DEQ Permitting Guide

This guide provides a broad, introductory overview of various Department of Environmental Quality permitting procedures. Essential permits and DEQ contacts are listed for the Air, Water, Waste, Tanks, and Renewable Energy programs. This guide is not exhaustive and aims only to provide a starting point in the permitting process by asking threshold permitting questions. Be sure to adhere to all local, state, and federal requirements and to contact your DEQ Regional Office about specific DEQ permitting requirements before moving forward with any activity that may have an environmental impact requiring a permit.

Disclaimer: This document does not constitute regulatory or legal advice. Permit applicants are responsible for ascertaining which permit requirements apply to their activities and projects and to comply with the requirements accordingly. For assistance, applicants and other members of the public are encouraged to contact their regional DEQ office, as suggested below.

Getting Started

Virginia Environmental Laws:  [LIS Environmental Laws]

Air:  [DEQ Air Permitting Page]  |  [DEQ Air Regulations]

Water:  [DEQ Water Permitting Page]  |  [DEQ Water Regulations]

Waste:  [DEQ Waste Permitting Page]  |  [DEQ Waste Regulations]

Tanks:  [DEQ AST/UST Files and Forms]  |  [DEQ Tanks Guidance and Regulations]


Permit Tracking:  [DEQ Permit Tracking (Air, Water, & Waste)]

Time Frames:  [DEQ Permitting Time Frames Page]
Air Permits

Permits:

Minor New Source Review Permits

Will you construct, reconstruct, relocate or modify a stationary pollution source? Will that source emit uncontrolled emissions of regulated air pollutants above the exemption thresholds listed in 9 VAC 5-80-1320 C or D?

If so, your facility may require a Minor New Source Review Permit.

Are the uncontrolled emissions of your equipment and process units below exemption levels? See link above. If so, your facility will not require a minor new source review permit.

Article 7 Permits

Your facility or emissions unit may also require a New and Reconstructed Major Source of Hazardous Air Pollutants Permit (Article 7 Permit).

Article 7 Exemptions:

Does one or more of the following apply? If so, your source is likely exempt from Article 7 Permitting requirements.

1) Research and Development Activities

2) Sources with a Promulgated MACT Standard (including Electric Utility Steam Generating Units)

3) Sources in a Source Category that has been Delisted from the §112(c) Source Category List.

Does your facility or emissions unit have the potential to emit less than 10 tons per year of an individual hazardous air pollutant (HAP) and less than 25 tons per year of any combination of HAPs? If so, your facility will not require an Article 7 Permit.
General Permits

Will you construct, reconstruct, relocate or modify a stationary pollution source? Is that source a Non-Metallic Mineral Processing Facility, a Biomass Pilot Test Facility, a Voluntary Demand Response Generator, or an Emergency Generator?

If so, you may opt to use a General Permit rather than a minor New Source Review Permit. Virginia has four General Permits for specific source categories that have similar pieces of equipment and similar control requirements (listed above). The General Permit, like the minor New Source Review Permit, is only required for sources emitting regulated air pollutants above the exemption thresholds in 9 VAC 5-80-1320 C or D but less than 100 tons per year.

Major New Source Review (NSR) Permits

Will you construct a new air pollution source or modify, relocate, or reactivate an existing source that (1) has the potential to emit over 250 tons per year of a single criteria pollutant OR (2) is in one of the listed source categories under 9 VAC 5-80-1615 (or 9 VAC 5-80-2010) and has the potential to emit over 100 tons per year of any criteria pollutant OR (3) has the potential to emit over 100,000 tons per year of CO₂ equivalent (CO₂e) (9 VAC 5-85 Part III)?

If so, and your facility is located in an Attainment Area, your facility will likely require a Prevention of Significant Deterioration Permit.

If so, and your facility is located in a Non-Attainment Area and is major for the pollutant for which the area is in non-attainment, your facility will likely require a Non-Attainment Permit.

Title V Operating Permits

Does your facility have the potential to emit (PTE) of pollutants at levels higher than the major source thresholds, listed in 9VAC5-80-60?

If so, you will likely require a Title V Operating Permit.

State Major Permit

Does your facility emit between 100 and 250 tons per year of any criteria pollutant (PM, PM-10, CO, NOₓ, SO₂, and VOC)? Is your facility not a major stationary source under the definition provided by 9 VAC 5-80-1615? Is your facility not a Prevention of Significant Deterioration (PSD) facility?

If ‘yes’ to all of the above, your facility will likely require a State Major Permit.
State Operating Permits

State Operating Permits are elective, and are most often used by stationary sources to establish federally enforceable limits on potential to emit to avoid major New Source Review permitting (PSD and Nonattainment permits), Title V permitting, and/or major source MACT applicability. When a source chooses to use a SOP to limit its emissions below major source permitting thresholds, it is commonly referred to as a “synthetic minor” source. SOPs can also be used to combine multiple permits from a stationary source into one permit or to implement emissions trading requirements.

The State Air Pollution Control Board, at its discretion, may also issue SOPs to cap the emissions of a stationary source or emissions unit causing or contributing to a violation of any air quality standard or to establish a source-specific emission standard or other requirement necessary to implement the federal Clean Air Act or the Virginia Air Pollution Control Law.

Contacts:

Your DEQ Regional Office

Central Office Contacts
**Permits:**

**Surface Discharge**

Will your production process involve waste water discharges into surface waters?

If so, you may need a [VPDES Individual Permit](#).

If the nature of your discharge is only contaminated storm water from the facility, you may need to apply for: coverage under the VPDES General Permit for discharges of storm water associated with industrial activity.

**Land Application**

Will your production process handle waste and wastewater in a manner that involves land application of waste and/or wastewater, or will wastewater be reclaimed and reused?

If waste or wastewater is land applied, you will likely need a [Virginia Pollution Abatement (VPA) Permit](#). Individual permits are available, as well as general permits for livestock and poultry waste.

If wastewater is reclaimed and reused, you may need a VPA permit depending on the intended use.

**Wetland and Stream Disturbances**

- Will you be conducting any of the following activities in a wetland or stream?
  - Excavating.
  - Filling.
  - Dumping.
  - Permanent flooding or Impounding.
  - New activities that cause significant alteration or degradation of existing wetland acreage or functions.
  - Altering the physical, chemical, or biological properties of state waters.

If so, you will likely need a [Virginia Water Protection (VWP) Permit](#).
Ground Water Withdrawal

Will you be withdrawing 300,000 gallons or more per month from any ground water source in a designated Ground Water Management Area?

If so, you may need a [Ground Water Withdrawal Permit](#) (depending upon your location).

Surface Water Withdrawal

Will you be withdrawing 10,000 gallons a day or more from any surface water source?

If so, you may need a [Virginia Water Protection (VWP) Permit](#) (some exclusions apply).

Contacts:

[Your DEQ Regional Office](#) – Please contact before contacting Central Office.

[Ground Water Withdrawal (Central Office)](#)

[VPDES Permits (Central Office)](#)

[VPA Permits](#)

[VWP Permits](#)
Waste Permits

Permits:

Hazardous Wastes

Are you engaging in the treatment, storage or disposal of hazardous waste? 

If so, you will likely need a Hazardous Waste Management Facility Permit.

Are you an owner or operator who proposes to treat, store or dispose of hazardous waste at a non-permitted facility or at a facility whose permit does not cover such hazardous waste or hazardous waste management activities as a result of an emergency situation in which there is an imminent and substantial threat to human health or the environment? 

If so, you will likely need a Hazardous Waste Emergency Permit.

Are you a person or commercial business who intends to transport hazardous waste shipments that originate or terminate in Virginia? 

If so, you will likely need a Hazardous Waste Transporter Permit.

Regulated Medical Wastes

Are you in the business of transporting regulated medical waste (examples)?

If so, you must register with the Regulated Medical Waste Transport Registry.

Are you an owner or operator of a facility for temporary storage, collection of regulated medical waste (examples) prior to transportation to a treatment facility, or treatment of regulated medical waste through incineration, steam sterilization, or approved alternate treatment? 

If so, you will likely need a Regulated Medical Waste Management Facility Permit. Note: If more than 75 percent (by weight, in a calendar year) of all regulated medical waste that is stored, treated, or disposed of by the facility is generated on site, the facility may apply for an on-site permit-by-rule.
Solid Wastes

Are you an owner or operator of a solid waste management facility who operates a treatment system to solidify non-hazardous solid waste from offsite to meet the disposal criteria of 9 VAC 20-81-140?

If so, you will likely need a Solid Waste Centralized Treatment Facility Permit. Note: The requirements of this section shall not apply to solidification operations at active landfills that are authorized in the landfill's solid waste permit.

Are you an owner or operator of facilities for temporary storage or collection of waste prior to transportation to incineration, resource recovery or disposal sites?

If so, you will likely need a Solid Waste Transfer Station Permit. Note: This does not include convenience centers, as defined under 9 VAC 20-81-10.

Are you an owner or operator of a sanitary landfill; construction, demolition and debris landfill; or an industrial landfill, public or private?

If so, you will likely need a Solid Waste Landfill Permit.

Are you an owner or operator of incinicators, energy recovery, or thermal treatment facilities managing non-hazardous waste?

If so, you will likely need a Solid Waste Incinerator and Energy Recovery Facility Permit.

Are you an owner or operator of facilities for the collection, processing and recovery of materials from non-hazardous solid waste?

If so, you will likely need a Materials Recovery Facility Permit.

Are you an owner or operator of facilities that produce compost from municipal solid waste/refuse or combinations of municipal solid waste/refuse with animal manures, except those facilities specifically exempt under 9 VAC 20-81-95?

If so, you will likely need a Solid Waste Compost Facility Permit.

Are you an owner or operator of a solid waste treatment facility who proposes to use innovative or experimental treatment technologies or processes for which permit standards have not been promulgated?

If so, you will likely need a Solid Waste Experimental Facility Permit.
Are you an owner or operator who proposes to treat, store or dispose of solid waste at a non-permitted facility whose permit does not cover such solid waste or solid waste management activities as a result of an emergency situation in which there is an imminent and substantial threat to human health or the environment.

If so, you will likely need a **Solid Waste Emergency Permit**.

**Coal Combustion By-Products**

Are you an owner or operator who proposes to use, reuse or reclaim coal combustion by-products by applying or placing them on the land in a manner other than addressed in **9 VAC 20-81-95** of the Virginia Solid Waste Management Regulations?

If so, you will need to provide to the DEQ a **Coal Combustion By-Product Site Notification**. Note: Coal mining facilities that are otherwise exempt under **9 VAC 20-81-95(D)(18)** of the regulations or who have been issued a permit by the Virginia Department of Mines, Minerals and Energy that incorporates the applicable conditions in **9 VAC 20-85-10 et seq.** are not subject to these requirements.

**Contacts:**

- **Your DEQ Regional Office**
- **Central Office Contacts**
Storage Tanks (AST & UST) Requirements

Preliminary Questions:

Does your project require the storage of petroleum-based products (including oil, gasoline, kerosene, diesel, heating oil, asphalt, used oil, jet fuel, lubricant, and petroleum solvent) or hazardous substances?

Permitting:

Above-Ground Tanks

Is the certified capacity of your above-ground oil tank greater than 660 gallons, while the total capacity of the facility is less than 25,000 gallons? (Count only above-ground tanks larger than 660 gallons toward the total capacity)

If so, your oil tank must be **registered** every 5 years and fulfill certain compliance requirements.

Is the capacity of your above-ground oil tank greater than 660 gallons, while the total capacity of the facility is equal to or above 25,000 and below 1 million gallons? (Count only above-ground tanks larger than 660 gallons toward the total capacity)

If so, your oil tank must be **registered** every 5 years, and you must complete an **oil discharge contingency plan**, among other compliance requirements.

Is the capacity of your above-ground oil tank greater than 660 gallons, while the total capacity of the facility is greater than 1 million gallons? (Count only above-ground tanks larger than 660 gallons toward the total capacity)

If so, your oil tank must be **registered** every 5 years, you must complete an **oil discharge contingency plan**, and you must conduct a **ground water characterization study**, among other compliance requirements.

Underground Tanks

Is your tank one of the following types that is **exempt from UST regulations**?

- A farm or residential tank of 1,100 gallons or less capacity used for storing motor fuel for non-commercial purposes.
- A tank used for storing heating oil for consumption on the premises where stored.
- A septic tank.
- A regulated pipeline facility.
- A surface impoundment, pit, pond or lagoon.
• A storm water collection system that transports storm water to or from a retention area or treatment facility.
• A wastewater collection system that transports wastewater to or from a retention area or treatment facility.
• A flow-through process tank.
• A liquid trap or gathering lines directly related to oil or gas production and gathering operations.
• A tank situated in an underground area (such as a basement, cellar, mine-working, drift, shaft or tunnel), but on or above the floor.

If so, your system does not fall within the definition of an Underground Storage Tank under 9 VAC 25-580-10 and will not be subject to UST regulations.

Is your tank excluded from UST regulations for another of the following reasons?

• It is an underground storage tank system that is being regulated by DEQ’s hazardous waste program because it contains hazardous wastes.
• It is a wastewater treatment tank system that is being regulated under the Clean Water Act (i.e., with a VPDES or pre-treatment permit).
• It is an item of equipment or machinery that contains regulated substances for operational purposes (i.e., hydraulic lift tanks, electrical equipment tanks, etc.).
• It has a capacity of 110 gallons or less.
• It contains a de minimis amount of regulated substances.
• It is an emergency spill or overflow containment UST system that is expeditiously emptied after use.

If so, your underground storage tank is excluded from Virginia UST regulations under 9 VAC 25-580-20.

Is your tank one of the following types that is deferred from some of the requirements?

A wastewater treatment tank system that is not regulated by the Clean Water Act.

An underground tank system containing radioactive material that is regulated under the Atomic Energy Act of 1954.

An underground tank system that is part of an emergency generator system at a nuclear power generation facility regulated by the Nuclear Regulatory Commission.

An airport hydrant fuel distribution system.

An underground tank system with field-constructed tanks.

If so, your underground storage tank is deferred under 9 VAC 25-580-20. Only the following regulations apply: If installing a new tank, it must have corrosion protection, and it must be constructed or lined with material that is compatible
with the stored substance (see 9 VAC 25-580-30). The tank is subject to permitting and inspection by local building or fire officials when it is installed, upgraded, repaired or closed. If a spill occurs, certain notification and remediation actions must be taken, as detailed in 9 VAC 25-580. In this regulation, sections 10-40 and 230-300 (Parts I and VI) apply to your tank.

Contact:

Your DEQ Regional Office – Please contact before contacting Central Office.

Central Office Contacts
Renewable Energy Permits

Permits:

Wind Energy

Will your proposed project have a rated capacity greater than 5 MW and less than or equal to 100 MW?

   If so, go to regulation 9 VAC 15-40 et seq. and to the corresponding provisions of agency guidance.

Will your proposed project have a rated capacity greater than 500 kW and less than or equal to 5 MW?

   If so, go to regulatory provision 9 VAC 15-40-130 B and to the corresponding provisions of agency guidance (specifically, see Section II, pages 41-42).

Will your proposed project have a rated capacity less than or equal to 500 kW?

   If so, there are no regulatory requirements pursuant to DEQ’s Renewable Energy Permit by Rule (PBR). See regulatory provision 9 VAC 15-40-130 A and corresponding provisions of agency guidance (specifically, see Section II, page 40 of Wind PBR Guidance).

Solar Energy – Photovoltaic (PV) and Concentrated Photovoltaic (CPV) Technologies

Will your proposed project have a rated capacity greater than 5 MW and less than or equal to 100 MW, and a disturbance zone of more than 10 acres, and not otherwise meet the criteria for 9 VAC 15-60-130?

   If so, go to regulation 9 VAC 15-60 et seq. and to the corresponding provisions of agency guidance.

Will your proposed project have a rated capacity greater than 500 kW and less than or equal to 5 MW, or a disturbance zone greater than 2 acres and less than or equal to 10 acres?

   If so, go to regulatory provision 9 VAC 15-60-130 B and to the corresponding provision of agency guidance.

Will your proposed project have a rated capacity less than or equal to 500 kW or a disturbance zone less than or equal to 2 acres
OR

Fall within at least one of the following categories (without regard to rated capacity or size of disturbance zone)?

Mounted on a single-family or duplex private residence.
Mounted on one or more buildings less than 50 years old (or if 50 years or older, determined by the Department of Historic Resources to be not VLR-eligible).
Mounted over one or more existing parking lots, existing roads, or other previously disturbed areas and any impacts to undisturbed areas do not exceed 2 acres.
Utilizes integrated PV only, provided building or structure on which integrated PV materials are used is less than 50 years old (or if 50 years or older, determined by DHR to be not VLR-eligible).

If so, there are no regulatory requirements pursuant to DEQ’s Renewable Energy Permit by Rule (PBR). See regulatory provision 9 VAC 15-60-130(A) and corresponding provision of agency guidance.

Solar Energy – Technologies Other Than PV or CPV

Will your proposed project utilize other solar technologies?

If so, go to regulatory provision 9 VAC 15-60-20(D) and contact DEQ’s Renewable Energy staff (carol.wampler@deq.virginia.gov).

Combustion Energy (Proposed Regulation)

The Combustion PBR Regulation for projects generating electricity from biomass, energy from waste, and municipal solid waste are currently proposed but not final. Once the regulation becomes final and effective, it will appear at 9VAC15-70 et seq. Until DEQ’s regulations become final, regulatory authority over the PBR issues remains with the State Corporation Commission.

Contact:

Carol C. Wampler
Renewable Energy Policy Manager
Virginia Department of Environmental Quality
629 East Main Street
Richmond, VA  23219
(804) 698-4579
[carol.wampler@deq.virginia.gov](mailto:carol.wampler@deq.virginia.gov)