manual is available at most public libraries or on the internet.

SUBSURFACE INJECTION - land application of (1) liquid sludge which is injected into the plow layer; (2) sludges incorporated into the soil on the same day of application onto the soil surface.

VIRGINIA POLLUTION ABATEMENT (VPA) PERMIT - a document issued by Board, pursuant to the VPA Permit Regulation authorizing pollutant management activities under prescribed conditions. *Activities for which a VPA Permit may be issued include, but are not limited to, animal feeding operations, land application of wastewater, biosolids (or sewage sludge) or septage; and reclamation and reuse of wastewater.*

300 ANIMAL UNITS - means 300,000 pounds of live animal weight, or the following numbers and types of animals:

- a. 300 slaughter and feeder cattle;
- b. 200 mature dairy cattle (whether milked or dry cows);
- c. 750 swine each weighing over 25 kilograms (approximately 55 pounds);
- d. 150 horses;
- e. 3,000 sheep or lambs;
- f. 16,500 turkeys;
- g. 30,000 laying hens or broilers.