IN THE UNITED STATES DISTRICT COURT
FOR THE WESTERN DISTRICT OF PENNSYLVANIA

UNITED STATES OF AMERICA and
COMMONWEALTH OF PENNSYLVANIA,
DEPARTMENT OF ENVIRONMENTAL PROTECTION,

Plaintiffs,

v.

Civil No. 2:24-cv-1675

PENNENERGY RESOURCES, LLC

Defendant.

CONSENT DECREE

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WHEREAS, the United States of America, on behalf of the United States Environmental Protection Agency ("EPA"), and the Pennsylvania Department of Environmental Protection ("PADEP"), have filed a Complaint concurrently with the lodging of this Consent Decree, pursuant to the Clean Air Act, 42 U.S.C. § 7401, *et seq*. (the "Act").

WHEREAS, the Complaint alleges that Defendant, PennEnergy Resources, LLC (PennEnergy), violated requirements of the Act, the Standards of Performance for Crude Oil and Natural Gas Facilities for Which Construction, Modification, or Reconstruction Commenced After August 23, 2011, and on or Before September 18, 2015, 40 C.F.R. Part 60, Subpart OOOO ("NSPS OOOO"), and the Standards of Performance for Crude Oil and Natural Gas Facilities for Which Construction, Modification or Reconstruction Commenced After September 18, 2015, 40 C.F.R. Part 60, Subpart OOOOa ("NSPS OOOOa"). The violations are alleged to have occurred at Well Pads that are part of PennEnergy's oil and natural gas production system located in Butler, Beaver, Armstrong, and Lawrence Counties, Pennsylvania. All of PennEnergy's oil and natural gas production facilities referenced in the Complaint are located in the Appalachian Basin, one of the nation's largest oil and gas producing regions.

WHEREAS, PennEnergy's oil and natural gas production system separates Produced Oil and Produced Water from natural gas at Well Pads. After separation, the Produced Oil and Produced Water may be emptied into Storage Vessels, or sent directly into a pipeline for transport. Produced Water and Produced Oil stored on-site in Storage Vessels is transported by tanker trucks for sale, reuse, or disposal. As Pressurized Liquids are transferred into Storage Vessels, the pressure of the fluids decreases and vapors, which include volatile organic compounds ("VOC"), are released in a gaseous state.

WHEREAS, VOC is a precursor to ground-level ozone, commonly known as smog. Ground-level ozone is one of six criteria pollutants for which EPA has promulgated National Ambient Air Quality Standards ("NAAQS") due to its adverse effects on human health and the environment.

WHEREAS, the ground-level ozone formation is caused by the emissions of VOCs and oxides of nitrogen into the atmosphere.

WHEREAS, PennEnergy has equipped Storage Vessels that are part of its oil and natural gas production system with Vapor Control Systems that include covers and closed vents required to route vapors from the Storage Vessels to a control device or through a Vapor Recovery Unit.

WHEREAS, the Act, NSPS OOOO, NSPS OOOOa, and PADEP's Air Quality General Plan Approval and/or General Operating Permit (GP-5 and GP-5a) require owners and operators of oil and natural gas production systems to comply with design and operating requirements associated with the Vapor Control System so that it captures and routes all emissions from Storage Vessels back to the process stream or to a control device, such that no emissions are vented to the atmosphere.

WHEREAS, the Complaint alleges that on October 16-18, 2018, EPA inspected 16 of PennEnergy's oil and natural gas production Well Pads. At 11 of these Well Pads where production was occurring, the inspectors observed that Storage Vessels were emitting VOC emissions to the atmosphere.

WHEREAS, the Complaint further alleges that many of the Storage Vessels at PennEnergy's Well Pads were equipped with Vapor Control Systems that failed to route all vapors from the Storage Vessel to control devices or to a process, resulting in vapors being emitted directly to the atmosphere.

WHEREAS, the 16 Well Pads inspected by EPA on or about October 16, 2018 were acquired by PennEnergy from another operator on or about September 28, 2018.

WHEREAS, PennEnergy does not admit any liability to the United States or PADEP arising out of the occurrences alleged in the Complaint.

WHEREAS, prior to the lodging of this Consent Decree, PennEnergy has prepared a written Design Analysis Methodology, and EPA, in consultation with PADEP, has provided comments on the methodology and discussed such comments with PennEnergy.

WHEREAS, PennEnergy conducts routine verification of its Storage Vessels to ensure emissions do not vent to the atmosphere below the Trigger Point and has provided EPA and PADEP with electronic pressure monitoring data and related information.

WHEREAS, the United States, PADEP, and PennEnergy (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 among the Parties and that this Consent Decree is fair, reasonable, and in the public interest.

NOW, THEREFORE, before the taking of any testimony, without the adjudication or admission 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, 1355, and 1367, and Section 113(b) of the Act, 42 U.S.C. § 7413(b), and over the Parties. Venue lies in this judicial district pursuant to Section 113(b) of the Act, 42 U.S.C. § 7413(b), and 28 U.S.C §§ 1391(b) and 1395(a), because violations alleged in the

Complaint are alleged to have occurred in, and PennEnergy conducts business in, this judicial district. For purposes of this Consent Decree, or any action to enforce this Consent Decree, PennEnergy consents to: the Court's jurisdiction over this Consent Decree and any such action; the Court's jurisdiction over PennEnergy; and venue in this judicial district.

2. For purposes of this Consent Decree, PennEnergy agrees that the Complaint states claims upon which relief may be granted pursuant to Section 113(b) of the Act, 42 U.S.C. § 7413(b).

II. APPLICABILITY

3. The obligations of this Consent Decree apply to and are binding upon the United States, PADEP, and upon PennEnergy and any successors, assigns, or other entities or persons otherwise bound by law. Unless otherwise noted, the obligations of this Consent Decree shall become enforceable on the Effective Date as provided in Section XV (Effective Date).

4. No transfer of ownership or operation of any Facility, whether in compliance with the procedures of this Paragraph or otherwise, shall relieve PennEnergy of its obligation to ensure that the terms of the Consent Decree are implemented, unless (1) the transferee agrees to be substituted for PennEnergy as a Party under the Consent Decree and thus be bound by the terms thereof and to undertake the obligations required by Section V (Compliance Requirements) of this Consent Decree as to the Facility, (2) the United States consents to relieve PennEnergy of its obligations), and (3) the Court approves a modification of the Consent Decree substituting the transferee for PennEnergy 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 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. PennEnergy may transfer its interest in any Facility without relieving PennEnergy of its Consent Decree obligations, without consent of other Parties, and without modification of the Consent Decree, provided that, at least 30 Days prior to such transfer, PennEnergy shall provide a copy of this Consent Decree to the proposed transferee and shall simultaneously provide written notice of the prospective transfer to EPA, DOJ, and PADEP in accordance with Section XIV (Notices).

6. PennEnergy shall provide a copy of this Consent Decree to all officers, employees, and agents whose duties might reasonably include compliance with any provision of this Consent Decree, as well as to any contractor retained to perform work required under this Consent Decree. PennEnergy 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, PennEnergy 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 the regulations promulgated thereunder have the meanings assigned to them in the Act or such regulations, unless otherwise provided in this Consent Decree. Whenever the terms set forth below are used in this Consent Decree, the following definitions apply.

a. "AVO" shall mean audio, visual, and olfactory.

b. "Business Day" shall mean Monday through Friday, with the exception of federal holidays.

c. "Calendar Day" shall mean any of the seven days of the week. In computing any period of time under this Consent Decree expressed in Calendar Days, except for actions required to be completed within five Days or less, where the last Calendar Day would fall on a Saturday, Sunday, or federal holiday, the period shall run until the close of the next Business Day.

d. "Complaint" shall mean the Complaint filed by the United States and PADEP in this action.

e. "Compromised Equipment" shall mean equipment at a Well Pad that shows signs of wear beyond normal wear and tear (*i.e.*, that cannot be addressed by routine maintenance such as tightening, cleaning, or lubricating the equipment) such that the equipment creates a likelihood of excess VOC emissions. Examples include, but are not limited to, indications of inefficient connection of the thief hatch to the Storage Vessel such as cracks or grooves in gaskets, abnormally or heavily corroded equipment, and beveling of sealing surfaces.

f. "Consent Decree" or "Decree" shall mean this Consent Decree and all appendices attached hereto.

g. "Date of Lodging" shall mean the date this Consent Decree is filed for lodging with the Clerk of the Court for the United States District Court for the Western District of Pennsylvania.

h. "Day" or "day" shall mean a Calendar Day unless expressly stated to be a Business Day.

i. "Defendant" or "PennEnergy" shall mean PennEnergy Resources LLC.

j. "Design Analysis Methodology" shall mean the methodology, prepared pursuant to Paragraph 26 of this Consent Decree and Appendix D that PennEnergy shall use in developing the Engineering Evaluations.

k. "DOJ" means the United States Department of Justice and any of its successor departments or agencies.

l. "Effective Date" shall have the definition provided in Section XV (Effective Date).

m. "Engineering Evaluation" shall mean the evaluations performed by PennEnergy in compliance with Paragraph 27 of this Consent Decree to determine whether the Subject Vapor Control System is adequately designed and sized for Potential Minimum Instantaneous Vapor Flow Rate ("PMIVFR"), Potential Peak Instantaneous Vapor Flow Rate ("PPIVFR"), and Peak Modeled Pressure in accordance with the Design Analysis Methodology.

n. "Environmental Mitigation Project" shall mean the requirements specified in Section V, Subsection J and Appendix F of this Consent Decree to

remedy, reduce, or offset past excess emissions resulting from PennEnergy's alleged violations of the Act in this matter.

o. "EPA" shall mean the United States Environmental Protection Agency and any of its successor departments or agencies.

p. "Facility" shall mean each Well Pad identified in Appendix A, Appendix B, and any Well Pad where a Storage Vessel System identified pursuant to Paragraph 59 is located.

q. "Flame Arrestor" shall mean a device in a Subject Vapor Control System which allows gas to pass through it but stops a flame from returning to an ignition source in order to prevent a larger, uncontrolled fire or explosion.

r. "Heater-Treater" shall mean a unit that heats the reservoir fluid to break oil/water emulsions and to reduce the oil viscosity. The water is then typically removed by using gravity to allow the water to separate from the oil.

s. "IR Camera Inspection" shall mean an inspection of a Subject Vapor Control System using an optical gas imaging infrared camera designed for and capable of detecting hydrocarbon and VOC emissions, conducted by trained personnel who maintain proficiency through regular use of the optical gas imaging infrared camera.

t. "Leak Point" shall mean the pressure at which a certain make, model, and Set Point of a Storage Vessel System PRD first opens to release vapors. The Leak Point shall be no greater than the lowest Set Point of any PRD of the Storage Vessel System.

u. "Malfunction" shall mean any sudden, infrequent, and not reasonably preventable failure of air pollution control equipment, process equipment, instrumentation, monitoring system, or a process to operate in a normal or usual manner. Failures that are caused in part by poor maintenance or careless operation are not Malfunctions.

v. "Maximum Design Pressure" shall mean the highest pressure that the Subject Vapor Control System is designed to accommodate without uncontrolled emissions to the atmosphere due to over-pressurization.

w. "Normal Operations" shall mean all periods of Well Pad operation, excluding Malfunctions, periods of well maintenance (*e.g.*, swabbing, liquids unloading), or periods of Shut-In. For Storage Vessel Systems, Normal Operations include, but are not limited to, receipt or transfer of liquids from a Separator or Heater-Treater.

x. "NSPS OOOO" shall mean the Standards of Performance for Crude Oil and Natural Gas Production, Transmission and Distribution for Which Construction, Modification or Reconstruction Commenced After August 23, 2011 and on or Before September 15, 2015, set forth at 40 C.F.R. Part 60, Subpart OOOO.

y. "NSPS OOOOa" shall mean the Standards of Performance for Crude Oil and Natural Gas Facilities for Which Construction, Modification or Reconstruction Commenced After September 18, 2015, set forth at 40 C.F.R. Part 60, Subpart OOOOa.

z. "PADEP" shall mean Commonwealth of Pennsylvania, Department of Environmental Protection.

aa. "Paragraph" shall mean a portion of this Consent Decree identified by an Arabic numeral.

bb. "Parties" shall mean the United States, PADEP, and PennEnergy.

cc. "Peak Modeled Pressure" shall mean the highest pressure predicted to occur in the Subject Vapor Control System during Normal Operations, as determined according to an Engineering Evaluation.

dd. "Potential Minimum Instantaneous Vapor Flow Rate" or "PMIVFR" shall mean the minimum instantaneous rate of vapors predicted to be routed to a control device or Routed to Process during Normal Operations, including flashing, working, breathing, and standing losses, as determined according to an Engineering Evaluation.

ee. "Potential Peak Instantaneous Vapor Flow Rate" or "PPIVFR" shall mean the maximum instantaneous rate of vapors predicted to be routed to a Subject Vapor Control System during Normal Operations, including flashing, working, breathing, and standing losses, as determined according to an Engineering Evaluation.

ff. "Plaintiffs" shall mean the United States and PADEP.

gg. "Pressure Control Valve" shall mean a valve that allows the flow of vapor based on pressure measurements at the inlet of a control device or VRU.

hh. "Pressure Relief Device" or "PRD" shall mean a thief hatch or a pressure relief valve ("PRV") or pressure vacuum relief valve ("PVRV").

ii. "Pressurized Liquids" shall mean pressurized Produced Oil upstream of the Storage Vessel(s) that has not been exposed to the atmosphere or pressurized Produced Water upstream of the Storage Vessel(s) that has not been exposed to the atmosphere.

jj. "Produced Oil" shall mean oil or condensate that is separated from extracted reservoir fluids during Production Operations.

kk. "Produced Water" shall mean water that is separated from extracted reservoir fluids during Production Operations.

ll. "Production Operations" shall mean the extraction, separation using Separators and/or Heater-Treaters, and temporary storage of reservoir fluids from an oil or natural gas well at a Well Pad.

mm. "PSI" or "psi" shall mean pounds per square inch.

nn. "QA/QC" shall mean quality assurance and quality control.

oo. "Reliable Information" shall mean any observation or detection, when collected by employees or contractors of EPA, PADEP, government contractors, trained PennEnergy employees, trained PennEnergy contractors, or the Verifier of: (i) VOC emissions from a Vapor Control System, an open bypass device or any bypass device as described in Paragraph 47, an open thief hatch, an open Pressure Relief Device, or open-ended line while using an optical gas imaging camera, AVO techniques, or EPA Method 21 monitoring techniques; (ii) any deviation indicated by a Subject Storage Vessel Pressure Monitor as specified in Paragraphs 38 and 39; (iii) any deviation indicated by a Vapor Inlet

Monitor as specified in Paragraph 46; (iv) any deviation from bypass device monitoring as specified in Paragraph 47; (v) Visible Smoke Emissions from a combustion control device; (vi) VOC emissions from an unlit combustion control device; (vii) any deviation as indicated by an Auto Pilot Relighter or Pilot Monitor as specified in Paragraphs 50 and 51; (viii) significant staining emanating from a PRD, where such staining was not previously identified during a Field Survey or previously identified as Reliable Information; or (ix) recorded VRU uptime is less than represented on a rolling 12-month basis, as specified in Paragraph 48. The following shall not be considered Reliable Information notwithstanding any other provision of the Consent Decree:

(1) Observations while conducting the pressure test required by Paragraph 37;

(2) Any observation or detection of VOC emissions made during active maintenance of equipment associated with a Vapor Control System;

(3) Any observation or detection of VOC emissions from a lit combustion control device, as long as the combustion control device is operated and maintained in conformance with the manufacturer's specifications and the plume of VOC emissions is insignificant and does not extend away from the flare tip or combustion zone;

(4) Any observation or detection of VOC emissions made during well unloading, during Storage Vessel truck loadout conducted without a requirement to control emissions, or during gauging activities; or

(5) Any observation or detection of VOC emissions made while a PennEnergy representative is on-site performing active well maintenance (*e.g.*, swabbing, liquids unloading) at the well production facility associated with the Storage Vessel System.

pp. "Root Cause Analysis" shall mean an assessment conducted through a process of investigation to determine the primary cause and contributing cause(s) of Reliable Information, including but not limited to an analysis of relevant historical trends.

qq. "Routed to Process" or "Route to Process" shall have the meaning set forth in 40 C.F.R. § 60.5430a.

rr. "Section" shall mean a portion of this Consent Decree identified by a Roman numeral.

ss. "Separator" shall mean a pressurized vessel designed to separate reservoir fluids into their constituent components of Produced Oil, natural gas, and Produced Water.

tt. "Set Point" shall mean the rated pressure at which the Storage Vessel PRD is designed to be fully lifted. The Set Point shall be not greater than the manufacturer's rated pressure of the associated Storage Vessel(s).

uu. "Trigger Point" shall mean the pressure verified by field testing specified in Paragraph 37. The Trigger Point for a Storage Vessel System shall be no greater than 2 oz/in^2 below the lowest PRD Set Point.

vv. "Shut-In" shall mean the flow of all liquids and vapor into the Storage Vessel System, Storage Vessel, or piece of equipment has ceased and cannot be resumed without PennEnergy personnel opening valves, activating equipment, or supplying a power source.

ww. "Storage Vessel" shall mean the definition of "storage vessel" as set forth in 40 C.F.R. § 60.5430a.

xx. "Storage Vessel System" shall mean one or more Storage Vessels, with at least one Produced Oil Storage Vessel, that are connected through a common Vapor Control System.

yy. "Subject Vapor Control Systems" shall mean the Vapor Control Systems located at the Facilities listed in Appendix A and those Storage Vessel Systems identified pursuant to Paragraph 59 (Newly Identified Subject Vapor Control Systems).

zz. "Subsection" shall mean a portion of this Consent Decree within a Section that is identified with a capitalized alphabetical letter.

aaa. "TPY" or "tpy" shall mean tons per year.

bbb. "United States" shall mean the United States of America, acting on behalf of EPA.

ccc. "Vapor Control System" or "VCS" shall mean the system used to contain, convey, or control vapors from one or more Storage Vessel(s) (including

flashing, working, breathing, and standing losses as well as any emissions routed to the Storage Vessel(s) or the Vapor Control System(s)). The Vapor Control System includes the Storage Vessel System, piping to convey vapors from a Storage Vessel System to a combustion device and/or Vapor Recovery Unit, fittings, connectors, liquid knockout vessels, openings on Storage Vessels (such as PRDs), the Vapor Recovery Unit (if any), and emission control devices (if any).

ddd. "Vapor Recovery Unit" or "VRU" shall mean a device that captures and compresses all vapors from a Storage Vessel System and Routes to Process such vapors (*e.g.*, for recovery to a sales line).

eee. "Verifier" shall mean the independent third-party verifier retained pursuant to Paragraph 69.

fff. "Visible Smoke Emissions" shall mean observations of smoke from a Vapor Control System for any period or periods of duration greater than or equal to one minute in any fifteen-minute period, pursuant to EPA Method 22 of 40 C.F.R. Part 60, Appendix A.

ggg. "VOC" shall mean volatile organic compounds as defined in 40 C.F.R. § 60.2.

hhh. "Well Pad" shall mean a property with one or more Storage Vessel(s) capable of receiving Produced Oil or Produced Water from Production Operations.

IV. CIVIL PENALTY

9. Within 30 Days after the Effective Date, PennEnergy shall pay the sum of $2,000,000 as a civil penalty, together with interest accruing from the date on which the Consent Decree is lodged with the Court, at the rate specified in 28 U.S.C. § 1961 as of the date of lodging. The civil penalty payment will be divided between the United States and the Commonwealth of Pennsylvania as specified below.

10. PennEnergy shall pay a civil penalty of $1,000,000, together with interest, to the United States by FedWire Electronic Funds Transfer ("EFT") to the DOJ account, in accordance with instructions provided to PennEnergy by the Financial Litigation Unit ("FLU") of the United States Attorney's Office for the Western District of Pennsylvania after the Effective Date. The payment instructions provided by the FLU will include a Consolidated Debt Collection System ("CDCS") number, which PennEnergy shall use to identify all payments required to be made in accordance with this Consent Decree. The FLU will provide the payment instructions to: Bryan Best, 3000 Westinghouse Drive, Suite 300, Cranberry Township PA, 16066, (412) 275-3546, bfbest@pennenergyresources.com on behalf of PennEnergy. PennEnergy 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. PennEnergy shall pay a civil penalty of $1,000,000, together with interest, to the Commonwealth of Pennsylvania – Clean Air Fund by certified or corporate check made out as follows:

> Pennsylvania DEP – Northwest Regional Office
> Air Quality Program
> 230 Chestnut St.
> Meadville, PA 16335
>
> Or, by wire transfer according to instructions provided to PennEnergy by Pennsylvania DEP, upon request.

12. At the time of payment, PennEnergy shall send notice that payment has been made: (i) to EPA via email at cinwd_acctsreceivable@epa.gov or via regular mail at EPA Cincinnati Finance Office, 26 W. Martin Luther King Drive, Cincinnati, Ohio 45268; (ii) to the U.S. EPA Regional Hearing Clerk at R3_Hearing_Clerk@epa.gov; (iii) to DOJ via email or regular mail in accordance with Section XIV; (iv) to EPA in accordance with Section XIV; and (v) to PADEP via email or regular mail in accordance with Section XIV. Such notice shall state that the payment is for the civil penalty owed pursuant to the Consent Decree in *United States and the Commonwealth of Pennsylvania, PADEP v. PennEnergy Resources, LLC* and shall reference the civil action number, CDCS Number and DOJ case number 90-5-2-1-12465.

13. PennEnergy shall not deduct any penalties paid under this Consent Decree pursuant to this Section or Section VIII (Stipulated Penalties) in calculating its federal, state or local income tax.

V. COMPLIANCE REQUIREMENTS

A. FIELD SURVEYS

14. Field Survey. By no later than 60 days after the Effective Date, PennEnergy shall conduct a field survey at each Well Pad listed in Appendix A ("Facility Field Survey").

15. During the Facility Field Survey, PennEnergy shall with respect to equipment on-site:

a. inventory all Storage Vessel types (Produced Oil or Produced Water), Storage Vessel sizes, Storage Vessel serial numbers, and the equipment associated with each Vapor Control System (including piping configuration and low spots), PRD makes/models and Set Points, thief hatch mountings, thief hatch gasket types, VRU makes/models, control

devices makes/models, flow-regulating valves associated with a VRU or control device, and Storage Vessel or VCS blowdown valves;

b. compile the manufacturer designed minimum inlet pressure and temperature range for each control device and manufacturer designed minimum inlet pressure for each VRU; if such information is not available, provide the results of an engineering assessment that determines the minimum and maximum flow rates or pressures necessary to achieve the expected destruction efficiency of the control device;

c. evaluate the physical condition of all PRDs, flow regulating valves associated with a control device, blowdown valves, mountings, and gaskets at each Storage Vessel;

d. evaluate the physical condition of all VRUs and control devices, associated VRU components, associated control device components, and associated monitoring systems; and

e. identify equipment needed to be repaired, replaced, or upgraded.

16. PennEnergy shall ensure that, at the time of the Facility Field Survey, every thief hatch associated with a Vapor Control System is either welded to or mounted on the Storage Vessel with a suitable gasket, in accordance with good engineering practices and manufacturer specifications.

17. During the Facility Field Survey, PennEnergy shall confirm, using field testing or other parametric data, the set pressure of any backpressure regulating devices at the inlet of any control device or VRU on a Vapor Control System, unless the Storage Vessel System is equipped with a Pressure Control Valve that regulates the flow at the inlet to the control device

or VRU. Where the Storage Vessel System is equipped with a Pressure Control Valve, PennEnergy shall confirm the set points for actuating the control valve using Supervisory Control and Data Acquisition ("SCADA").

18. If PennEnergy observes Compromised Equipment or evidence of significant staining emanating from any PRDs associated with any Vapor Control System, PennEnergy shall take appropriate corrective action, including the repair, replacement, or upgrade of such equipment. If PennEnergy fails to complete appropriate corrective action to address any such observations within five Days of each such observation(s), PennEnergy shall until such time that appropriate corrective action can be completed either (a) temporarily Shut-In and isolate as much equipment at the Well Pad as is necessary to address such observation, or (b) immediately Shut-In and cease all Production Operations associated with that Vapor Control System. If PennEnergy observes any other equipment in need of repair or replacement, PennEnergy shall take appropriate corrective action, including the repair, replacement, or upgrade of such equipment, as soon as practicable.

19. Nothing herein shall require PennEnergy to repair, replace, or upgrade such equipment on Shut-In Storage Vessel Systems and their associated Vapor Control Systems except that PennEnergy must repair, replace, or upgrade such equipment prior to resuming Normal Operations. In the event that all Production Operations associated with a Vapor Control System are Shut-In pursuant to Paragraph 18, PennEnergy may resume Production Operations for up to five Calendar Days for the sole purpose of taking corrective actions pursuant to Paragraph 18.

20. PennEnergy shall maintain records of the following information collected during the Facility Field Survey:

a. The date each Storage Vessel System underwent the Facility Field Survey;

b. The full name of the person(s) who performed the Facility Field Survey;

c. A description of the PRDs that includes pressure Set Points, and descriptions of PRDs, blowdown valves, mountings, gaskets, VRUs, control devices, and monitoring systems that include the manufacturer and model number;

d. Whether Compromised Equipment, Reliable Information, or significant staining around potential venting points were observed; and

e. What, if any, repair, replacement, upgrade, or other corrective action was performed, including a description of the PRDs, blowdown valve, mounting, gasket, VRU, control device, or monitoring system, and a description of how that equipment was repaired or with what it was replaced or upgraded.

f. What equipment was temporarily Shut-In and isolated, if any, including the date that such equipment was Shut-In and the date that it was returned to operation.

21. Limited Field Survey. By no later than 90 Days after the Effective Date, PennEnergy shall conduct a Limited Field Survey at each Well Pad listed in Appendix B ("Limited Field Survey").

22. During the Limited Field Survey, PennEnergy shall, with respect to equipment on-site:

a. Inventory all Storage Vessel types (Produced Oil or Produced Water), Storage Vessel sizes, and the equipment associated with each Vapor

Control System (including piping configuration and low spots), PRDs, thief hatch mountings, thief hatch gasket types, VRU makes/models, control devices makes/models, flow-regulating valves associated with a VRU or control device, and Storage Vessel or VCS blowdown valves;

b. Record whether all components of the Vapor Control System are operating;

c. Record the Set Points of PRDs;

d. Record the minimum inlet pressure of combustion control devices;

e. Evaluate the physical condition of all PRDs, thief hatch mountings, thief hatch gaskets, blowdown valves, and monitoring systems associated with the Vapor Control System;

f. Ensure that the Separator(s), including dump valve(s), are operating properly; and

g. Identify any equipment needed to be repaired, replaced, or upgraded.

23. If, while conducting a Limited Field Survey, PennEnergy observes any equipment in need of repair, replacement, or upgrade to reduce the likelihood of excess VOC emissions (e.g., a stuck open Separator dump valve), PennEnergy shall (a) take appropriate corrective action including the repair, replacement, or upgrade of such equipment within five Days, or (b) by no later than the end of the fifth Day, temporarily remove from service as much equipment at the Well Pad as is necessary to stop such excess emissions until the corrective action required by subparagraph (a) is completed. If PennEnergy observes any other equipment in need of repair, replacement, or upgrade, PennEnergy shall take appropriate corrective action, including the repair, replacement, or upgrade of such equipment, as soon as practicable.

24. PennEnergy shall maintain records of the following information for each Limited Field Survey:

a. The date of the Limited Field Survey;

b. The full name of the person(s) who performed the Limited Field Survey;

c. The information collected in Paragraph 22;

d. Whether Compromised Equipment was observed; and

e. What, if any, repair, replacement, upgrade, or other corrective action was performed and a description of how that equipment was repaired or with what it was replaced or upgraded;

f. What equipment was temporarily removed from service, if any, including the date that such equipment was removed from service and the date that it was returned to operation.

B. SAMPLING

25. Pressurized Liquid Sampling. By no later than 75 days after the Effective Date, PennEnergy shall collect and analyze Pressurized Liquids samples from Storage Vessel Systems at the Well Pads listed in Appendix A, in accord with the Sampling and Analysis Plan ("SAP") under Appendix C. PennEnergy shall provide at least 15 Business Days' written Notice (pursuant to Section XIV) to EPA and PADEP of the date when field sampling events are scheduled to occur.

C. COMPLIANCE ASSESSMENT FOR SUBJECT VAPOR CONTROL SYSTEMS

26. Design Analysis Methodology. Prior to the Effective Date, PennEnergy submitted a written Design Analysis Methodology in accordance with Appendix D (Design Analysis Methodology) to EPA for review and comment, after consultation with PADEP. At any time,

PennEnergy may submit a revised Design Analysis Methodology for EPA review and comment, after consultation with PADEP.

27. Engineering Evaluation. No later than 150 days after the Effective Date PennEnergy shall prepare an Engineering Evaluation for each Subject Vapor Control System that shall be based on the Design Analysis Methodology. Each Engineering Evaluation shall incorporate the results of the Facility Field Survey performed pursuant to Paragraphs 14 through 20 (Facility Field Surveys) and the results of the Pressurized Liquids sampling performed pursuant to Paragraph 25 (Pressurized Liquid Sampling). Each Engineering Evaluation shall include a determination as to whether the Subject Vapor Control System is adequately designed and sized for PMIVFR, PPIVFR, and Peak Modeled Pressure. For each Subject Vapor Control System that the Engineering Evaluation determines is not adequately designed and sized for the PMIVFR, PPIVFR, or Peak Modeled Pressure, PennEnergy shall determine what design, equipment, operational, or other modifications are necessary to achieve this objective and revise the Engineering Evaluation accordingly.

28. Modifications. With respect to each Subject Vapor Control System for which PennEnergy has determined, pursuant to Paragraph 27, that modifications are necessary to ensure that the Subject Vapor Control System is adequately designed and sized for the PMIVFR, PPIVFR, and Peak Modeled Pressure, PennEnergy shall implement the respective modifications referenced in the revised Engineering Evaluation no later than 180 days after the Effective Date.

29. Production Operations Shut-In. If PennEnergy has not completed the Engineering Evaluation required by Paragraph 27 or implemented the modifications required by Paragraph 28, if any, by the dates specified therein, PennEnergy shall immediately Shut-In and cease all Production Operations associated with that Subject Vapor Control System until the Engineering

Evaluation required by Paragraph 27 has been completed and the modifications required under Paragraph 28, if any, have been implemented.

30. In the event that Production Operations are temporarily Shut-In pursuant to Paragraphs 18 or 29, PennEnergy may resume Production Operations for up to five Calendar Days for the purpose of (i) completing an Engineering Evaluation at a Subject Vapor Control System, or (ii) taking corrective actions pursuant to Paragraph 18.

31. Verification by IR Camera Inspection. No later than 210 days after the Effective Date, or 210 days after EPA IR Camera Inspection Standard Operating Procedure (SOP) and DI/PM Plan approval, whichever is last to occur, PennEnergy shall verify that each Subject Vapor Control System is adequately designed and sized for the PMIVFR, PPIVFR, and Peak Modeled Pressure by conducting an IR Camera Inspection of each Subject Vapor Control System.

a. Inspections under this Paragraph must be conducted pursuant to the IR Camera Inspection Standard Operating Procedure (SOP) prepared by PennEnergy and approved by EPA pursuant to Appendix E (DI/PM Program). A video record of each IR Camera Inspection performed pursuant to this Paragraph shall be maintained and available to EPA and PADEP upon request.

b. Each such inspection shall be conducted during Normal Operations while, and immediately after, Produced Oil dump valves send Produced Oil to the Storage Vessel System. If multiple Produced Oil dump valves are capable of dumping simultaneously to the Storage Vessel System, such inspections shall be conducted when all Separators' Produced Oil dump

valves are sending Produced Oil either simultaneously or by manually triggering each Separator Produced Oil dump valve in succession.

c. If PennEnergy observes Reliable Information during an IR Camera Inspection, PennEnergy shall comply with the applicable requirements of Paragraphs 53 through 57.

32. Certification of Completion Report. No later than 240 days after the Effective Date, PennEnergy shall submit to EPA and PADEP a Certification of Completion Report, in electronic spreadsheet or database format, that contains the following information for each Subject Vapor Control System:

a. The results of the Engineering Evaluation (including any revised Engineering Evaluation);

b. The PMIVFR, PPIVFR, Vapor Control System Capacity, Peak Modeled Pressure, and Maximum Design Pressure;

c. A description of each modification required by Paragraph 28, if any, made to equipment or to operations as a result of the Engineering Evaluation;

d. A description of the site-specific or system-wide operational parameters or practices relied upon in the Engineering Evaluation (including but not limited to the maximum operating pressure for final stage of separation, the minimum available headspace in Storage Vessels, and whether the flow to the Storage Vessels is intermittent (*i.e.*, transient) or steady state);

e. The results of any operator reviews of the cause of any deviation indicated by a Subject Storage Vessel Pressure Monitor as specified in Paragraph 39

during the first 60 Days after each of the Subject Storage Vessel Pressure Monitors is installed and calibrated pursuant to Paragraph 35;

f. The minimum Storage Vessel System PRD settings; and

g. The date an IR Camera Inspection was completed pursuant to Paragraph 31 (Verification by IR Camera Inspection) and the results of such inspection, along with all corrective actions performed to address Reliable Information, the date and time of each corrective action performed, and the date and method of verification used to determine that the corrective action was successful.

33. Changes after the Certification of Completion Report. After PennEnergy has submitted a Certification of Completion Report for a Subject Vapor Control System in compliance with Paragraph 32 and PennEnergy subsequently makes any changes such that: (1) the PPIVFR of the Subject Vapor Control System is increased beyond what was evaluated in the Engineering Evaluation or (2) the Subject Vapor Control System capacity decreases, PennEnergy shall:

a. revise the Engineering Evaluation required by Paragraph 27 within 30 Days of the change;

b. implement all modifications necessary to ensure that the Subject Vapor Control System is adequately designed and sized for the revised PMIVFR, PPIVFR, and Peak Modeled Pressure within 60 Days of the change or, in failing to meet such modification deadline, immediately Shut-In and cease all Production Operations associated with that Subject Vapor Control System;

c. verify that each Subject Vapor Control System is adequately designed and sized for the PMIVFR, PPIVFR, and Peak Modeled Pressure by conducting an IR Camera Inspection in compliance with Paragraph 31; and

d. submit an updated Certification of Completion Report with the next Semi-Annual Report due at least 30 Days after the IR Camera Inspection conducted pursuant to Paragraph 33.c.

D. DIRECTED INSPECTION / PREVENTATIVE MAINTENANCE

34. Directed Inspection/Preventative Maintenance Program. Prior to the Effective Date, PennEnergy shall submit for review and approval by EPA in consultation with PADEP (pursuant to Paragraph 99) a directed inspection and preventative maintenance ("DI/PM") Plan in accordance with the requirements under Appendix E (DI/PM Program). PennEnergy shall commence implementation of the DI/PM Plan, as approved, at all Subject Vapor Control Systems no later than 30 Days after the Effective Date or 30 days after EPA DI/PM Plan approval, whichever is last to occur.

E. STORAGE VESSEL PRESSURE MONITORING FOR SUBJECT VAPOR CONTROL SYSTEMS

35. No later than 90 days after the Effective Date, PennEnergy shall, in accordance with manufacturer's recommendations, install, calibrate, maintain, and operate one electronic pressure monitor for each Subject Vapor Control System (collectively, "Subject Storage Vessel Pressure Monitors"). These Subject Storage Vessel Pressure Monitors shall record data at least once every 15 seconds and, every one minute, shall transmit pressure measurement records to a central monitoring station. The Subject Storage Vessel Pressure Monitors must be operated and function continuously except during instances of Malfunction, maintenance, calibration, or repair

of the Subject Storage Vessel Pressure Monitors. If a Subject Storage Vessel Pressure Monitor is identified as Malfunctioning, PennEnergy shall complete the repair within five Days of discovering the Subject Storage Vessel Pressure Monitor is Malfunctioning or Shut-In all Production Operations at the Storage Vessel System until a repair is completed. PennEnergy shall record all dates, durations of Subject Storage Vessel Pressure Monitor Malfunctions, maintenance, calibration, and repair; and report this information as required by Section VI (Periodic Reporting). In the case of a telecommunications failure beyond PennEnergy's control, it shall not be a violation of the data transmission requirement in this Paragraph if data recorded during such failure is transmitted to a central monitoring station within a reasonable time after the recommencement of telecommunications services.

36. During the first 60 Days after each of the Subject Storage Vessel Pressure Monitors is installed and calibrated pursuant to Paragraph 35, PennEnergy shall optimize in accordance with manufacturer's recommendations each Subject Storage Vessel Pressure Monitor to ensure that the data it produces is accurate.

37. No later than 90 Days after each of the Subject Storage Vessel Pressure Monitors is installed and calibrated pursuant to Paragraph 35, PennEnergy shall select the Trigger Point for each Subject Vapor Control System. PennEnergy shall perform a pressure test to confirm that the Trigger Point is below the Leak Point using representative Vapor Control System field testing verified with an IR Camera. VCS field testing will be considered representative if such testing is based on a sample of Vapor Control Systems of sufficient size to generate statistically significant results and each VCS in the sample is equipped with a set of PRDs that have the same make, model and Set Point as the PRDs in the VCS for which a Trigger Point is being confirmed.

After selecting a Trigger Point, PennEnergy shall verify each calendar month that the Trigger Point is less than the Leak Point at each Subject Vapor Control System.

38. If, at any time after the optimization period for Storage Vessel Pressure Monitors as set forth in Paragraph 36: (a) a Subject Storage Vessel Pressure Monitor records a sustained measurement that exceeds the Trigger Point for a duration of two minutes, PennEnergy shall ensure than an automatic alert is sent to an operator and shall take appropriate corrective action to reduce pressure measurements to below the Trigger Point, which may include remote shut-in of one or more separators; or (b) a Subject Storage Vessel Pressure Monitor records a sustained measurement that exceeds the Trigger Point for a duration of three minutes, PennEnergy shall ensure that an automatic alert is sent to an operator and that all Production Operations associated with the Storage Vessel System are automatically and immediately Shut-In. All such Production Operations shall remain Shut-In until the pressure measurement has fallen below the Trigger Point and the operator dispatched to the Facility has verified that the PRDs are properly seated and sealed. Such deviation shall constitute Reliable Information, except that Paragraphs 53 and 54 shall not apply and PennEnergy shall comply with the requirements of Paragraphs 55 through 57.

39. If, at any time after conducting the pressure test and determining the Trigger Point of any Subject Storage Vessel Pressure Monitor, as required pursuant to Paragraph 37, a deviation occurs at that Subject Storage Vessel Pressure Monitor, as described in Paragraphs 39.a through 39.e, an automatic notification shall alert PennEnergy personnel of the deviation and such notification shall constitute Reliable Information and PennEnergy shall comply with the applicable requirements of Paragraphs 53 through 57. A Subject Storage Vessel Pressure Monitor deviation is whenever a Subject Storage Vessel Pressure Monitor:

a. records two or more measurements within a Day that exceed the Trigger Point for a Vapor Control System;

b. records measurements below 0.25 ounces per square inch gauge for a duration of two minutes or longer;

c. exhibits a communication loss to the transmitter for a duration of five minutes or longer;

d. records static measurements for a duration of two hours or longer; or,

e. indicates that there is a loss of communications with the central monitoring station for a period of two hours or longer.

F. VRU AND CONTROL DEVICE MONITORING AT SUBJECT VAPOR CONTROL SYSTEMS

40. Vapor Inlet Monitors at Subject Vapor Control Systems. No later than 60 days after the Effective Date, PennEnergy shall, in accordance with manufacturer's recommendations, install, calibrate, maintain, and operate a monitor for each vapor inlet to a VRU, and to a control device (collectively, "Vapor Inlet Monitors") at each Subject Vapor Control System. PennEnergy may use the Subject Storage Vessel Pressure Monitor as the VRU Vapor Inlet Monitor.

41. Each Vapor Inlet Monitor that is installed, calibrated, maintained, and operated at a Subject Vapor Control System in accordance with the preceding Paragraph shall be located and designed to demonstrate that the pressures or flows at the inlet to the VRU or control device are consistent with the VRU and control device manufacturer specifications. Each such Vapor Inlet Monitor shall continually measure, calculate, and record vapor volumetric flow or pressure, as appropriate.

42. PennEnergy shall install, calibrate, maintain, and operate a Pressure Control Valve on each Subject Vapor Control System, in accordance with the deadline in Paragraph 40.

43. PennEnergy shall use the Vapor Inlet Monitor to demonstrate that the volumetric flow or pressure at the inlet to the VRU or control device is not less than the minimum, or greater than the maximum, specified by the equipment manufacturer.

44. Each Vapor Inlet Monitor shall record data at least once every 15 seconds and, every one minute, shall transmit pressure measurement records to a central monitoring station. The Vapor Inlet Monitor must be operated and function continuously except during instances of Malfunction, maintenance, repair, or calibration of the Vapor Inlet Monitor. If the Vapor Inlet Monitor is identified as Malfunctioning, PennEnergy shall complete all necessary repairs within five Days. PennEnergy shall record all dates and durations of Malfunction, maintenance, repair, or calibration of any Vapor Inlet Monitor and report this information as required by Section VI (Periodic Reporting).

45. During the first 30 Days after the deadline set forth in Paragraph 40 above, PennEnergy shall verify the calibration of, and shall take any necessary measures to optimize the operation of each Vapor Inlet Monitor to ensure that data produced is accurate and reliable.

46. No later than 60 Days after each Vapor Inlet Monitor is installed pursuant to Paragraph 40, PennEnergy shall begin, and shall thereafter continue, to record: the date, time, location, and flow or pressure measurement at all times whenever the Pressure Control Valve is open and the volumetric flow or pressure is less than the minimum, or greater than the maximum, specified by the equipment manufacturer. Each such record shall constitute Reliable Information and PennEnergy shall comply with the applicable requirements set forth in Paragraphs 53 through 57.

47. Bypass Monitoring at Subject Vapor Control Systems. For each VRU and control device for which a bypass line exists at a Subject Vapor Control System (including a VRU bypass that diverts vapors away from the VRU to a control device, unless the control device complies with Paragraph 41, or as excluded by 40 C.F.R. § 60.5411a(a)(3)(ii)), PennEnergy shall comply with the bypass monitoring requirements of 40 C.F.R. §§ 60.5411a(c)(3), 60.5416a(c)(3) and 60.5420a(c)(8). Whenever a bypass occurs, such bypass shall constitute Reliable Information and PennEnergy shall comply with the applicable requirements set forth in Paragraphs 53 through 57.

48. VRU Availability Monitoring. Starting no later than the Effective Date, PennEnergy shall record VRU uptime for each VRU installed at a Subject Vapor Control System for which PennEnergy has made prior written representation(s) to PADEP regarding such VRU's availability to control vapors. Whenever recorded VRU uptime is less than represented runtime on a rolling 12-month basis, such information shall constitute Reliable Information and PennEnergy shall comply with the applicable requirements set forth in Paragraphs 53 through 57. PennEnergy may remove a VRU in accordance with applicable legal requirements, so long as PennEnergy complies with Paragraph 33 (Changes after the Certification of Completion Report).

49. Combustion Control Device Auto Pilot Relighters and Pilot Monitoring for Subject Vapor Control Systems. For each combustion control device at a Subject Vapor Control System, on or before 60 days after the Effective Date, PennEnergy shall install, calibrate, maintain, and operate, in accordance with manufacturer's recommendations: (i) an automatic ignition system (collectively, "Auto Pilot Relighters"); and (ii) a thermocouple or equivalent device to detect the presence of a flame for each combustion control device (collectively, "Pilot Monitors"). The Auto Pilot Relighters shall relight the pilot whenever the Pilot Monitors indicate

that the combustion control device pilot is unlit. The Pilot Monitors shall record data at least once every 15 seconds and, every one minute, shall transmit data to a central monitoring station. The Auto Pilot Relighters and Pilot Monitors must be operated and must properly function continuously except during instances of Malfunction, maintenance, repair, or calibration of the Auto Pilot Relighters or the Pilot Monitors. If an Auto Pilot Relighter or a Pilot Monitor is identified as Malfunctioning, PennEnergy shall successfully complete the repair or maintenance within five Days. PennEnergy shall record all dates and durations of Auto Pilot Relighters Malfunctions, Pilot Monitor Malfunctions, maintenance, repair, or calibration and report this information as required by Section VI (Periodic Reporting).

50. If, at any time after the date by which PennEnergy is required to install, calibrate, maintain, and operate Auto Pilot Relighters and Pilot Monitors pursuant to Paragraph 49, a Pilot Monitor records measurements indicating the pilot is not lit for a duration of two minutes or longer, PennEnergy shall ensure that an automatic notification alerts PennEnergy personnel of such deviation and PennEnergy shall ensure that all flow of vapors to the combustion control device is automatically and immediately ceased until the pilot is relit. Such deviation shall constitute Reliable Information, and PennEnergy shall comply with the requirements of Paragraphs 53 through 57.

51. If, at any time after the deadline by which PennEnergy is required to install, calibrate, maintain, and operate Auto Pilot Relighters and Pilot Monitors pursuant to Paragraph 49, a deviation occurs at any Pilot Monitor, as described below in Paragraph 51.a through 51.c, an automatic notification shall alert PennEnergy personnel of the deviation and such notification shall constitute Reliable Information and shall require PennEnergy to comply with the applicable

requirements of Paragraphs 53 through 57. A Pilot Monitor deviation is whenever a Pilot Monitor:

a. has a communication loss for a duration of two minutes or longer;

b. that is a thermocouple, records a negative measurement for a duration of two minutes or longer, records a measurement above or below the maximum span of the transducer or records static measurements for a duration of three minutes or longer; or

c. indicates that there is a loss of communications with the central monitoring station for a period of two hours or longer.

G. RELIABLE INFORMATION, ROOT CAUSE ANALYSIS, AND CORRECTIVE ACTION

52. If at any time, PennEnergy personnel observe any improperly open bypass device, improperly open PRD, or open-ended line, PennEnergy shall address such observation with corrective action (including by manually closing such device or equipment, if appropriate) as quickly as practicable and no later than eight hours after the observation.

53. No more than five Calendar Days after PennEnergy obtains Reliable Information, PennEnergy shall either: (i) identify the suspected cause of the Reliable Information and complete all necessary corrective actions to address the Reliable Information; or (ii) temporarily Shut-In in accordance with Paragraph 54. Where the cause of Reliable Information is planned maintenance (other than the types of maintenance excluded from the definition of Reliable Information in Paragraph 8.oo), PennEnergy shall also record the cause and duration of such maintenance and report this information as required by Section VI (Periodic Reporting).

54. If PennEnergy is required to temporarily Shut-In equipment pursuant to Paragraph 53, PennEnergy shall proceed as follows:

a. If the Storage Vessel System has already undergone an Engineering Evaluation pursuant to Paragraph 27, PennEnergy shall temporarily remove from service as much equipment at the Subject Vapor Control System as is necessary to address the Reliable Information until all necessary corrective actions to address the Reliable Information have been completed. PennEnergy shall verify the corrective actions during the next monthly IR Camera Inspection.

b. If the Storage Vessel System has not yet undergone an Engineering Evaluation pursuant to Paragraph 27, all Production Operations shall remain Shut-In until the Engineering Evaluation and all necessary modifications, pursuant to Paragraph 28, and all necessary corrective actions to address the Reliable Information have been completed. PennEnergy shall comply with the requirements of Paragraph 31 (Verification by IR Camera Inspection) at such Storage Vessel System within 30 Days of resuming any Production Operations associated with that Storage Vessel System.

55. PennEnergy shall complete a quarterly Root Cause Analysis of all Reliable Information within 30 Days after the end of each calendar quarter for each Facility and identify the corrective actions to be taken to address any operation, maintenance, or design cause(s). PennEnergy shall implement any corrective actions necessary to address operation and maintenance causes no later than 30 Days after the completion of the Root Cause Analysis. Where the Root Cause Analysis identifies corrective action(s) to address a design cause, PennEnergy shall comply with Paragraph 56. Additional instances of Reliable Information at a

Subject Vapor Control System at which PennEnergy is performing a Root Cause Analysis at that time shall be added as additional information in that Root Cause Analysis but shall not trigger additional Root Cause Analyses.

56. If a Root Cause Analysis identifies any design cause or indicates that any Subject Vapor Control System is not adequately designed and sized for PMIVFR, PPIVFR, and Peak Modeled Pressure, as determined in accordance with the Design Analysis Methodology, PennEnergy shall:

a. revise the Engineering Evaluation and implement any necessary modifications no later than 90 Days after the completion of the Root Cause Analysis to ensure that the Subject Vapor Control System is adequately designed and sized;

b. immediately Shut-In and cease all Production Operations associated with that Subject Vapor Control System if PennEnergy fails to implement the modifications required by Paragraph 56.a within 90 Days after the completion of the Root Cause Analysis;

c. comply with the requirements of Paragraph 31 (Verification by IR Camera Inspection) at each such Storage Vessel System within 30 Days of resuming any Production Operations associated with that Storage Vessel System; and

d. submit an updated Certification of Completion Report with the next Semi-Annual Report due at least 30 Days following completion of all requirements in this Paragraph 56.

57. In the event that Production Operations are temporarily Shut-In at any Subject Vapor Control System pursuant to Paragraph 56.b, PennEnergy may resume Production Operations for up to five Days for the sole purpose of performing an IR Camera Inspection pursuant to Paragraph 31, upon completion of any modifications.

H. PERFORMANCE STANDARDS AND PERMITTING REQUIREMENTS

58. No later than the date PennEnergy submits the Certification of Completion Report required by Paragraph 32, PennEnergy shall comply with the requirements for storage vessel affected facilities as set forth in NSPS OOOO and NSPS OOOOa (depending on the date of construction, reconstruction or modification) at each Well Pad listed in Appendix A.

59. Newly Identified Subject Vapor Control Systems. If, at any time, PennEnergy redirects Produced Oil from a Storage Vessel System at a Well Pad that has a Subject Vapor Control System to any Storage Vessel System at a Well Pad that does not have a Subject Vapor Control System, PennEnergy shall:

a. notify EPA and PADEP within 30 Days of sending Produced Oil to such newly identified Subject Vapor Control System;

b. comply with Paragraphs 14 through 57 for such newly identified Subject Vapor Control System within 60 Days of sending Produced Oil to the System; and

c. identify such newly identified Subject Vapor Control System to EPA as part of the next Semi-Annual Report, as required by Paragraph 92.

I. EMISSION CREDIT GENERATION

60. PennEnergy shall not use any emission reductions that result from actions required by this Consent Decree for the purposes of obtaining project decreases, netting reductions, or emission offset credits, including applying for, obtaining, trading, or selling any

emission reductions credits. Nothing in this Paragraph shall be construed as prohibiting PennEnergy from selling its natural gas as "certified gas," "independently certified gas," or "responsibly sourced gas."

J. ENVIRONMENTAL MITIGATION PROJECTS

61. PennEnergy shall implement the Environmental Mitigation Project(s) ("Projects") described in Appendix F in compliance with the approved plan and schedule for such Project and other terms of this Consent Decree.

62. PennEnergy shall maintain and, within 30 Days of a request from EPA or PADEP, provide copies of all documents to identify and substantiate the costs expended to implement the Projects described in Appendix F.

63. All plans and reports prepared by PennEnergy pursuant to the requirements of this Subsection are required to be submitted to EPA and PADEP, and PennEnergy shall make any such plan or report available to the public upon request and without charge.

64. Project Certification. PennEnergy shall certify, as part of each plan submitted to EPA and PADEP for any Project, that:

a. PennEnergy is not required to perform the Project by any federal, state, or local law or regulation or by any agreement, grant, or as injunctive relief awarded in any other action in any forum;

b. The Project is not a project that PennEnergy was planning or intending to construct, perform, or implement other than in settlement of the claims resolved in this Consent Decree; and

c. PennEnergy has not received and will not receive credit for the Project in any other enforcement action.

65. PennEnergy shall use its best efforts to secure as much environmental benefit as possible for the Projects, consistent with the applicable requirements and limits of this Consent Decree.

66. PennEnergy shall comply with the reporting requirements described in Appendix F.

67. In connection with any communication to the public or shareholders regarding PennEnergy's actions or expenditures relating in any way to the Projects in this Consent Decree, PennEnergy shall include in the communication the information that the actions and expenditures were required as a part of this Consent Decree.

68. Project Completion Notice. In the Semi-Annual Report required by Section VI (Periodic Reporting), which is due no earlier than 30 Days following the completion of each Project required under this Consent Decree (including any applicable periods of demonstration or testing), PennEnergy shall submit to EPA and PADEP a report that documents the date the Project was completed, the results achieved by implementing the Project, including a general discussion of the environmental benefits and, where feasible, the estimated emissions reductions, and the costs expended by PennEnergy in implementing the Project.

K. THIRD-PARTY VERIFICATION PROGRAM

69. PennEnergy shall hire an independent third-party verifier ("Verifier") to conduct a compliance verification program ("Compliance Verification Program") at each of the Well Pads listed in Appendix A, along with any Storage Vessel Systems newly identified pursuant to Paragraph 59, to (a) evaluate and make a determination as to PennEnergy's compliance with Consent Decree requirements in Section V (Compliance Requirements) A through G; and (b) complete a Verification Program Report as detailed in Paragraph 86 of this Section.

70. PennEnergy shall bear the cost of retaining the Verifier and shall ensure that the Verifier conducts the Compliance Verification Program in accordance with the requirements of this Subsection.

71. PennEnergy shall not employ the Verifier or any of its personnel who managed, conducted, or otherwise participated in this Compliance Verification Program to provide any other commercial, business, or voluntary services to PennEnergy for a period of at least one year following the Verifier's submission of its final Verification Program Report.

72. Hiring. Within 30 Days of the Effective Date, PennEnergy shall submit to EPA and PADEP the name(s) and qualifications of one or more proposed Verifiers that meet the following requirements:

a. The proposed Verifier has expertise and competence in Vapor Control Systems, NSPS OOOO, and NSPS OOOOa;

b. The proposed Verifier and its personnel have not been employed by PennEnergy, have not conducted research and/or development for PennEnergy, and have not provided advisory services of any kind (including but not limited to design, construction, financial, engineering, hazardous waste management, legal, or consulting services) to PennEnergy, within two years prior to the Effective Date; and

c. The proposed Verifier has not been retained by PennEnergy to satisfy any of the requirements of Section V (Compliance Requirements) of this Consent Decree.

73. In the event that PennEnergy is unable, after extensive efforts, to identify a Verifier that would satisfy all of the conditions in Paragraph 72, PennEnergy may propose a

Verifier who does not meet the requirements of Paragraph 72.b and shall submit to EPA and PADEP:

a. an explanation of its efforts to find a Verifier that meets the conditions in Paragraph 72;

b. the names of one or more proposed Verifiers that does not meet the requirement in Paragraph 72.b and an explanation of why this requirement is not being met; and

c. a conflict of interest mitigation plan for how PennEnergy will ensure that the Verifier will have sufficient independence to objectively and competently perform the Compliance Verification Program.

74. Verifier Approval Procedure. PennEnergy shall direct Proposed Verifiers to submit the Verifier Certification Form (Appendix G) to PennEnergy, EPA, and PADEP simultaneously within 30 days of the Effective Date. EPA, after consulting with PADEP, shall inform PennEnergy in writing which of the proposed Verifiers, if any, it has approved. Within 30 Days of the EPA's written approval, PennEnergy shall retain the approved candidate to serve as the Verifier and to perform the activities set forth in this Subsection.

75. If EPA disapproves of all proposed Verifiers, PennEnergy shall, within 21 Days of receipt of EPA's written notification, submit to the EPA for approval the names, qualifications, and completed Verifier Certification Form (Appendix G) of one or more additional proposed Verifier that meets the qualifications set forth in Paragraph 72. EPA, after consulting with PADEP, shall again provide written approval or disapproval of the proposed Verifier, per Paragraphs 73 and 74.

76. Verifier Replacement Procedure. If PennEnergy or EPA, after consulting with PADEP, determines that the Verifier approved by EPA cannot satisfactorily perform the required Compliance Verification Program, PennEnergy, EPA and PADEP shall informally confer. If they agree that a new Verifier should be selected, PennEnergy shall submit to EPA for approval the name and qualifications of one or more proposed replacement Verifiers that meet the qualifications set forth in Paragraph 72. If PennEnergy and EPA do not agree on the need to select a replacement Verifier, EPA's position shall control, subject to PennEnergy's right to invoke the dispute resolution procedures in Section X (Dispute Resolution) of this Consent Decree.

77. Nothing in Paragraph 76 precludes EPA from assessing stipulated penalties for missed Compliance Verification Program deadlines associated with the need to replace a Verifier, unless PennEnergy successfully asserts that the inability of the Verifier to perform the required Compliance Verification Programs was due to a Force Majeure event in accordance with Section IX (Force Majeure) of this Consent Decree

78. Conducting the Compliance Verification Program. PennEnergy shall give the Verifier a copy of this Consent Decree and all appendices, the Design Analysis Methodology developed pursuant to Paragraph 26, the Engineering Evaluations developed pursuant to Paragraph 27, the Certification of Completion Reports developed pursuant to Paragraphs 32 and 33, and all other information and access necessary to complete the Compliance Verification Program.

79. PennEnergy shall ensure that the Verifier will evaluate PennEnergy's compliance with the Consent Decree requirements in Section V (Compliance Requirements) at each Well Pad listed in Appendix A (as well as any Storage Vessel System newly identified pursuant to

Paragraph 59), as of the date of the initiation of the Verification Program for that Subject Vapor Control System, including but not limited to whether:

a. the site-specific inputs and assumptions were correctly identified in the Engineering Evaluation, as informed by the Design Analysis Methodology prepared in accordance with Appendix D;

b. each Subject Vapor Control System is adequately designed and sized for PMIVFR, PPIVFR, and Peak Modeled Pressure; and

c. all modifications made pursuant to Paragraph 28 have been fully and correctly implemented in accordance with the requirements of this Consent Decree.

80. The Compliance Verification Program shall include a site visit to all Well Pads listed in Appendix A (including any Vapor Control Systems newly identified in accordance with Paragraph 59) by the Verifier and shall be conducted in sufficient detail to permit the Verifier to validate the results of the determinations made pursuant to Paragraph 79. PennEnergy shall instruct the Verifier to notify PennEnergy within 24 hours of any observation of Reliable Information during the site visit.

81. One or more representatives of PennEnergy with a comprehensive understanding of this Consent Decree shall accompany the Verifier during the on site portion of the Compliance Verification Program. The representatives of PennEnergy shall not interfere with the independent judgment of the Verifier.

82. PennEnergy shall permit representatives of EPA and PADEP to participate in the on site portion of the Compliance Verification Program as observers. PennEnergy shall notify EPA and PADEP at least 14 Days before each site visit by the Verifier.

83. As to each Subject Vapor Control System, the Compliance Verification Program shall begin no earlier than 90 Days after PennEnergy submits the Certification of Completion Report pursuant to Paragraphs 32 or 33 and shall be completed no later than 120 Days thereafter.

84. PennEnergy shall cooperate fully with any reasonable requests of the Verifier, and provide the Verifier with access, upon reasonable notice and taking into account operational impacts, to all records, employees, contractors, and properties under PennEnergy's ownership or control that the Verifier reasonably deems appropriate to effectively perform the duties described in this Section.

85. PennEnergy shall direct the Verifier to prepare a Compliance Verification Program Report for each Subject Vapor Control System. PennEnergy shall direct the Verifier to simultaneously send a copy of a Compliance Verification Program Report for each Subject Vapor Control System to PennEnergy and to EPA and PADEP no later than 60 Days after the completion of the site visit conducted pursuant to Paragraph 80. PennEnergy shall ensure the Verifier does not share draft reports with PennEnergy prior to submission of the Compliance Verification Program Report to EPA.

86. The Compliance Verification Program Report shall present the Compliance Verification Program findings and shall, at a minimum, contain the following information:

a. Verification Program scope, including the period of time covered by the Verification Program and an identification of all Well Pads evaluated;

b. The date(s) the on-site portion of the Verification Program was conducted;

c. Identification of Verifier's team members;

d. Identification of representatives of PennEnergy and regulatory agency personnel observing the Compliance Verification Program;

e. A summary of the Compliance Verification Program process, including any obstacles encountered;

f. Detailed Compliance Verification Program findings, including a determination as to PennEnergy's compliance with the requirements of Section V of the Consent Decree, including but not limited to the requirements referenced in Paragraph 79;

g. Copies of any photos or videos obtained during the Compliance Verification Program and the names of any PennEnergy representatives or personnel interviewed;

h. Recommendations by the Verifier, based on the findings and areas of concern, for corrective actions;

i. Detailed description of any Reliable Information observed, including the date the Reliable Information was observed; a description of the Reliable Information; identification of the Subject Vapor Control System at issue; the operation, maintenance or design cause(s) identified through PennEnergy's Root Cause Analysis or otherwise; a description of the corrective actions recommended or implemented, the date corrective actions were implemented (or proposed schedule for implementation of such corrective actions), the date that each corrective action was verified by an IR Camera Inspection, and a summary of the results of that Inspection; and

j. A certification by the Verifier, in the form set forth in Paragraph 95.

87. Upon the Verifier's submission of the Compliance Verification Program Report to PennEnergy, EPA and PADEP, PennEnergy shall investigate and report to the Verifier, EPA, and PADEP on any recommendations, areas of concern, or recommended corrective actions identified in the Compliance Verification Program Report, as follows:

a. Within 60 Days after the Verifier's submission of the Compliance Verification Program Report to PennEnergy, EPA, and PADEP, PennEnergy shall submit for the Verifier's review and comment an Action Plan to fully address all recommendations, areas of concern, and recommended corrective actions contained in the Compliance Verification Program Report. The Action Plan shall provide specific deliverables, responsibility assignments, and an implementation schedule to address all recommendations, areas of concern, and recommended corrective actions. PennEnergy shall submit a copy of the Action Plan to EPA and PADEP on the same Day it is submitted to the Verifier;

b. PennEnergy shall direct the Verifier to review and comment on the Action Plan, and direct the Verifier to simultaneously send a copy of its comments on the Action Plan to PennEnergy, EPA and PADEP no later than 30 Days after the Verifier receives the Action Plan; and

c. Within 30 Days of receiving the Verifier's comments, EPA and PADEP may provide additional comments, if any, to PennEnergy.

88. No later than 60 Days after receiving comments from the Verifier, PennEnergy shall (i) revise the Action Plan to address comments from the Verifier and comments from EPA, if any; (ii) submit a revised Action Plan to EPA and PADEP; and (iii) implement the Action Plan

in accordance with the requirements and schedules set forth therein unless otherwise notified in writing by EPA within 30 Days of receiving the revised Action Plan.

89. Within 30 Days after implementation of the Action Plan is complete, PennEnergy shall submit to EPA and PADEP a Completion Report explaining how each item in the Action Plan was addressed and certifying that implementation of the Action Plan is complete. The Completion Report shall comply with the certification requirements of Paragraph 95 of the Consent Decree.

90. Confidential Business Information. PennEnergy may assert that any information required to be provided under this Section is protected as Confidential Business Information ("CBI") under 40 C.F.R. Part 2 and 35 Pa. Stat. § 4013.2 by following the procedures set forth in those regulatory provisions.

VI. PERIODIC REPORTING

91. Within 10 Days of the Effective Date, PennEnergy shall submit to EPA and PADEP for review a list of deadlines included in this Consent Decree. For any deliverable required by the Consent Decree, the list shall indicate whether EPA and PADEP approval is required. The list shall be in substantially the same form as Appendix H and shall be submitted in an electronic format (*e.g.*, unlocked electronic spreadsheet or similar format agreed to by the Parties). Within 10 Days of modification of any deadline under this Consent Decree, PennEnergy shall submit an updated list reflecting changes to the future schedule. In the event of conflict between the list generated pursuant to this Paragraph and the Consent Decree, the Consent Decree shall control.

92. Following entry of this Consent Decree, PennEnergy shall submit to EPA and PADEP in accordance with the requirements of Section XIV (Notices), a Semi-Annual Report no

later than 30 Days after the end of each half of the calendar year (*i.e.*, January through June, and July through December). If the Effective Date is in either June or December, the initial Semi-Annual Report shall not be due until the next six-month reporting period. Each Semi-Annual Report shall contain the following information for the relevant six-month reporting period, if applicable:

a. All records required to be maintained regarding the Facility Field Survey performed pursuant to Paragraph 14;

b. All records required to be maintained regarding the Limited Field Survey performed pursuant to Paragraph 21;

c. All records of pressurized liquid sampling performed pursuant to Paragraph 25, including but not limited to QA/QC assessments and analytical results;

d. The Design Analysis Methodology prepared pursuant to Paragraph 26, including any updates or modifications to such Methodology;

e. All Certification of Completion reports prepared pursuant to Paragraph 32 and 33, including any updates or modifications to such reports;

f. Where any Storage Vessel or Storage Vessel System was required to be Shut-In pursuant to Section V (Compliance Requirements), identify the Storage Vessel System, the date such operations were required to be Shut-In, the cause of the Shut-In, and the date Production Operations or other equipment resumed;

g. Identify all Storage Vessel Systems newly identified pursuant to Paragraph 59, including the dates by which PennEnergy must comply with

Paragraphs 14 through 33 at such Systems and whether each is subject to NSPS OOOO or NSPS OOOOa;

h. The DI/PM Plan prepared pursuant to Paragraph 34 and Appendix E, including any updates or modifications to the DI/PM Plan;

i. Records of IR Camera inspections (video and images to be available upon request), AVO inspections, new or modified maintenance or inspection schedules or replacement program, and a summary of any reviews of or modifications to the spare parts program, prepared in accordance with Paragraph 34 and Appendix E;

j. Whenever PennEnergy obtains Reliable Information, the date Reliable Information was obtained; a description of the Reliable Information (including but not limited to observations obtained during AVO or IR camera inspections, pressure monitor data, control device or VRU monitor data); identification of the Subject Vapor Control System at issue; the operation, maintenance or design cause(s) identified in the Root Cause Analysis; a description of the corrective actions implemented and the date and time corrective actions were implemented (or schedule for implementation of such corrective actions); and the date the corrective action was verified by an IR camera inspection or other inspection methods meeting any EPA Method 21 standard and a summary of the results of that inspection;

k. The date of submittal of the Compliance Verification Program Report and Action Plan required pursuant to Section V, Subsection K (Third Party Verification Program), if submitted during the applicable reporting period;

l. All dates, durations and causes of failures of the Storage Vessel Pressure Monitor, pursuant to Paragraph 35;

m. Any Leak Point(s) and Trigger Point(s) identified pursuant to Paragraph 37;

n. All dates, durations, and causes of failures of the Vapor Inlet Monitor, pursuant to Paragraph 44;

o. All dates, durations and causes of failures of the Auto Pilot Relighter or Pilot Monitor pursuant to Paragraph 49; and,

p. 12-month rolling VRU runtime records pursuant to Paragraph 48 (VRU Availability Monitoring); and,

q. A summary of activities undertaken pursuant to Section V, Subsection J (Environmental Mitigation Projects), the status of Environmental Mitigation Project milestones set forth in Appendix E, and a summary of costs incurred in the implementation of Subsection K since the previous Semi-Annual report.

93. The Semi-Annual 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. If PennEnergy violates, or has reason to believe that it may violate, any requirement of this Consent Decree with an associated stipulated penalty, PennEnergy shall notify the United States,

EPA, and PADEP in accordance with the requirements of Section XIV (Notices) of such violation and its likely duration, in writing, within 10 Days of the Day PennEnergy 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, PennEnergy shall so state in the report. PennEnergy 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 PennEnergy becomes aware of the cause of the violation. Nothing in this Paragraph or the following Paragraph relieves PennEnergy of its obligation to provide the notice required by Section IX (Force Majeure). If EPA or PADEP become aware of any violation of any requirement of this Consent Decree, they will use best efforts to promptly notify PennEnergy of such violation.

94. Whenever any violation of this Consent Decree or of any applicable permit(s) or any other event affecting PennEnergy's performance under this Consent Decree may pose an immediate threat to the public health or welfare or the environment, PennEnergy shall comply with any applicable federal and state or local laws and, in addition, shall notify EPA and PADEP as per Section XIV (Notices) by electronic transmission as soon as possible, but no later than 24 hours after PennEnergy first knew of the violation or event. This notice requirement is in addition to the requirement to provide notice of a violation of this Consent Decree set forth in the preceding Paragraph.

95. Certification Statement. Each report submitted by PennEnergy under this Section, and each Certification of Completion Report submitted pursuant to the requirements of

Paragraphs 32 or 33 shall be signed by an official of the submitting party and include the following certification:

> I certify under penalty of law 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 am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

96. This certification requirement does not apply to emergency notifications where compliance would be impractical.

97. The reporting requirements of this Consent Decree do not relieve PennEnergy 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.

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

VII. APPROVAL OF DELIVERABLES

99. After review of any plan, report, or other item that is required to be submitted for EPA's approval pursuant to this Consent Decree, EPA, after consultation with PADEP, 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.

100. If the submission is approved pursuant to Paragraph 99(a), PennEnergy 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 99(b) or (c), PennEnergy

shall, upon written direction from the EPA (after consulting with PADEP), take all actions required by the approved plan, report, or other item that EPA determines are technically severable from any disapproved portions, subject to PennEnergy's right to dispute only the specified conditions or the disapproved portions, under Section X (Dispute Resolution).

101. If the submission is disapproved in whole or in part pursuant to Paragraph 99, PennEnergy 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, PennEnergy shall proceed in accordance with the preceding Paragraph.

102. If a resubmitted plan, report, or other item, or portion thereof, is disapproved in whole or in part, EPA after consulting with PADEP may again require PennEnergy to correct any deficiencies, in accordance with the preceding Paragraphs, subject to PennEnergy's right to invoke Dispute Resolution and the right of EPA or PADEP to seek stipulated penalties as provided in Section VIII (Stipulated Penalties).

103. If PennEnergy elects to invoke Dispute Resolution as set forth in Paragraphs 100 or 102, PennEnergy shall do so by sending a Notice of Dispute in accordance with Paragraph 123 within 30 Days (or such other time as the Parties agree to in writing) after receipt of the applicable decision.

104. Any stipulated penalties applicable to the original submission, as provided in Section VIII (Stipulated Penalties), 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 PennEnergy's obligations under this Consent Decree, the stipulated penalties applicable to the original submission shall be due and payable notwithstanding any subsequent resubmission.

105. Where any compliance obligation under this Section requires PennEnergy to obtain a federal, state, or local permit or approval, PennEnergy shall submit timely and complete applications and take all other actions necessary to obtain all such permits or approvals. PennEnergy 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 PennEnergy has submitted timely and complete applications and has taken all other actions necessary to obtain all such permits or approvals.

VIII. STIPULATED PENALTIES

106. PennEnergy shall be liable for stipulated penalties to the United States and PADEP 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 Consent Decree, including any work plan approved under this Consent Decree, according to all applicable requirements of this Consent Decree and within the specified time schedules established by or approved under this Consent Decree.

Violation	**Penalty per Facility (unless otherwise noted)**
(a) Failure to perform any of the requirements associated with the Facility Field Survey, as specified in Paragraphs 14, 15, 16, 17, and 20.	$675 per Day for the first 30 Days and $3,300 per Day thereafter
(b) Failure to take corrective action in accordance with Paragraph 18, or Shut-In all Production Operations, as specified in Paragraph 18.	$1,800 per Day for the first 30 Days and $9,000 per Day thereafter

(c) Failure to perform any of the requirements associated with the Limited Field Survey, as specified in Paragraphs 21, 22, and 24.	$675 per Day for the first 30 Days and $3,300 per Day thereafter
(d) Failure to take corrective action or temporarily remove equipment from service, as specified in Paragraph 23.	$1,200 per Day for the first 30 Days and $6,000 per Day thereafter
(e) Failure to collect and analyze Pressurized Liquids samples from Storage Vessel Systems at the Well Pads listed in Appendix A, as specified in Paragraph 25.	$675 per Day for the first 30 Days and $3,300 per Day thereafter
(f) Failure to prepare an Engineering Evaluation for each Subject Vapor Control System, as specified in Paragraph 27.	$1,200 per Day for the first 30 Days and $6,000 per Day thereafter
(g) Failure to Shut-In and cease Production Operations as required in Paragraph 29.	$1,800 per Day for the first 30 Days and $9,000 per Day thereafter
(h) Failure to verify that each Subject Vapor Control System is adequately designed by conducting an IR Camera Inspection as specified in Paragraph 31.	$675 per Day for the first 30 Days and $4,000 per Day thereafter
(i) Failure to submit to EPA and PADEP a Certification of Completion Report as specified in Paragraph 32.	$675 per Day for the first 30 Days and $4,000 per Day thereafter
(j) Failure to revise an Engineering Evaluation, implement the necessary modifications, verify adequacy with an IR Camera Inspection, or submit an updated Certification of Completion report, as required by Paragraph 33.	$675 per Day for the first 30 Days and $4,000 per Day thereafter
(k) Failure to comply with the DI/PM Program requirements as specified in Paragraph 34.	$675 per Day for the first 30 Days and $3,300 per Day thereafter
(l) Failure to comply with any of the requirements pertaining to Storage Vessel Pressure Monitoring set forth in Paragraphs 35 through 38.	$675 per Day for the first 30 Days and $3,300 per Day thereafter
(m) Failure to comply with any of the requirements pertaining to VRU, Bypass, Control Device, and Pilot Monitoring set forth in Paragraphs 40 through 49.	$675 per Day for the first 30 Days and $3,300 per Day thereafter

(n) Failure to comply with any of the requirements pertaining to Pilot Monitor deviations, as specified in Paragraphs 50 and 51.	$1,800 per Day for the first 30 Days and $9,000 per Day thereafter
(o) Failure to comply with any of the requirements pertaining to an improperly open bypass device, thief hatch, or PRV, or an open-ended line, as set forth in Paragraph 52.	$1,800 per Day for the first 30 Days and $9,000 per Day thereafter
(p) Failure to comply with any of the requirements pertaining to the observation of Reliable Information set forth in Paragraphs 53 and 54.	$1,800 per Day for the first 30 Days and $9,000 per Day thereafter
(q) Failure to complete a Root Cause Analysis and complete all necessary corrective actions or modifications or Shut-In all Production Operations associated with the Subject Vapor Control System, as required in Paragraphs 55 and 56.	$1,800 per Day for the first 30 Days and $9,000 per Day thereafter
(r) Unless subject to another stipulated penalty under this Consent Decree for the same conduct, failure to comply with requirements applicable to a storage vessel affected facility, as required in Paragraph 58.	$1,650 per Day for the first 30 Days and $8,250 per Day thereafter
(s) Failure to comply with any of the requirements for Newly Identified Subject Vapor Control Systems, as required in Paragraph 59.	$675 per Day for the first 30 Days and $3,300 per Day thereafter
(t) Failure to implement the Environmental Mitigation Project(s), as required by Paragraphs 61 through 68.	$675 per Day for the first 30 Days and $4,000 per Day thereafter, assessed on a companywide basis (not per facility)
(u) Failure to comply with the Periodic Reporting requirements as set forth in Paragraphs 91 through 95.	$675 per Day for the first 30 Days and $3,300 per Day thereafter, assessed on a companywide basis (not per facility)
(v) Failure to comply with any of the requirements pertaining to the Third-Party Verification Program set forth in Paragraphs 69 through 89.	$675 per Day for the first 30 Days and $4,000 per Day thereafter, assessed on a companywide basis (not per facility)

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

108. 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.

109. PennEnergy shall pay stipulated penalties to the United States and PADEP within 30 Days of a written demand by the United States or PADEP unless PennEnergy invokes the dispute resolution procedures under Section X ("Dispute Resolution") of this Consent Decree within the 30-Day period. PennEnergy shall pay 50% of the total stipulated penalty amount due to the United States and 50% to PADEP. The Plaintiff making a demand for payment of a stipulated penalty shall simultaneously send a copy of the demand to the other Plaintiff and, where PADEP is the demanding Plaintiff, PADEP shall also send notice of such stipulated penalty demand to EPA Region III via email to the U.S. EPA Region III Regional Hearing Clerk at R3_Hearing_Clerk@epa.gov.

110. Either Plaintiff may, in the unreviewable exercise of its discretion, reduce or waive stipulated penalties otherwise due it under this Consent Decree.

111. Stipulated penalties shall continue to accrue as provided in Paragraph 108, during any Dispute Resolution, but need not be paid until the following:

a. If the dispute is resolved by agreement or by a decision of EPA or PADEP that is not appealed to the Court, PennEnergy shall pay accrued penalties determined to be owing, together with interest, to the United States or

PADEP within 30 Days of the effective date of the agreement or the receipt of the EPA's or PADEP's decision or order;

b. If the dispute is appealed to the Court and the United States or PADEP prevails in whole or in part, PennEnergy 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 Paragraph 111.c, below;

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

112. If PennEnergy fails to pay stipulated penalties according to the terms of this Consent Decree, PennEnergy 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 or PADEP from seeking any remedy otherwise provided by law for PennEnergy's failure to pay any stipulated penalties.

113. PennEnergy shall pay stipulated penalties owing to the United States and PADEP in the manner set forth and with the confirmation notices required by Section IV (Civil Penalty) 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.

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

115. Stipulated penalties are not the United States' or PADEP's exclusive remedy for violations of this Consent Decree. Subject to the provisions of Section XII (Effect of Settlement/Reservation of Rights), the United States and PADEP expressly reserve the right to seek any other relief they deem appropriate for PennEnergy's violation of this Consent Decree or applicable law, including but not limited to an action against PennEnergy 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

116. "Force majeure," for purposes of this Consent Decree, means any event arising from causes beyond the control of PennEnergy, of any entity controlled by PennEnergy, or of PennEnergy's contractors, that delays or prevents the performance of any obligation under this Consent Decree despite PennEnergy's best efforts to fulfill the obligation. Given the need to protect public health and welfare and the environment, the requirement that PennEnergy 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.

117. If any event occurs for which PennEnergy will or may claim a force majeure, PennEnergy shall provide notice to EPA and PADEP pursuant to Section XIV. The deadline for

the initial notice is 72 hours after PennEnergy first knew or should have known that the event would likely delay or prevent performance. PennEnergy shall be deemed to know of any circumstance of which any trained contractor of, subcontractor of, or entity controlled by PennEnergy knew or should have known.

118. If PennEnergy seeks to assert a claim of force majeure concerning the event, within 10 Days after the notice under Paragraph 117, PennEnergy shall submit a further notice to EPA and PADEP that includes (a) an explanation and description of the event and its effect on PennEnergy'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 PennEnergy to complete the requirements of the Consent Decree; (d) PennEnergy'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 PennEnergy, such event may cause or contribute to an endangerment to public health or welfare or the environment; and (f) all available proof supporting any claim that the delay was attributable to a force majeure.

119. Failure to submit a timely or complete notice or claim under Paragraph 117 or 118 regarding an event precludes PennEnergy 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 PennEnergy has exercised its best efforts, under Paragraph 116.

120. After receipt of any claim of force majeure, EPA, after a reasonable opportunity for review and comment by PADEP, will notify PennEnergy of its determination whether PennEnergy is entitled to relief under Paragraph 116, 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.

121. If PennEnergy 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, PennEnergy has the burden of proving that it is entitled to relief under Paragraph 116, that its proposed excuse or extension was or will be warranted under the circumstances, and that it complied with the requirements of Paragraphs 116 to 118. If PennEnergy carries this burden, the delay or non-performance at issue shall be deemed not to be a violation by PennEnergy of the affected obligation of this Consent Decree identified to EPA, PADEP, and the Court.

X. DISPUTE RESOLUTION

122. 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. PennEnergy'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 PennEnergy arising under this Decree precludes PennEnergy from raising any such issue as a defense to any such enforcement action. The deadlines in this Section may be extended by mutual written agreement of the Parties, unless subject to Local Rules of this Court.

123. 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 PennEnergy sends DOJ, EPA, and PADEP a written Notice of

Dispute. Such Notice of Dispute shall state clearly the matter in dispute. The period of informal negotiations shall not exceed 20 Days from the date the dispute arises, unless the Parties mutually agree to an extension of that period by written agreement. If the Parties cannot resolve a dispute by informal negotiations, then the position advanced by the United States (after consultation with PADEP) shall be considered binding unless, within 30 Days after the conclusion of the informal negotiation period, PennEnergy invokes formal dispute resolution procedures as set forth below.

124. Formal Dispute Resolution. PennEnergy shall invoke formal dispute resolution procedures, within the time period provided in the preceding Paragraph, by sending DOJ, EPA, and PADEP 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 PennEnergy's position and any supporting documentation relied upon by PennEnergy.

125. The United States, after consultation with PADEP, will send PennEnergy its Statement of Position within 45 Days of receipt of PennEnergy'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 PennEnergy, unless PennEnergy files a motion for judicial review of the dispute in accordance with the following Paragraph.

126. Judicial Dispute Resolution. PennEnergy may seek judicial review of the dispute by filing with the Court and serving on the United States and PADEP a motion requesting judicial resolution of the dispute. The motion (a) must be filed within 14 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 123, unless the Plaintiffs raise a new issue of law or fact in the Statement of Position; (c) shall contain a written statement of PennEnergy'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.

127. The United States shall, after consultation with PADEP, respond to PennEnergy's motion within the time period allowed by the Local Rules of this Court. PennEnergy may file a reply memorandum, to the extent permitted by the Local Rules.

128. Standard of Review

a. Disputes Concerning Matters Accorded Record Review. Except as otherwise provided in this Consent Decree, in any dispute brought under Paragraph 124 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, PennEnergy 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 124, PennEnergy shall bear the

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

129. The invocation of dispute resolution procedures under this Section shall not, by itself, extend, postpone, or affect in any way any obligation of PennEnergy 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 111. If PennEnergy 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

130. The United States, PADEP and their 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 or PADEP in accordance with the terms of this Consent Decree;

c. obtain samples and, upon request, splits or duplicates of any samples taken by PennEnergy or its representatives, contractors, or consultants related to activities under this Consent Decree;

d. obtain documentary evidence, including photographs and similar data related to activities under this Consent Decree; and

e. assess PennEnergy's compliance with this Consent Decree.

131. Upon request, PennEnergy shall submit to EPA and PADEP or their authorized representatives splits or duplicates of any pressurized liquid samples taken by PennEnergy at a Storage Vessel System or other associated equipment as required by this Consent Decree. Upon request, EPA and PADEP shall provide PennEnergy splits or duplicates of any samples taken for purposes of this Consent Decree by EPA or PADEP or their authorized representatives. In both cases, such request shall be made prior to sampling whenever possible to ensure that adequate sample volume is obtained.

132. Until five years after the termination of this Consent Decree, PennEnergy 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 PennEnergy'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 or PADEP, PennEnergy shall submit copies of any documents, records, or other information required to be maintained under this Paragraph.

133. At the conclusion of the information-retention period provided in the preceding Paragraph, PennEnergy shall notify the United States and PADEP 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 or PADEP, PennEnergy shall deliver any such documents, records, or other information to EPA or PADEP. PennEnergy 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 PennEnergy 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 PennEnergy. 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.

134. PennEnergy may also assert that information required to be provided or submitted under this Section is protected as CBI under 40 C.F.R. Part 2 and 35 Pa. Stat. § 4013.2. As to any information that PennEnergy seeks to protect as CBI, PennEnergy shall follow the procedures set forth in 40 C.F.R. Part 2 and 35 Pa. Stat. § 4013.2.

135. 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 or PADEP pursuant to applicable federal or state laws, regulations, or permits, nor does it limit or affect any duty or obligation of PennEnergy to maintain documents, records, or other information imposed by applicable federal or state laws, regulations, or permits.

XII. EFFECT OF SETTLEMENT/RESERVATION OF RIGHTS

136. This Consent Decree resolves the civil claims of the United States and PADEP for (a) the violations alleged in the Clean Air Act Notice of Violation and Opportunity to Confer dated August 16, 2021, (b) the violations alleged in the Complaint filed in this action, and (c) any other violations of the following provisions of federal and state law through the Date of Lodging as to each of the Facilities listed in Appendix A and Appendix B.

a. 42 U.S.C. § 7661a;

b. 40 C.F.R. § 52.2020(c), as it relates to the corresponding state provisions identified in Paragraphs 136.o and 136.p;

c. 40 C.F.R. §§ 60.5365 and 60.5365a;

d. 40 C.F.R. §§ 60.5370 and 60.5370a;

e. 40 C.F.R. §§ 60.5395 and 60.5395a;

f. 40 C.F.R. §§ 60.5410 and 60.5410a;

g. 40 C.F.R. §§ 60.5411 and 60.5411a;

h. 40 C.F.R. §§ 60.5412 and 60.5412a;

i. 40 C.F.R. §§ 60.5413 and 60.5413a;

j. 40 C.F.R. §§ 60.5415 and 60.5415a;

k. 40 C.F.R. §§ 60.5416 and 60.5416a;

l. 40 C.F.R. §§ 60.5417 and 60.5417a;

m. 40 C.F.R. §§ 60.5420 and 60.5420a;

n. 40 C.F.R. § 60.18;

o. Title 25, § 122.3 of the Pennsylvania Code, as to adoption of the provisions of 40 C.F.R. Part 60 that are referenced in Paragraphs 136.c through 136.n;

p. Title 25, §§ 127.11, 127.402 and Chapter 127, Subchapter G of the Pennsylvania Code; and

q. Section 6.1(a) and (b) of the Pennsylvania Air Pollution Control Act, 35 P.S. § 4006.1(a) and (b).

137. The United States and PADEP reserve 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 or PADEP to obtain penalties or injunctive relief under the

Act or implementing regulations, or under other federal or state laws, regulations, or permit conditions, except as expressly specified in Paragraph 136. The United States and PADEP further reserve all legal and equitable remedies to address any imminent and substantial endangerment to the public health or welfare or the environment arising at, or posed by, any of PennEnergy's Facilities, whether related to the violations addressed in this Consent Decree or otherwise.

138. In any subsequent administrative or judicial proceeding initiated by the United States or PADEP for injunctive relief, civil penalties, or other appropriate relief relating to any of PennEnergy's Facilities, PennEnergy shall not assert, and may not maintain, any defense or claim based upon the principles of waiver, res judicata, collateral estoppel, issue preclusion, claim preclusion, claim-splitting, or other defenses based upon any contention that the claims raised by the United States or PADEP 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 136.

139. This Consent Decree is not a permit, or a modification of any permit, under any federal, state, or local laws or regulations. PennEnergy is responsible for achieving and maintaining complete compliance with all applicable federal, state, and local laws, regulations, and permits; and PennEnergy'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 and PADEP do not, by their consent to the entry of this Consent Decree, warrant or aver in any manner that PennEnergy's compliance with any aspect of this Consent Decree will result in compliance with provisions of the Act, 42 U.S.C. § 7401, *et seq*., or with any other provisions of federal, state, or local laws, regulations, or permits.

140. This Consent Decree does not limit or affect the rights of any of the Parties 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 PennEnergy, except as otherwise provided by law.

141. 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

142. The Parties shall bear their own costs of this action, including attorneys' fees, except that the United States and PADEP 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 PennEnergy.

XIV. NOTICES

143. Unless otherwise specified in this Consent Decree, whenever notifications, submissions, or communications are required by this Consent Decree, they shall be sent by email, and addressed as follows:

As to DOJ by email (preferred):	eescdcopy.enrd@usdoj.gov Re: DJ # 90-5-2-1-12465
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 # 90-5-2-1-12465
As to EPA by email (preferred):	r3_orc_mailbox@epa.gov R3_Hearing_Clerk@epa.gov augustine.bruce@epa.gov hall.kristen@epa.gov

Note: notifications, submissions, or communications for the R3_Hearing_Clerk@epa.gov are for payment of civil penalty and stipulated payments only.

As to PADEP:

By Mail: Regional Air Quality Program Manager
Pennsylvania Department of Environmental Protection
230 Chestnut Street
Meadville, PA 16335

And

Electronically using: PADEP's Public Upload with Payment system at:
https://greenport.pa.gov/ePermitPublicAccess/PublicSubmission/ValidatePublicSubmission

As to PennEnergy by mail:

ATTN: Domenic A. Tedesco, Director of Air Quality and Sustainability
3000 Westinghouse Drive, Suite 300
Cranberry Township, PA 16066
Telephone No.: 412-275-3200

And

S. Casey Bowers, Senior Vice President and General Counsel
3000 Westinghouse Drive, Suite 300
Cranberry Township, PA 16066
Telephone No.: 412-275-3200

As to PennEnergy by email: datedesco@pennenergyresources.com
scbowers@pennenergyresources.com

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

145. 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

146. 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.

XVI. RETENTION OF JURISDICTION

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

XVII. MODIFICATION

148. 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 Consent Decree, it shall be effective only upon approval by the Court.

149. Any disputes concerning modification of this Consent Decree shall be resolved pursuant to Section X (Dispute Resolution), provided, however, that, instead of the burden of proof provided by Paragraph 128, 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. PLUGGING AND ABANDONMENT

150. Effect of Plugging and Abandonment. The permanent plug and abandonment of a well ("P&A") shall be deemed to satisfy all requirements of this Consent Decree applicable to

the well (as long as the well no longer emits or has the potential to emit hydrocarbons) and the Storage Vessel System (as long as the Storage Vessel System is no longer servicing wells that have not been plugged and abandoned). To P&A a well, PennEnergy must submit to EPA and PADEP verified reporting of abandonment made in accordance with 25 Pa. Code § 78.124 or 25 Pa. Code § 78a.124, as appropriate. PennEnergy shall maintain copies of all documentation required by this Paragraph for inspection and review by EPA and PADEP. In each Semi-Annual Report, PennEnergy shall update the list of Subject Vapor Control Systems to reflect any wells and associated Storage Vessel Systems that have been permanently plugged and abandoned. Nothing herein shall preclude PennEnergy from reusing any equipment from a plugged and abandoned well.

XIX. TERMINATION

151. After PennEnergy has (a) completed the requirements of Paragraphs 14 through 32 for each of the Facilities listed in Appendix A and Appendix B, (b) has thereafter maintained satisfactory compliance with this Consent Decree for a period of three years at all Subject Vapor Control Systems (except that such three-year requirement shall not apply at those Storage Vessel Systems identified pursuant to Paragraph 59), (c) has completed the Environmental Mitigation Projects under Section V, Subsection J, and (d) has paid the civil penalty and any accrued stipulated penalties as required by this Consent Decree, PennEnergy may serve upon the Plaintiffs a Request for Termination, stating that PennEnergy has satisfied those requirements, together with all necessary supporting documentation.

152. Following receipt by the United States and PADEP of PennEnergy's Request for Termination, the Parties shall confer informally concerning the Request and any disagreement that the Parties may have as to whether PennEnergy has satisfactorily complied with the

requirements for termination of this Consent Decree. If the United States, after consultation with PADEP, agrees that the Consent Decree may be terminated, the Parties shall submit, for the Court's approval, a joint stipulation terminating the Consent Decree.

153. If the United States, after consultation with the PADEP, does not agree that the Consent Decree may be terminated, PennEnergy may invoke Dispute Resolution under Section X (Dispute Resolution). However, PennEnergy shall not seek Dispute Resolution of any dispute regarding termination until 90 Days after service of its Request for Termination.

XX. PUBLIC PARTICIPATION

154. 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. PennEnergy 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 Consent Decree, unless the United States has notified PennEnergy in writing that it no longer supports entry of the Consent Decree.

XXI. SIGNATORIES/SERVICE

155. Each undersigned representative of PennEnergy, PADEP, and the Assistant Attorney General 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.

156. This Consent Decree may be signed in counterparts, and its validity shall not be challenged on that basis. PennEnergy agrees to accept service of process by mail 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. PennEnergy need not file an answer to the complaint in this action unless or until the Court expressly declines to enter this Consent Decree.

XXII. INTEGRATION

157. 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.

XXIII. FINAL JUDGMENT

158. 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, PADEP, and PennEnergy.

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

159. For purposes of the identification requirement of Section 162(f)(2)(A)(ii) of the Internal Revenue Code, 26 U.S.C. § 162(f)(2)(A)(ii), performance of the requirements set out in: Section II (Applicability), Paragraph 6; Section V (Compliance Requirements), Paragraphs 14 through 89; Section VI (Periodic Reporting), Paragraphs 91 through 95; Section XI (Information

Collection and Retention), Paragraphs 130 through 133; and Appendices C, D, E, F, and G is restitution or required to come into compliance with law.

XXV. APPENDICES

160. The following Appendices are attached to and part of this Consent Decree:

"Appendix A" is the PennEnergy Well Pads Subject to Consent Decree (except for requirements pertaining to Limited Field Surveys);
"Appendix B" is the Limited Field Survey Well Pads;
"Appendix C" is the Sampling and Analysis Plan;
"Appendix D" is the Design Analysis Methodology;
"Appendix E" is the Directed Inspection / Preventative Maintenance Program;
"Appendix F" is the Environmental Mitigation Projects;
"Appendix G" is the Verifier Certification; and
"Appendix H" is the Consent Decree Deliverables Template.

Dated and entered this __ day of _____, _____

_____
UNITED STATES DISTRICT JUDGE

FOR THE UNITED STATES OF AMERICA:

Date: December 10, 2024

TODD KIM
Assistant Attorney General
Environment and Natural Resources Division
U.S. Department of Justice

Nicholas Morales

NICHOLAS MORALES
Trial Attorney
Environmental Enforcement Section
Environment and Natural Resources Division
U.S. Department of Justice
P.O. Box 7611
Washington, DC 20044-7611

FOR THE U.S. ENVIRONMENTAL PROTECTION AGENCY:

DAVID UHLMANN Digitally signed by DAVID UHLMANN Date: 2024.11.26 15:32:40 -05'00'

DAVID M. UHLMANN
Assistant Administrator
Office of Enforcement and Compliance Assurance
U.S. Environmental Protection Agency
Washington, D.C. 20460

ROSEMARIE KELLEY
Director, Office of Civil Enforcement
Office of Enforcement and Compliance Assurance
U.S. Environmental Protection Agency,
1200 Pennsylvania Avenue, N.W.
Washington, D.C. 20460

MARY E. GREENE
Director, Air Enforcement Division
Office of Enforcement and Compliance Assurance
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1200 Pennsylvania Avenue, N.W.
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ALEX CHEN
Attorney, Air Enforcement Division
Office of Enforcement and Compliance Assurance
U.S. Environmental Protection Agency,
1200 Pennsylvania Avenue, N.W.
Washington, D.C. 20460

FOR THE U.S. ENVIRONMENTAL PROTECTION AGENCY:

Date: _____

ADAM ORTIZ Digitally signed by ADAM ORTIZ Date: 2024.11.27 11:14:01 -05'00'

ADAM ORTIZ
Regional Administrator
U.S. Environmental Protection Agency, Region 3

ALLISON GARDNER Digitally signed by ALLISON GARDNER Date: 2024.11.25 15:25:02 -05'00'

ALLISON F. GARDNER
Acting Regional Counsel
U.S. Environmental Protection Agency, Region 3

HUMANE ZIA Digitally signed by HUMANE ZIA Date: 2024.11.21 12:26:44 -05'00'

HUMANE ZIA
Senior Assistant Regional Counsel
Office of Regional Counsel
U.S. Environmental Protection Agency, Region 3

FOR THE PENNSYLVANIA DEPARTMENT OF ENVIRONMENTAL PROTECTION:

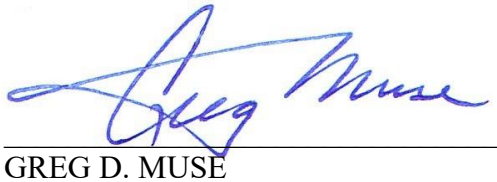
Date: 11/26/24

CARL D. BALLARD
Assistant Counsel
Northwest Regional Counsel
Pennsylvania Department of Environmental Protection

ERIN K. WELLS
Northwest Regional Director
Pennsylvania Department of Environmental Protection

LORI L. MCNABB
Northwest Regional Air Quality Program Manager
Pennsylvania Department of Environmental Protection

FOR PENNENERGY RESOURCES, LLC:



Date: November 18, 2024

GREG D. MUSE
President and COO of PennEnergy Resources, LLC

APPENDIX A

PENNENERGY WELL PADS SUBJECT TO CONSENT DECREE (EXCEPT FOR REQUIREMENTS PERTAINING TO LIMITED FIELD SURVEYS)

Well Pad Name	Surface Latitude	Surface Longitude	Street Address	County	State
Baird	40.99840	-79.87398	435 Hooker Road, West Sunbury, PA 16016	Butler	PA
Bloom	40.86033	-79.99798	949 Whitestown Road, Butler, PA 16001	Butler	PA
Bricker	40.86291	-80.01726	670 Dick Road, Renfrew, PA 16053	Butler	PA
Dunmire	40.92349	-80.11782	340 East Portersville Road, Portersville, PA 16051	Butler	PA
Fleeger	40.94296	-79.93483	346 Jamisonville Road, Butler, PA 16001	Butler	PA
Fleeger 2	40.97685	-79.89488	115 Christy Road, West Sunbury, PA 16061	Butler	PA
Flinner	40.89195	-80.07648	155 Ragan Road, Prospect, PA 16052	Butler	PA
Frye	40.91720	-79.85598	201 Kelly Road, Chicora, PA 16025	Butler	PA
Gray	40.92546	-79.96628	5176 Brown Road, Butler, PA 16001	Butler	PA
Hamilton	40.8594	-80.15221	517 Scott Ridge Road, Harmony, PA 16037	Butler	PA
Kern	40.90583	-79.95805	205 West Brewster Road, Butler, PA 16001	Butler	PA
Klever	40.98064	-79.87335	167 Klever Road, West Sunbury, PA 16016	Butler	PA
Mackrell	40.94987	-79.77737	166 Bish Road, Chicora, PA 16025	Butler	PA
Manuel	41.02041	-79.84903	200 Stoops Road, West Sunbury, PA 16061	Butler	PA

Renick	40.95057	-79.90617	135 Rider Church Road, West Sunbury, PA 16061	Butler	PA
Shields	40.92676	-79.80000	331 Conway Road, Chicora, PA 16025	Butler	PA
Twentier	40.92089	-80.17991	1055 Breakneck Bridge Road, Portersville, PA 16051	Lawrence	PA

APPENDIX B

LIMITED FIELD SURVEY WELL PADS

Well Pad Name	Surface Latitude	Surface Longitude	Street Address	County	State
Grubbs	40.87300	-80.13669	754A Perry Highway, Harmony, PA 16037	Butler	PA
Perry Twp / Hufnagel	40.87744	-80.18450	801 Pleasant Hill Road, Perry, PA 16051	Lawrence	PA
R Knauf	40.80341	-80.06713	125 Knauf Lane, Evans City, PA 16033	Butler	PA
Warner	40.84796	-80.12182	551 Perry Highway, Harmony, PA 16037	Butler	PA
Adams	40.89959	-80.13958	1005 Perry Highway, Harmony, PA 16053	Butler	PA
JRGL	40.81564	-80.12399	160 Emma Lane, Harmony, PA 16037	Butler	PA
Dorsch	40.83243	-80.11560	196 Salt Works Road, Harmony, PA 16037	Butler	PA
Wack	40.85230	-80.14915	425 Scott Ridge Road, Harmony, PA 16037	Butler	PA
Graham	40.83488	-80.09223	138 Berthol Lane, Harmony, PA 16037	Butler	PA
Plesniak	40.86963	-80.07931	136 Stone Church Road, Harmony, PA 16037	Butler	PA
Bell Properties	40.76121	-80.13384	155 Lutz Road, Zelienople, PA 16063	Butler	PA
Burgh / Bicehouse	40.87050	-80.13274	725 Perry Highway, Harmony, PA 16037	Butler	PA
Meyer	40.77370	-80.08447	99 Ridge Road, Zelienople, PA 16063	Butler	PA
Grosick	40.84180	-80.06753	151 Woodlands Rd, Evans City, PA 16033	Butler	PA

Baillie Trust	40.77078	-80.08172	568 1/2 Lindsay Road, Zelienople, PA 16063	Butler	PA
Ceaser	40.88636	-80.09808	636 Yellow Creek Road, Harmony, PA 16037	Butler	PA
Gilliland	40.84242	-80.03618	365 Welsh Road, Evans City, PA 16033	Butler	PA
Bame	40.80126	-80.09834	171 Hartmann Road, Harmony, PA 16037	Butler	PA
Pallack	40.85560	-80.10021	235A E. Lancaster Road, Harmony, PA 16037	Butler	PA
Carson	40.84376	-80.03336	448 Shannon Road, Evans City, PA 16033	Butler	PA
Harvey	40.79438	-79.96343	1050 Meridian Road, Renfrew, PA 16053	Butler	PA
Michael	40.83788	-79.99954	1047 Evans City Road, Renfrew, PA 16053	Butler	PA
L&L Properties	40.83488	-80.09223	117 Berthol Lane, Harmony, PA 16037	Butler	PA
Lamperski	40.80064	-80.02760	401 Old Route 68, Evans City, PA 16033	Butler	PA
Lynn	40.82044	-79.96433	675 Meridian Road, Renfrew, PA 16053	Butler	PA
BBC	40.77142	-80.10589	480 Ridge Road, Zelienople, PA 16063	Butler	PA
Drushel	40.78918	-80.06620	407 Textor Hill Road, Zelienople, PA 16063	Butler	PA
Shipley	40.81847	-80.00785	215 Constitution Ave, Connoquenessing, PA 16027	Butler	PA
Bintrim	40.85443	-80.08501	341 Whitestown Road, Harmony, PA 16037	Butler	PA

Shannon	40.82364	-80.05338	487 Upper Harmony Road, Evans City, PA 16033	Butler	PA
R Double	40.79874	-80.08331	237 Textor Hill Road, Zelienople, PA 16063	Butler	PA
Burr	40.86982	-80.05056	175 Lower Harmony Road, Prospect, PA 16052	Butler	PA

APPENDIX C:
SAMPLING AND ANALYSIS PLAN

TABLE OF CONTENTS

LIST OF TABLES

1 INTRODUCTION

This document sets forth the sampling, analytical, and data collection activities needed to support the assessment of peak (and actual) atmospheric emissions from Produced Oil and Produced Water Storage Vessels at natural gas production facilities. Atmospheric emissions from Produced Oil Storage Vessels may be attributed to flashing, working, and breathing losses. The emissions from Produced Water Storage Vessels may be attributed to working and breathing, in addition to flashing of natural gas dissolved in the Produced Water, and to flashing associated with any carry-over of entrained Produced Oil.

The primary information required to estimate air emissions from the Storage Vessel System includes the type of liquid received, temperature and pressure of the received liquid at the upstream Separator (sampling point), temperatures of the stored liquid and vent gas, flash gas factor, composition of the vent gas, Reid vapor pressure (RVP) and API gravity of the weathered Produced Oil, and also, in the case of Produced Water Storage Vessels, the extent of entrained Produced Oil carry-over. This information and data on design and maximum activity levels and operating conditions are needed to conduct sizing and capacity reviews of vapor collection and control systems.

The procedures in this document are based primarily on Appendix C to Title 17 California Code of Regulations (17 CCR Appendix C, Eff. Oct. 1, 2017), "Test Procedure for Determining Annual Flash Emission Rate of Gaseous Compounds from Crude Oil, Condensate, and Produced Water" (hereinafter referred to the "CARB Protocol"). Some elements of the CARB protocol are repeated here for easy reference and improved readability. Additionally, some refinements and alternative options are incorporated.

The sampling technician and laboratory technician shall use checklists and/or appropriate documentation to implement the requirements stated in the following sections.

2 SAMPLING REQUIREMENTS

1. **Pre-Sampling Requirements** – These requirements vary according to the type of sample to be collected:
    a. For Pressurized Liquid samples, apply the pre-sampling requirements of CARB Protocol § 7.1 and §7.2. At a minimum, record the following data on the sample cylinder identification tag and on Form 1 (see Appendix 1) prior to conducting a sample collection method: the Separator identification number, the Separator temperature and pressure if available, and first downstream Storage Vessel or Separator temperature.
    b. For flowing natural gas samples, apply the pre-sampling requirements of GPA 2166. At a minimum, record the following information on the sample identification tag and data collection form prior to collecting the sample: the Separator identification number and the Separator temperature and pressure.
2. **Samples to be Collected** – The extent and location of samples to be collected depends on the circumstances and proposed emissions assessment approach (see Section 3):
    a. For hydrocarbon liquid Storage Vessels, collect a pressurized Produced Oil sample from a representative Separator located upstream of the Storage Vessel System.
    b. For Produced Water Storage Vessels, assume that the amount of entrained Produced Oil that carries through to the Produced Water Storage Vessels is 1% of the Produced Water volume, and utilize Bryan Research and Engineering's (BRE's) ProMax v5.0 simulator software with Peng-Robinson equations of state (or equivalent simulation software/methodology for applying Peng Robinson EOS) to determine flash gas contributions from the pressurized Produced Water. The flash calculations from the pressurized Produced Water consist of contributions from natural gas dissolved in produced water (which may be negligible), and contributions from Produced Oil carryover. The contributions from Produced Oil carryover are simulated using the composition of a sample of Produced Oil obtained from the Separator upstream of the Produced Water Storage Vessels.
    c. If the natural gas composition at the Separator mentioned in 2(a) is required for simulation purposes (see Section 3), then collect a sample of the associated natural gas.

d. Collect all samples from a given Separator on the same date and as close as possible to the same time.

3. **Pressurized Liquid Sample Collection Point Selection, Conditions, & Purging** – Apply the following guidance:

   a. Collect a Pressurized Liquid sample at a temperature and pressure that is representative of conditions in the Separator. The sample point should be located as close to the Separator and as far upstream of the dump valve as possible.

   b. Ensure the operating conditions at the time of sample collection are representative of the facility's operating conditions. Correct sampling results to represent worst case operating conditions when estimating peak emissions using simulated preconditioning techniques, such as back blending.

   c. Purge the process connection used for sampling (for example the sight glass), prior to connecting the sampling assembly. This will flush any static fluid from the connection and ensure that the connection is free of any blockage.

4. **Pressurized Liquid Sample Timing Relative to Dumping Events** –The following shall apply:

   a. If the Separator features on/off level control, then take each sample after and not during a dumping event (i.e., regardless of where the sample point is located).

   b. If a dumping event occurs during the collection of a sample, then reject that sample and collect a new one.

   c. If there is insufficient time between dumping events to collect a sample, then temporarily adjust the level controller to achieve a long enough period between dumping events to collect a sample.

   d. If a Separator has proportional (or throttling) level control, then collect the sample during a period when the flow is stable.

5. **Referenced Sampling Method** –Table 1 below summarizes the sampling method options. The most current version of each selected option shall apply.

Table 1: Summary of approved sampling methods for pressurized liquids, flowing natural gas, and atmospheric crude oil or condensate.

Sample Type	Method Type	Approved Methods
Pressurized Liquid	Manual	• GPA 2174
Flowing Natural Gas	Manual	• GPA 2166
Atmospheric Crude Oil or Condensate	Manual	• ASTM D4057 • ISO 3170
	Automatic	• API MPS Chapter 8.2 • ASTM D 4177 • ISO 3171

6. **Pressurized Liquid Sampling Rate** – The Pressurized Liquid sampling rate shall not exceed 60 milliliters per minute and shall be verified by timing the fill indicator on the cylinder used during collection.
7. **Measurement of the Source Temperature and Pressure** – Measure the source pressure and temperature using calibrated instruments and record the following values: the initial source pressure and temperature, the minimum pressure observed during the purging stage, and the minimum pressure observed during the sampling stage. The measurement equipment shall comply with the requirements of CARB Protocol § 5.1 to 5.2:
    a. An intrinsically safe pressure gauge capable of measuring liquid pressures of up to 2,000 pounds per square inch absolute within ±0.1 percent accuracy.
    b. A temperature gauge capable of reading liquid temperature within ±2°F and within a range of 32°F to 250°F.
8. **Leak Checks** – Perform a leak check of the sample cylinder or container after each sample collection.
    a. For pressurized cylinders, wrap the external valve connections with Teflon tape and then cap them using threaded metal caps.

3 ANALYTICAL METHODS AND QUALITY ASSURANCE

1. **Analytical Methods for Selected Parameters -**Table 2 presents a summary of approved methods for selected parameters potentially applicable to the necessary emission rate determinations.

Table 2: Summary of approved analytical methods for potentially relevant parameters.

Parameter	Subparameter	Approved Methods
Flash Gas Composition	H2S (low level)	• EPA Method 15 and Method 16 • ASTM D-1945M • ASTM D-5504 • ASTM D-6228 • ASTM D-4810 (Stain tube) for ppm range, only • GPA 2377 (Stain tube) for ppm range, only
	O2, N2, CO2, H2S (high level), and C1 to C10+	• ASTM D-1945 • ASTM D-3588 • ASTM D-2597.
	BTEX	• EPA 8021 B • ASTM D-3170[1] • GPA 2286 • EPA 8260B • EPA TO-14 • EPA TO-15
Pressurized Hydrocarbon Liquid Composition	O2, N2, CO2, H2S (high level), and C1 to C10+	• GPA 2186 • GPA 2103
	BTEX	• GPA 2186 • GPA 2103.
Density or API Gravity	None	• ASTM D-287
Specific Gravity of Pre-flash liquid phase crude oil or condensate	None	• ASTM D-4052 • ASTM D-70 • ASTM D-5002 • ASTM D-287 (calculation method).
Flash Gas Molecular Weight	All	• ASTM D-3588
Percent Water Cut	All	• ASTM D-4007 (BS&W)
RVP	All	• ASTM D6377

2. **Flash Gas Factor and Composition Determination Methodology –** Assess the flash gas factor and composition for the Storage Vessel System using the following approach:

   Computational Flash of the Pressurized Liquid Analysis:

   a. Perform an extended analysis of hydrocarbons using GPA Standard 2103 (Method for the Analysis of Natural Gas Condensate Mixtures Containing Nitrogen and Carbon Dioxide by Gas Chromatography) for each collected Pressurized Liquid hydrocarbon sample.

   b. Perform an integrity verification of the analysis results for the Pressurized Liquid hydrocarbon sample by equation of state modeling of the composition. The sample integrity verification is to demonstrate that the Pressurized Liquid hydrocarbon sample was obtained correctly in the field and has not been compromised prior to testing. The bubble point verification achieves this by comparing the bubble point pressure at field sample collection temperature with the field measured sample collection pressure and temperature.

   c. Perform the bubble point calculation from the Pressurized Liquid composition for the vapor pressure at sample collection temperature, Tsep. If the calculated bubble point pressure is ±30% from the field sample pressure, then that sample shall not be used. Where the stated acceptance criterion is not achieved, resample the source, analyze, and verify the integrity of the new results.

   d. Determine the flash gas factor and flash gas composition by performing flash calculations on the fluid having the composition determined from the liquid sample extended hydrocarbon analysis. The flash shall simulate taking the fluid from the Separator to Storage Vessel conditions. The flash calculation shall be performed using BRE's ProMax v5.0 process simulation software and the Peng-Robinson equation of state solver package (or equivalent simulation/software methodology for applying Peng Robinson EOS). The process simulation shall model the actual field equipment from the point of sample collection to the Storage Vessel with pressures and temperatures taken from field measurements.

Where a vapor recovery tower (VRT) or other gas-liquid Separator upstream of a Storage Vessel System (and downstream of the initial Separator) is used, two flash calculations shall be performed: (1) involving transfer of fluids from the Separator to the VRT/etc., and (2) the other involving transfer of fluids from the VRT/etc. to an atmospheric Produced Oil Storage Vessel.

4 SELECTION OF REPRESENTATIVE SAMPLES

1. **Representative Sample Selection Criteria -** A sample shall be considered sufficiently representative for use in emissions determinations, Design Analysis Methodologies, and/or Engineering Evaluations for a subject facility if it satisfies all the following criteria:
   a. Produces from the same geologic formation(s) and within a 5 mile radius of subject facility.
   b. Operating conditions of sampled Separator are representative of the Facility (must be within 20 psig of the Separator average historical operating conditions) and limited to one sample per Facility.
   c. Operating conditions of sampled Separator are representative of the Facility (must be within 20 degrees Fahrenheit of the Separator average historical operating conditions) and limited to one sample per Facility.
   d. If more than one sufficiently representative sample exists for a subject Facility, then document the reason for selecting a particular representative sample. Address the following factors, at a minimum, in the explanation: relative similarity of Separator operating conditions, relative similarity of geological substrates, relative physical proximity of surface sites, and the apparent validity of the representative samples under consideration.

Use of a Representative Sample - Where a representative sample is used in lieu of a sample taken from a subject Facility, perform simulated back blending of the modeled liquid sample with a gas stream having a composition appropriate to the subject facility (i.e., based on an empirical analysis of subject facility Heater Treater gas or sales gas) to define a representative Separator inlet fluid. The purpose of the simulated back blending procedure is to ensure that the pre-flash modeled system has a system pressure consistent with the worst-case operating pressure of the Separator at the facility of interest.

5 REPORT REQUIREMENTS

Upon completion of all applicable sampling and analysis activities and any associated process simulations, prepare a comprehensive report stating all assumptions and providing details and results of the completed measurements, analyses, calculations. The report documents must include the following:

a. Completed CARB Protocol Field Data Form (Form 1).
b. Sample identification.
c. Date and time sampled.
d. Data analyzed.
e. Description of Separator sampled.
f. Facility name and location.
g. Local ambient temperature and barometric pressure.
h. Maximum and annual Produced Oil throughput for the Storage Vessel for calendar year.
i. Results of analysis (hydrocarbons C_1 through C_{10+}, benzene-toluene-ethylbenzene-xylene components, CO_2, and N_2).
j. Relative specific gravity of decanes (C_{10+}) fraction (calculated).
k. Average molecular weight.
l. Average molecular weight of decanes (C_{10+}) fraction (calculated).
m. Reid vapor pressure of the sales oil or condensate.
n. Flash gas factor expressed in cubic feet gas per gallon of liquid, as ideal gas (calculated or measured);
o. API gravity of the sales oil or condensate.
p. Bubble point temperature (°F) and pressure (psig);
q. Conditions (temperature in °F and pressure in psig) at time of liquids and gas sample collection.
r. Conditions (temperature in °F and pressure in psig) at time of liquids and gas sample analysis in the laboratory.
s. Start and stop times for sampling. Quality assurance data, including bubble point verifications.
t. Field data sheets and checklists.
u. Calibration certificates for field instruments for temperature and pressure.

6 REFERENCES CITED

Appendix C to Title 17 California Code of Regulations (17 CCR Appendix C, Eff. Oct. 1, 2017), "Test Procedure for Determining Annual Flash Emission Rate of Gaseous Compounds from Crude Oil, Condensate, and Produced Water."

API. 2015. API MPMS Chapter 8.2: Standard Practice for Automatic Sampling of Petroleum and Petroleum Products.

ASTM. 2021. ASTM D6730-21: Standard Test Method for Determination of Individual Component in Spark Ignition Engine Fuels by 100-Metre Capillary (with Pre-column) High-Resolution Gas Chromatography.

ASTM. 2020. ASTM D4177: Standard Practice for Automatic Sampling of Petroleum and Petroleum Products.

ASTM. 2020. ASTM D5504-20: Standard Test Method for Determination of Sulfur Compounds in Natural Gas and gaseous Fuels by gas Chromatography and Chemiluminescence.

ASTM. 2020. ASTM D6377-20: Standard Test Method for Determination of Vapor Pressure of Crude Oil: VPCRx (Expansion Method).

ASTM. 2020. ASTM D7169-20e1: Standard Test Method for Boiling Point Distribution of Samples with Residues Such as Crude Oils and Atmospheric and Vacuum Residues by High Temperature Gas Chromatography.

ASTM. 2019. ASTM D287-12b: Standard Test Method for API Gravity of Crude Petroleum and Petroleum Products (Hydrometer Method).

ASTM. 2019. ASTM D1945-14: Standard Test Method for Analysis of Natural Gas by Gas Chromatography.

ASTM. 2019. ASTM D4057: Standard Practice for Manual Sampling of Petroleum and Petroleum Products.

ASTM. 2019. ASTM D5002-19: Standard Test Method for Density, Relative Density, and API Gravity of Crude Oils by Digital Density Analyzer.

ASTM. 2019. ASTM D6228-19: Standard Test Method for Determination of Sulfur Compounds in Natural Gas and Gaseous Fuels by Gas Chromatography and Flame Photometric Detection.

ASTM. 2018. ASTM D70-18a: Standard Test Method for Density of Semi-Solid Asphalt Binder (Pycnometer Method)

ASTM. 2018. ASTM D4052-18a: Standard Test Method for Density, Relative Density, and API Gravity of Liquids by Digital Density Meter.

ASTM. 2018. ASTM D7777-13e1: Standard Test Method for Density, Relative Density, or API Gravity of Liquid Petroleum by Portable Digital Density Meter.

ASTM. 2017. ASTM D3588-98(2017)e1: Standard Practice for Calculating Heat Value, Compressibility Factor, and Relative Density of Gaseous Fuels.

ASTM. 2016. ASTM D4007-11(2016)e1: Standard Test Method for Water and Sediment in Crude Oil by the Centrifuge Method (laboratory Procedure).

ASTM. 2014. ASTM D3170/D3170M-14: Standard Test Method for Chipping Resistance of Coatings.

ASTM. 2010. ASTM D2597-10: Standard Test Method for Analysis of Demethanized Hydrocarbon Liquid Mixtures Containing Withdrawn by ASTM. Nitrogen and Carbon Dioxide by Gas Chromatography. [**Withdrawn 2016; no replacement**.]

GPA Midstream Association. 2020. GPA 2103-20, Method for the Analysis of Natural Gas Condensate Mixtures Containing Nitrogen and Carbon Dioxide by Gas Chromatography.

GPA Midstream Association. 2020. GPA 2174-20, Obtaining Pressurized Liquid Hydrocarbons Samples.

GPA Midstream Association. 2020. GPA 2177-20, Analysis of Natural Gas Liquids by Gas Chromatography.

GPA Midstream Association. 2020. GPA 2261-20, Analysis for Natural Gas and Similar Mixtures by Gas Chromatography.

GPA Midstream Association. 2017. GPA 2166-17, Obtaining Natural Gas Samples for Analysis by Gas Chromatography.

GPA Midstream Association. 2014. GPA 2186-14, Method for the Extended Analysis of Hydrocarbon Liquid Mixtures Containing Nitrogen and Carbon Dioxide by Temperature Programmed Gas Chromatography.

GPA Midstream Association. 2014. GPA 2286-14, Method for the Extended Analysis for Natural Gas and Similar Gaseous Mixtures.

ISO. 2004. ISO 3170, Petroleum Liquids – Manual Sampling.

ISO. 1998. ISO 3171, Petroleum Liquids – Automatic Pipeline Sampling.

US EPA Method 15: Determination of Hydrogen Sulfide, Carbonyl Sulfide, and Carbon Disulfide Emissions from Stationary Sources.

US EPA Method 16: Semi-continuous Determination of Sulfur Emissions from Stationary Sources.

US EPA Method 8021B: Aromatic and Halogenated Volatiles by Gas Chromatography Using Photoionization and/or Electrolytic Conductivity Detectors.

US EPA Method 8260B: Volatile Organic Compounds by Gas Chromatography/Mass Spectrometry (GC/MS).

US EPA Method TO-14A: Determination of Volatile Organic Compounds (VOCs) in Ambient Air Using Specially Prepared Canisters with Subsequent Analysis by Gas Chromatography.

US EPA Method TO-15: Determination of Volatile Organic Compounds (VOCs) in Air Collected in Specially-Prepared Canisters and Analyzed by Gas Chromatography/Mass Spectrometry (GC/MS).

7 APPENDIX 1

Flash Analysis Testing Field Data Form	
Date of Testing:	
Production Company Name:	
Corporate Address:	
Contact:	Phone:
Sampling Company Name:	
Corporate Address:	
Contact:	Phone:
Sample Information	
Facility Sampled:	
Facility Address:	
Cylinder ID:	
Cylinder Type (Double valve or piston):	
Cylinder Volume (mL):	
Sample Type (Condensate or produced water):	
Displacement Liquid Type:	
Time Sampled (Start and finish):	
Ambient Temperature and Barometric Pressure:	
Separator Sampled (ID):	
Separator Pressure (psia):	
Separator Temperature (°F):	
Sample Pressure (psia):	
Sample Temperature (°F):	
Sample Volume (mL):	
Outage Displaced (mL):	

APPENDIX D:
DESIGN ANALYSIS METHODOLOGY

I. SCOPE AND APPLICABILITY

1. PennEnergy shall develop a Design Analysis Methodology as outlined below, and revise it as required by this Consent Decree.

II. VAPOR FLOW RATE AND PRESSURE MODELING

2. PennEnergy shall determine the PMIVFR, PPIVFR and Peak Modeled Pressure for each Storage Vessel System with a Subject Vapor Control System. The PPIVFR shall (i) reflect the maximum potential rate of vapors routed to the Subject Vapor Control System during Normal Operations, and (ii) be expressed in standard cubic feet per day or other similar unit.

3. The Design Analysis Methodology shall address the following, where applicable:

   a. All vapor sources (*e.g.*, atmospheric Storage Vessels and transfer and loading systems) tied or to be tied into the Subject Vapor Control System;

   b. The maximum operating pressure and minimum operating temperature from the last stage of separation prior to the Storage Vessel System;

   c. Maximum potential Storage Vessel liquid temperature;

   d. Vapor pressure of the final weathered product transported from the Storage Vessel(s);

   e. The recycling of liquids from the Storage Vessel(s) back to the upstream process equipment;

   f. Estimation of highest potential flow rate of flash gas to the Vapor Control System utilizing: representative or site-specific pressurized and atmospheric liquid sampling according to Appendix C; lab analyses,

including representative or site-specific flash gas to oil ratio according to Appendix C; process simulation; correlations; or any combination thereof;

g. Volume and duration of individual dump events, including the nature of the flow of liquids to and from the Separator (*i.e.*, steady flow, slug flow, intermittent flow due to discrete well cycling events), and the maximum number of dump events associated with a single well cycle with slug or intermittent flow, and the minimum time between dump events, including where applicable:

(1) The type of dump valve control (*e.g.*, proportional, on/off) and dump valve size and trim size;

(2) Size, length and fittings of the liquid transfer line between the last stage of separation and the Storage Vessel(s);

(3) Simultaneous dump events to the same Storage Vessel System (unless all potential simultaneous dump events have been precluded through installation of timers, automation, or other measures);

(4) The maximum potential daily Produced Oil and Produced Water production rates and diurnal variations in these flows;

(5) The calculation methods or simulation tools for processing the data inputs; and

(6) The accuracy of the input data and results (*e.g.*, uncertainty of empirical correlations, representativeness of samples, process conditions).

III. VAPOR CONTROL SYSTEM CAPACITY DETERMINATION

4. The Design Analysis Methodology shall include:

a. Vapor control equipment installed on the Subject Vapor Control System including the size, design and manufacturer specifications for minimum and maximum flow or pressure for each VRU and control device, the Maximum Design Pressure and capacity of the Vapor Control System and the set points for each Pressure Control Valve and the Set Points for each Subject Vapor Control System Pressure Relief Device.

b. Size and design of the piping system between the Storage Vessel(s) and the emission control device, including any associated pressure losses (*e.g.*, liquid knock-out drums, control device Flame Arrestors) and consideration of equivalent pipe length and back pressure valves or other restrictions on vapor flow;

c. Volume and duration of individual dump events; the nature of the flow of liquids to and from the Separator (*i.e.*, steady flow, slug flow, intermittent flow (*e.g.*, due to discrete well cycling events)); the minimum time between dump events; and the maximum number of dump events associated with a single well cycle with slug or intermittent flow;

d. Minimum available headspace in the Storage Vessel(s); and

e. Engineering design considerations applied to account for issues associated with the Vapor Control System (*e.g.*, fouling, potential for liquids accumulation in lines, winter operations) and variability of data.

APPENDIX E:
DIRECTED INSPECTION / PREVENTATIVE MAINTENANCE PROGRAM

1. On November 11, 2024, PennEnergy submitted a Directed Inspection/Preventative Maintenance ("DI/PM") Plan that includes: (a) a schedule for the performance of all requirements set forth in this Appendix E, and (b) Standard Operating Procedures ("SOPs") for each of the inspection and maintenance programs listed in Paragraph 2, below.

2. PennEnergy submitted Standard Operating Procedures ("SOP") for the following aspects of the DI/PM Plan:

a. **Weekly AVO Inspections.** PennEnergy shall perform an AVO Inspection at each Subject Vapor Control System on a weekly basis. PennEnergy shall develop an SOP, informed by the Engineering Evaluations, for AVO Inspections. In each AVO Inspection and, PennEnergy shall verify that the equipment is operating consistent with all such parameters and practices. In addition, the SOP for weekly AVO inspections shall include:

(1) Definitions for "audio," "visual," and "olfactory" components of AVO inspections to assist in training of the personnel who will conduct these inspections; and

(2) Procedures for walk-around AVO inspection of all Vapor Control Systems and associated production equipment (*e.g.*, Separators) on a weekly basis (including while Storage Vessel(s) are receiving Produced Oil from Production Operations) to ensure that all equipment is operating properly and to check for hissing,

hydrocarbon odors, new stains, or any other evidence of VOC emissions. In addition, the procedures shall include, but not be limited to:

(i) As to the Vapor Control System: check to ensure that PRDs are properly sealed; thief hatches are closed, latched, and properly sealed; other valves are in the correct position (*e.g.*, blowdown valve is not open); and that Storage Vessel piping (*e.g.*, load line, blowdown line, vapor line) have no other observed or detected emissions.

(ii) As to the VRUs and control devices: check to ensure that the pressure monitoring equipment and Pressure Control Valve (if installed) are operating such that the valve is closed whenever the Vapor Inlet Monitor indicates the pressure is inconsistent with manufacturer specifications.

(iii) As to the combustion control devices: ensure that burner is operational and that there are no indications of inadequate combustion (e.g., black smoke); confirm the presence of a pilot light and that the liquid knockout is drained as necessary, inlet valves are functioning properly, and that the auto-ignitor is in good working condition. Where there are indications of inadequate combustion, perform EPA Method 22 of 40 C.F.R. Part 60, Appendix A to determine whether there are Visible Smoke Emissions.

(iv) As to the Pilot Monitor, Storage Vessel Pressure Monitor, the Vapor Inlet Monitor: ensure that the data is being recorded at the required interval and being transmitted to a central monitoring station.

b. **Monthly IR Camera Inspection Program.** PennEnergy shall develop an SOP for monthly IR Camera Inspections that includes, but is not limited to, the following procedures:

(1) PennEnergy shall perform an IR Camera Inspection at each Subject Vapor Control System on a monthly basis.

(2) PennEnergy shall record the date and time of all IR Camera Inspections and record and maintain a video of any emissions detected from the Vapor Control System during an IR Camera Inspection.

(3) PennEnergy shall maintain and submit the following records pertaining to each IR Camera Inspection in an electronic spreadsheet form in the Semi-Annual Report required pursuant to Paragraph 92 of the Consent Decree:

(i) The date, start time and end time, and Well Pad, Subject Storage Vessel System, number of Storage Vessels inspected, and number of combustion devices inspected;

(ii) The make, model, and serial number of each IR camera used in inspections. Also, the name(s) of personnel conducting the IR Camera Inspections; and

(iii) A description of any Reliable Information that is observed;

c. The model and manufacturer, where available, of any combustion devices found with: a) VOC emissions observed (indicating incomplete combustion); or b) no pilot light present.

d. **Other Monthly Inspections.** PennEnergy shall perform the bypass device inspection that is required by 40 C.F.R. § 60.5416a(c)(3), to the extent PennEnergy operates any bypass devices.

e. **Preventative Maintenance**. PennEnergy shall develop an SOP for Preventative Maintenance that includes, but is not limited to, maintenance, inspection, and replacement schedules for equipment subject to wear and tear. Such SOP shall include, but not be limited to, the following actions:

(1) Clean and check PRD and thief hatch seals and gaskets for integrity when opened for maintenance or other activities, check that the spring in the thief hatch/PRD aligns with the parameter identified in the Engineering Evaluation (through visual observation), repair or replace any Compromised Equipment, clean or replace Flame Arrestor and air-intake, clean or replace burner tray, and check proper operation of dump valve on Separator by manually actuating the dump valve and visually observing its operation (unless actuation occurs without manual activation during the inspection), and perform any other appropriate maintenance and inspection activities. These activities shall occur

no less frequently than semi-annually, except where otherwise noted.

(2) If applicable, where Separator dump valve orifices are present, check to ensure they are in good condition and replace them as necessary. This shall occur no less frequently than once in a calendar year.

(3) Clear liquids from lines in the Vapor Control System, as needed and no less frequently than quarterly; and drain liquids from each knock-out pot, as needed, and no less frequently than semi-annually. Should maintenance activities or other inspection activities, including any Root Cause Analysis or abnormal pressure fluctuations identified by the Tank Pressure Monitor or Vapor Inlet Monitor, indicate that liquids are accumulating in vapor lines and causing VOC emissions, PennEnergy shall perform this maintenance more frequently to minimize the accumulation of liquids in vapor lines, including but not limited to the knockout pot.

f. **Spare Parts Program**. PennEnergy shall develop an SOP for a Spare Parts Program that supports normal operation, routine maintenance, and replacement requirements. The SOP shall include written procedures for evaluating and maintaining a spare parts inventory such that corrective actions can be conducted in a timely manner (*e.g.*, gaskets and seals for thief hatches kept on trucks and replacement PRDs kept at a central

PennEnergy facility). No later than 30 Days after the Effective Date, PennEnergy shall ensure that a current employee has been designated with the responsibility to maintain an adequate spare parts inventory.

g. **Recordkeeping and Reporting**. PennEnergy shall establish and implement requirements for documentation of compliance with DI/PM practices and procedures (organized by Subject Vapor Control System as identified in Appendix A), including documentation of the date of the inspection/maintenance activity, the observation of any Reliable Information, and the performance of any Corrective Action. PennEnergy shall report all observations of Reliable Information (and instances of corrective action in conducting inspections pursuant to the DI/PM Plan) as required by Paragraph 92 of the Consent Decree.

h. **Reliable Information**. As to the Subject Vapor Control Systems, PennEnergy shall develop procedures for addressing Reliable Information, including performing Root Cause Analysis, and implementing corrective action.

i. **Training**. PennEnergy shall ensure that all persons (*e.g.*, employees and contractors) responsible for implementation or execution of any part of the DI/PM program, except for independent contractors solely responsible for servicing equipment (*e.g.*, combustor manufacturer personnel replacing a burner tray), have completed training on the aspects of the DI/PM program, including any SOPs, that are applicable to the person's duties. PennEnergy shall develop a training program to ensure that refresher

training is performed once per calendar year and that new personnel are sufficiently trained prior to any involvement in the DI/PM program. New personnel training will include a job shadowing program, and refresher training shall include on-the-job review by supervising personnel or personnel familiar with the requirements of this Consent Decree and SOPs.

j. **Annual Review**. PennEnergy shall perform the following during each Calendar year for each Subject Vapor Control System, and any other equipment subject to the DI/PM program:

(1) A DI/PM program-trained employee or contractor of PennEnergy, whose primary responsibilities do not include performing duties in the DI/PM program on a routine basis for the particular Subject Vapor Control System under evaluation, shall undertake the following for each Subject Vapor Control System, and any other equipment subject to the DI/PM, in consultation with persons performing DI/PM program duties for that particular Subject Vapor Control System:

(i) Verify that maintenance and inspection schedules and the replacement program have been followed at the appropriate frequency;

(ii) Review maintenance and corrective action work records required to be maintained by this Consent Decree and records necessary to implement the DI/PM program for the

Vapor Control System to confirm proper recordkeeping, timely response to all issues (*e.g.*, emissions or other operational issues), and determine if there are recurrent or systemic issues associated with a particular Vapor Control System; and

(iii) Make any appropriate updates to the DI/PM program, including SOPs.

(2) Upon completion of review of all Subject Vapor Control Systems, PennEnergy shall evaluate whether there are recurrent or systemic issues across PennEnergy's Subject Vapor Control Systems.

(3) If PennEnergy determines that actions need to be taken to address operations or maintenance activities at one or more Vapor Control Systems based on PennEnergy's review described in this Paragraph 2.j, such as making appropriate updates to the DI/PM program, including SOPs, PennEnergy shall take such actions as soon as practicable, but no later than 30 Days after completion of the Annual Review of all Subject Vapor Control Systems.

(4) PennEnergy shall complete the review required by this Paragraph 2.j for no fewer than half of its Subject Vapor Control Systems during the first semi-annual period of each Calendar year (*e.g.*, PennEnergy shall review its 2021 records for no fewer than half of its Subject Vapor Control Systems between January 1 and June 30 of 2022).

(5) With each Semi-Annual Report, PennEnergy shall submit documentation of the following information: (a) the date that review of the Subject Vapor Control System was completed; (b) a discussion of whether PennEnergy identified any systemic issues; and (c) the nature and timing of all modifications, corrective actions, or other actions planned or undertaken as a result of this review.

APPENDIX F:
ENVIRONMENTAL MITIGATION PROJECTS

PennEnergy shall comply with the requirements of this Appendix F and with Section V.J. (Environmental Mitigation Projects) of the Consent Decree to implement and secure the environmental benefits of the Project described in this Appendix.

1. By no later than January 1, 2025, PennEnergy shall ensure that no fewer than 156 Intermittent Bleed Pneumatic Controllers and 61 Low Bleed Pneumatic Controllers for which it is the Operator in Butler or Lawrence County, Pennsylvania are either converted to Non-emitting Controllers or are Removed From Service ("the Project").

2. For purposes of this Appendix:

a. "Pneumatic Controller" means a device, that was included in the 40 C.F.R. Part 98 Subpart W report for 2023 for pneumatic device emissions, that monitors a process parameter such as liquid level, pressure, or temperature and uses pressurized gas (which may be released to the atmosphere during normal operation) and sends a signal to a control valve in order to control the process parameter. Controllers that do not utilize pressurized gas are not Pneumatic Controllers;

b. "Intermittent Bleed Pneumatic Controller" means an automated flow control device, that was included in the 40 C.F.R. Part 98 Subpart W report for 2023 for pneumatic device emissions, that is powered by pressurized natural gas and used for automatically maintaining a process condition such as liquid level, pressure, delta-pressure and temperature. These are snap-acting or throttling devices that discharge all or a portion of the full volume of the actuator intermittently when control action is necessary, but does not Bleed continuously;

c. "Low Bleed Pneumatic Controller" means an automated flow control device, that was included in the 40 C.F.R. Part 98 Subpart W report for 2023 for pneumatic device emissions, that is powered by pressurized natural gas and used for maintaining a process condition such as liquid level, pressure, delta-pressure and temperature. Part of the gas power stream that is regulated by the process condition flows to a valve actuator controller where it vents continuously to the atmosphere at a rate equal to or less than six standard cubic feet per hour.

d. "Non-emitting Controller" means a device that monitors a process parameter such as liquid level, pressure, or temperature and sends a signal to a control valve in order to control the process parameter and does not emit natural gas to the atmosphere. Examples of Non-emitting Controllers include but are not limited to instrument air or inert gas pneumatic controllers, electric controllers, and mechanical controllers; and

e. "Remove(d) From Service" means a Pneumatic Controller that has been

physically disconnected and removed from a Facility without requiring the installation of another Pneumatic Controller in its absence.

3. In accordance with Section VI (Periodic Reporting) of the Consent Decree, PennEnergy shall submit the following information in each Semi-Annual Report:

a. the cumulative number of Intermittent Bleed and Low Bleed Pneumatic Controllers that have been removed entirely without replacement or converted to Non-emitting Controllers;

b. the number of Intermittent Bleed and Low Bleed Pneumatic Controllers that have been removed entirely without replacement or converted to Non-emitting Controllers during the relevant Semi-Annual reporting period; and

c. a cumulative list of all facilities, including latitude/longitude of each facility, at which PennEnergy has completed the removal without replacement or conversion of Intermittent Bleed or Low Bleed Pneumatic Controllers with Non-emitting Controllers, together with the number of devices that were removed or converted at each facility.

4. Nothing in this Appendix shall relieve PennEnergy of its obligation to comply with all applicable federal, state and local laws and regulations in implementing the Mitigation Project, including any requirement to obtain permits under the Act or the Pennsylvania Air Pollution Control Act.

APPENDIX G:
VERIFIER CERTIFICATION

[VERIFIER] makes the following certifications and representations in connection with its proposed appointment as the Independent Compliance Auditor to oversee compliance aspects of the consent decree entered in *United States and PADEP v. PennEnergy Resources LLC:*

"VERIFIER" means [VERIFIER], and the employees or contractors who would provide the oversight described above.

"The PennEnergy" means PennEnergy Resources LLC.

1. Financial interests.
    a. [VERIFIER] has no financial interest in the PennEnergy or any of its subsidiaries or affiliates.
    b. If, between the date of this certification and when [VERIFIER]'s term as the Independent Compliance Auditor expires, [VERIFIER]'s financial interests with respect to the PennEnergy change, [VERIFIER] agrees to notify the EPA in writing as soon as reasonably possible after becoming aware of the change. [VERIFIER] is aware that acquiring a financial interest in the PennEnergy could disqualify it from continuing the oversight work described above.
2. Employment, professional relationships, and affiliations.
    a. [VERIFIER] is not a party to any employment, consulting, agency, attorney-client, auditing or other professional relationship or affiliation with the PennEnergy, or any of its subsidiaries or affiliates.
    b. [VERIFIER] has not been a party to such a professional relationship or affiliation to PennEnergy, within two years prior to the Effective Date.

c. [VERIFIER] agrees not to engage in such a professional relationship or affiliation with PennEnergy during its term as the Independent Compliance Auditor or for a period of at least one year after the termination of its term as the Independent Compliance Auditor.

d. After the date of this certification, to the extent that the services of additional personnel will be utilized in the proper discharge of the Independent Compliance Auditor's duties, prior to engaging any such personnel, [VERIFIER] agrees to review the backgrounds of all such personnel to determine whether said personnel or any other entity with which said personnel is affiliated, is or has been a party to any employment, consulting, agency, attorney-client, auditing or other professional relationship or affiliation with the PennEnergy or any of its subsidiaries or affiliates. To the extent any such relationship or affiliation exists, [VERIFIER] will notify the EPA to seek a determination whether it is appropriate to engage said personnel to assist in the monitorship of the PennEnergy.

Date: _____ _____

Name:
On behalf of [VERIFIER]

APPENDIX H:
CONSENT DECREE DELIVERABLES TEMPLATE

Field	Instructions
Deliverable/Obligation	This should contain a description of the specific deliverable or obligation (a single line of succinct text for plans, reports, data, penalty payments and any other item due under the consent decree). In the case of repeating or ongoing deliverables/obligations (*e.g.*, annually recurring deliverables), enter each repeating or ongoing deliverable/obligation as a distinct line item. For consent decrees that cover multiple facilities, a separate deliverable/obligation line should be included for each item (*e.g.*, a plan, a report) that must be submitted individually for each facility and the deliverable/obligation name should be provided in the following format: "Facility Name – Deliverable/Obligation Name." If a single item (*e.g.*, a plan, a report) is required for all facilities, a single, aggregated deliverable/obligation line should be included for this one item and a note should be included in the "Comments" field indicating that this item addresses all of the facilities.
Due Date	Enter the due date for the deliverable in MM/DD/YYYY format.
Comments	Enter any comments or details specific to the deliverable/obligation. If the exact deliverable/obligation due date is not known (*e.g.*, it is contingent upon the completion of another deliverable), enter a description for the deliverable/obligation due date.
Approval Required?	Enter "Yes" or "No" to indicate whether the deliverable/obligation requires written approval by EPA and/or PADEP.
Facility Name	Enter the facility name associated with the deliverable/obligation. The facility name will be consistent across all deliverables/obligations for single-facility consent decrees. For multi-facility consent decrees, each deliverable/obligation for each facility must be entered as a separate line and the facility name associated with each deliverable/obligation will be entered accordingly. If the deliverable line pertains to all facilities, leave the Facility Name field blank.

Deliverable/Obligation	Due Date	Comments	Approval Required?	Facility Name
[Type Input]	*[MM/DD/YYYY]*	*[Type Input]*	*[Select "Yes/No" Input]*	*[Type Input]*