

# Virginia

## 1. Definitions

- a. Produced Water – Water brought to the surface during oil or gas well drilling, completion, and production operations, which may include formation water, injected water, and flowback water.
  - i. If your state defines the term “produced water,” please provide that definition below.

**"Produced waters" means water or fluids produced from a gas well, oil well, coalbed methane gas well, or gob well as a byproduct of producing gas, oil, or coalbed methane gas. (4VAC25-150-10. Definitions)**

- b. Recycle/Reuse – To process or treat produced water or its constituent substances for beneficial use.
  - i. If your state defines the term “recycle” or “reuse,” please provide the definition(s) below.

**N/A**

## 2. Ownership

- a. Please describe the authority (deed, lease, contract, statute, regulation, case law, common law etc..) and include any relevant citations under which any of the following occurs.
  - i. The right to produce water during well completion and oil and gas production operations.

**Ground Water Management Act of 1992 § 62.1-259. Certain withdrawals; permit not required.**

**No ground water withdrawal permit shall be required for (i) withdrawals of less than 300,000 gallons a month; (ii) temporary construction dewatering; (iii) temporary withdrawals associated with a state-approved ground water remediation; (iv) the withdrawal of ground water for use by a ground water heat pump where the discharge is reinjected into the aquifer from which it is withdrawn; (v) the withdrawal from a pond recharged by ground water without mechanical assistance; (vi) the withdrawal of water for geophysical investigations, including pump tests; (vii) the withdrawal of ground water coincident with exploration for and extraction of coal or activities associated with coal mining regulated by the Department of Mines, Minerals and Energy; (viii) the withdrawal of ground water coincident with the exploration for or production of oil, gas or other minerals other than coal, unless such withdrawal adversely impacts aquifer**

**quantity or quality or other ground water users within a ground water management area; (ix) the withdrawal of ground water in any area not declared a ground water management area; or (x) the withdrawal of ground water pursuant to a special exception issued by the Board.**

- ii. Ownership of produced water from oil or gas wells after it has been brought to the surface.

**Ownership of produced water is not specified in Virginia Laws and Regulations**

- iii. Use and/or reuse of produced water in the oilfield.

**Virginia Laws and Regulations only provide requirements for disposal of produced water (4VAC25-150-420. Disposal of Pit and Produced Fluids). Regulations allow operators to submit fluid disposal plans for approval, which could include plans for reuse or recycling.**

- iv. Use and/or reuse of produced water outside of the oilfield.

**Virginia Laws and Regulations only provide requirements for disposal of produced water (4VAC25-150-420. Disposal of Pit and Produced Fluids). Regulations allow operators to submit fluid disposal plans for approval, which could include plans for reuse or recycling.**

- b. Place an “x” in each box to indicate who holds the right to each of the following regarding water that has not yet been produced.

**The Ground Water Management Act of 1992 recognizes and declares that “...the right to reasonable control of all ground water resources within this Commonwealth belongs to the public...” The Act provides for the establishment of groundwater management areas where withdrawal permits may be required. Otherwise, groundwater withdrawal within Virginia is not restricted and ownership is not specified.**

Who	Possession	Use	Other rights (please specify)
Landowner			
Operator			
Government			
Other (please specify) <b>public</b>	<b>x</b>	<b>x</b>	

- c. Place an “x” in each box to indicate who holds the right to each of the following regarding produced water after it has been brought to the surface. **Not specifically defined in Virginia Laws and Regulations. Regulations simply require that produced water must be properly disposed by the operator of the gas or oil well (4VAC25-150-420. Disposal of Pit and Produced Fluids).**

Who	Possession	Use	Other rights (please specify)
Landowner			
Operator			
Government			
Other (please specify)			

- d. Does the quality of the produced water play a role in the ownership of the water?  
**No.**

### 3. Liability

- a. Please provide the cite to any relevant state statute/case law/regulation regarding liability for:
- i. Produced water handling (extraction, transportation, sale, etc.).

**In Virginia, produced water is considered waste. Virginia Laws and Regulations simply provide requirements for proper storage and disposal of produced water (4VAC25-150-420. Disposal of Pit and Produced Fluids). No other liabilities are specified.**

- ii. Use and/or reuse of produced water in the oilfield:
  1. By the producer  
**N/A**
  2. By a different operator  
**N/A**
- iii. Use and/or reuse of produced water outside of the oilfield.  
**N/A**

### 4. State or Provincial Regulatory Agency

- a. State or provincial agencies charged with regulating the use/reuse of produced water:

**Department of Mines Minerals and Energy, Division of Gas and Oil**

Contact information:  
**Division of Gas and Oil**  
**Rick Cooper, Director**  
**P.O Drawer 159**  
**135 Highland Drive**  
**Lebanon, VA 24266**  
**(276) 415-9700 (Phone)**  
**(276) 415-9671 (Fax)**  
**DgoInfo@dmme.virginia.gov.**

Brief summary of areas of responsibilities:

**The Division of Gas and Oil's responsibilities include regulating the effects of gas and oil operations both on and below the surface, issuing permits, client assistance programs, inspection of well sites and gathering pipelines, reclamation of abandoned well sites, protection of correlative rights, and promotion of resource conservation practices.**

- b. Federal agencies charged with regulating the use and/or reuse of produced water:  
If available, please provide appropriate contact information.

**N/A**

## **5. Incentives**

- a. Does your state or province have any incentives to use and/or reuse produced water in the oilfield? If so, please describe.

**Virginia currently does not provide any incentives to use or reuse produced water; however, Virginia has encouraged use or reuse of produced fluid, and has cited the potential operational, financial, and environmental benefits to gas and oil operators by issuing a Guidance Memorandum on August 12, 2017. The Memorandum is available at:  
<https://dmme.virginia.gov/dgo/pdf/Recycle.pdf>**

- b. Outside of the oilfield? If so, please describe.

**N/A**

## 6. Innovations and Successes

- a. Do you have any innovative or unique approaches to addressing use and/or reuse of produced water? If so, please provide a brief description.

**No plans for use or reuse of produced water have been submitted by gas and oil operators to the Department of Mines Minerals and Energy.**

- b. Does the quality of the produced water pose impediments to recycling and reuse?

**No.**

## 7. Other Information

- a. Please provide any additional notes or commentary below.