

**COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION**

IN THE MATTER OF:

CNX Gas Company LLC : The 2012 Oil and Gas Act
1000 CONSOL Energy Drive :
Canonsburg, PA 15317 :

CONSENT ORDER AND AGREEMENT

This Consent Order and Agreement (“COA”) is entered into this 13th day of August, 2020, by and between the Commonwealth of Pennsylvania, Department of Environmental Protection (“Department”) and CNX Gas Company LLC (“CNX”).

The Department has found and determined the following:

A. The Department is the agency with the duty and authority to administer and enforce Chapter 32 of Title 58 of the Pennsylvania Consolidated Statutes, 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.

B. CNX is a Virginia limited liability company engaged in various oil and gas exploration and production activities in Pennsylvania. CNX’s business address is 1000 CONSOL Energy Drive, Canonsburg, PA 15317.

C. CNX is the “owner” and “operator,” as those terms are defined in Section 3203 of the 2012 Oil and Gas Act, 58 Pa. C.S. § 3203, of the Shaw 1GHSU Utica Gas Well (the “Shaw 1G Well”), Permit No. 129-28963, the Shaw 1HHSU and 1JHSU Utica Gas Wells (“Shaw 1H and 1J Wells”), and the Shaw 1DHSU Utica Gas Well (“Shaw 1D Well”) located on the Shaw Well Site in Washington Township, Westmoreland County.

D. On January 26, 2019, CNX experienced an unexpected loss of pressure during hydraulic fracturing operations on the Shaw 1G Well. The loss of pressure, later determined by

CNX's Root Cause Analysis to have -resulted from a casing integrity issue, allowed gas to be emitted uncontrollably into shallow geologic formations, resulting in a communication incident with nine nearby conventional gas wells: Mountain 4 (129-24903), Gumbert 3 (129-24501), Germroth 1 (129-25011), H J Kuhn 1 (129-23518), APC Remaly 1 (129-24497), Robert Shaw 1 (129-27540), Gaut 1 (129-24509), Gaut 3 (129-24514) and Speer 3 (129-27539). Upon experiencing the anomaly, CNX immediately investigated the loss of pressure. The following day a wireline tool hit an obstruction in the Shaw 1G Well. Through CNX's remote monitoring, it was determined that one of the nine nearby conventional gas wells had increased pressure concurrently with the wireline event. To mitigate the over-pressurization caused by the communication incident, CNX temporarily flared the nine conventional gas wells near the Shaw Well Site. CNX also shut down all operations on the Shaw Well Pad, including hydraulic fracturing operations on three additional Utica gas wells. No spills or releases were observed or reported as a result of the communication incident.

E. On the date and at the location set forth in Paragraph D, CNX:

- 1) Violated Section 3219 of the 2012 Oil and Gas Act, 58 Pa. C.S. § 3219, by failing to use casing of sufficient strength and other safety devices to prevent blowouts, explosions and fires;
- 2) Violated 25 Pa. Code § 78a.73(a) by failing to maintain well integrity and ensure that health, safety, environment and property are protected; and
- 3) Violated 25 Pa. Code § 78a.74 by venting gas to the atmosphere,

F. On February 4, 2019, CNX regained control of the Shaw 1G Well and stopped the vertical flow of gas by pumping heavy mud into the wellbore. CNX partially plugged the Shaw 1G Well back to approximately 2,000 feet on or about May 21, 2019. CNX cannot produce the Shaw 1G Well after the partial plugging and will not complete the plugging of the Shaw 1G Well

until the Department approves the plugging plan submitted by CNX pursuant to Paragraph 3 (c) of this Order.

G. On May 1, 2019, CNX submitted a Root Cause Analysis to the Department for the January 26, 2019 communication incident stating that hydrogen stress cracking is the most probable cause of the parting of the 5 ½-inch production casing and the pressure released from the production casing caused a breach of the adjacent 9 5/8-inch casing and cement, allowing gas and hydraulic fracturing fluids to be discharged into the surrounding substrate. The Department's contracted technical expert concurred with CNX's conclusion regarding the most likely cause of the casing failure.

H. As a result of the Root Cause Analysis, CNX began using different production casing that is less susceptible to hydrogen stress cracking in all of its new Utica and Marcellus gas wells. CNX also retrofitted with hydraulically and mechanically expanded metal internal casing liners three drilled but uncompleted Utica gas wells (the Shaw 1H and 1J Wells and the MOR 10H gas well) that incorporated production casing similar to the casing on the Shaw 1G Well. The Shaw 1D Well also has similar production casing as the production casing in the Shaw 1 G well, but CNX plans no further hydraulic fracturing on the Shaw 1 D Well. CNX retrofitted the Shaw 1 D Well with tubing that is less susceptible to hydrogen stress cracking and a packer, per DEP approval, prior to placing the well into production on July 13, 2020.

I. The violations described in Paragraph E, above, constitute unlawful conduct pursuant to Section 3259 of the 2012 Oil and Gas Act, 58 Pa. C.S. § 3259.

J. The violations described in Paragraph E, above, constitute a public nuisance pursuant to Section 3252 of the 2012 Oil and Gas Act, 58 Pa. C.S. § 3252, and subject CNX to a claim for civil penalties pursuant to Section 3256 of the 2012 Oil and Gas Act, 58 Pa. C.S. § 3256.

ORDER

After full and complete negotiation of all matters set forth in this COA and upon mutual exchange of the covenants herein, the parties desiring to avoid litigation and intending to be legally bound, it is hereby ORDERED by the Department and AGREED to by CNX as follows:

1. Authority. This COA is an Order of the Department authorized and issued pursuant to Section 3253 of the 2012 Oil and Gas Act, 58 Pa. C.S. § 3253, and Section 1917-A of the Administrative Code, 71 P.S. § 510-17.

2. Findings.

a. CNX agrees that the findings in Paragraphs A, B, C, D, F, G, H and J, above, are true and correct and, in any matter or proceeding involving CNX and the Department, CNX shall not challenge the accuracy or validity of these findings.

b. The parties do not authorize any other persons to use the findings in this COA in any matter or proceeding.

3. Corrective Actions. Within thirty (30) days after execution of this COA, or prior to initiation of the stimulation Shaw 1H and 1J, whichever occurs first, CNX shall submit to the Department a monitoring and response plan for the Shaw 1G Well and the nine conventional gas wells described in Paragraph D, above (“Monitoring and Response Plan”).

a. *Stimulation of the Shaw 1H and 1J Wells*. The Monitoring and Response Plan shall address the stimulation of the Shaw 1H and 1J Wells, and provide a plan to:

i. Identify and mobilize to the Shaw Well Site any necessary equipment for monitoring and control of the Shaw 1G Well and explain how any equipment utilized will allow CNX to monitor and maintain control of the Shaw 1G Well at all times and ensure public health and safety are protected.

ii. Monitor the pressures of the nine conventional gas wells described in Paragraph D, above, at least once per day, report any pressure changes as

outlined in the monitoring plan to the Department and inform the Department of any proposed corrective actions within 24 hours of the observed change.

iii. Continuously monitor the Shaw 1G Well, report any annular gas flow increase greater than five thousand cubic feet per day (5 Mcfd) in the Shaw 1G Well to the Department and inform the Department of any proposed corrective actions within 24 hours of the observed increase.

b. *Post-Stimulation of the Shaw 1H and 1J Wells.* Upon completion of stimulation of the Shaw 1H and 1J wells, CNX Shall identify within the Monitoring and Response Plan a plan to:

i. Monitor the pressure of and annular gas flow in the Shaw 1G Well monthly and report any annular gas flow increase greater than five thousand cubic feet per day (5 Mcfd) in the Shaw 1G Well to the Department within five (5) business days of the observed increase.

ii. Perform a quarterly inspection of the Shaw 1G Well, in accordance with 25 Pa. Code § 78a.88, including the remaining wellhead, annuli meters, valves and regulators associated with the meters, any fluids present, and the condition of any ancillary equipment that may be used.

c. *Ongoing Monitoring of the Shaw 1G Well.* CNX shall schedule a meeting with the Department before July 1, 2025 to review the status of the Shaw 1G Well. Within thirty (30) days after the meeting, CNX shall submit either a Revised Monitoring Plan or a Plugging Plan for the Shaw 1G Well to be reviewed and approved by the Department. If a Plugging Plan is not submitted or approved at that time, CNX shall continue to adhere to the Monitoring Plan or Revised Monitoring Plan until a Plugging Plan is approved by the Department.

d. Plugging the Shaw 1G Well. Except as set forth in this Paragraph 3.d, CNX shall not change the condition of Shaw 1G Well as described in Paragraph F, above, without written approval from the Department and CNX shall initiate plugging operations within 270 days of notification of approval of the Plugging Plan.

i. Notice of Intent to Plug. At least three (3) days, but not more than fifteen (15) days, before the scheduled plugging date for the Shaw 1G Well, CNX shall submit Form 8000-FM-OOGM0005, “Notice of Intent By Well Operator To Plug a Well,” or, if appropriate, Form 8000-PM-OOG0024, “Proposed Alternate Method or Material for Casing, Plugging, Venting or Equipping a Well,” to the Department in accordance with the requirements set forth in Sections 3220 and 3221 of the 2012 Oil and Gas Act, 58 Pa. C.S. §§ 3220 and 3221, and 25 Pa. Code §§ 78a.91 – 78a.98.

ii. Plugging Certificate. Within thirty (30) days after plugging the Shaw 1G Well, CNX shall submit Form 8000-FM-OOGM0006, “Certificate of Well Plugging,” to the Department in accordance with the requirements of 25 Pa. Code § 78a.124.

4. Civil Penalty Settlement. CNX consents to the assessment of a civil penalty of ONE HUNDRED SEVENTY-FIVE THOUSAND DOLLARS (\$175,000.00), which shall be paid in full upon signing this COA. This payment is in settlement of the Department’s claim for civil penalties for the violations set forth in Paragraph E, above. The payment shall be by corporate check or the like, made payable to “Commonwealth of Pennsylvania” and sent to the address set forth in Paragraph 10 (Correspondence with the Department), below.

5. Stipulated Civil Penalties.

a. In the event CNX fails to comply in a timely manner with any

applicable term or provision of this COA, CNX shall be in violation of this COA and, in addition to other applicable remedies, shall pay a civil penalty in the amount of \$1,000 per day for each violation.

b. Stipulated civil penalty payments shall be payable monthly on or before the fifteenth day of each succeeding month and shall be made by corporate check or the like made payable to “Commonwealth of Pennsylvania” and sent to the address set forth in Paragraph 10 (Correspondence with the Department), below.

c. Any payment under this Paragraph shall neither waive CNX’s duty to meet its obligations under this COA nor preclude the Department from commencing an action to compel CNX’s compliance with the terms and conditions of this COA. The payment resolves only CNX’s liability for civil penalties arising from the violation of this COA for which the payment is made.

d. Stipulated civil penalty payments shall be due automatically and without notice.

6. Additional Remedies.

a. If CNX fails to comply with any provision of this COA, the Department may, in addition to the remedies prescribed herein, pursue any remedy available for a violation of an order of the Department, including an action to enforce this COA.

b. The remedies provided by this Paragraph and Paragraph 5 (Stipulated Civil Penalties), above, are cumulative, and the exercise of one does not preclude the exercise of any other. The failure of the Department to pursue any remedy shall not be deemed to be a waiver of that remedy. The payment of a stipulated civil penalty, however, shall preclude any further assessment of civil penalties for the violation for which the stipulated civil penalty is paid.

7. Reservation of Rights. The Department reserves the right to require additional measures to achieve compliance with applicable law. CNX reserves the right to challenge any action which the Department may take to require those measures.

8. Liability of Operator. CNX shall be liable for any violations of the COA, including those caused by, contributed to, or allowed by its officers, agents, employees, or contractors. Except as provided in Paragraph 9(c), CNX also shall be liable for any violation of this COA caused by, contributed to, or allowed by its successors and assigns..

9. Transfer of Site.

a. CNX's duties and obligations under this COA shall not be modified, diminished, terminated, or otherwise altered by the transfer of any legal or equitable interest in the Shaw 1G Well or any part thereof.

b. If CNX intends to transfer any legal or equitable interest in the Shaw 1G Well, CNX shall serve a copy of this COA upon the prospective transferee of the legal and equitable interest at least **thirty (30) days** prior to the contemplated transfer and shall simultaneously inform the Southwest Oil and Gas District Office of the Department of such intent.

c. The Department in its sole discretion may agree to modify or terminate CNX's duties and obligations under this COA upon transfer of the Shaw 1G Well. CNX waives any right that it may have to challenge the Department's decision in this regard.

10. Correspondence with the Department. All correspondence with the Department concerning this COA shall be addressed to:

Daniel F. Counahan
Southwest District Oil and Gas Manager
Pennsylvania Department of Environmental Protection
400 Waterfront Drive
Pittsburgh, PA 15222-4745
Phone 412-442-4006

11. Correspondence with CNX. All correspondence with CNX concerning this COA shall be addressed to:

Carrie Crumpton
Vice President, Environmental Strategy and Permitting
CNX Resources Corporation
1000 CONSOL Energy Drive
Canonsburg, PA 15317

CNX shall notify the Department in writing whenever there is a change in the contact person's name, title, or address. Service of any notice or any legal process for any purpose under this COA, including its enforcement, may be made by mailing a copy by first class mail to the above address.

12. Decisions Under COA. Any decision which the Department makes under the provisions of this COA, including a notice that stipulated civil penalties are due, is intended to be neither a final action under 25 Pa. Code § 1021.2, nor an adjudication under 2 Pa. C.S.A. § 101. Any objection that CNX may have to the decision will be preserved until the Department enforces this COA.

13. Force Majeure.

a. In the event that CNX is prevented from complying in a timely manner with any time limit imposed in this COA solely because of a strike, fire, flood, act of God, or other circumstance beyond CNX's control and which CNX, by the exercise of all reasonable diligence, is unable to prevent, then CNX may petition the Department for an extension of time. An increase in the cost of performing the obligations set forth in this COA shall not constitute circumstances beyond CNX's control. CNX's economic inability to comply with any of the obligations of this COA shall not be grounds for any extension of time.

b. CNX shall only be entitled to the benefits of this paragraph if it notifies the Department within **five (5) working days** by telephone and within **ten (10) working days** in writing of the date it becomes aware of or reasonably should have become aware of the event

impeding performance. The written submission shall include relevant documentation, as well as an affidavit from an authorized individual specifying the reasons for the delay, the expected duration of the delay, and the efforts which have been made and are being made by CNX to mitigate the effects of the event and to minimize the length of the delay. The initial written submission may be supplemented within ten (10) working days of its submission. CNX's failure to comply with the requirements of this paragraph specifically and in a timely fashion shall render this paragraph null and of no effect as to the incident involved.

c. The Department will decide whether to grant all or part of the extension requested on the basis of all documentation submitted by CNX and other information available to the Department. In any subsequent litigation, CNX shall have the burden of proving that the Department's refusal to grant the requested extension was an abuse of discretion based upon the information then available to it.

14. Severability. The Paragraphs of this COA shall be severable and should any part hereof be declared invalid or unenforceable, the remainder shall continue in full force and effect between the Parties.

15. Entire Agreement. This COA shall constitute the entire integrated agreement of the Parties. No prior or contemporaneous communications or prior drafts shall be relevant or admissible for purposes of determining the meaning or intent of any provisions herein in any litigation or any other proceeding.

16. Attorney Fees. The Parties shall bear their respective attorney fees, expenses, and other costs in the prosecution or defense of this matter or any related matters, arising prior to execution of this COA.

17. Modifications. No changes, additions, modifications, or amendments of this COA shall be effective unless they are set out in writing and signed by the Parties.

18. Titles. A title used at the beginning of any Paragraph of this COA may be used to aid in the construction of that Paragraph but shall not be treated as controlling.

19. Termination of COA. CNX's obligations, but not the Findings, of this COA shall terminate when CNXM has completed all the requirements of this COA and paid any outstanding stipulated civil penalties due under Paragraph 5 (Stipulated Civil Penalties), above.

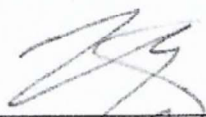
20. Execution of Agreement. This COA may be signed in counterparts, each of which shall be deemed to be an original and all of which together shall constitute one and the same instrument.

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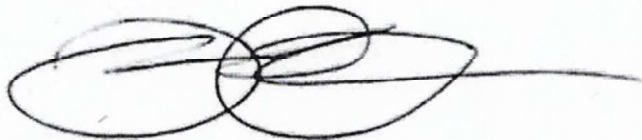
IN WITNESS WHEREOF, the parties have caused this COA to be executed by their duly authorized representatives. The undersigned representatives of CNX certify, under penalty of law, as provided by 18 Pa. C.S. § 4904, that they are authorized to execute this COA on behalf of CNX; that CNX consents to the entry of this COA as a final ORDER of the Department; and that CNX knowingly waives its right to appeal this COA and to challenge its content or validity, which rights may be available under Section 4 of the Environmental Hearing Board Act, the Act of July 13, 1988, P.L. 530, No. 1988-94, 35 P.S. § 7514; the Administrative Agency Law, 2 Pa. C.S. § 103(a) and Chapters 5A and 7A; or any other provision of law. Signature by CNX's attorney certifies only that the agreement has been signed after consulting with counsel.

FOR CNX GAS COMPANY LLC:

FOR THE COMMONWEALTH OF PENNSYLVANIA, DEPARTMENT OF ENVIRONMENTAL PROTECTION:



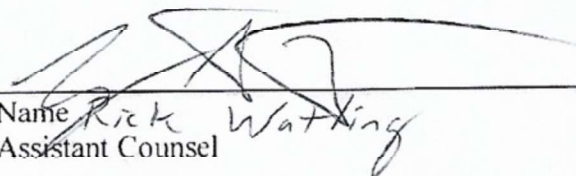
Chad A. Griffith
President & CEO, CNX Gas Company LLC



Daniel F. Counahan
District Oil and Gas Manager
Southwest Oil and Gas District



Donald W. Rush
Vice President & CFO, CNX Gas Company LLC



Name Rick Watking
Assistant Counsel

waived

Name
Attorney for CNX Gas Company LLC