



pennsylvania
DEPARTMENT OF ENVIRONMENTAL PROTECTION

Oil and Gas Management



Chapter 78a Training Protection of Water Supplies

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Purpose of Presentation

- The purpose of this presentation is to discuss the laws, regulations and guidance for the protection of water supplies as they pertain to unconventional oil and gas operations.
- **Bold Font** denotes new language included in Title 25 Pa. Code Chapter 78a. Sections 51 and 52.

Protection of water supplies

- The Department determines if a water supply is adversely impacted by oil and gas activities by conducting a thorough water supply investigation.
- The Department will also determine if the water supply is located within a rebuttable presumption area.

Rebuttable Presumption

58 Pa.C.S. § 3218(c)(2)

- What is rebuttable presumption?
- It shall be presumed that an unconventional oil or gas well operator is responsible for pollution of a water supply if:
 - i. The water supply is within 2,500 feet of the unconventional vertical well bore; and
 - ii. The pollution occurred within 12 months of the later of completion, drilling, stimulation or alteration of the unconventional well.

Rebuttable Presumption

25 Pa. Code § 78a.51(c)

- **The presumption established by Section 3218(c) of the 2012 Oil and Gas Act is not applicable to pollution resulting from well site construction.**

Rebuttable Presumption

58 Pa.C.S. § 3218(d)(2)

- What are the defenses against presumption?
- For unconventional wells that fall under the rebuttable presumption criteria:
 - i. The pollution existed prior to the drilling, stimulation or alteration activity as determined by a predrilling or prealteration survey.
 - ii. The landowner or water purveyor refused to allow the operator access to conduct a predrilling or prealteration survey.

Rebuttable Presumption

58 Pa.C.S. § 3218(d)(2)

- iii. The water supply is not within 2,500 feet of the unconventional vertical well bore.
- iv. The pollution occurred more than 12 months after completion of drilling or alteration activities.
- v. The pollution occurred as the result of a cause other than the drilling or alteration activity.

Predrilling/Prealteration Survey

25 Pa. Code § 78a.52(a) & 58 Pa.C.S. § 3218(d)(2)(i)

- A well operator may conduct a predrilling or prealteration survey to prove the pollution of a water supply existed prior to the drilling or alteration of the well.
- These surveys may be used as a defense against presumption and/or a water supply investigation being conducted by the Department.
- **“Survey”** means all of the water supply samples associated with a single well.

Predrilling/Prealteration Survey

25 Pa. Code § 78a.52(c)

- The survey shall be conducted by an independent **Pennsylvania-accredited** laboratory.
- 25 Pa. Code § 252 ENVIRONMENTAL LABORATORY ACCREDITATION - Requires testing or analysis of environmental samples within a matrix identified in § 252.3(b) and to comply with a statute listed in § 252.3(a) shall be performed by an environmental laboratory accredited under this chapter.

▶ § 252.3(a) Environmental Statutes

- The Oil and Gas Act (58 P. S. § § 3201-3274).
- The Clean Streams Law (35 P. S. § § 691.1—691.1001).
- The Land Recycling and Environmental Remediation Standards Act (35 P. S. § § 6026.101—6026.908).
- The Pennsylvania Safe Drinking Water Act (35 P. S. § § 721.1—721.17).
- The Solid Waste Management Act (35 P. S. § § 6018.101—6018.1003).

Predrilling/Prealteration Survey

25 Pa. Code § 78a.52(d)

- In order to preserve its defense of presumption under Section 3218(d)(2)(i) of the 2012 Oil and Gas Act (regarding existing pollution), the operator must provide a report containing a copy of **all the sample results** taken as part of the survey **electronically** to the Department **10 business days prior to commencement of drilling** of the well that is the subject of the survey.

Predrilling/Prealteration Survey

25 Pa. Code § 78a.52(d)

- **Survey results** not received by the Department within 10 business days may not be used to preserve the operator's defenses under section 3218(d)(2)(i) of the 2012 Oil and Gas Act.
- **The operator shall provide a copy of any sample results to the landowner or water purveyor within 10-business days of receipt of the sample results.**

Predrilling/Prealteration Survey

25 Pa. Code § 78a.52(f)

- A well operator who wishes to preserve the defense under Section 3218(d)(2)(ii) of the 2012 Oil and Gas Act that the landowner or water purveyor refused the operator access to conduct a survey shall confirm the desire to conduct this survey and that access was refused by issuing notice to the person by certified mail, or otherwise document that access was refused.

Predrilling/Prealteration Survey

25 Pa. Code § 78a.52(g) & 58 Pa.C.S. § 3218(e.1)

- **Additionally, an operator of an unconventional well must provide written notice to the landowner or water purveyor indicating that presumption may be void if they refuse to allow the operator access to conduct a predrilling or prealteration survey. Proof of a written notice to the landowner or water purveyor must be provided to the Department for the operator to retain this defense of presumption.**

Predrilling/Prealteration Survey

25 Pa. Code § 78a.52(g)

- **Proof of written notice will be presumed if provided in accordance with Section 3212(a) of the 2012 Oil and Gas Act.**

Predrilling/Prealteration Survey

Section 3212(a) of the 2012 Oil and Gas Act

- Receipt of notice by the surface owner shall be presumed to have occurred 15 days from the date of the certified mailing when the well operator submits a copy of the certified mail receipt sent to the surface owner and an affidavit certifying that the address of the surface owner to which notice was sent is the same as the address listed in the assessment books in the county where the property is located.

Notifications for Investigations

25 Pa. Code § 78a.51(b)

- A landowner, water purveyor or affected person suffering pollution or diminution of a water supply **as a result of oil and gas operations** may notify the Department and request that an investigation be conducted.

Notifications for Investigations

25 Pa. Code § 78a.51(h)

- A well operator who receives notice that a water supply has been affected by pollution or diminution, shall report receipt of notice from an affected person to the Department within 24 hours of receiving the notice. **Notice shall be provided electronically to the Department through its web site.**

Oil and Gas Operations

25 Pa. Code § 78a.1

- **Oil and gas operations**—The term includes the following:
- (i) Well site preparation, construction, drilling, hydraulic fracturing, completion, production, operation, alteration, plugging and site restoration associated with an oil or gas well.
- (ii) Water withdrawals, residual waste processing, water and other fluid management and storage used exclusively for the development of oil and gas wells.
- (iii) Construction, installation, use, maintenance and repair of:
 - (A) Oil and gas well development, gathering and transmission pipelines.
 - (B) Natural gas compressor stations.
 - (C) Natural gas processing plants or facilities performing equivalent functions.
- (iv) Construction, installation, use, maintenance and repair of all equipment directly associated with activities in subparagraphs (i)-(iii) to the extent that the equipment is necessarily located at or immediately adjacent to a well site, impoundment area, oil and gas pipeline, natural gas compressor station or natural gas processing plant.
- (v) Earth disturbance associated with oil and gas exploration, production, processing, or treatment operations or transmission facilities.

Water Supply Investigations

- The Department has the authority to conduct water supply investigations pertaining to oil and gas operations in accordance with Section 5 of The Clean Streams Law (35 P. S. § 5).

Water Supply Investigations

The Clean Streams Law Section 5. Powers and Duties.

- (b) The Department shall have the power and its duty shall be to:
- (8) Make such inspections of public or private property as are necessary to determine compliance with the provisions of this act, and the rules, regulations, orders or permits issued hereunder.

Water Supply Investigations

25 Pa. Code § 78a.51(c)

- Within 10 **calendar** days of the receipt of the investigation request, the Department will investigate the claim and within 45 **calendar** days of receipt of the request, make a determination.

Water Supply Investigations

Standards and Guidelines for Identifying, Tracking, and Resolving Oil and Gas Violations (820-4000-001) (January 17, 2015)

- If possible, the WQS will attempt to contact the requestor the same business day the request for investigation is received.
- The WQS or the WQS's supervisor will make every effort to contact the requestor within two business days of the day the request for investigation is received.

Water Supply Investigations

Standards and Guidelines for Identifying, Tracking, and Resolving Oil and Gas Violations (820-4000-001) (January 17, 2015)

- Within two business days of contacting the requestor, the WQS should conduct a site inspection and obtain samples of the water supply if warranted.
- A site inspection should be conducted within 10 calendar days of contact unless the water supply user/owner fails or refuses to grant access to the water supply.

Temporary Water Supply

Standards and Guidelines for Identifying, Tracking, and Resolving Oil and Gas Violations (820-4000-001) (January 17, 2015)

- Following an onsite inspection, if the WQS observes a potential impact to the water supply and determines that rebuttable presumption applies to the water supply, the Department will request that the operator provide a temporary water supply adequate in quality and quantity for the needs of the user within 24 hours.

Temporary Water Supply

Standards and Guidelines for Identifying, Tracking, and Resolving Oil and Gas Violations (820-4000-001) (January 17, 2015)

- If the operator does not provide a temporary water supply within 24 hours of receipt of written notification and also fails to rebut the presumption of liability, the Program Manager may issue an administrative order as needed directing the operator to provide temporary water within 24 hours.

Water Supply Investigations

Standards and Guidelines for Identifying, Tracking, and Resolving Oil and Gas Violations (820-4000-001) (January 17, 2015)

- When extenuating circumstances prevent the Department from making a determination within 45 calendar days, a letter will be sent to the water supply user/owner containing a summary of the investigation to date and an explanation that additional investigation is necessary.

Water Supply Investigations

25 Pa. Code § 78a.51(c)

- If the Department's investigation determines that water supply pollution or diminution was caused by **oil and gas operations** or if the impacted water supply falls under presumption, the Department will issue orders to the well operator necessary to assure the water supply is restored or replaced.

Restore or Replace Water Supply

25 Pa. Code § 78a.51(a) & 58 Pa.C.S. § 3218(a)

- A well operator who affects a public or private water supply by pollution or diminution shall restore or replace the affected supply with an alternate source of water adequate in quantity and quality for the purposes served by the supply.

Restored or Replaced Water Supplies

25 Pa. Code § 78a.51(d)

- A restored or replaced water supply includes any well, spring, public water system or other water supply approved by the Department.

▶ Restored or Replaced Water Supplies

25 Pa. Code § 78a.51(d)(2)

- The quality of a restored or replaced water supply must meet the standards established under the Pennsylvania Safe Drinking Water Act (35 P.S. §§ 721.1 – 721.17), **or is comparable to the quality of water that existed prior to pollution if the water quality was better than these standards.**

Replacement of water supplies

25 Pa. Code § 78a.51(g)

- If the well operator and the water user are unable to reach agreement on the means for restoring or replacing the water supply, the Department or either party may request a conference under Section 3251 of the 2012 Oil and Gas Act (relating to conferences) to help facilitate the review and approval of the means for permanently restoring or replacing the water supply.

Conclusion

- Section 3218 of the 2012 Oil & Gas Act requires water supplies impacted by oil and gas operations to be restored to Pennsylvania Safe Drinking Water Act standards, at a minimum. If the quality of the water supply was better than Pennsylvania Safe Drinking Water Act standards, prior to being affected by the operator, it needs to be returned to the pre-pollution quality of the water. These regulations include private water supplies.



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QUESTIONS?

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