

# Michigan

## 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 term is not defined or used in Part 615, Supervisor of Wells (Part 615), of the Natural Resources and Environmental Protection Act (NREPA). Part 615 uses the term brine. In Administrative Rule, “Brine” means all nonpotable water resulting, obtained, or produced from the exploration, drilling, or production of oil or gas, or both.**

**Michigan also uses the term Fracture Fluid. “Flowback fluid” means hydraulic fracturing fluid and brine recovered from a well after completion of a hydraulic fracturing operation and before the conclusion of test production under R 324.606.**

- 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.

**Michigan does not define or use either term in Part 615, Supervisor of Wells.**

## 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.

**Common law, rule of capture and reasonable use. Owner/Operator has the right via lease to coproduce associated water/brines with hydrocarbons and to drill an onsite well for drilling and completions.**

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

**Ownership after produced water/brine is brought to surface is not addressed directly in Michigan. Once in possession it is viewed as owned by the operator, and the operator has liability as described in various statutes. That ownership and liability transfers to service companies who transport and dispose of the produced water, if different than the owner operator who produced it.**

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

**In Michigan, the regulations the disposition of Brine is addressed by Rule R 324.703 which requires disposal in an approved injection well. Administrative Rule R 324.705 essentially calls for disposal in an injection well. Section 61525 and Administrative Rule R324.612 allow for the injection of brines for secondary recovery if authorized by the Supervisor of Wells. If the secondary recovery is approved and the injection wells are approved, the produced water/brine can be used for pressure maintenance and sweeping of hydrocarbons. Approximately 700 wells are used for this purpose in Michigan.**

**Pursuant to Administrative Rule R 324.405, the Supervisor of Wells can also approve the use of brines for drilling and completion fluids. Brines cannot be used for drilling of surface casing.**

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

**Part 615 regulations do not allow for use of produced water/brine outside of the oilfield except for ice and dust control and road stabilization if conditions of Administrative Rule 324.705 are met and the source well is approved by the Supervisor of Wells.**

- 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		X	
Operator			X by lease agreement
Government			Only as a landowner
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			<b>Possession and Use by agreement only transferring liability.</b>
Operator	<b>X</b>	<b>X</b>	
Government			
Other (please specify)			

- d. Does the quality of the produced water play a role in the ownership of the water?

**The quality of the produced water does not play a role in the ownership of the water.**

### 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.).

**Prohibition of waste is in handling and disposition of waste and fluids is expressed in several statute and rules of Part 615, Supervisor of Wells, of the NREPA. Administrative Rules 324.703 and 324.705, Part 121 addresses transportation exception if used for dust and ice control), Part 31 Groundwater Discharge General Permit, and also Part 201, Environmental Remediation, of the NREPA.**

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

1. By the producer

**Part 615 Administrative Rule R 324.612 addresses liability of the operator for approved secondary recovery projects in that it must prevent waste. Many other citations in Part 615 statute and rule address the prevention of waste by an owner/operator producing hydrocarbons and associated brines.**

2. By a different operator

**If by agreement between operators and approval of the Supervisor of Wells the produced water/brine is to be used by another operator, Part 615 Administrative Rule R 324.612 addresses liability of the operator for approved secondary recovery projects in that it must prevent waste. Many other citations in Part 615 statute and rule address the prevention of waste by an owner/operator producing hydrocarbons and associated brines.**

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

**Prohibition of waste is in handling and disposition of waste and fluids is expressed in several statute and rules of Part 615, Supervisor of Wells, of the NREPA. Administrative Rules 324.703 and 324.705, Part 121 addresses transportation exception if used for dust and ice control), Part 31 Groundwater Discharge General Permit, and also Part 201, Environmental Remediation, of the NREPA.**

**4. State or Provincial Regulatory Agency**

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

**Michigan Department of Environment, Great Lakes, and Energy (EGLE)**

**Oil, Gas, and Minerals Division – Administers Part 615, Supervisor of Wells, and Part 201, Environmental Remediation, of the NREPA for oil and gas sites.**

**Water Resources Division – Administers Part 31 Groundwater Discharge General Permit for use of water, if source well is approved, for dust and ice control.**

Contact information:

**Michigan Department of Environment, Great Lakes, and Energy**

**Oil, Gas, and Minerals Division**

**P.O. Box 30256**

**Lansing, MI 48909-7756**

**517-284-6826**

**[www.michigan.gov/egle](http://www.michigan.gov/egle)**

Brief summary of areas of responsibilities:

**Michigan Department of Environment, Great Lakes, and Energy (EGLE)**

**Oil, Gas, and Minerals Division – Administers Part 615, Supervisor of Wells, and Part 201, Environmental Remediation, of the NREPA for oil and gas sites.**

**Water Resources Division – Administers Part 31 Groundwater Discharge General Permit for use of water, if source well is approved, for dust and ice control.**

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

**Because Part 615 significantly limits the use or reuse of produced water/brines coproduced with hydrocarbons, EGLE is not aware of any federal agency involvement.**

## 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.

**Michigan has no incentives to use or reuse produced water in or outside of the oilfield.**

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

**Michigan has no incentives to use or reuse produced water in or outside of the oilfield.**

## 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.

**Not Applicable, only as described in previous sections (secondary recovery, drilling, completions, and for dust or ice control).**

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

**In the past, the quality of produced water has precluded its use in some completion methods, depending on completion and reservoir characteristics.**

## **7. Other Information**

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

**Michigan has some flexibility in Administrative Rule R 324.705 to approve brine for other uses which are not explicitly specified and would likely require a petition and hearing. Recycling and reuse of brine can have associated handling, storage, and use risks and challenges which may require future rulemaking if requested.**