

UNITED STATES DISTRICT COURT  
FOR THE SOUTHERN DISTRICT OF OHIO  
EASTERN DIVISION

UNITED STATES OF AMERICA,

Plaintiff,

v.

XTO Energy, Inc.,

Defendant.

Civil Action No. 12-cv-4269

**CONSENT DECREE**

TABLE OF CONTENTS

I. JURISDICTION AND VENUE..... 4  
II. APPLICABILITY..... 4  
III. DEFINITIONS..... 6  
IV. CIVIL PENALTY ..... 7  
V. COMPLIANCE REQUIREMENTS..... 8  
VI. ADDITIONAL INJUNCTIVE RELIEF ..... 10  
VII. REPORTING REQUIREMENTS..... 11  
VIII. STIPULATED PENALTIES ..... 13  
IX. FORCE MAJEURE..... 16  
X. DISPUTE RESOLUTION..... 17  
XI. INFORMATION COLLECTION AND RETENTION ..... 20  
XII. EFFECT OF SETTLEMENT/RESERVATION OF RIGHTS ..... 22  
XIII. COSTS ..... 23  
XIV. NOTICES ..... 24  
XV. EFFECTIVE DATE ..... 25  
XVI. RETENTION OF JURISDICTION..... 25  
XVII. MODIFICATION..... 25  
XVIII. TERMINATION ..... 25  
XIX. PUBLIC PARTICIPATION ..... 26  
XX. SIGNATORIES/SERVICE..... 27  
XXI. INTEGRATION..... 27  
XXII. 26 U.S.C. SECTION 162(F)(2)(A)(II) IDENTIFICATION ..... 27  
XXIII. HEADINGS..... 28  
XXIV. FINAL JUDGMENT..... 28  
XXV. APPENDICES ..... 28

APPENDIX A: COMPLIANCE ASSURANCE PROJECTS

APPENDIX B: MITIGATION PROJECTS

APPENDIX C: EXISTING OIL AND GAS WELLS IN XTO'S APPALACHIA DISTRICT

Plaintiff United States of America, on behalf of the United States Environmental Protection Agency (“EPA”), has filed a complaint in this action concurrently with this Consent Decree alleging that Defendant, XTO Energy Inc., violated the Clean Air Act (“Act”). In particular, the complaint seeks civil penalties and injunctive relief pursuant to Section 113(b) of the Act, 33 U.S.C. § 7413(b), for XTO’s alleged violation of Section 112(r)(1) of the Act, which imposes a general duty on facility owners and operators to, among other things, “design and maintain a safe facility taking such steps as are necessary to prevent releases [of hazardous substances], and to minimize the consequences of accidental releases which do occur.”

On February 15, 2018, Defendant lost containment of its Schnegg C 7H well near Powhatan Point, Belmont County, Ohio during post-fracking coil drill-out operations. A pressure spike displaced gravel and cellar cement from the well head, which sheared off a valve resulting in the venting of completion fluid and dry natural gas. The gas subsequently ignited, causing the crane holding the coil injector head to fall and contact an adjacent well. The area was ultimately cleared, the 7H well tree was replaced, and the well was killed with mud on March 7, 2018.

Defendant entered into agreements with both the Ohio Department of Natural Resources (“ODNR”) and the Ohio Environmental Protection Agency which resolved all violations of law alleged by those agencies, which agreements included the payment of \$1,000,000 in civil penalties. A portion of the civil penalties paid were paid to first responders in Belmont County for training and equipment. All remedial work necessitated by the incident, including work outlined in the agreements, was completed in 2019. The C 7-H well was returned to production in 2019 under the supervision of ODNR. Defendant’s assets in Ohio have since been divested.

Defendant has embarked on a program of voluntary methane emissions reductions. Since 2019, Defendant estimates its voluntary methane reduction efforts and programs have resulted in more than 24,000 Metric Tons of methane reductions in its Eastern Business Unit alone.

Defendant does not admit any liability arising out of the transactions or occurrences alleged in the Complaint.

The Parties recognize, and the Court by entering this Consent Decree finds, that this Consent Decree has been negotiated by the Parties in good faith and will avoid litigation between the Parties and that this Consent Decree is fair, reasonable, and in the public interest.

NOW, THEREFORE, before the taking of any testimony, without any adjudication of any issue of fact or law except as provided in Section I. JURISDICTION AND VENUE, and with the consent of the Parties, IT IS HEREBY ADJUDGED, ORDERED, AND DECREED as follows:

#### I. JURISDICTION AND VENUE

1. This Court has jurisdiction over the subject matter of this action, pursuant to 28 U.S.C. §§ 1331, 1345, and 1355 and 42 U.S.C. § 7413(b), and over the Parties. Venue lies in this District pursuant to 28 U.S.C. §§ 1391(b) and 1395(a) because the violations alleged in the Complaint are alleged to have occurred in this judicial district. For purposes of this Decree, or any action to enforce this Decree, Defendant consents to the Court's jurisdiction over this Decree and any such action and over Defendant and consents to venue in this judicial district.

2. For purposes of this Consent Decree, Defendant agrees that the Complaint states claims upon which relief may be granted pursuant to Section 112(r); 42 U.S.C. § 7412(r)(1).

#### II. APPLICABILITY

3. The obligations of this Consent Decree apply to and are binding upon the United States, and upon Defendant and any successors, assigns, or other entities or persons otherwise bound by law.

4. No transfer of ownership or operation of any Facility, whether in compliance with the procedures of this Paragraph or otherwise, shall relieve Defendant of its obligation to ensure that the terms of the Consent Decree are implemented, unless (1) the transferee agrees to be

substituted for Defendant as a Party under the Consent Decree and thus be bound by the terms thereof and to undertake any outstanding obligations required by Sections V (Compliance Requirements) and VI (Additional Injunctive Relief) of this Consent Decree as to the Facility, (2) the United States consents to relieve Defendant of its obligations, and (3) the Court approves a modification of the Consent Decree substituting the transferee for Defendant and providing that the transferee will implement the terms of the Consent Decree with respect to the Facility. The United States may refuse to approve such a modification to the Consent Decree if it determines that the proposed transferee does not possess the requisite technical abilities or financial means, taking into account any form of financial assurance provided by Defendant and/or transferee, to implement the Consent Decree. If the United States opposes the substitution, the issue shall first be subject to dispute resolution pursuant to Section X (Dispute Resolution). If the United States agrees to the substitution, or upon approval of the substitution following dispute resolution, the Parties will file a joint motion with the Court seeking such substitution.

5. Defendant may transfer its interest in any Facility without relieving Defendant of its Consent Decree obligations, without consent of the United States, and without modification of the Consent Decree, provided that, at least 30 Days prior to the closing of such transfer, Defendant shall provide a copy of this Consent Decree to the proposed transferee and shall simultaneously provide written notice of the prospective transfer to EPA and DOJ in accordance with Section XIV (Notices).

6. Defendant shall provide a copy of this Consent Decree to all officers, employees, and agents whose duties include compliance with any provision of this Decree, as well as to any contractor retained to perform work required under this Consent Decree. Defendant shall condition any such contract upon performance of the work in conformity with the terms of this Consent Decree.

7. In any action to enforce this Consent Decree, Defendant shall not raise as a defense the failure by any of its officers, directors, employees, agents, or contractors to take any actions necessary to comply with the provisions of this Consent Decree.

### III. DEFINITIONS

8. Terms used in this Consent Decree that are defined in the Act or in regulations promulgated pursuant to the Act have the meanings assigned to them in the Act or such regulations, unless otherwise provided in this Decree. Whenever the terms set forth below are used in this Consent Decree, the following definitions apply:

“**Appalachia District**” (of XTO’s Eastern Business Unit) means those oil and gas wells owned or operated by XTO in the following counties:

Pennsylvania: Allegheny; Armstrong; Butler; Clarion; Clinton; Fayette; Indiana; Jefferson; Lycoming; and Westmoreland; and

West Virginia: Harrison and Marion.

“**Complaint**” means the complaint filed by the United States in this action;

“**Consent Decree**” or “**Decree**” means this Decree and all appendices attached hereto (listed in Section XXV);

“**Day**” means a calendar day unless expressly stated to be a business day. In computing any period of time for a deadline under this Consent Decree, where the last day would fall on a Saturday, Sunday, or federal holiday, the period runs until the close of business of the next business day;

“**Defendant(s)**” means XTO Energy, Inc. and its successors and assigns;

“**DOJ**” means the United States Department of Justice and any of its successor departments or agencies;

“**Eastern Business Unit**” or “**EBU**” means those oil and gas wells owned or operated by XTO in the following counties:

Texas: Anderson; Angelina; Atascosa; Bee; Cherokee; Harrison; Henderson; Houston; Karnes; La Salle; Liberty; McMullen; Nacogdoches; Panola; Polk; Rusk; Sabine; San Augustine; Shelby; Van Zandt; Webb

Louisiana: Bienville; Bossier; Caddo; Caldwell; Claiborne; De Soto; La Salle; Lincoln; Natchitoches; Sabine; Union; Webster;

Pennsylvania: Allegheny; Armstrong; Butler; Clarion; Clinton; Fayette; Indiana; Jefferson; Lycoming; and Westmoreland; and

West Virginia: Harrison and Marion;

“**EPA**” means the United States Environmental Protection Agency and any of its successor departments or agencies;

“**Effective Date**” means the definition provided in Section XV;

“**Existing oil and gas wells in XTO’s Appalachia District**” means any of those wells identified in the table included as Appendix C to this Consent Decree;

“**Facility**” or “**Facilities**” means the wells identified on Appendix C of this Consent Decree and the equipment identified in Sections II through VI of Appendix B of this Consent Decree.

“**Metric Ton**” means a unit of weight equal to 1,000 kilograms.

“**Paragraph**” means a portion of this Decree identified by an Arabic numeral;

“**Parties**” means the United States and Defendant;

“**Section**” means a portion of this Decree identified by a Roman numeral;

“**Schnegg C Well Pad**” means the well pad facility and all oil and gas wells included therein located in Belmont County, Ohio (at approximately 39.864°N, 80.861°W); and

“**United States**” means the United States of America, acting on behalf of EPA.

#### IV. CIVIL PENALTY

9. Within 30 Days after the Effective Date, Defendant shall pay the sum of eight million dollars (\$8,000,000.00) as a civil penalty, together with interest accruing from the Effective Date of the Consent Decree, at the rate specified in 28 U.S.C. § 1961 as of the Effective Date.

10. Defendant shall pay the civil penalty due, together with interest, by FedWire Electronic Funds Transfer (“EFT”) to the DOJ account, in accordance with instructions provided to Defendant by the Financial Litigation Unit (“FLU”) of the United States Attorney’s Office for the Southern District of Ohio after the Effective Date. The payment instructions provided by the FLU will include a Consolidated Debt Collection System (“CDCS”) number, which Defendant shall use to identify all payments required to be made in accordance with this Consent Decree. The FLU will provide the payment instructions to: Rodney Barnwell, XTO Energy, Inc. 22777 Springwoods Village Pkwy, N1.5B, Spring, TX 77389, email [rodney.b.barnwell@exxonmobil.com](mailto:rodney.b.barnwell@exxonmobil.com) on behalf of Defendant. Defendant may change the individual to receive payment instructions on its behalf by providing written notice of such change to DOJ and EPA in accordance with Section XIV (Notices).

11. At the time of payment, Defendant shall send notice that payment has been made: (i) to EPA via email at [cinwd\\_acctsreceivable@epa.gov](mailto:cinwd_acctsreceivable@epa.gov) or via regular mail at EPA Cincinnati Finance Office, 26 W. Martin Luther King Drive, Cincinnati, Ohio 45268; and (ii) to DOJ via email or regular mail in accordance with Section XIV; and (iii) to EPA in accordance with Section XIV. Such notice shall state that the payment is for the civil penalty owed pursuant to the Consent Decree in XTO and shall reference the civil action number, CDCS Number, and DOJ case number 90-5-2-1-12521.

12. Defendant shall not deduct any penalties paid under this Decree pursuant to this Section or Section VIII (Stipulated Penalties) in calculating its federal income tax.

#### V. COMPLIANCE REQUIREMENTS

13. Compliance Assurance Projects. Defendant shall perform Compliance Assurance Projects as described and scheduled in Appendix A.



14. Approval of Deliverables. After review of any plan, report, or other item that is required to be submitted for approval pursuant to this Consent Decree, EPA will in writing: (a) approve the submission; (b) approve the submission upon specified conditions; (c) approve part of the submission and disapprove the remainder; or (d) disapprove the submission.

15. If the submission is approved pursuant to Paragraph 14, Defendant shall take all actions required by the plan, report, or other document, in accordance with the schedules and requirements of the plan, report, or other document, as approved. If the submission is conditionally approved or approved only in part pursuant to Paragraph 14(b) or (c), Defendant shall, upon written direction from EPA, take all actions required by the approved plan, report, or other item that EPA determines are technically severable from any disapproved portions.

16. If the submission is disapproved in whole or in part pursuant to Paragraph 14(c) or (d), Defendant shall, within 45 Days or such other time as the Parties agree to in writing, correct all deficiencies and resubmit the plan, report, or other item, or disapproved portion thereof, for approval, in accordance with the preceding Paragraphs. If the resubmission is approved in whole or in part, Defendant shall proceed in accordance with the preceding Paragraph.

17. If a resubmitted plan, report, or other item, or portion thereof, is disapproved in whole or in part, EPA may again require Defendant to correct any deficiencies, in accordance with the preceding Paragraphs, or may itself correct any deficiencies.

18. If Defendant elects to invoke Dispute Resolution as set forth in Section X (Dispute Resolution) concerning a decision by EPA to disapprove, approve on specified conditions, or modify a deliverable, Defendant shall do so by sending a Notice of Dispute in accordance with Paragraph 49 within 30 Days (or such other time as the Parties agree to in writing) after receipt of the applicable decision.

19. Any stipulated penalties applicable to the original submission, as provided in Section VIII, accrue during the 45 Day period or other specified period, but shall not be payable unless the resubmission is untimely or is disapproved in whole or in part; provided that, if the original submission was so deficient as to constitute a material breach of Defendant's obligations under this Decree, the stipulated penalties applicable to the original submission shall be due and payable notwithstanding any subsequent resubmission.

20. Permits. Where any compliance obligation under this Section requires Defendant to obtain a federal, state, or local permit or approval, Defendant shall submit timely and complete applications and take all other actions necessary to obtain all such permits or approvals. Defendant may seek relief under the provisions of Section IX (Force Majeure) for any delay in the performance of any such obligation resulting from a failure to obtain, or a delay in obtaining, any permit or approval required to fulfill such obligation, if Defendant has submitted timely and complete applications and has taken all other actions necessary to obtain all such permits or approvals.

## VI. ADDITIONAL INJUNCTIVE RELIEF

21. Mitigation Projects. Defendant shall perform Mitigation Projects as described and scheduled in Appendix B.

22. Mitigation Project Certifications. With regard to each Mitigation Project, Defendant certifies the truth and accuracy of each of the following:

- a. That, as of the date of executing this Decree, Defendant is not required to implement any of the Mitigation Projects identified in Appendix B by any federal, state, or local law or regulation and is not required to perform or develop any of the Mitigation Projects identified in Appendix B by agreement, grant, or as injunctive relief awarded in any other action in any forum;

b. That the Mitigation Project is not a project that Defendant was committed or currently intending to construct, perform, or implement other than in settlement of the claims resolved in this Decree;

c. That Defendant has not received and will not receive credit for the Mitigation Project in any other federal or state enforcement action; and

d. That Defendant shall not use any pollutant reductions from the Mitigation Project as netting reductions, pollutant offsets, or to apply for, obtain, trade, or sell any pollutant reduction credits.

## VII. REPORTING REQUIREMENTS

23. By July 31<sup>st</sup> and January 31<sup>st</sup> of each year after the lodging of this Consent Decree, until termination of this Decree pursuant to Section XVIII, Defendant shall submit by email a semi-annual report for the preceding six months that includes information regarding the status of any activities required under this Consent Decree to the following email addresses: [R5airenforcement@epa.gov](mailto:R5airenforcement@epa.gov); [Topinka.natalie@epa.gov](mailto:Topinka.natalie@epa.gov); [Gustafson.Robert@epa.gov](mailto:Gustafson.Robert@epa.gov). The report shall also include a description of any non-compliance with the requirements of this Consent Decree and an explanation of the violation's likely cause and of the remedial steps taken, or to be taken, to prevent or minimize such violation.

24. If Defendant violates, or has reason to believe that it may violate, any requirement of this Consent Decree, Defendant shall notify DOJ and EPA of such violation and its likely duration, in writing, within 20 business days of the Day Defendant first becomes aware of the violation, with an explanation of the violation's likely cause and of the remedial steps taken, or to be taken, to prevent or minimize such violation. If the cause of a violation cannot be fully explained at the time the report is due, Defendant shall so state in the report. Defendant shall investigate the cause of the violation and shall then submit an amendment to the report, including a full explanation of the cause

of the violation, within 30 Days of the Day Defendant becomes aware of the cause of the violation. Nothing in this Paragraph or the following Paragraph relieves Defendant of its obligation to provide the notice required by Section IX (Force Majeure).

25. Whenever any violation of this Consent Decree or any other event affecting Defendant's performance under this Decree may pose an immediate threat to the public health or welfare or the environment, Defendant shall notify EPA as soon as possible, but no later than 24 hours after Defendant first knew of the violation or event. This procedure is in addition to the requirements set forth in the preceding Paragraph. For purposes of this paragraph, Defendant shall notify:

- a. Natalie M. Topinka, (312) 886-3853, [Topinka.Natalie@epa.gov](mailto:Topinka.Natalie@epa.gov); and
- b. Robert Gustafson, (312) 886-1308, [Gustafson.Robert@epa.gov](mailto:Gustafson.Robert@epa.gov).

26. Each report submitted by Defendant under this Section shall be signed by an official of the submitting party and include the following certification:

I certify under penalty of perjury that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I have no personal knowledge that the information submitted is other than true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

27. This certification requirement does not apply to emergency or similar notifications where compliance would be impractical.

28. The reporting requirements of this Consent Decree do not relieve Defendant of any reporting obligations required by the Act or implementing regulations, or by any other federal, state, or local law, regulation, permit, or other requirement.

29. Any information provided pursuant to this Consent Decree may be used by the United States in any proceeding to enforce the provisions of this Consent Decree and as otherwise permitted by law.

VIII. STIPULATED PENALTIES

30. Defendant shall be liable for stipulated penalties to the United States for violations of this Consent Decree as specified below, unless excused under Section IX (Force Majeure). A violation includes failing to perform any obligation required by the terms of this Decree, including any work plan or schedule approved under this Decree, according to all applicable requirements of this Decree and within the specified time schedules established by or approved under this Decree.

31. Late Payment of Civil Penalty. If Defendant fails to pay the civil penalty required to be paid under Section IV (Civil Penalty) when due, Defendant shall pay a stipulated penalty of \$2,400 per Day for each Day that the payment is late.

32. Compliance Milestones.

a. The following stipulated penalties shall accrue per violation per Day for each violation of the requirements identified in subparagraphs b. and c. below

<u>Penalty Per Violation Per Day</u>	<u>Period of Noncompliance</u>
\$1,000.....	1st through 30th Day
\$4,000.....	31st Day and beyond

b. All compliance assurance project deadlines set forth in Appendix A to this Consent Decree with the exception of the reporting requirements described in paragraph A-III.C;

c. All mitigation project deadlines set forth in Appendix B to this Consent Decree with the exception of the reporting requirements described in paragraphs B-II.F, B-III.F, B-IV.F, B-V.F, B-VI.F, and B-VII.F.

33. Reporting Requirements. The following stipulated penalties shall accrue per violation per Day for each violation of the reporting requirements of Section VII, as such requirements are further described in Appendices A (in paragraph A-III.C) and B (in paragraphs B-II.F, B-III.F, B-IV.F, B-V.F, B-VI.F, and B-VII.F):

<u>Penalty Per Violation Per Day</u>	<u>Period of Noncompliance</u>
\$500.....	1st through 30th Day
\$2,000.....	31st Day and beyond

34. Stipulated penalties under this Section shall begin to accrue on the Day after performance is due or on the Day a violation occurs, whichever is applicable, and shall continue to accrue until performance is satisfactorily completed or until the violation ceases. Stipulated penalties shall accrue simultaneously for separate violations of this Consent Decree.

35. Defendant shall pay any stipulated penalty within 30 Days of receiving the United States' written demand.

36. The United States may in the unreviewable exercise of its discretion, reduce or waive stipulated penalties otherwise due to it under this Consent Decree.

37. Stipulated penalties shall continue to accrue as provided in Paragraph 34, during any Dispute Resolution, but need not be paid until the following:

a. If the dispute is resolved by agreement of the Parties or by a decision of EPA that is not appealed to the Court, Defendant shall pay accrued penalties determined to be owing, together with interest, to the United States within 30 Days of the effective date of the agreement or the receipt of EPA's decision or order.

b. If the dispute is appealed to the Court and the United States prevails in whole or in part, Defendant shall pay all accrued penalties determined by the Court to be owing, together with interest, within 60 Days of receiving the Court's decision or order,

except as provided in subparagraph c, below.

c. If any Party appeals the District Court's decision, Defendant shall pay all accrued penalties determined to be owing, together with interest, within 15 Days of receiving the final appellate court decision.

38. Defendant shall pay stipulated penalties owing to the United States in the manner set forth in Paragraph 10 and with the confirmation notices required by Paragraph 11, except that the transmittal letter shall state that the payment is for stipulated penalties and shall state for which violation(s) the penalties are being paid.

39. If Defendant fails to pay stipulated penalties according to the terms of this Consent Decree, Defendant shall be liable for interest on such penalties, as provided for in 28 U.S.C. § 1961, accruing as of the date payment became due. Nothing in this Paragraph shall be construed to limit the United States from seeking any remedy otherwise provided by law for Defendant's failure to pay any stipulated penalties.

40. The payment of penalties and interest, if any, shall not alter in any way Defendant's obligation to complete the performance of the requirements of this Consent Decree.

41. Non-Exclusivity of Remedy. Stipulated penalties are not the United States' exclusive remedy for violations of this Consent Decree. Subject to the provisions of Section XII (Effect of Settlement/Reservation of Rights), the United States expressly reserves the right to seek any other relief it deems appropriate for Defendant's violation of this Decree or applicable law, including but not limited to an action against Defendant for statutory penalties, additional injunctive relief, mitigation or offset measures, and/or contempt. However, the amount of any statutory penalty assessed for a violation of this Consent Decree shall be reduced by an amount equal to the amount of any stipulated penalty assessed and paid pursuant to this Consent Decree.

## IX. FORCE MAJEURE

42. “Force majeure,” for purposes of this Consent Decree, means any event arising from causes beyond the control of Defendant, of any entity controlled by Defendant, or of Defendant’s contractors, that delays or prevents the performance of any obligation under this Consent Decree despite Defendant’s best efforts to fulfill the obligation. Given the need to protect public health and welfare and the environment, the requirement that Defendant exercise “best efforts to fulfill the obligation” includes using best efforts to anticipate any potential force majeure and best efforts to address the effects of any potential force majeure (a) as it is occurring and (b) following the potential force majeure, such that any delay or non-performance is, and any adverse effects of the delay or non-performance are, minimized to the greatest extent possible. “Force majeure” does not include financial inability to perform any obligation under this Consent Decree.

43. If any event occurs for which Defendant will or may claim a force majeure, Defendant shall provide notice by email to [R5airenforcement@epa.gov](mailto:R5airenforcement@epa.gov); [Topinka.Natalie@epa.gov](mailto:Topinka.Natalie@epa.gov); and [Gustafson.Robert@epa.gov](mailto:Gustafson.Robert@epa.gov). The deadline for the initial notice is 10 days after Defendant first knew or should have known that the event would likely delay or prevent performance. Defendant shall be deemed to know of any circumstance of which any contractor of, subcontractor of, or entity controlled by Defendant knew or should have known.

44. If Defendant seeks to assert a claim of force majeure concerning the event, within 15 Days after the notice under Paragraph 43, Defendant shall submit a further notice to EPA that includes (a) an explanation and description of the event and its effect on Defendant’s completion of the requirements of the Consent Decree; (b) a description and schedule of all actions taken or to be taken to prevent or minimize the delay and/or other adverse effects of the event; (c) if applicable, the proposed extension of time for Defendant to complete the requirements of the Consent Decree; (d) Defendant’s rationale for attributing such delay to a force majeure if it intends to assert such a



claim; (e) a statement as to whether, in the opinion of Defendant, such event may cause or contribute to an endangerment to public health or welfare or the environment; and (f) all available proof supporting the claim that the delay was attributable to a force majeure.

45. Failure to submit a timely or complete notice or claim under Paragraph 43 or 44 regarding an event precludes Defendant from asserting any claim of force majeure regarding that event, provided, however, that EPA may, in its unreviewable discretion, excuse such failure if it is able to assess to its satisfaction whether the event is a force majeure, and whether Defendant has exercised its best efforts, under Paragraph 42.

46. After receipt of any claim of force majeure, EPA will notify Defendant of its determination whether Defendant is entitled to relief under Paragraph 42, and, if so, the excuse of, or the extension of time for, performance of the obligations affected by the force majeure. An excuse of, or extension of the time for performance of, the obligations affected by the force majeure does not, of itself, excuse or extend the time for performance of any other obligation.

47. If Defendant elects to invoke the dispute resolution procedures set forth in Section X (Dispute Resolution), it shall do so no later than 30 Days after receipt of EPA's notice. In any such proceeding, Defendant has the burden of proving that it is entitled to relief under Paragraph 42, that its proposed excuse or extension was or will be warranted under the circumstances, and that it complied with the requirements of Paragraphs 42 - 44. If Defendant carries this burden, the delay or non-performance at issue shall be deemed not to be a violation by Defendant of the affected obligation of this Consent Decree identified to EPA and the Court.

#### X. DISPUTE RESOLUTION

48. Unless otherwise expressly provided for in this Consent Decree, the dispute resolution procedures of this Section shall be the exclusive mechanism to resolve disputes arising under or with respect to this Consent Decree. Defendant's failure to seek resolution of a dispute

under this Section concerning an issue of which it had notice and an opportunity to dispute under this Section prior to an action by the United States to enforce any obligation of Defendant arising under this Decree precludes Defendant from raising any such issue as a defense to any such enforcement action.

49. Informal Dispute Resolution. Any dispute subject to Dispute Resolution under this Consent Decree shall first be the subject of informal negotiations. The dispute shall be considered to have arisen when Defendant sends DOJ and EPA a written Notice of Dispute. Such Notice of Dispute shall state clearly the matter in dispute. The period of informal negotiations shall not exceed 30 Days from the date the dispute arises, unless that period is modified by written agreement. If the Parties cannot resolve a dispute by informal negotiations, then the position advanced by the United States shall be considered binding unless, within 40 Days after the conclusion of the informal negotiation period, Defendant invokes formal dispute resolution procedures as set forth below.

50. Formal Dispute Resolution. Defendant shall invoke formal dispute resolution procedures, within the time period provided in the preceding Paragraph, by sending DOJ and EPA a written Statement of Position regarding the matter in dispute. The Statement of Position shall include, but need not be limited to, any factual data, analysis, or opinion supporting Defendant's position and any supporting documentation relied upon by Defendant.

51. The United States will send Defendant its Statement of Position within 45 Days of receipt of Defendant's Statement of Position. The United States' Statement of Position shall include, but need not be limited to, any factual data, analysis, or opinion supporting that position and any supporting documentation relied upon by the United States. The United States' Statement of Position is binding on Defendant, unless Defendant files a motion for judicial review of the dispute in accordance with the following Paragraph.

52. Judicial Dispute Resolution. Defendant may seek judicial review of the dispute by filing with the Court and serving on the United States a motion requesting judicial resolution of the dispute. The motion (a) must be filed within 45 Days of receipt of the United States' Statement of Position pursuant to the preceding Paragraph; (b) may not raise any issue not raised in informal dispute resolution pursuant to Paragraph 54, unless the United States raises a new issue of law or fact in the Statement of Position; (c) shall contain a written statement of Defendant's position on the matter in dispute, including any supporting factual data, analysis, opinion, or documentation, and (d) shall set forth the relief requested and any schedule within which the dispute must be resolved for orderly implementation of the Consent Decree.

53. The United States shall respond to Defendant's motion within the time period allowed by the Local Rules of this Court. Defendant may file a reply memorandum, to the extent permitted by the Local Rules.

54. Standard of Review

a. Disputes Concerning Matters Accorded Record Review. Except as otherwise provided in this Consent Decree, in any dispute brought under Paragraph 50 pertaining to the adequacy or appropriateness of plans, procedures to implement plans, schedules or any other items requiring approval by EPA under this Consent Decree; the adequacy of the performance of work undertaken pursuant to this Consent Decree; and all other disputes that are accorded review on the administrative record under applicable principles of administrative law, Defendant shall have the burden of demonstrating, based on the administrative record, that the position of the United States is arbitrary and capricious or otherwise not in accordance with law.

b. Other Disputes. Except as otherwise provided in this Consent Decree, in any other dispute brought under Paragraph 50, Defendant shall bear the burden of

demonstrating that its position complies with this Consent Decree and better furthers the objectives of the Consent Decree.

55. The invocation of dispute resolution procedures under this Section shall not, by itself, extend, postpone, or affect in any way any obligation of Defendant under this Consent Decree, unless and until final resolution of the dispute so provides. Stipulated penalties with respect to the disputed matter shall continue to accrue from the first Day of noncompliance, but payment shall be stayed pending resolution of the dispute as provided in Paragraph 37. If Defendant does not prevail on the disputed issue, stipulated penalties shall be assessed and paid as provided in Section VIII (Stipulated Penalties).

#### XI. INFORMATION COLLECTION AND RETENTION

56. The United States and its representatives, including attorneys, contractors, and consultants, shall have the right of entry into any facility covered by this Consent Decree, at all reasonable times, upon presentation of credentials, to:

- a. monitor the progress of activities required under this Consent Decree;
- b. verify any data or information submitted to the United States in accordance with the terms of this Consent Decree;
- c. obtain samples and, upon request, splits of any samples taken by Defendant or its representatives, contractors, or consultants;
- d. obtain documentary evidence, including photographs and similar data; and
- e. assess Defendant's compliance with this Consent Decree.

Splits of any samples taken by the United States shall be similarly provided to Defendant upon request.

57. Until two years after the termination of this Consent Decree, Defendant shall retain, and shall instruct its contractors and agents to preserve, all non-identical copies of all documents,

records, or other information (including documents, records, or other information in electronic form) in its or its contractors' or agents' possession or control, or that come into its or its contractors' or agents' possession or control, and that relate in any manner to Defendant's performance of its obligations under this Consent Decree. This information-retention requirement shall apply regardless of any contrary corporate or institutional policies or procedures. At any time during this information-retention period, upon request by the United States, Defendant shall provide copies of any documents, records, or other information required to be maintained under this Paragraph.

58. At the conclusion of the information-retention period provided in the preceding Paragraph, Defendant shall notify the United States at least 90 Days prior to the destruction of any documents, records, or other information subject to the requirements of the preceding Paragraph and, upon request by the United States, Defendant shall deliver any such documents, records, or other information to EPA. Defendant may assert that certain documents, records, or other information is privileged under the attorney-client privilege or any other privilege recognized by federal law. If Defendant asserts such a privilege, it shall provide the following: (a) the title of the document, record, or information; (b) the date of the document, record, or information; (c) the name and title of each author of the document, record, or information; (d) the name and title of each addressee and recipient; (e) a description of the subject of the document, record, or information; and (f) the privilege asserted by Defendant. However, no documents, records, or other information created or generated pursuant to the requirements of this Consent Decree shall be withheld on grounds of privilege.

59. Defendant may also assert that information required to be provided under this Section is protected as Confidential Business Information ("CBI") under 40 C.F.R. Part 2. As to any

information that Defendant seeks to protect as CBI, Defendant shall follow the procedures set forth in 40 C.F.R. Part 2.

60. This Consent Decree in no way limits or affects any right of entry and inspection, or any right to obtain information, held by the United States pursuant to applicable federal laws, regulations, or permits, nor does it limit or affect any duty or obligation of Defendant to maintain documents, records, or other information imposed by applicable federal or state laws, regulations, or permits.

## XII. EFFECT OF SETTLEMENT/RESERVATION OF RIGHTS

61. This Consent Decree resolves only the civil claims of the United States for the violations alleged in the Complaint filed in this action through the date of lodging.

62. The United States reserves all legal and equitable remedies available to enforce the provisions of this Consent Decree. This Consent Decree shall not be construed to limit the rights of the United States to obtain penalties or injunctive relief under the Act or implementing regulations, or under other federal laws, regulations, or permit conditions, except as expressly specified in Paragraph 61. The United States further reserves all legal and equitable remedies to address any conditions if there is or may be an imminent and substantial endangerment to the public health or welfare or the environment arising at, or posed by, Defendant's Facilities, whether related to the violations addressed in this Consent Decree or otherwise.

63. In any subsequent administrative or judicial proceeding initiated by the United States for injunctive relief, civil penalties, or other appropriate relief relating to the Schnegg C Well Pad, Defendant shall not assert, and may not maintain, any defense or claim based upon the principles of waiver, claim preclusion (*res judicata*), issue preclusion (*collateral estoppel*), claim-splitting, or other defenses based upon any contention that the claims raised by the United States in

the subsequent proceeding were or should have been brought in the instant case, except with respect to claims that have been specifically resolved pursuant to Paragraph 61.

64. This Consent Decree is not a permit, or a modification of any permit, under any federal, State, or local laws or regulations. Defendant is responsible for achieving and maintaining complete compliance with all applicable federal, State, and local laws, regulations, and permits; and Defendant's compliance with this Consent Decree shall be no defense to any action commenced pursuant to any such laws, regulations, or permits, except as set forth herein. The United States does not, by its consent to the entry of this Consent Decree, warrant or aver in any manner that Defendant's compliance with any aspect of this Consent Decree will result in compliance with provisions of the Act, 42 U.S.C. § 7412 et seq., or with any other provisions of federal, State, or local laws, regulations, or permits.

65. This Consent Decree does not limit or affect the rights of Defendant or of the United States against any third parties, not party to this Consent Decree, nor does it limit the rights of third parties, not party to this Consent Decree, against Defendant, except as otherwise provided by law.

66. This Consent Decree shall not be construed to create rights in, or grant any cause of action to, any third party not party to this Consent Decree.

### XIII. COSTS

67. The Parties shall bear their own costs of this action, including attorneys' fees, except that the United States shall be entitled to collect the costs (including attorneys' fees) incurred in any action necessary to collect any portion of the civil penalty or any stipulated penalties due but not paid by Defendant.

XIV. NOTICES

68. Unless otherwise specified in this Decree, whenever notifications, submissions, or communications are required by this Consent Decree, they shall be made in writing and sent by email, addressed as listed below. When a document is to be sent to the United States, it shall be sent to both DOJ and EPA. When a document is to be sent to EPA, it need not be sent to DOJ:

As to DOJ by email (preferred): eescdcopy.enrd@usdoj.gov  
Re: DJ # 90-5-2-1-12521

As to DOJ by mail: EES Case Management Unit  
Environment and Natural Resources Division  
U.S. Department of Justice  
P.O. Box 7611  
Washington, D.C. 20044-7611  
Re: DJ # 90-5-2-1-12521

As to EPA by email: R5aireinforcement@epa.gov  
[topinka.natalie@epa.gov](mailto:topinka.natalie@epa.gov)  
[gustafson.robert@epa.gov](mailto:gustafson.robert@epa.gov)

As to Defendant by email: SchneggOH.XTO.ConsentDecree@exxonmobil.com

As to Defendant by mail: Attn: Regulatory Manager  
XTO Energy, Inc.  
190 Thorn Hill Road  
Warrendale, PA 15086

69. Any Party may, by written notice to the other Parties, change its designated notice recipient or notice address provided above.

70. Notices submitted pursuant to this Section shall be deemed submitted upon mailing or transmission by email, unless otherwise provided in this Consent Decree or by mutual agreement of the Parties in writing.



#### XV. EFFECTIVE DATE

71. The Effective Date of this Consent Decree shall be the date upon which this Consent Decree is entered by the Court or a motion to enter the Consent Decree is granted, whichever occurs first, as recorded on the Court's docket; provided, however, that Defendant hereby agrees that it shall be bound to perform duties scheduled to occur prior to the Effective Date. In the event the United States withdraws or withholds consent to this Consent Decree before entry, or the Court declines to enter the Consent Decree, then the preceding requirement to perform duties scheduled to occur before the Effective Date shall terminate.

#### XVI. RETENTION OF JURISDICTION

72. The Court shall retain jurisdiction over this case until termination of this Consent Decree, for the purpose of resolving disputes arising under this Decree or entering orders modifying this Decree, pursuant to Sections X and XVII, or effectuating or enforcing compliance with the terms of this Decree.

#### XVII. MODIFICATION

73. The terms of this Consent Decree, including any attached appendices, may be modified only by a subsequent written agreement signed by all the Parties. Where the modification constitutes a material change to this Decree, it shall be effective only upon approval by the Court.

74. Any disputes concerning modification of this Decree shall be resolved pursuant to Section X (Dispute Resolution), provided, however, that, instead of the burden of proof provided by Paragraph 54, the Party seeking the modification bears the burden of demonstrating that it is entitled to the requested modification in accordance with Federal Rule of Civil Procedure 60(b).

#### XVIII. TERMINATION

75. After Defendant has completed the requirements of Section V (Compliance Requirements) and Section VI (Mitigation Projects), and has thereafter maintained continuous

satisfactory compliance with this Consent Decree for a period of two years, and has paid the civil penalty and any accrued stipulated penalties as required by this Consent Decree, Defendant may serve upon the United States a Request for Termination, stating that Defendant has satisfied those requirements, together with all necessary supporting documentation.

76. Following receipt by the United States of Defendant's Request for Termination, the Parties shall confer informally concerning the Request and any disagreement that the Parties may have as to whether Defendant has satisfactorily complied with the requirements for termination of this Consent Decree. If the United States agrees that the Decree may be terminated, the Parties shall submit, for the Court's approval, a joint stipulation terminating the Decree.

77. If the United States does not agree that the Decree may be terminated, Defendant may invoke Dispute Resolution under Section X. However, Defendant shall not seek Dispute Resolution of any dispute regarding termination until 90 Days after service of its Request for Termination.

#### XIX. PUBLIC PARTICIPATION

78. This Consent Decree shall be lodged with the Court for a period of not less than 30 Days for public notice and comment in accordance with 28 C.F.R. § 50.7. The United States reserves the right to withdraw or withhold its consent if the comments regarding the Consent Decree disclose facts or considerations indicating that the Consent Decree is inappropriate, improper, or inadequate. Defendant consents to entry of this Consent Decree without further notice and agrees not to withdraw from or oppose entry of this Consent Decree by the Court or to challenge any provision of the Decree, unless the United States has notified Defendant in writing that it no longer supports entry of the Decree.

XX. SIGNATORIES/SERVICE

79. Each undersigned representative of Defendant and the Deputy Section Chief of the Environmental Enforcement Section for the Environment and Natural Resources Division of the Department of Justice identified on the DOJ signature page below, certifies that that person is fully authorized to enter into the terms and conditions of this Consent Decree and to execute and legally bind the Party that person represents to this document.

80. This Consent Decree may be signed in counterparts, and its validity shall not be challenged on that basis. Defendant agrees to accept service of process by mail or email with respect to all matters arising under or relating to this Consent Decree and to waive the formal service requirements set forth in Rules 4 and 5 of the Federal Rules of Civil Procedure and any applicable Local Rules of this Court including, but not limited to, service of a summons. Defendant need not file an answer to the complaint in this action unless or until the Court expressly declines to enter this Consent Decree.

XXI. INTEGRATION

81. This Consent Decree, including deliverables that are subsequently approved pursuant to this Decree, constitutes the entire agreement among the Parties regarding the subject matter of the Decree and supersedes all prior representations, agreements, and understandings, whether oral or written, concerning the subject matter of the Decree herein.

XXII. 26 U.S.C. SECTION 162(f)(2)(A)(ii) IDENTIFICATION

82. For purposes of the identification requirement in Section 162(f)(2)(A)(ii) of the Internal Revenue Code, 26 U.S.C. § 162(f)(2)(A)(ii), and 26 C.F.R. § 1.162-21(b)(2)(iii)(A), performance of the requirements set out in Section II (Applicability), Section V (Compliance Requirements), Section VI (Additional Injunctive Relief), Section VII (Reporting Requirements),

Section XI (Information Collection and Retention), and Appendices A and B is restitution, remediation, or required to come into compliance with law.

#### XXIII. HEADINGS

83. Headings to the Sections and Subsections of this Consent Decree are provided for convenience and do not affect the meaning or interpretation of the provisions of this Consent Decree.

#### XXIV. FINAL JUDGMENT

84. Upon approval and entry of this Consent Decree by the Court, this Consent Decree shall constitute a final judgment of the Court as to the United States and Defendant. The Court finds that there is no just reason for delay and therefore enters this judgment as a final judgment under Fed. R. Civ. P. 54 and 58.

#### XXV. APPENDICES

85. The following Appendices are attached to and part of this Consent Decree:
- “Appendix A” describes and schedules Defendant’s Compliance Assurance Projects;
  - “Appendix B” describes and schedules Defendant’s Environmental Mitigation Projects;
  - “Appendix C” lists existing oil and gas wells in the Appalachia District of Defendant’s Eastern Business Unit.

Dated and entered this \_\_\_ day of \_\_\_\_\_, 20

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UNITED STATES DISTRICT JUDGE

Signature Page for Consent Decree in the matter of *United States of America v. XTO Energy, Inc.*

FOR THE UNITED STATES OF AMERICA:

12.16.24  
Date

PATRICIA MCKENNA  
Deputy Section Chief  
Environmental Enforcement Section  
Environment and Natural Resources Division  
United States Department of Justice



ELIAS L. QUINN  
Senior Attorney  
SASHA ALVARENGA  
Trial Attorney  
Washington, DC 20044-7611  
Email: [elias.quinn@usdoj.gov](mailto:elias.quinn@usdoj.gov)

Signature Page for Consent Decree in the matter of *United States of America v. XTO Energy, Inc.*

FOR THE U.S. ENVIRONMENTAL PROTECTION  
AGENCY:

Dated: 12.15.24

*s/ Robert A. Kaplan*

\_\_\_\_\_  
ROBERT A. KAPLAN  
Regional Counsel  
United States Environmental Protection Agency, Region 5  
77 W. Jackson Blvd  
Chicago, Illinois 60604

Signature Page for Consent Decree in the matter of *United States of America v. XTO Energy, Inc.*

FOR THE U.S. ENVIRONMENTAL PROTECTION  
AGENCY:

Dated: 12.16.24

s/ David M. Uhlmann .

DAVID M. UHLMANN  
Assistant Administrator  
Office of Enforcement and Compliance Assurance  
United States Environmental Protection Agency

ROSEMARIE KELLEY  
Office Director  
Office of Civil Enforcement  
Office of Enforcement and Compliance Assurance  
United States Environmental Protection Agency

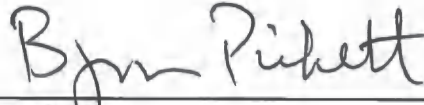
Gregory Sullivan  
Division Director  
Waste and Chemical Enforcement Division  
Office of Civil Enforcement  
Office of Enforcement and Compliance Assurance  
United States Environmental Protection Agency

Signature Page for Consent Decree in the matter of *United States of America v. XTO Energy, Inc.*

FOR XTO ENERGY, INC.:

13 Dec 2024

Date



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Bryan Pickett  
General Manager  
Americas Unconventionals



## APPENDIX A

### Compliance Assurance Projects

XTO shall comply with the requirements of this Appendix A and with Section V. (Compliance Assurance Projects) of the Consent Decree.

#### **I. Standard Operation Procedure Certification and Modification**

- A. Within 14 Days of the Effective Date of the Consent Decree, XTO shall submit a statement to EPA certifying that Exxon's Completion and Well Work Standard Operating Procedures (6th ed.), November 2023, and Section 5.8 of Exxon's Unconventional Well Integrity Standard Operating Procedures, Revision 2 dated July 23, 2024 (including their various exceptions and exemptions as written) apply to and will be implemented at all of XTO's existing oil and gas wells in its Eastern Business Unit and any oil and gas wells drilled and developed by XTO within the EBU during the term of this Consent Decree.
- B. The statement to EPA shall include the certification set forth in Paragraph 25 of the Consent Decree.
- C. If provisions of Exxon's Completion and Well Work Standard Operating Procedures (6th ed.), November 2023 or Section 5.8 of Exxon's Unconventional Well Integrity Standard Operating Procedures, Revision 2 dated July 23, 2024 are revised, within 30 days of the adoption of such revisions, XTO shall notify EPA, provide the revisions, and certify that such revisions apply to and will be implemented at all XTO's oil and gas well development and operations throughout its Eastern Business Unit during the term of this Consent Decree.

#### **II. Pressure Monitoring Technology Audit of Existing Wells in the Appalachia District of XTO's Eastern Business Unit**

- A. Within 120 Days of the Effective Date of the Consent Decree, XTO shall submit to EPA a plan for performing a Pressure Monitoring Technology Audit for its review and approval.
- B. The Pressure Monitoring Technology Audit shall involve the inspection of on-the-ground pressure monitoring equipment at all existing wells owned and/or operated by XTO in the Appalachia District of its Eastern Business Unit to ensure such equipment is fully operational and conforms to the requirements of Section 5.8 of Exxon's Unconventional Well Integrity Standard Operating Procedures, Revision 2 dated July 23, 2024.
- C. The Pressure Monitoring Technology Audit shall be completed no more than eight Months following EPA's approval of the plan.

- D. Within 45 days of completion, XTO shall submit the results of the Pressure Monitoring Technology Audit to EPA. In the submittal, XTO shall include records of corrective actions taken to date or planned to address any equipment deficiencies discovered.
- E. Within 120 Days of the completion of the Pressure Monitoring Technology Audit, XTO shall submit a statement to EPA certifying that all wells included in the Pressure Monitoring Technology Audit have been inspected and are compliant with the pressure monitoring provisions of Section 5.8 of Exxon's Unconventional Well Integrity Standard Operating Procedures, Revision 2 dated July 23, 2024.

### III. Documentation of Investigations of Potential Failures of Subsurface Barriers

- A. In the event pressure monitoring, well operations, or well observations dictate an investigation into a potential failure of a subsurface barrier at any well within the Appalachia District of its Eastern Business Unit pursuant to Section 5.8 of Exxon's Unconventional Well Integrity Standard Operating Procedures, Revision 2 dated July 23, 2024, XTO shall begin an investigation within 60 days.
- B. If a well within the Appalachia District of XTO's Eastern Business Unit is vented or pressure is bled off as an interim measure while an investigation proceeds, XTO shall assess the mass of the methane vented or bled off using a bottom-up method based on the Real Gas Law,<sup>1</sup> and shall provide those calculations and report those masses as a part of XTO's semi-annual reports pursuant to Section VII of the CD.
- C. All semi-annual reports made pursuant to Section VII of the Consent Decree shall provide the following documentation of XTO's operations:
  - 1. Documentation for any subsurface barrier failure investigation concluded during the previous six months for any well in the Appalachia District of XTO's Eastern Business Unit; and
  - 2. Documentation for any corrective actions taken as a result of any operations integrity management system ("OIMS") safety audit as related to Exxon's Completion and Well Work Standard Operating Procedures (6th ed.), November 2023 or Section 5.8 of Exxon's Unconventional Well Integrity Standard Operating Procedures, Revision 2 dated July 23, 2024 in the

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<sup>1</sup> Specifically, the formula XTO uses for calculating the bleed-off is:  
Real Gas Law:  $PV = (m/Mw) RTZ$ : solve for mass:  $m = P*V*Mw/(R*T*Z)$  where:  
P=pressure inside pipe/annulus (psia)  
V= volume of vent pipe (ft<sup>3</sup>) + annular space (ft<sup>3</sup>)  
m = mass of material  
Mw = molecular weight of the gas (lb/lb-mole)  
R = ideal gas constant (10.73 psia-ft<sup>3</sup>/lb-mole R)  
T = Temperature (R)  
Z = compressibility factor (unitless)

Appalachia District of XTO's Eastern Business Unit during the period covered by the semi-annual report; and

3. A list of all OIMS safety audits as related to Exxon's Completion and Well Work Standard Operating Procedures (6th ed.), November 2023 or Section 5.8 of Exxon's Unconventional Well Integrity Standard Operating Procedures, Revision 2 dated July 23, 2024 performed in the Appalachia District of XTO's Eastern Business Unit during the period covered by the semi-annual report for which no corrective actions were needed or taken as a result of a safety audit.

## APPENDIX B

### Environmental Mitigation Projects

XTO shall comply with the requirements of this Appendix B and with Section VI (Additional Injunctive Relief) of the Consent Decree to implement and secure the environmental benefits of each of the Projects described in this Appendix.

#### I. Project Plans

- A. At least 30 Days prior to any proposed date for project initiation, unless otherwise specified by this Appendix, XTO shall submit proposed plans (Project Plans) to EPA. Each Project Plan is subject to review and approval by EPA. If any early implementation work for a Project is commenced before the Effective Date, the proposed Project Plan for that Project which includes the work performed during the early implementation portion shall be due 30 Days after the Effective Date.
- B. XTO may, at its election, consolidate the Project Plans required by this Appendix into a single Project Plan.
- C. All proposed Project Plans shall include the following:
  1. A plan for implementation of the Project;
  2. A summary-level budget for the Project, including both capital investments and any associated operations and maintenance costs for maintaining the project through the term of the Consent Decree;
  3. A timeline for implementation of the Project, including a date by which all equipment installation, modification, or well work associated with the project shall be completed; and
  4. A proposed method to verify the anticipated environmental benefits of the Project, which may include methods described in 40 CFR 98 Subpart W.
- D. Upon approval by EPA of the Project Plan(s) required by this Appendix, XTO shall complete the approved Projects according to the approved Project Plan(s). Nothing in the Consent Decree shall be interpreted to prohibit XTO from completing the Projects ahead of schedule.
- E. Alternative Projects. If, at any time before completion of any Project, XTO identifies an alternative project(s) that would achieve at least equivalent emissions reductions, XTO may propose such alternative project(s) to U.S. EPA in lieu of one or more Projects identified herein. Upon U.S. EPA's initial approval of such alternative project(s), XTO shall prepare a proposed Project Plan for such alternative project(s) for U.S. EPA's final approval. Upon EPA's final approval of such proposed Project Plan, XTO shall implement such alternative project(s) in accordance with the approved Project Plan in lieu of the Project(s) being replaced. Any such alternative shall be effective upon EPA's final

approval and shall not be considered material modifications of the terms of the Consent Decree for which the Court's approval is required under Section XVII.

- F. Nothing in this Appendix shall relieve XTO of its obligation to comply with all applicable federal, state, and local laws and regulations, including, but not limited to, any obligations to obtain any permits pursuant to the Clean Air Act.

## II. Rebuild CAT Series 3500 Engines

- A. General Requirements. XTO shall implement a CAT series 3500 engine rebuild project ("CAT 3500 Project"), as provided in this Appendix B. XTO shall use Caterpillar-produced engine retrofit kits to upgrade engine mechanical parts and control software in not fewer than 15 CAT Series 3500 engines operated by its Eastern Business Unit. These upgrades will involve the installation of specialized pistons, rings, liners, cuffs, and/or pre-chambers to optimize combustion chamber efficiency, as well as programing updates for engine control software if needed to optimize the fuel injection timing and firing cycle. CAT Series 3500 engines rebuilt as a part of this Mitigation Project are expected to achieve an estimated 33% improvement in methane slip rates, which will be verified by pre-and post-rebuild emissions stack testing.
- B. Environmental Benefits. This project shall accomplish at least 800 Metric Tons of methane emissions reductions within 8 years.
- C. Deadline for Completion of Project. The CAT 3500 Project shall be completed no later than the completion deadline in the approved Project Plan.
- D. Early Implementation. Nothing in the Consent Decree or this Appendix B shall prohibit XTO from including, as part of this Project, the rebuilding of CAT Series 3500 Engines by XTO for use by its Eastern Business Unit where such rebuilds were conducted in accordance with the requirements of this Appendix any time after January 1, 2024.
- E. Completion. If at any time XTO documents that the Environmental Benefits for this Project specified in Paragraph II.B above have been met, XTO may request EPA's approval to end the Project. EPA shall approve the request if it determines that the Environmental Benefits for this Project have been secured.
- F. Reporting Requirements. XTO's reporting requirements for this Project under Paragraph 22 of the Consent Decree shall be satisfied by:
  - 1. Identification of the CAT Series 3500 Engines that have been rebuilt during the period covered by the Semi-Annual Report;
  - 2. Photographs or other records establishing the upgrade kit was installed during the period covered by the Semi-Annual Report;
  - 3. Any pre- and post-rebuild stack tests verifying the emissions reductions and efficiency gains in engine operations for engines rebuilt during the period covered by

the Semi-Annual Report.

4. Upon completion, a summary of expenditures on this Project through the date of the report; and
5. Upon completion, a summary of emissions benefits from the Project through the date of the report.

### **III. Rebuild CAT Series 3600 Engines**

- A. General Requirements. XTO shall implement a CAT series 3600 engine rebuild project (“CAT 3500 Project”), as provided in this Appendix B. XTO shall use Caterpillar-produced engine retrofit kits to upgrade engine mechanical parts and control software in not fewer than 35 CAT Series 3600 engines operated by its Eastern Business Unit. These upgrades will involve the installation of specialized pistons, rings, liners, cuffs, and/or pre-chambers to optimize combustion chamber efficiency, as well as programing updates for engine control software if needed to optimize the fuel injection timing and firing cycle. CAT Series 3600 engines rebuilt as part of this Mitigation Project are expected to achieve an estimated 33% improvement in methane slip rates, which will be verified by pre-and post-rebuild emissions stack testing.
- B. Environmental Benefits. This project shall accomplish at least 3,000 Metric Tons of methane emissions reductions within 8 years.
- C. Deadline for Completion of Project. The CAT 3600 Project shall be completed no later than the completion deadline in the approved Project Plan.
- D. Early Implementation. Nothing in the Consent Decree or this Appendix B shall prohibit XTO from including, as part of this Project, the rebuilding of CAT Series 3600 Engines by XTO for use by its Eastern Business Unit where such rebuilds were conducted in accordance with the requirements of this Appendix any time after January 1, 2024.
- E. Completion. If at any time XTO documents that the Environmental Benefits for this Project specified in Paragraph III.B above have been met, XTO may request EPA’s approval to end the Project. EPA shall approve the request if it determines that the Environmental Benefits for this Project have been secured.
- F. Reporting Requirements. XTO’s reporting requirements for this Project under Paragraph 22 of the Consent Decree shall be satisfied by:
  1. Identification of the CAT Series 3600 Engines that have been rebuilt during the period covered by the Semi-Annual Report;
  2. Photographs or other records establishing the upgrade kit was installed during the period covered by the Semi-Annual Report;

3. Any pre- and post-rebuild stack tests verifying the emissions reductions and efficiency gains in engine operations for engines rebuilt during the period covered by the Semi-Annual Report.
4. Upon completion, a summary of expenditures on this Project through the date of the report; and
5. Upon completion, a summary of emissions benefits from the Project through the date of the report.

#### **IV. Fixed Catalyst Systems for Stationary Engines**

- A. General Requirements. XTO shall add post-combustion fixed catalyst systems to no fewer than 50 stationary engines in its Eastern Business Unit (“Engine Catalyst Project”). The installation of the post-combustion catalyst along with regular catalyst maintenance will further reduce methane slip from the engines during operation. Engines retrofitted with post-combustion catalysts are expected to achieve an estimated 90 % improvement in methane slip rates, which will be verified by pre-and post-rebuild emissions stack testing.
- B. Environmental Benefits. The Engine Catalyst Project shall accomplish at least 7,300 Metric Tons of methane emissions reductions within 8 years.
- C. Deadline for Completion of Project. Installation of post-combustion catalysts for the Engine Catalyst Project shall be completed no later than the completion deadline in the approved Project Plan.
- D. Early Implementation. Nothing in the Consent Decree or this Appendix B shall prohibit XTO from including, as part of this Project, post-combusting catalyst installations at Eastern Business Unit engines by XTO where such installations were conducted in accordance with the requirements of this Appendix any time after January 1, 2024.
- E. Completion. If at any time XTO documents that the Environmental Benefits for this Project specified in Paragraph IV.B above have been met, XTO may request EPA’s approval to end the Project. EPA shall approve the request if it determines that the Environmental Benefits for this Project have been secured.
- F. Reporting Requirements. XTO’s reporting requirements for this Project under Paragraph 22 of the Consent Decree shall be satisfied by:
  1. Identification of the engines that were retrofitted under this Project during the period covered by the Semi-Annual Report;
  2. Photographs or other records establishing the post-combustion catalyst bed was installed during the period covered by the Semi-Annual Report;

3. Any pre- and post-rebuild stack tests verifying the emissions reductions and efficiency gains in engine operations for engines serviced under this Project during the period covered by the Semi-Annual Report.
4. Upon completion, a summary of expenditures on this Project through the date of the report; and
5. Upon completion, a summary of emissions benefits from the Project through the date of the report.

**V. Rod Packing Vent Control Equipment Installation**

- A. General Requirements. XTO shall install equipment to recover compressor rod-packing vent discharges at no fewer than eight compressor stations operated in its Eastern Business Unit (“Rod-Packing Vent Control Project”).
- B. Environmental Benefits. The Rod-Packing Vent Control Project shall accomplish at least 1,000 Metric Tons of methane emissions reductions within 8 years.
- C. Deadline for Implementation of Project. Installation of vent control equipment under this Project shall be completed no later than the estimated completion deadline in the approved Project Plan.
- D. Early Implementation. Nothing in the Consent Decree or this Appendix B shall prohibit XTO from including, as part of this Project, rod-packing vent control systems installed at Eastern Business Unit compressor stations XTO where such installations were conducted in accordance with the requirements of this Appendix any time after January 1, 2024.
- E. Completion. If at any time XTO documents that the Environmental Benefits for this Project specified in Paragraph V.B above have been met, XTO may request EPA’s approval to end the Project. EPA shall approve the request if it determines that the Environmental Benefits for this Project have been secured.
- F. Reporting Requirements. XTO’s reporting requirements for this Project under Paragraph 22 of the Consent Decree shall be satisfied by:
  1. Identification of the compressor stations that were retrofitted under this Project during the period covered by the Semi-Annual Report;
  2. Photographs or other records establishing the rod-packing vent control systems were installed during the period covered by the Semi-Annual Report;
  3. Any pre- and post-rebuild emissions testing verifying the emissions reductions during operations under this Project during the period covered by the Semi-Annual Report;



4. Upon completion, a summary of expenditures on this Project through the date of the report; and
5. Upon completion, a summary of emissions benefits from the Project through the date of the report.

**VI. Retrofit/Replace/Retire Pneumatic Devices**

- A. General Requirements. XTO shall retrofit, replace, or retire from service no fewer than 300 pneumatic devices (pneumatic controllers, process controllers, pumps) powered by methane containing gas from its Eastern Business Unit and replace them with methane-free replacements (“Pneumatic Devices Project.”). In the event XTO is able to identify additional devices for retrofit or replacement outside its the Haynesville, Marcellus, or Eagleford Districts, XTO may elect to retrofit, replace, or retire from service additional devices to achieve the intended environmental benefits of this mitigation Project.
- B. Environmental Benefits. The Pneumatic Devices Project shall accomplish at least 3,400 Metric Tons of methane emissions reductions within 8 years.
- C. Deadline for Implementation of Project. All retrofits, replacements, and retirements associated with the Pneumatic Devices Project shall be completed no later than the estimated completion deadline in the approved Project Plan.
- D. Early Implementation. Nothing in the Consent Decree or this Appendix B shall prohibit XTO from including, as part of this Project, pneumatic devices installed at its Eastern Business Unit retrofitted, replaced or retired XTO in accordance with the requirements of this Appendix any time after January 1, 2024.
- E. Completion. If at any time XTO documents that the Environmental Benefits for this Project specified in Paragraph VI.B above have been met, XTO may request EPA’s approval to end the Project. EPA shall approve the request if it determines that the Environmental Benefits for this Project have been secured.
- F. Reporting Requirements. XTO’s reporting requirements for this Project under Paragraph 22 of the Consent Decree shall be satisfied by:
  1. Identification of the pneumatic devices that were retrofitted under this Project during the period covered by the Semi-Annual Report;
  2. Photographs or other records establishing the pneumatic devices were retrofitted, replaced or retired from service during the period covered by the Semi-Annual Report;
  3. Emissions reductions will be estimated using emission factors contained in 40 CFR 98 subpart W. Pre- and post-testing verification will not be required for pneumatic replacements;

4. Upon completion, a summary of expenditures on this Project through the date of the report; and
5. Upon completion, a summary of emissions benefits from the Project through the date of the report.

## VII. Orphaned Well Closure Project

- A. General Requirements. XTO shall plug and restore or cause to be plugged and restored orphan wells in Ohio, Pennsylvania, and other states within its Appalachia District in accordance with all applicable statutory and regulatory requirements of those states (“Orphaned Well Closure Project”). For the purposes of this Project, plugging and restoration may include pre-plugging due diligence; sampling, obtaining necessary permits, road bonds, approvals, or permissions required to complete the work; clearing and construction necessary to access the well(s); downhole work necessary to plug the well(s); post plugging regulatory reporting; and basic site restoration to the approximate contour present prior to plugging. Restoration excludes abatement or remediation of any environmental contamination not caused or contributed to by XTO or its agents.
- B. Well-Plugging Selection Criteria. In selecting wells to be plugged, XTO shall prioritize the reduction of methane emissions and other related environmental benefits, including working with state agencies to identify priority orphan or abandoned wells throughout the Appalachia District. XTO may also consider feasibility, as well as logistical and technical considerations
- C. Project Funding Requirement. XTO shall spend not less than three million dollars (\$3,000,000) implementing this project. None of these project funds may be used to abate or remediate any environmental contamination caused or contributed to by XTO or its agents. As a part of completing the Orphaned Well Closure Project, XTO may need to spend additional funds to complete a well plugging in process once this required minimum expenditure has been met. In that case, the well plugging will be completed and the additional costs beyond this minimum spend level shall be paid by XTO.
- D. Deadline for Completion of Project. The Orphaned Well Closure Project shall be completed no later than the estimated completion deadline in approved Project Plan, and in no event later than 4 years from the Effective Date of this Consent Decree, unless otherwise agreed to in writing by US EPA.
- E. Environmental Benefits. The Orphaned Well Closure Project is estimated to result in the closure of at least 35–40 orphaned wells, and is estimated to accomplish 5,000 Metric Tons of methane emissions reductions based on the 20-year crediting period of the American Carbon Registry (ACR) Methodology for the Quantification, Monitoring, Reporting and Verification of Greenhouse Gas Emissions Reductions and Removals from Plugging Orphan Oil and Gas Wells in the U.S. and Canada (Ver. 1.0 May, 2023).

- F. Reporting Requirements. XTO's reporting requirements for this Project under Paragraph 22 of the Consent Decree shall be satisfied by:
1. Identification of the orphaned oil and gas wells surveyed, assessed, from which emissions were quantified, plugged or restored under this Project during the period covered by the Semi-Annual Report;
  2. Photographs or other records establishing the orphaned oil and gas wells involved during the period covered by the Semi-Annual Report;
  3. Any pre- and post-project emissions testing verifying the emissions reductions from any orphaned oil and gas wells under this Project during the period covered by the Semi-Annual Report;
  4. Upon completion, a summary of expenditures on this Project through the date of the report; and
  5. Upon completion, a summary of emissions benefits expected from the Project using the American Carbon Registry (ACR) Methodology for the Quantification, Monitoring, Reporting and Verification of Greenhouse Gas Emissions Reductions and Removals from Plugging Orphan Oil and Gas Wells in the U.S. and Canada (Ver. 1.0 May, 2023).

## APPENDIX C

## Existing oil and gas wells in XTO's Appalachia District

Well Name	API #	State	County	GPS latitude	GPS longitude
Boggess A North Unit 7H	4703305843	WV	Harrison	39.376085	-80.385998
Boggess Unit A 1H	4703305729	WV	Harrison	39.376061	-80.385987
Brennan NW 13H	4704902426	WV	Marion	39.500352	-80.295730
Brennan Unit A 1H	4704902161	WV	Marion	39.500380	-80.295590
Brennan Unit A 2H	4704902162	WV	Marion	39.500400	-80.295560
Brennan Unit A 3H	4704902166	WV	Marion	39.500410	-80.295490
Brennan Unit A 5H	4704902210	WV	Marion	39.500380	-80.295620
Brennan Unit A 7H	4704902209	WV	Marion	39.500370	-80.295650
Snider 15H	4704902432	WV	Marion	39.5003510	-80.2956973
Crands Unit 8H	4704902486	WV	Marion	39.47174	-80.30196
Crim 2171V	4704901993	WV	Marion	39.47158	-80.30206
Crim 2209H	4704902022	WV	Marion	39.47154	-80.30213
Crim 2247H	4704902114	WV	Marion	39.47158	-80.30218
Crim 2248H	4704902115	WV	Marion	39.47156	-80.30216
Crim 4H	4704902153	WV	Marion	39.47161	-80.30207
Crim East Unit 11H	4704902490	WV	Marion	39.471758	-80.3089871
Crim East Unit 12H	4704902488	WV	Marion	39.4717028	-80.3019082
Crim South Unit 10H	4704902489	WV	Marion	39.4717765	-80.3020133
Crim South Unit 9H	4704902487	WV	Marion	39.4717212	-80.3019345
Fenn A 10H	4704902138	WV	Marion	39.45675	-80.31778
Fenn A 1H	4704902129	WV	Marion	39.45681	-80.31775
Fenn A 9H	4704902130	WV	Marion	39.45686	-80.31772
Four States Unit A 1H	4704902221	WV	Marion	39.47556	-80.2904
Four States Unit A 2H	4704902236	WV	Marion	39.47556	-80.29050
Four States Unit A 3H	4704902222	WV	Marion	39.47556	-80.29043
Four States Unit A 7H	4704902223	WV	Marion	39.47556	-80.29047
Harbert East A 1H	4703305541	WV	Harrison	39.38708	-80.34599
Harbert East A 2H	4703305542	WV	Harrison	39.38481	-80.34603
Harbert East A 3H	4703305543	WV	Harrison	39.38480	-80.34606
Harbert East A 4H	4703305578	WV	Harrison	39.38478	-80.34613
Hughes 11H	4704902361	WV	Marion	39.453752	-80.370856
Hughes 5H	4704902406	WV	Marion	39.453725	-80.370864
Hughes A Unit 10H	4704902405	WV	Marion	39.453780	-80.370849
Martin 2181H	4703305176	WV	Harrison	39.41500	-80.32089
Martin 2210H	4703305407	WV	Harrison	39.41500	-80.32083
McClelland 2172H	4704901984	WV	Marion	39.45165	-80.32472
McClelland 2198H	4704902102	WV	Marion	39.45159	-80.32464
McClelland 2246H	4704902103	WV	Marion	39.45161	-80.32467
McClelland 4H	4704902157	WV	Marion	39.45157	-80.32461
Tetrick A 1H	4704902164	WV	Marion	39.45155	-80.32459

Well Name	API #	State	County	GPS latitude	GPS longitude
Tetrick A 2H	4704902165	WV	Marion	39.45153	-80.32457
McIntire 2250H	4703305431	WV	Harrison	39.43488	-80.30117
Rockwell 8H	4704902408	WV	Marion	39.455563	-80.363241
Crands Unit 6H	4704902493	WV	Marion	39.463177	-80.3133647
Sands Unit A 3H	4704902491	WV	Marion	39.463111	-80.3135824
Sands Unit A 8H	4704902495	WV	Marion	39.4630734	-80.3135308
Sands Unit B 4H	4704902492	WV	Marion	39.463215	-80.313416
Sands Unit B 7H	4704902494	WV	Marion	39.463234	-80.313442
Hackett 4H	4704902410	WV	Marion	39.463552	-80.354235
Swearingen Unit 3H	4704902409	WV	Marion	39.463526	-80.354248
Worthington A 3H	4704902422	WV	Marion	39.4838208	-80.3217719
Worthington C 6H	4704902423	WV	Marion	39.483832	-80.3217395
Worthington D 10H	4704902420	WV	Marion	39.4838096	-80.3218042
Zogol 2213H	4704902084	WV	Marion	39.48549	-80.34958
Zogol A 2H	4704902146	WV	Marion	39.48553	-80.34955
A K Stear A Unit 1H	3706337308	PA	Indiana	40.860836	-79.078464
Adams Unit A2H	3706337482	PA	Indiana	40.576789	-79.246958
AK Steel A Unit 1H	3701922645	PA	Butler	40.846578	-79.935133
AK Steel A Unit 2H	3701922646	PA	Butler	40.846578	-79.935097
AK Steel B1H	3701922100	PA	Butler	40.840358	-79.943647
AK Steel B2H	3701922101	PA	Butler	40.840361	-79.943611
AK Steel B3H	3701922102	PA	Butler	40.840361	-79.943575
AK Steel C1H	3701922096	PA	Butler	40.836944	-79.950278
AK Steel C2H	3701922097	PA	Butler	40.836967	-79.950297
AK Steel C3H	3701922098	PA	Butler	40.837017	-79.950331
AK Steel C4H	3701922099	PA	Butler	40.836992	-79.950314
AK Steel D Unit 1H	3701922575	PA	Butler	40.822283	-79.940106
AK Steel D Unit 2H	3701922576	PA	Butler	40.822258	-79.940111
AK Steel D Unit 3H	3701922577	PA	Butler	40.822231	-79.940117
Charlton Unit 7H	3700531209	PA	Armstrong	40.738911	-79.683656
Alexander Lindsay Unit 5H	3700531202	PA	Armstrong	40.738939	-79.683653
Ambrose Unit 1H	3701922017	PA	Butler	40.8233	-79.848408
Ambrose Unit 2H	3701921994	PA	Butler	40.823311	-79.848517
Ambrose Unit 4H	3701921995	PA	Butler	40.823308	-79.848481
Ambrose Unit 5H	3701921980	PA	Butler	40.823303	-79.848444
Angert A Unit 3H	3701922333	PA	Butler	40.913033	-79.748394
Angert B Unit 6H	3701922334	PA	Butler	40.913019	-79.748289
Bachelor 4Hu	3701922814	PA	Butler	40.7961	-79.881947
Bachelor Unit 1H	3701922542	PA	Butler	40.796194	-79.881942
Bachelor Unit 2H	3701922793	PA	Butler	40.796169	-79.881944
Bachelor Unit 3H	3701922794	PA	Butler	40.796142	-79.881947
Beilstein C Unit 3H	3701922232	PA	Butler	40.784789	-79.860036
Bergbigler A Unit 1H	3701922217	PA	Butler	40.874158	-79.7611
Bergbigler A Unit 2H	3701922218	PA	Butler	40.874161	-79.761028
Bergbigler A Unit 3H	3701922219	PA	Butler	40.874158	-79.761136

Well Name	API #	State	County	GPS latitude	GPS longitude
Bergbigler A Unit 4H	3701922220	PA	Butler	40.874161	-79.761064
Bergbigler A Unit 5H	3701922223	PA	Butler	40.874161	-79.760992
Bergbigler B Unit 9H	3701922358	PA	Butler	40.874164	-79.760956
Bowser 1H	3703125484	PA	Clarion	41.150072	-79.215789
Boyle A Unit 5H	3701922361	PA	Butler	40.860339	-79.721211
Briston B Unit 5H	3701922696	PA	Butler	40.819992	-79.900206
Briston Unit 3H	3701922447	PA	Butler	40.820019	-79.900208
Brown 8519H	3708120290	PA	Lycoming	41.234053	-76.658758
Brown 8520H	3708120293	PA	Lycoming	41.234075	-76.658758
Buck Unit A 1H	3708120767	PA	Lycoming	41.259469	-76.565942
Christensen B Unit 6H	3701922694	PA	Butler	40.800422	-79.843608
Christensen Unit 4H	3701922473	PA	Butler	40.80045	-79.8436
Christianson 8436H	3712928488	PA	Westmoreland	40.314711	-79.166547
Clouse Unit 1H	3701922058	PA	Butler	40.91605	-79.823397
Clouse Unit 2H	3701922149	PA	Butler	40.915961	-79.823539
Clouse Unit 3H	3701922150	PA	Butler	40.915981	-79.823508
Clouse Unit 4H	3701922168	PA	Butler	40.916086	-79.823342
Clouse Unit 5H	3701922206	PA	Butler	40.915997	-79.823481
Clouse Unit 6H	3701922077	PA	Butler	40.916033	-79.823425
Cratty B Unit 1H	3701922453	PA	Butler	40.914436	-80.015367
Clair Cratty A Unit 3H	3701922647	PA	Butler	40.914442	-80.015439
Clair Cratty B Unit 5H	3701922648	PA	Butler	40.914439	-80.015403
Cypher A Unit 1H	3701922019	PA	Butler	40.882592	-79.749672
Cypher A Unit 2H	3701922053	PA	Butler	40.882617	-79.749675
Cypher A Unit 3H	3701922054	PA	Butler	40.882644	-79.749675
Cypher A Unit 4H	3701922167	PA	Butler	40.882672	-79.749678
Cypher A Unit 5H	3701922173	PA	Butler	40.8827	-79.749681
Cypher B Unit 1H	3701922020	PA	Butler	40.882564	-79.749669
Cypher B Unit 2H	3701922166	PA	Butler	40.882536	-79.749667
Cypher B Unit 3H	3701922176	PA	Butler	40.882508	-79.749667
Cypher B Unit 4H	3701922175	PA	Butler	40.882481	-79.749664
Cypher B Unit 5H	3701922174	PA	Butler	40.882453	-79.749661
Detterick 8510H	3708120223	PA	Lycoming	41.249803	-76.500594
Devinney Unit 1H	3712928697	PA	Westmoreland	40.452133	-79.420519
Devinney Unit 4H	3712928762	PA	Westmoreland	40.452078	-79.420517
Dreher A Unit 1H	3701922065	PA	Butler	40.851733	-79.823544
Dreher A Unit 2H	3701922135	PA	Butler	40.851753	-79.823475
Dreher A Unit 3H	3701922137	PA	Butler	40.85168	-79.823681
Dreher A Unit 4H	3701922136	PA	Butler	40.851678	-79.823747
Dreher A Unit 5H	3701922147	PA	Butler	40.851686	-79.823714
Dreher B Unit 1H	3701922134	PA	Butler	40.851742	-79.823508
Dreher B Unit 2H	3701922138	PA	Butler	40.851706	-79.823644
Dreher B Unit 3H	3701922064	PA	Butler	40.851761	-79.823442
Dreher B Unit 4H	3701922177	PA	Butler	40.851725	-79.823578
Dreher B Unit 5H	3701922178	PA	Butler	40.851714	-79.823611

Well Name	API #	State	County	GPS latitude	GPS longitude
Dreher B Unit 6HB	3701922208	PA	Butler	40.851667	-79.823781
Eckels 8448H	3712928075	PA	Westmoreland	40.341356	-79.145666
Eckels 8590H	3712928396	PA	Westmoreland	40.341392	-79.145644
Edward R Gaw Jr 1	3701921588	PA	Butler	40.768573	-80.04443
Everbe Farms 8518H	3708120287	PA	Lycoming	41.233928	-76.633736
Everbe Farms 8551H	3708120414	PA	Lycoming	41.233867	-76.633656
Fabin Unit A3H	3706337496	PA	Indiana	40.562025	-79.256297
Fawn Developers Inc 3H	3700322091	PA	Allegheny	40.648568	-79.777621
Fawn Developers Inc 4H	3700322092	PA	Allegheny	40.648704	-79.777674
Fawn Developers Inc 1	3700321994	PA	Allegheny	40.657901	-79.781085
Flickinger 2H	3712928380	PA	Westmoreland	40.341972	-79.088983
Flickinger Unit 8447H	3712928076	PA	Westmoreland	40.341981	-79.088986
Frantz Unit 1H	3700531212	PA	Armstrong	40.7559	-79.666069
Galan A Unit 2H	3701922445	PA	Butler	40.822772	-79.752464
Galan B Unit 6H	3701922446	PA	Butler	40.822761	-79.752431
Galan C Unit 10H	3701922454	PA	Butler	40.822781	-79.752497
Geibel C Unit 1H	3701922386	PA	Butler	40.840814	-79.789553
Geibel Unit 1H	3701922141	PA	Butler	40.865617	-79.783928
Geibel Unit 2H	3701922142	PA	Butler	40.865667	-79.783956
Geibel Unit 3H	3701922148	PA	Butler	40.865642	-79.783942
Geibel Unit 4H	3701922169	PA	Butler	40.865592	-79.783911
Geibel Unit 5H	3701922170	PA	Butler	40.865567	-79.783894
George F Joseph 10H	3705124330	PA	Fayette	40.020536	-79.678322
George F Joseph 11H	3705124331	PA	Fayette	40.020536	-79.678142
George F Joseph Et Al 13H	3705124386	PA	Fayette	40.021644	-79.675569
Gill Unit 1H	3701921968	PA	Butler	40.782194	-79.992569
Gill Unit 2H	3701921969	PA	Butler	40.782208	-79.9926
Gill Unit 3H	3701921970	PA	Butler	40.782219	-79.992633
Godfrey Unit B1H	3701922010	PA	Butler	40.791642	-79.9052
Godfrey Unit B2H	3701922011	PA	Butler	40.791669	-79.905189
Godfrey C Unit 2H	3701922021	PA	Butler	40.791722	-79.905167
Godfrey C Unit 3H	3701922022	PA	Butler	40.791694	-79.905178
Godfrey Unit 1H	3701921837	PA	Butler	40.797806	-79.904989
Godfrey Unit 2H	3701921864	PA	Butler	40.797736	-79.904986
Guiher Unit 3H	3701922226	PA	Butler	40.874761	-80.013956
Guiher Unit 4H	3701922227	PA	Butler	40.874783	-80.013981
Guiher Unit 7Hb	3701922228	PA	Butler	40.874803	-80.014003
Lutherlyn Unit 5H	3701922229	PA	Butler	40.874742	-80.013933
Lutherlyn Unit 6H	3701922230	PA	Butler	40.874719	-80.013908
Hall 8423H	3705124158	PA	Fayette	39.93752	-79.469236
Harvey Unit 1H	3701922043	PA	Butler	40.679428	-79.766089
Harvey Unit 3H	3701922044	PA	Butler	40.679406	-79.766106
Hcpp A 2H	3706337134	PA	Indiana	40.524644	-79.198075
Hcpp A 3H	3706337135	PA	Indiana	40.524617	-79.198078
Hcpp A 4H	3706337136	PA	Indiana	40.524589	-79.198081

Well Name	API #	State	County	GPS latitude	GPS longitude
Hcpp A 8H	3706337137	PA	Indiana	40.524561	-79.198081
Heasleys Nurseries Unit 1H	3701921975	PA	Butler	40.831044	-79.84845
Heasleys Nurseries Unit 2H	3701921981	PA	Butler	40.83105	-79.848486
Heasleys Nurseries Unit 4H	3701921996	PA	Butler	40.831053	-79.848519
Helen K Bukovac 4H	3705124328	PA	Fayette	40.010133	-79.672622
Hinch Smith Unit 2H	3701921952	PA	Butler	40.829969	-79.888519
Hinch Smith Unit 3H	3701921953	PA	Butler	40.829981	-79.888553
Hinch Smith Unit 4H	3701921923	PA	Butler	40.829992	-79.888586
Hinch Smith Unit 5H	3701922159	PA	Butler	40.829958	-79.888486
Hinch Smith Unit 6H	3701922119	PA	Butler	40.829947	-79.888453
Hinch Smith Unit 7H	3701922120	PA	Butler	40.829936	-79.888422
Hinch Smith Unit 8H	3701922084	PA	Butler	40.829922	-79.888389
Hinch Smith Unit 9H	3701922085	PA	Butler	40.829911	-79.888356
Hinch Smith Unit 10Hb	3701922205	PA	Butler	40.829908	-79.888317
Hixon Unit 1H	3701921904	PA	Butler	40.768886	-79.976956
Hixon Unit 2H	3701921905	PA	Butler	40.7689	-79.976989
Hixon Unit 4H	3701921944	PA	Butler	40.768861	-79.976894
Hixon Unit 5H	3701921973	PA	Butler	40.768847	-79.976864
Hixon Unit 6Hb	3701922207	PA	Butler	40.768922	-79.977011
Holy Trinity Monastery A Unit 4H	3701921924	PA	Butler	40.806047	-79.876314
Holy Trinity Monastery Et Al 3H	3701921725	PA	Butler	40.806075	-79.876314
Holy Trinity Monastery B Unit 1H	3701921938	PA	Butler	40.812442	-79.873736
Holy Trinity Monastery B Unit 2H	3701921961	PA	Butler	40.812453	-79.873703
Homer City Power Plant 8421H	3706336827	PA	Indiana	40.534092	-79.198464
Homer City Power Plant 8422H	3706336434	PA	Indiana	40.510643	-79.186639
Indiana County Airport 8431H	3706336304	PA	Indiana	40.629369	-79.101191
Isaacs Unit 2H	3701922565	PA	Butler	40.895197	-79.971217
James G Simon et al 9H	3705124335	PA	Fayette	40.002533	-79.682167
James G Simon et al 10H	3705124336	PA	Fayette	40.002439	-79.682294
James G Simon et ux 11H	3705124334	PA	Fayette	40.002358	-79.682439
Jenzano 8492H	3708120174	PA	Lycoming	41.259515	-76.577664
Jenzano 8542H	3708120432	PA	Lycoming	41.259603	-76.577797
Jenzano 8543H	3708120433	PA	Lycoming	41.259611	-76.577831
John Foertsch et ux 1	3701921462	PA	Butler	40.761903	-79.837028
John Foertsch et ux 2	3701921456	PA	Butler	40.764076	-79.839321
John O Hillen 2	3705124320	PA	Fayette	39.999778	-79.660925
John Obringer et ux 1	3701921421	PA	Butler	40.678731	-79.750587
Jones A Unit 1H	3706337474	PA	Indiana	40.482919	-79.143758
Jones B Unit 2H	3706337500	PA	Indiana	40.482906	-79.143728
Joseph Green 5	3705124300	PA	Fayette	40.008228	-79.650108
Joseph Green et al 6H	3705124332	PA	Fayette	40.008319	-79.649797
Joseph Green et al 7H	3705124333	PA	Fayette	40.008283	-79.649969
Karen O Foertsch et al 3H	3701921773	PA	Butler	40.758503	-79.851514
Kiley A Unit 1H	3701922493	PA	Butler	40.811158	-79.791725
Kozik Bros Const Inc 2	3701921494	PA	Butler	40.847569	-79.837178



Well Name	API #	State	County	GPS latitude	GPS longitude
Kozik Brothers B Unit 7H	3701922390	PA	Butler	40.843075	-79.831247
Kozik Brothers Unit 1H	3701921986	PA	Butler	40.843111	-79.831383
Kozik Brothers Unit 2H	3701921985	PA	Butler	40.843103	-79.831347
Kozik Brothers Unit 3H	3701922027	PA	Butler	40.843094	-79.831314
Kozik Brothers Unit 4H	3701922028	PA	Butler	40.843086	-79.831281
Guiher Unit 6H	3701922805	PA	Butler	40.88515	-80.008336
Kyne Unit 1H	3701922264	PA	Butler	40.885153	-80.008444
Kyne Unit 2H	3701922265	PA	Butler	40.885153	-80.008408
Kyne Unit 3H	3701922266	PA	Butler	40.885153	-80.008372
Kyne Unit 4H	3701922804	PA	Butler	40.88515	-80.0083
Kyne Unit 5H	3701922806	PA	Butler	40.88515	-80.008264
Landgraf A Unit 2H	3701922298	PA	Butler	40.902731	-79.764514
Landgraf B Unit 7H	3701922299	PA	Butler	40.902758	-79.764511
Lassinger Unit 1H	3701921982	PA	Butler	40.836669	-79.884389
Lassinger Unit 2H	3701921997	PA	Butler	40.836667	-79.884461
Lassinger Unit 3H	3701921983	PA	Butler	40.836669	-79.884425
Lassinger Unit 5H	3701922018	PA	Butler	40.836667	-79.884497
Lesney Unit 5H	3701922697	PA	Butler	40.880494	-79.978133
Pawlowicz Unit 4H	3701922583	PA	Butler	40.880467	-79.978133
Lucella 8564H	3708120371	PA	Lycoming	41.205603	-76.642556
Marburger Farm Dairy B Unit 1H	3701921936	PA	Butler	40.778361	-79.998897
Marburger Farm Dairy B Unit 2H	3701921937	PA	Butler	40.778386	-79.998878
Marburger Farm Dairy Inc Unit 1H	3701921866	PA	Butler	40.757428	-80.045967
Marburger Farm Dairy Inc Unit 2H	3701921865	PA	Butler	40.757472	-80.045903
Vicnor Gaw Unit 4H	3701922484	PA	Butler	40.757492	-80.045881
Marquardt 8494H	3708120175	PA	Lycoming	41.247307	-76.649366
Marquardt 8537H	3708120294	PA	Lycoming	41.247358	-76.649397
Marquardt 8534H	3708120301	PA	Lycoming	41.234153	-76.644056
Marquardt Unit B 2H	3708120533	PA	Lycoming	41.234178	-76.644064
Marquardt Unit B 3H	3708120532	PA	Lycoming	41.234206	-76.644075
Derr 8544H	3708120348	PA	Lycoming	41.239603	-76.638631
Derr 8545H	3708120496	PA	Lycoming	41.239553	-76.638603
Marquardt Unit 8517H	3708120275	PA	Lycoming	41.239577	-76.638618
McCall Unit 3H	3701922352	PA	Butler	40.933547	-79.737339
Melvin R Tissue et al 11H	3705124368	PA	Fayette	40.019189	-79.656761
Merten Unit 1H	3701921876	PA	Butler	40.74745	-80.021769
Merten Unit 2H	3701921877	PA	Butler	40.747383	-80.021778
Moser 8521H	3708120295	PA	Lycoming	41.210897	-76.622575
Moser 8560H	3708120402	PA	Lycoming	41.210911	-76.622644
Moser 8561H	3708120403	PA	Lycoming	41.210906	-76.622608
Mountain Gathering A Unit 2H	3701922784	PA	Butler	40.8075	-79.94825
Mountain Gathering A Unit 3H	3701922492	PA	Butler	40.807433	-79.948314
Mountain Gathering B Unit 4H	3701922785	PA	Butler	40.807478	-79.948272
Mountain Gathering B Unit 5H	3701922786	PA	Butler	40.807456	-79.948292
Mountain Gathering B Unit 6H	3701922481	PA	Butler	40.807411	-79.948336

Well Name	API #	State	County	GPS latitude	GPS longitude
Mourer A Unit 2H	3701922356	PA	Butler	40.943311	-79.714761
Mourer B Unit 8H	3701922415	PA	Butler	40.943331	-79.714786
Muir 8444H	3712928045	PA	Westmoreland	40.309931	-79.179734
Muir 8579H	3712928360	PA	Westmoreland	40.309981	-79.179744
Nelson 8392H	3712927952	PA	Westmoreland	40.30384	-79.216724
Nelson 8557H	3712928357	PA	Westmoreland	40.303886	-79.216714
Nelson 8558H	3712928358	PA	Westmoreland	40.303911	-79.216694
Olive M Marburger Living Trust 1	3701921590	PA	Butler	40.755412	-80.033007
Olive M Marburger Living Trust 2	3701921587	PA	Butler	40.750759	-80.032435
Pa Tract 8546H	3703521217	PA	Clinton	41.367067	-77.670517
Pa Tract 8548H	3703521218	PA	Clinton	41.367108	-77.670503
Pa Tract A 5H	3703521316	PA	Clinton	41.367014	-77.670528
Pa Tract A 6H	3703521318	PA	Clinton	41.367039	-77.670522
Pa Tract A 7H	3703521317	PA	Clinton	41.367136	-77.670494
Pa Tract A 8H	3703521320	PA	Clinton	41.366986	-77.670536
Pa Tract A 9H	3703521319	PA	Clinton	41.367164	-77.670486
Pa Tract E 1H	3703521268	PA	Clinton	41.409683	-77.621067
Pa Tract E 3H	3703521270	PA	Clinton	41.409592	-77.620989
Pa Tract E 4H	3703521271	PA	Clinton	41.409639	-77.621028
Pa Tract E 5H	3703521272	PA	Clinton	41.409617	-77.621008
Pa Tract E 6H	3703521284	PA	Clinton	41.409753	-77.621125
Pa Tract E 7H	3703521285	PA	Clinton	41.409731	-77.621106
Pa Tract G 1H	3703521275	PA	Clinton	41.406442	-77.627708
Pa Tract G 2H	3703521276	PA	Clinton	41.406417	-77.627728
Pa Tract Unit B 1H	3703521239	PA	Clinton	41.352417	-77.673528
Pa Tract Unit B 2H	3703521238	PA	Clinton	41.352389	-77.673597
Patton B Unit 7H	3701922130	PA	Butler	40.877217	-80.034856
Patton Unit 1H	3701921906	PA	Butler	40.877264	-80.034869
Paul Smith Unit 1H	3701921903	PA	Butler	40.793506	-79.829056
Prager A Unit 1H	3701922687	PA	Butler	40.825392	-79.829844
Prager B Unit 3H	3701922689	PA	Butler	40.825397	-79.829808
Quinn Unit A 1H	3701921867	PA	Butler	40.719658	-79.865942
R C Winslow 1H	3706526972	PA	Jefferson	41.040583	-78.991794
R C Winslow 2H	3706526992	PA	Jefferson	41.040608	-78.991781
R C Winslow 3H	3706526993	PA	Jefferson	41.040633	-78.991764
R.C. Winslow 5H	3706527079	PA	Jefferson	41.040556	-78.991811
R.C. Winslow 6HU	3706527080	PA	Jefferson	41.040522	-78.991833
Renn Unit A 1H	3708120565	PA	Lycoming	41.2423	-76.543742
Renn Unit A 2H	3708120597	PA	Lycoming	41.242325	-76.543728
Ritenour 2H	3712928695	PA	Westmoreland	40.336331	-79.155311
Ritenour 4H (8446H)	3712928512	PA	Westmoreland	40.336317	-79.155344
Rutledge Unit 1H	3701922006	PA	Butler	40.808419	-79.978519
Rutledge Unit 2H	3701922007	PA	Butler	40.808392	-79.978528
Rutledge Unit 3H	3701922008	PA	Butler	40.808364	-79.978536
Rutledge Unit 4H	3701922009	PA	Butler	40.808339	-79.978544

Well Name	API #	State	County	GPS latitude	GPS longitude
Salvatora B Unit 6H	3701922448	PA	Butler	40.840778	-79.848708
Salvatora C Unit 9H	3701922449	PA	Butler	40.840778	-79.848672
Salvatora Unit 1H	3701921971	PA	Butler	40.840772	-79.848778
Salvatora Unit 2H	3701921972	PA	Butler	40.840775	-79.848742
Scaife 8451H	3712928491	PA	Westmoreland	40.338836	-79.131725
Stein A Unit 4H	3701922562	PA	Butler	40.918153	-80.001997
Stein B Unit 5H	3701922564	PA	Butler	40.918178	-80.002014
Steven Lesney et ux 1	3701921438	PA	Butler	40.881535	-79.980124
Stevens Unit 1H	3705124401	PA	Fayette	40.027158	-79.655672
Stevens Unit 2H	3705124402	PA	Fayette	40.027236	-79.655525
Temple 8496H	3708120173	PA	Lycoming	41.221471	-76.629721
Temple 8541H	3708120296	PA	Lycoming	41.221611	-76.629614
Terry Bowser A Unit 3H	3700531097	PA	Armstrong	40.742906	-79.670406
Thomas S Pajer et al 2H	3701921686	PA	Butler	40.675081	-79.751297
Thomas S Pajer et al 3H	3701921687	PA	Butler	40.675026	-79.751126
Tome 8522H	3708120300	PA	Lycoming	41.199694	-76.632069
Trilogy 5HU	3700531315	PA	Armstrong	40.686825	-79.681244
Trilogy A 1H	3700531325	PA	Armstrong	40.686839	-79.681297
Trilogy B 2H	3700531316	PA	Armstrong	40.686847	-79.681331
Trilogy B 3H	3700531317	PA	Armstrong	40.686856	-79.681364
Trilogy C 4H	3700531318	PA	Armstrong	40.686867	-79.681397
Vadnal A Unit 3H	3701922213	PA	Butler	40.768797	-79.852897
Vadnal A Unit 10HB	3701922214	PA	Butler	40.768847	-79.852919
Vadnal B Unit 5H	3701922215	PA	Butler	40.768769	-79.852883
Vadnal B Unit 7H	3701922216	PA	Butler	40.768822	-79.852908
Veselich A Unit 7H	3701922497	PA	Butler	40.789772	-79.851372
Veselich B Unit 1H	3701922221	PA	Butler	40.789772	-79.851408
Veselich B Unit 5H	3701922222	PA	Butler	40.789772	-79.851444
Waltman A Unit 1H	3701922003	PA	Butler	40.926983	-79.748547
Waltman B Unit 1H	3701922004	PA	Butler	40.926956	-79.748547
Welter Unit 1H	3701922048	PA	Butler	40.898358	-79.779203
Welter Unit 2H	3701922047	PA	Butler	40.898333	-79.779206
Welter Unit 5H	3701922063	PA	Butler	40.898414	-79.779197
Zacherl Unit 1H	3701921899	PA	Butler	40.7817	-79.788219