



pennsylvania
DEPARTMENT OF ENVIRONMENTAL PROTECTION
OIL & GAS MANAGEMENT

COPY

December 16, 2013

CERTIFIED MAIL NO. [REDACTED]

Re: [REDACTED]

58 Pa. C.S. § 3218 Determination
Donegal Township, Westmoreland County

Dear [REDACTED]

The Department of Environmental Protection ("DEP") has investigated the alleged pollution of your water supply well located at [REDACTED]. Samples from your water supply were collected by a qualified third party on 4/12/2011, 10/4/2012, 3/22/13, and by DEP on 11/13/2013 and submitted to accredited laboratories for analysis.

DEP compared an April 12, 2011 "pre-drill" survey test of your water supply with the October 2012 and November 2013 tests. The comparison shows that in November 2013, Chlorides, Barium, Calcium, Hardness, Iron, Magnesium, Manganese, and Total Dissolved Solids (TDS) were present in your water supply in concentrations that exceed those observed in the pre-drill survey, and several are elevated above the drinking water standards. As a result of our investigation, DEP has determined that nearby oil and gas operations are responsible for the pollution in your water supply.

Enclosed are copies of the analytical test results of the samples taken and a fact sheet to assist you in interpreting the results. If you have any questions about this determination, or if you would like to discuss this further, please contact Jeffrey Dewey, Environmental Protection Compliance Specialist, at 412.442.4012 or via email at jdewey@pa.gov. The Department will keep you apprised of future developments.

Sincerely,

Alan Eichler
Environmental Program Manager
District Oil and Gas Operations

Enclosures:

cc: Complaint File # 301088
April Weiland
Richard Thomas
Jeffrey Dewey
Amanda Sluss



pennsylvania

DEPARTMENT OF ENVIRONMENTAL PROTECTION
OIL & GAS MANAGEMENT

June 17, 2014

Certified Mail No. [REDACTED]

[REDACTED]

Re: Complaint ID 281911
Township: Donegal
County: Westmoreland

Dear [REDACTED]

Enclosed please find an executed copy of an order of the Pennsylvania Department of Environmental Protection directed to WPX Energy Appalachia, LLC for restoration or replacement of your water supply.

If you have any questions or concerns regarding this matter please feel free to contact Jeff Dewey at 412.442.4012.

Sincerely,

Amanda Sluss
Environmental Protection Compliance Specialist

cc: Enforcement File
Ms. April Weiland

JUL - 1 2014

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION

IN THE MATTER OF:

WPX Energy Appalachia, LLC : 2012 Oil and Gas Act
6000 Town Center Boulevard : Affected Water Supply
Suite 300 : Donegal Township,
Canonsburg, PA 15317-5838 : Westmoreland County

ORDER

NOW, this 17th day of June, 2014, the Commonwealth of Pennsylvania, Department of Environmental Protection ("Department") has made and determined the following FINDINGS and enters the following ORDER:

A. The Department is the agency with the duty and authority to implement, administer, and enforce the Oil and Gas Act, Act of February 14, 2012, P.L. 87, No. 13, 58 Pa. C.S. §§ 3201-3274 ("2012 Oil and Gas Act"); Section 1917-A of the Administrative Code of 1929, Act of April 9, 1929, P.L. 177, *as amended*, 71 P.S. § 510-17 ("Administrative Code"); and the rules and regulations promulgated thereunder.

WPX Energy Appalachia, LLC

B. WPX Energy Appalachia, LLC ("WPX") is a Delaware limited liability company engaged in various oil and gas well activities in Pennsylvania. WPX's business address is 6000 Town Center Boulevard, Suite 300, Canonsburg, PA 15317-5838.

C. WPX is the "well operator" as that term is defined in Section 3203 of the 2012 Oil and Gas Act, 58 Pa. C.S. § 3203, of the Gas Well, as defined herein.

The Gas Well Site

D. On June 6, 2011, the Department issued Well Permit No. [REDACTED] to WPX authorizing WPX to drill and operate the [REDACTED] gas well ("Gas Well") in Donegal Township,

Westmoreland County. The Gas Well is an unconventional well as that term is defined in Section 3203 of the 2012 Oil and Gas Act, 58 Pa. C.S. § 3203. The Gas Well is located on a well pad [REDACTED] that includes a temporary drilling and flowback fluids pit (“Impoundment”).

E. WPX commenced drilling the Gas Well on October 19, 2011, and completed drilling on November 11, 2011. WPX completed stimulation of the Gas Well on May 29, 2012.

F. On September 12, 2012, the Department sampled the fluids in the Impoundment. The results from that sampling are included in the table of Paragraph L, herein.

G. On or before September 19, 2012, flowback fluid leaked from the Impoundment into the ground (“Release”).

Water Supply

H. Two individuals (the “Complainant”) reside at [REDACTED] Donegal Township, Westmoreland County. A private water well (“Water Well”) serves as the water supply at the Complainant’s residence for all domestic purposes (“Water Supply”). The Complainant described the Water Well as ninety (90) feet deep. The Water Well is a “water supply” as that term is defined by section 78.1 of the rules and regulations, 25 Pa Code § 78.1. The Water Well is 425 feet from the Impoundment and 1003 feet from the Gas Well.

I. WPX conducted a pre-drilling survey of the Water Supply on April, 12, 2011 (“Pre-Drilling Survey”).

J. The laboratory analyses of the Pre-Drill Survey showed that the Water Supply’s quality met or exceeded the standards for barium, chloride, and total dissolved solids (“TDS”) set forth in the Pennsylvania Safe Drinking Water Act, 35 P.S. §§ 721.1–721.17, 25 Pa. Code § 109.202 (hereinafter, “SDWA Standards”). The hardness, iron, and manganese levels in the Pre-Drill Survey

did not meet the SDWA Standards. The results from that Pre-Drill Survey, as well as the SDWA Standards, are included in the table of Paragraph N, herein.

Water Supply Pollution Investigation

K. On November 6, 2013, the Complainant notified the Department that the quality of the Water Supply changed and that the Water Supply was no longer adequate for domestic uses, specifically noting a change in taste.

L. Following the November 2013 complaint, the Department initiated an investigation. The Department and WPX each collected samples of the Water Supply for laboratory analyses to test for gas-well-related contaminants (“Post-Release Samples”). Results from that sampling, as well as the other results described above, are set forth in this table:

| Contaminant or Parameter | Unit | SDWA Standards | Pre-Drill Survey 4/12/11 | DEP Post-Release Sample Result 11/13/13 | WPX Post-Release Sample Result 03/14/2014 | DEP Impoundment Fluid Sample Result 9/12/2012 |
|--------------------------|------|----------------|--------------------------|---|---|---|
| Chloride | mg/L | 250 | 85.70 | 283 | 207 | 8574 |
| Barium | mg/L | 2 | 0.34 | 0.68 | 0.58 | 169 |
| Calcium | mg/L | 75 | 52.80 | 111 | 95.3 | 1110 |
| Hardness | mg/L | 30-150 | 188 | 385 | Not analyzed | 3185 |
| Iron | mg/L | 0.30 | 0.51 | 0.68 | 0.40 | 0.311 |
| Manganese | mg/L | 0.05 | 0.16 | 0.32 | 0.26 | 0.608 |
| TDS | mg/L | 500 | 298 | 924 | 607 | 16,198 |

M. The levels of the following gas-well-related contaminants in the Post-Release Samples were above the levels in the Pre-Drill Survey and SDWA Standards: chloride, calcium, iron, hardness, manganese, and TDS. Of those, the pre-drill levels of Hardness, Iron, and Manganese that did not meet the SDWA Standards were exacerbated. The SDWA Standards applicable to those analytes and parameters were developed to protect on aesthetics/taste. These increases correlate to changes in taste affecting domestic usage as identified by Complainant.

N. In addition, another gas-well-related contaminant, barium, had levels in the Post-Release Samples higher than the Pre-Drill Survey level.

O. The gas-well-related contaminants identified in Paragraphs M and N, above, were also found in sample results from the Impoundment's fluids.

P. The Water Supply was and continues to be polluted from WPX's gas well drilling, alteration, or operation activities at the [REDACTED] Site, and is not of adequate quality for the purposes served by the Water Supply.

Responsibility for Pollution

Q. WPX is responsible for the pollution of the Water Supply under Section 3218(a) of the 2012 Oil and Gas Act, 58 Pa. C.S. § 3218(a), as the result of drilling, alteration or operation of an oil and gas well.

R. On December 16, 2013, the Department sent a letter to the Complainant notifying WPX that WPX is responsible for the pollution of the Water Supply.

S. Section 3218(a) of the 2012 Oil and Gas Act, 58 Pa. C.S. §3218(a), and 25 Pa. Code § 78.51(d), set forth the criteria for adequate reliability, cost, maintenance, control, quality, and quantity of the restored or replaced water supply.

T. As of the date of this Order, WPX has not restored or replaced the Water Supply with an alternative source of water that is adequate for the purposes served by the Water Supply in violation of Section 3218(a) of the 2012 Oil and Gas Act, 58 Pa.C.S. § 3218(a), and 25 Pa. Code §78.51(a).

U. The pollution of the Water Supply from the drilling of the Gas Well and WPX's failure to restore or replace the affected Water Supply with an alternate source of water adequate for

the purposes served by the Water Supply constitute a public nuisance and unlawful conduct pursuant to Sections 3252 and 3259(2) of the 2012 Oil and Gas Act, 58 Pa. C.S. §§ 3252 and 3259(2).

ORDER

NOW, THEREFORE, pursuant to Sections 3218(b) and 3253 of the 2012 Oil and Gas Act, 58 Pa. C.S. §§ 3218(b) and 3253, 25 Pa. Code § 78.51(c), and Section 1917-A of the Administrative Code, 71 P.S. § 510-17, the Department hereby ORDERS that:

1. Restore or Replace the Water Supply.

a. Temporary Drinking Water Supply. If the Complainant accepts temporary water, WPX shall provide the owners of the Water Supply with a temporary drinking water supply of adequate and reliable quantity and quality for the purposes served within fifteen days of notice of the Complainant's acceptance. WPX shall continue to provide temporary water until the Department notifies WPX, in writing, that the requirements of this Order have been satisfied. If the Complainant refuses temporary water, WPX shall immediately provide documentation of that refusal to the Department.

b. Restoration/Replacement Plan. Within thirty (30) days of the date of this Order, WPX shall submit to the Department, in writing, a plan to permanently restore or replace the Water Supply ("Restoration/Replacement Plan") that, at a minimum, shall identify the:

- i. proposed corrective actions (e.g. treatment, drill new water supply well, hook into public water supply, and/or other corrective actions) to permanently restore or replace the Water Supply in compliance with Section 3218(a) of the 2012 Oil and Gas Act, 58 Pa. C.S. § 3218(a), and 25 Pa. Code § 78.51(d);
- ii. proposed schedule to implement the corrective actions so that the Water Supply is restored or replaced within forty-five (45) days of receipt of the Department's written approval of the Restoration/Replacement Plan or of the modified Restoration/Replacement Plan;

- iii. the independent laboratory, certified by the Department, that WPX will use to analyze samples from the restored or replaced Water Supply;
- iv. proposed or executed agreements/contracts between WPX and the Complainant to provide for all plumbing, conveyance, pumping, or auxiliary facilities necessary for the use of the permanently restored or replaced Water Supply;
- v. proposed or executed contracts/agreements between WPX and the Complainant documenting how WPX will compensate on a permanent basis for any increased operating and maintenance costs for the replaced or restored Water Supply; and
- vi. plan for confirmatory samples of the restored and/or replaced Water Supply after WPX asserts that it has permanently restored or replaced the Water Supply, or after WPX asserts that the Water Supply is no longer affected. Such samples will be used to determine whether the Water Supply meets the standards set forth in Section 3218(a) of the 2012 Oil and Gas Act, 58 Pa. C.S. § 3218(a), and 25 Pa. Code § 78.51(d). The confirmatory sampling plan should provide for: split samples with the Department; that sampling would only take place Monday through Friday during Department working hours; and should specify that WPX will notify the Department at least three (3) working days before any scheduled sampling of the Water Supply.

2. **Submission of Documents.**

a. With regard to any document that WPX submits to the Department pursuant to Paragraph 1.b., above, WPX shall submit to the Department, in writing, additional information and/or correct deficiencies within ten (10) days of receipt of the Department's written request for additional information and/or notice of deficiencies.

b. Upon receipt of a complete document in compliance with the requirements Paragraph 1.a., above, or a revised document that addresses the Department's request(s) under Paragraph 2.a., above, the Department will approve or modify and approve the document in writing.

c. Upon receipt by WPX of the Department's written approval under this Order of a document or modified document, the approved document shall be incorporated herein and enforceable hereunder.

3. Implementation of Approved Plan(s).

a. WPX shall implement the Department-approved Restoration/Replacement Plan in accordance with the approved schedule therein.

b. In all cases, WPX shall complete the approved corrective actions to permanently restore or replace the Water Supply within forty-five (45) days of receipt of the Department's written approval of the Restoration/Replacement Plan.

4. In complying with this Order, WPX shall not cause pollution of any waters of the Commonwealth and shall not affect by pollution or diminution any other water supply.

5. All correspondence with the Department concerning this Order shall be addressed as follows:

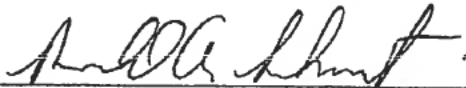
Jeffrey Dewey; Compliance Specialist
Oil and Gas Operations
Pennsylvania Department of Environmental Protection
400 Waterfront Drive
Pittsburgh, PA 15222-4745

Any person aggrieved by this action may appeal, pursuant to Section 4 of the Environmental Hearing Board Act, 35 P.S. §7514, and the Administrative Agency Law, 2 Pa.C.S.A. Chapter 5A, to the Environmental Hearing Board, Second Floor, Rachel Carson State Office Building, 400 Market Street, P.O. Box 8457, Harrisburg, Pennsylvania 17105-8457, 717-787-3483. TDD users may contact the Board through the Pennsylvania Relay Service, 800-654-5984. Appeals must be filed with the Environmental Hearing Board within 30 days of receipt of written notice of this action

unless the appropriate statute provides a different time period. Copies of the appeal form and the Board's rules of practice and procedure may be obtained from the Board. The appeal form and the Board's rules of practice and procedure are also available in braille or on audiotape from the Secretary to the Board at 717-787-3483. This Paragraph does not, in and of itself, create any right of appeal beyond that permitted by applicable statutes and decisional law.

IF YOU WANT TO CHALLENGE THIS ACTION, YOUR APPEAL MUST REACH THE BOARD WITHIN 30 DAYS. YOU DO NOT NEED A LAWYER TO FILE AN APPEAL WITH THE BOARD. IMPORTANT LEGAL RIGHTS ARE AT STAKE, HOWEVER, SO YOU SHOULD SHOW THIS DOCUMENT TO A LAWYER AT ONCE. IF YOU CANNOT AFFORD A LAWYER, YOU MAY QUALIFY FOR FREE PRO BONO REPRESENTATION. CALL THE SECRETARY TO THE BOARD (717-787-3483) FOR MORE INFORMATION.

**FOR THE COMMONWEALTH OF PENNSYLVANIA,
DEPARTMENT OF ENVIRONMENTAL PROTECTION:**


_____ *fev*

Southwest District Manager
District Oil and Gas Operations