# Ohio

#### 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.

The Ohio Revised Code has the following statutory definition:

R.C. 1509.01 (U) "Brine" means all saline geological formation water resulting from, obtained from, or produced in connection with exploration, drilling, well stimulation, production of oil or gas, or plugging of a well.

The Ohio Administrative Code has the following regulatory definition: 1501:9-3-01(E) "Saltwater" means any and all nonpotable water resulting, obtained, or produced from the exploration, drilling, or production of oil or gas.

- 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.

There is not currently a definition for "recycle" or "reuse" in the Ohio Revised (R.C.) or Ohio Administrative Code (O.A.C.). The Division is drafting a rule that will define "recycle."

# 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.

Ohio law does not explicitly address ownership of produced water (called "brine" under Ohio law); however, R.C. 1509.11 requires well owners to report brine production and the definition of "owner" under R.C. 1509.01(K) generally includes the "right to drill and produce from a pool."

- ii. Ownership of produced water from oil or gas wells after it has been brought to the surface.
  - Ohio law does not explicitly address ownership of produced water; however, Ohio law places the burden for managing and disposing of wastes on well owners. See R.C. 1509.01 (definition of "wastes" and "production operations"), 1509.02 regarding the authority of the Division over the regulation of wastes, and 1509.22 (prohibiting the placing of brine in groundwater or in or on the land, also governing the injection and disposal of brine).
- iii. Use and/or reuse of produced water in the oilfield.
  - R.C. 1509.22(C) does not directly address use/reuse of brine "in" or "outside" of the oilfield. The statute states that brine or other waste substances may be:
    - Injected into an underground formation (as governed by R.C. 1509.22(D));
    - 2. Spread on surface roads by local governments (as governed by R.C. 1509.226);
    - 3. Used in an enhanced recovery project; or
    - 4. Any other method approved by the Chief.
- iv. Use and/or reuse of produced water outside of the oilfield. **See above.**
- 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.

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

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.

Who	Possession	Use	Other rights (please specify)
Landowner			
Operator	x	x	
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.).

Brine hauler requirements R.C. 1509.222.

Prohibition of spilling or placing brine in or on the ground or in waters R.C. 1509.22(A).

Brine treatment, processing, recycling, and disposal R.C. 1509.22(C). Brine spreading R.C. 1509.226.

- ii. Use and/or reuse of produced water in the oilfield:
  - 1. By the producer
    - a. Spreading brine on roads (R.C. 1509.226);
    - b. R.C. 1509.22(C)(1)(d) In any other manner not specified in divisions (C)(1)(a) to (c) of this section that is approved by a permit or order issued by the Chief; and
    - c. Enhanced recovery R.C. 1509.22 (C)(1)(c).
    - d. Reuse of the material if it is not TENORM R.C. 1509.074(A)(5).

# 2. By a different operator

- a. Brine spreading on roads (R.C. 1509.226)
- R.C. 1509.22(C)(1)(d) In any other manner not specified in divisions (C)(1)(a) to (c) of this section that is approved by a permit or order issued by the chief
- c. Oil and gas waste facilities R.C. 1509.22(B)(2)(a) that have received authorizations to store, recycle, treat, or process brine or other waste substances by order or permit.
- iii. Use and/or reuse of produced water outside of the oilfield.
  - 1. R.C. 1509.074 the ability to reuse outside of oilfield if Ohio EPA approve beneficial reuse.
  - 2. Oil and gas waste facilities under R.C. 1509.22(B)(2)(a) that have received authorizations to store, recycle, treat, or process brine or other waste substances by order or permit.

#### 4. State or Provincial Regulatory Agency

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

#### Ohio EPA

Ohio Department of Natural Resources, Division of Oil and Gas Resources Management

Contact information:

For Ohio EPA, (614) 644 – 2621.

For Ohio Department of Natural Resources, Division of Oil and Gas Resources Management, (614) 265 – 6922.

Brief summary of areas of responsibilities:

Ohio EPA is responsible for potential spills that have impacted areas outside the boundaries of well sites and waste facilities, areas in which OEPA has concurrent jurisdiction, and beneficial reuse.

Ohio Department of Natural Resources, Division of Oil and Gas Resources Management ("Division") is responsible for produced water being used or disposed of in its jurisdiction, including production operations, well sites, and oil and gas waste facilities. Additionally, the Division licenses brine haulers.

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.
 No.

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

#### 6. Innovations and Successes

No.

- 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.
  N/A.
- b. Does the quality of the produced water pose impediments to recycling and reuse? The quality of the produced water requires treatment and processing prior to recycling and reuse.

#### 7. Other Information

a. Please provide any additional notes or commentary below.

Ohio has jurisdiction over the handling and disposal of radiological materials, which may include recycled, processed, or treated brine.