West Virginia Department of Environmental Protection

Austin Caperton Cabinet Secretary

# Permit for a Major Modification



# R14-0033

This permit is issued in accordance with the West Virginia Air Pollution Control Act (West Virginia Code §§22-5-1 et seq.) and 45 CSR 13 – Permits for Construction, Modification, Relocation and Operation of Stationary Sources of Air Pollutants, Notification Requirements, Temporary Permits, General Permits and Procedures for Evaluation. The permittee identified at the above-referenced facility is authorized to construct the stationary sources of air pollutants identified herein in accordance with all terms and conditions of this permit.

Issued to:

Dominion Energy Transmission, Inc. Mockingbird Hill Compressor Station 103-00006

William F. Durham Director, Division of Air Quality

Issued: DRAFT

Facility Location:	From State Route 20, turn onto Mockingbird Hill Road		
	Pine Grove, Wetzel County, West Virginia		
Mailing Address:	925 White Oaks Blvd.		
	Bridgeport, WV, 26330		
Facility Description:	Natural Gas Transmission Station		
NAICS Codes:	486210		
UTM Coordinates:	528.64 km Easting • 4,377.66 km Northing • Zone 17		
Permit Type:	Major Modification		
Description of Change:	This action is for the expansion of the Mockingbird Hill Compressor Station which		
	includes two Titan 130 combustion turbines/compressors, one auxiliary emergency		
	generator, one small boiler, and two storage vessels.		

Any person whose interest may be affected, including, but not necessarily limited to, the applicant and any person who participated in the public comment process, by a permit issued, modified or denied by the Secretary may appeal such action of the Secretary to the Air Quality Board pursuant to article one [§§22B-1-1 et seq.], Chapter 22B of the Code of West Virginia. West Virginia Code §§22-5-14.

The source is subject to 45CSR30. Changes authorized by this permit must also be incorporated into the facility's Title V operating permit. Commencement of the operations authorized by this permit shall be determined by the appropriate timing limitations associated with Title V permit revisions per 45CSR30.

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#### 1.0. Emission Units

Emission Unit ID	Emission Point ID			Design Capacity	Control Device
CT-01	CT-01	Combustion Turbine (CT)/Compressor Solar Titan 130-20502S	2018	21,765 bph	SoLoNO <sub>x</sub> & Ox Cat
CT-02	CT-02	Combustion Turbine (CT)/Compressor Solar Titan 130-20502S2018		21,765 bph	SoLoNO <sub>x</sub> & Ox Cat
EG-01	EG-01EG-01Natural gas- fired Emergency Generator Caterpillar G3412C (lean burn 4-stoke reciprocating engine)2		2018	755 bhp	None
WH-1	WH-1	Natural gas-fired boiler	2018	8.72 MMBtu/hr	None
TK-1	TK-1 TK-1 Accumulator Tank for pipeline fluids		2018	1,000 gallons	None
TK-2	TK-2	Hydrocarbon (Used Oil) Tank	2018	550 gallons	None
LR-1		Tank unloading operations	2018	N/A	None

SoLoNox – Lean-premix combustion controls.

Ox Cat - Oxidation Catalyst to control carbon monoxide and VOCs.

ISO rating of 20,500 bhp for both Solar Titan 130 Turbines

#### 2.0. General Conditions

#### 2.1. Definitions

- 2.1.1. All references to the "West Virginia Air Pollution Control Act" or the "Air Pollution Control Act" mean those provisions contained in W.Va. Code §§ 22-5-1 to 22-5-18.
- 2.1.2. The "Clean Air Act" means those provisions contained in 42 U.S.C. §§ 7401 to 7671q, and regulations promulgated thereunder.
- 2.1.3. "Secretary" means the Secretary of the Department of Environmental Protection or such other person to whom the Secretary has delegated authority or duties pursuant to W.Va. Code §§ 22-1-6 or 22-1-8 (45CSR§30-2.12.). The Director of the Division of Air Quality is the Secretary's designated representative for the purposes of this permit.

#### 2.2. Acronyms

СААА	Clean Air Act Amendments	NOx	Nitrogen Oxides
CBI	Confidential Business	NSPS	New Source Performance
	Information		Standards
CEM	Continuous Emission Monitor	PM	Particulate Matter
CES	Certified Emission Statement	PM <sub>2.5</sub>	Particulate Matter less than 2.5
CFR	Code of Federal Regulations		μm in diameter
CO	Carbon Monoxide	PM10	Particulate Matter less than
CSR	Codes of State Rules		10µm in diameter
DAQ	Division of Air Quality	ppb	Pounds per Batch
DEP	Department of Environmental	pph	Pounds per Hour
	Protection	ppm	Parts per Million
dscm	Dry Standard Cubic Meter	ppmv	Parts per Million by Volume
FOIA	Freedom of Information Act		1 2
GHG	Greenhouse Gases	PSD	Prevention of Significant
HAP	Hazardous Air Pollutant		Deterioration
HON	Hazardous Organic NESHAP	psi	Pounds per Square Inch
HP	Horsepower	SIC	Standard Industrial
lbs/hr	Pounds per Hour		Classification
LDAR	Leak Detection and Repair	SIP	State Implementation Plan
Μ	Thousand	SO <sub>2</sub>	Sulfur Dioxide
MACT	Maximum Achievable	ТАР	Toxic Air Pollutant
	Control Technology	TPY	Tons per Year
MDHI	Maximum Design Heat Input	TRS	Total Reduced Sulfur
MM	Million	TSP	Total Suspended Particulate
MMBtu/hr or	Million British Thermal Units	USEPA	United States Environmental
mmbtu/hr	per Hour		Protection Agency
MMCF/hr or	Million Cubic Feet per Hour	UTM	Universal Transverse Mercator
mmcf/hr		VEE	Visual Emissions Evaluation
NA	Not Applicable	VOC	Volatile Organic Compounds
NAAQS	National Ambient Air Quality	VOL	Volatile Organic Liquids
	Standards		
NESHAPS	National Emissions Standards		
	for Hazardous Air Pollutants		

#### 2.3. Authority

This permit is issued in accordance with West Virginia Air Pollution Control Act W.Va. Code §§ 22-5-1. et seq. and the following Legislative Rules promulgated thereunder:

- 2.3.1. 45CSR13 Permits for Construction, Modification, Relocation and Operation of Stationary Sources of Air Pollutants, Notification Requirements, Temporary Permits, General Permits and Procedures for Evaluation;
- 2.3.2. 45CSR14 Permits for Construction and Major Modification of Major Stationary Sources of Air Pollution for the Prevention of Significant Deterioration;

#### 2.4. Term and Renewal

2.4.1. This Permit shall remain valid, continuous and in effect unless it is revised, suspended, revoked or otherwise changed under an applicable provision of 45CSR13 or any other applicable legislative rule;

#### 2.5. Duty to Comply

- 2.5.1. The permitted facility shall be constructed and operated in accordance with the plans and specifications filed in Permit Application R14-0033, and any modifications, administrative updates, or amendments thereto. The Secretary may suspend or revoke a permit if the plans and specifications upon which the approval was based are not adhered to; [45CSR§\$13-5.11 and 10.3.]
- 2.5.2. The permittee must comply with all conditions of this permit. Any permit noncompliance constitutes a violation of the West Virginia Code and the Clean Air Act and is grounds for enforcement action by the Secretary or USEPA;
- 2.5.3. Violations of any of the conditions contained in this permit, or incorporated herein by reference, may subject the permittee to civil and/or criminal penalties for each violation and further action or remedies as provided by West Virginia Code 22-5-6 and 22-5-7;
- 2.5.4. Approval of this permit does not relieve the permittee herein of the responsibility to apply for and obtain all other permits, licenses, and/or approvals from other agencies; i.e., local, state, and federal, which may have jurisdiction over the construction and/or operation of the source(s) and/or facility herein permitted.

#### 2.6. Duty to Provide Information

The permittee shall furnish to the Secretary within a reasonable time any information the Secretary may request in writing to determine whether cause exists for administratively updating, modifying, revoking, or terminating the permit or to determine compliance with the permit. Upon request, the permittee shall also furnish to the Secretary copies of records to be kept by the permittee. For information claimed to be confidential, the permittee shall furnish such records to the Secretary along with a claim of confidentiality in accordance with 45CSR31. If confidential information is to be sent to USEPA, the permittee shall directly provide such information to USEPA along with a claim of confidentiality in accordance with 40 CFR Part 2.

#### 2.7. Duty to Supplement and Correct Information

Upon becoming aware of a failure to submit any relevant facts or a submittal of incorrect information in any permit application, the permittee shall promptly submit to the Secretary such supplemental facts or corrected information.

#### 2.8. Administrative Update

The permittee may request an administrative update to this permit as defined in and according to the procedures specified in 45CSR13. **[45CSR§13-4.]** 

#### 2.9. Permit Modification

The permittee may request a minor modification to this permit as defined in and according to the procedures specified in 45CSR13. **[45CSR§13-5.4.]** 

#### 2.10 Major Permit Modification

The permittee may request a major modification as defined in and according to the procedures specified in 45CSR14 or 45CSR19, as appropriate. [45CSR\$13-5.1]

#### 2.11. Inspection and Entry

The permittee shall allow any authorized representative of the Secretary, upon the presentation of credentials and other documents as may be required by law, to perform the following:

- a. At all reasonable times (including all times in which the facility is in operation) enter upon the permittee's premises where a source is located or emissions related activity is conducted, or where records must be kept under the conditions of this permit;
- b. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;
- c. Inspect at reasonable times (including all times in which the facility is in operation) any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under the permit; and
- d. Sample or monitor at reasonable times substances or parameters to determine compliance with the permit or applicable requirements or ascertain the amounts and types of air pollutants discharged.

#### 2.12. Emergency

2.12.1. An "emergency" means any situation arising from sudden and reasonable unforeseeable events beyond the control of the source, including acts of God, which situation requires immediate corrective action to restore normal operation, and that causes the source to exceed a technology-based emission limitation under the permit, due to unavoidable increases in emissions attributable

to the emergency. An emergency shall not include noncompliance to the extent caused by improperly designed equipment, lack of preventative maintenance, careless or improper operation, or operator error.

- 2.12.2. Effect of any emergency. An emergency constitutes an affirmative defense to an action brought for noncompliance with such technology-based emission limitations if the conditions of Section 2.12.3 are met.
- 2.12.3. The affirmative defense of emergency shall be demonstrated through properly signed, contemporaneous operating logs, or other relevant evidence that:
  - a. An emergency occurred and that the permittee can identify the cause(s) of the emergency;
  - b. The permitted facility was at the time being properly operated;
  - c. During the period of the emergency the permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards, or other requirements in the permit; and
  - d. The permittee submitted notice of the emergency to the Secretary within one (1) working day of the time when emission limitations were exceeded due to the emergency and made a request for variance, and as applicable rules provide. This notice must contain a detailed description of the emergency, any steps taken to mitigate emissions, and corrective actions taken.
- 2.12.4. In any enforcement proceeding, the permittee seeking to establish the occurrence of an emergency has the burden of proof.
- 2.12.5 The provisions of this section are in addition to any emergency or upset provision contained in any applicable requirement.

#### 2.13. Need to Halt or Reduce Activity Not a Defense

It shall not be a defense for a permittee in an enforcement action that it should have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit. However, nothing in this paragraph shall be construed as precluding consideration of a need to halt or reduce activity as a mitigating factor in determining penalties for noncompliance if the health, safety, or environmental impacts of halting or reducing operations would be more serious than the impacts of continued operations.

#### 2.14. Suspension of Activities

In the event the permittee should deem it necessary to suspend, for a period in excess of sixty (60) consecutive calendar days, the operations authorized by this permit, the permittee shall notify the Secretary, in writing, within two (2) calendar weeks of the passing of the sixtieth (60) day of the suspension period.

#### 2.15. Property Rights

This permit does not convey any property rights of any sort or any exclusive privilege.

#### 2.16. Severability

The provisions of this permit are severable and should any provision(s) be declared by a court of competent jurisdiction to be invalid or unenforceable, all other provisions shall remain in full force and effect.

#### 2.17. Transferability

This permit is transferable in accordance with the requirements outlined in Section 10.1 of 45CSR13. **[45CSR\$13-10.1.]** 

#### 2.18. Notification Requirements

The permittee shall notify the Secretary, in writing, no later than thirty (30) calendar days after the actual startup of the operations authorized under this permit.

#### 2.19. Credible Evidence

Nothing in this permit shall alter or affect the ability of any person to establish compliance with, or a violation of, any applicable requirement through the use of credible evidence to the extent authorized by law. Nothing in this permit shall be construed to waive any defense otherwise available to the permittee including, but not limited to, any challenge to the credible evidence rule in the context of any future proceeding.

#### 3.0. Facility-Wide Requirements

#### **3.1.** Limitations and Standards

- 3.1.1. Open burning. The open burning of refuse by any person, firm, corporation, association or public agency is prohibited except as noted in 45CSR§6-3.1.
   [45CSR§6-3.1.]
- 3.1.2. Open burning exemptions. The exemptions listed in 45CSR§6-3.1 are subject to the following stipulation: Upon notification by the Secretary, no person shall cause, suffer, allow or permit any form of open burning during existing or predicted periods of atmospheric stagnation. Notification shall be made by such means as the Secretary may deem necessary and feasible. [45CSR§6-3.2.]
- 3.1.3. Asbestos. The permittee is responsible for thoroughly inspecting the facility, or part of the facility, prior to commencement of demolition or renovation for the presence of asbestos and complying with 40 CFR § 61.145, 40 CFR § 61.148, and 40 CFR § 61.150. The permittee, owner, or operator must notify the Secretary at least ten (10) working days prior to the commencement of any asbestos removal on the forms prescribed by the Secretary if the permittee is subject to the notification requirements of 40 CFR § 61.145(b)(3)(i). The USEPA, the Division of Waste Management, and the Bureau for Public Health Environmental Health require a copy of this notice to be sent to them. [40CFR§61.145(b) and 45CSR§34]
- 3.1.4. Odor. No person shall cause, suffer, allow or permit the discharge of air pollutants which cause or contribute to an objectionable odor at any location occupied by the public. [45CSR§4-3.1] [State Enforceable Only]
- 3.1.5. Permanent shutdown. A source which has not operated at least 500 hours in one 12-month period within the previous five (5) year time period may be considered permanently shutdown, unless such source can provide to the Secretary, with reasonable specificity, information to the contrary. All permits may be modified or revoked and/or reapplication or application for new permits may be required for any source determined to be permanently shutdown. [45CSR\$13-10.5.]
- 3.1.6. Standby plan for reducing emissions. When requested by the Secretary, the permittee shall prepare standby plans for reducing the emissions of air pollutants in accordance with the objectives set forth in Tables I, II, and III of 45CSR11.
  [45CSR\$11-5.2.]

#### **3.2.** Monitoring Requirements

[Reserved]

#### **3.3.** Testing Requirements

3.3.1. **Stack testing.** As per provisions set forth in this permit or as otherwise required by the Secretary, in accordance with the West Virginia Code, underlying regulations, permits and orders, the permittee shall conduct test(s) to determine compliance with the emission limitations set forth in this permit and/or established or set forth in underlying documents. The Secretary, or his duly authorized representative, may at his option witness or conduct such test(s). Should the Secretary exercise his option to conduct such test(s), the operator shall provide all necessary sampling

connections and sampling ports to be located in such manner as the Secretary may require, power for test equipment and the required safety equipment, such as scaffolding, railings and ladders, to comply with generally accepted good safety practices. Such tests shall be conducted in accordance with the methods and procedures set forth in this permit or as otherwise approved or specified by the Secretary in accordance with the following:

- a. The Secretary may on a source-specific basis approve or specify additional testing or alternative testing to the test methods specified in the permit for demonstrating compliance with 40 CFR Parts 60, 61, and 63 in accordance with the Secretary's delegated authority and any established equivalency determination methods which are applicable. If a testing method is specified or approved which effectively replaces a test method specified in the permit, the permit may be revised in accordance with 45CSR§13-4. or 45CSR§13-5.4 as applicable.
- b. The Secretary may on a source-specific basis approve or specify additional testing or alternative testing to the test methods specified in the permit for demonstrating compliance with applicable requirements which do not involve federal delegation. In specifying or approving such alternative testing to the test methods, the Secretary, to the extent possible, shall utilize the same equivalency criteria as would be used in approving such changes under Section 3.3.1.a. of this permit. If a testing method is specified or approved which effectively replaces a test method specified in the permit, the permit may be revised in accordance with 45CSR§13-4. or 45CSR§13-5.4 as applicable.
- c. All periodic tests to determine mass emission limits from or air pollutant concentrations in discharge stacks and such other tests as specified in this permit shall be conducted in accordance with an approved test protocol. Unless previously approved, such protocols shall be submitted to the Secretary in writing at least thirty (30) days prior to any testing and shall contain the information set forth by the Secretary. In addition, the permittee shall notify the Secretary at least fifteen (15) days prior to any testing so the Secretary may have the opportunity to observe such tests. This notification shall include the actual date and time during which the test will be conducted and, if appropriate, verification that the tests will fully conform to a referenced protocol previously approved by the Secretary.
- d. The permittee shall submit a report of the results of the stack test within sixty (60) days of completion of the test. The test report shall provide the information necessary to document the objectives of the test and to determine whether proper procedures were used to accomplish these objectives. The report shall include the following: the certification described in paragraph 3.5.1.; a statement of compliance status, also signed by a responsible official; and, a summary of conditions which form the basis for the compliance status evaluation. The summary of conditions shall include the following:
  - 1. The permit or rule evaluated, with the citation number and language;
  - 2. The result of the test for each permit or rule condition; and,
  - 3. A statement of compliance or noncompliance with each permit or rule condition.

[WV Code § 22-5-4(a)(14-15) and 45CSR13]

#### **3.4.** Recordkeeping Requirements

3.4.1. **Retention of records.** The permittee shall maintain records of all information (including monitoring data, support information, reports, and notifications) required by this permit recorded in a form suitable and readily available for expeditious inspection and review. Support information includes all calibration and maintenance records and all original strip-chart recordings for

continuous monitoring instrumentation. The files shall be maintained for at least five (5) years following the date of each occurrence, measurement, maintenance, corrective action, report, or record. Said records shall be maintained on site or in a readily accessible off-site location maintained by the permittee for a period of five (5) years. Said records shall be readily available to the Secretary of the Division of Air Quality or his/her duly authorized representative for expeditious inspection and review. Any records submitted to the agency pursuant to a requirement of this permit or upon request by the Secretary shall be certified by a responsible official. Where appropriate, the permittee may maintain records electronically. Where appropriate, the permittee may maintain records electronically (on a computer, on computer floppy disks, CDs, DVDs, or magnetic tape disks), on microfilm, or on microfiche.

3.4.2. **Odors.** For the purposes of 45CSR4, the permittee shall maintain a record of all odor complaints received, any investigation performed in response to such a complaint, and any responsive action(s) taken.

#### [45CSR§4. State Enforceable Only.]

3.4.3. The permittee shall install and maintain an industrial fence around this permitted facility as outlined in the August 28, 2017 submittal of the Prevention of Significant Deterioration Air Quality Dispersion Modeling Report. This industrial fence shall construct in such a manner to prevent the general public from accessing this permitted facility.

#### **3.5.** Reporting Requirements

- 3.5.1. **Responsible official.** Any application form, report, or compliance certification required by this permit to be submitted to the DAQ and/or USEPA shall contain a certification by the responsible official that states that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.
- 3.5.2. **Confidential information.** A permittee may request confidential treatment for the submission of reporting required by this permit pursuant to the limitations and procedures of W.Va. Code § 22-5-10 and 45CSR31.
- 3.5.3. **Correspondence.** All notices, requests, demands, submissions and other communications required or permitted to be made to the Secretary of DEP and/or USEPA shall be made in writing and shall be deemed to have been duly given when delivered by hand, or mailed first class or by private carrier with postage prepaid to the address(es), or submitted in electronic format by email as set forth below or to such other person or address as the Secretary of the Department of Environmental Protection may designate:

DAQ:	US EPA:
Director	Associate Director
WVDEP	Office of Air Enforcement and Compliance Assistance
Division of Air Quality	(3AP20)
601 57 <sup>th</sup> Street	U.S. Environmental Protection Agency
Charleston, WV 25304-2345	Region III
	1650 Arch Street
DAQ Compliance and Enforcement <sup>1</sup> :	Philadelphia, PA 19103-2029
DEPAirQualityReports@wv.gov	

<sup>1</sup>For all self-monitoring reports (MACT, GACT, NSPS, etc.), stack tests and protocols, Notice of Compliance Status Reports, Initial Notifications, etc.

#### 3.5.4. Operating Fee

- 3.5.4.1. In accordance with 45CSR30 Operating Permit Program, the permittee shall submit a certified emissions statement and pay fees on an annual basis in accordance with the submittal requirements of the Division of Air Quality. A receipt for the appropriate fee shall be maintained on the premises for which the receipt has been issued, and shall be made immediately available for inspection by the Secretary or his/her duly authorized representative.
- 3.5.5. **Emission inventory.** At such time(s) as the Secretary may designate, the permittee herein shall prepare and submit an emission inventory for the previous year, addressing the emissions from the facility and/or process(es) authorized herein, in accordance with the emission inventory submittal requirements of the Division of Air Quality. After the initial submittal, the Secretary may, based upon the type and quantity of the pollutants emitted, establish a frequency other than on an annual basis.

#### 4.0. Specific Requirements for Combustion Turbines (CT-01 and CT-02)

#### 4.1. Limitations and Standards

- 4.1.1. The following conditions and requirements are specific to Combustion Turbines #1 through #2 (ID CT-01 & CT-02):
  - a. Emissions from each combustion turbine shall not exceed the following:
    - i. Emissions of nitrogen oxides (NO<sub>x</sub>) shall be controlled with combustion controls. Each turbine shall not discharge nitrogen oxides (NO<sub>x</sub>) emissions in excess of 9 ppmvd at 15 percent oxygen (O<sub>2</sub>) when operating at load conditions at or above 75 percent of peak load and/or when operating temperatures are at or above 0<sup>0</sup>F. When the operating loads of the turbine are less than 75% of peak load and/or operating temperatures are less than 0<sup>0</sup>F, NO<sub>x</sub> emissions from the turbine shall not exceed 150 ppm at 15 percent O<sub>2</sub>. Annual NO<sub>x</sub> emissions from each turbine shall not exceed 27.04 tpy on a 12-month rolling total. This limit applies at all times, including periods of startup, shutdown, or malfunction.
      [40CFR§§60.4320(a), Table 1 to Subpart KKKK of Part 60 Nitrogen Oxides Emission Limits for New Stationary Combustion Turbines]
    - ii. Emissions of CO shall not exceed 5 ppmvd at 15%  $O_2$  during normal operating conditions. Normal operating conditions shall be when ambient temperature is at or above  $0^0$  F and compressor load on the turbine is at or above 75% of peak load. During non-normal temperature (low temperature) conditions, CO emissions shall not exceed 30 ppmvd at 15%  $O_2$ . Annual CO emissions from each turbine shall not exceed 27.8 tpy on a 12-month rolling total. The above short-term limits apply at all times, including periods of shutdowns or malfunctions.
    - iii. Emissions of SO<sub>2</sub> from each turbine shall not exceed 0.060 lb of SO<sub>2</sub>/MMBtu heat input. For purposes of demonstrating compliance with this limit, the permittee shall maintain the Federal Energy Regulatory Commission (FERC) tariff limit on total sulfur content of 20 grains of sulfur per 100 standard cubic feet of natural gas combusted in the turbines. [40 CFR §§60.4330(a)(2) & 60.4365(a)]
    - iv. Emissions of PM, PM<sub>10</sub>, and PM<sub>2.5</sub> from each turbine shall not exceed 3.46 pounds per hour, which includes filterable and condensable portions of particulate matter. Annual PM, PM<sub>10</sub>, and PM<sub>2.5</sub> emissions from each turbine shall not exceed 15.16 tpy on a 12-month rolling total. This limit applies at all times, including periods of startup, shutdown, or malfunction.
       [45 CSR §14-8-.3.]
    - v. Emissions of VOC from each turbine shall not exceed 1.25 ppmvd (expressed as propane) at 15% O<sub>2</sub> during normal operating conditions. Normal operating conditions shall be when ambient temperature is at or above 0<sup>0</sup> F and at compressor load on the turbine at or above 75% of peak load. During non-normal temperature (low temperature) conditions, VOC emissions shall not exceed 2.50 ppmvd (expressed as propane) at 15% O<sub>2</sub>. Annual VOC emissions from each turbine shall not exceed 3.57 tpy on a 12-month rolling total. The above short-term limits apply at all times, including periods of shutdowns, or malfunctions.
    - vi. Emissions of greenhouse gases (GHG), in terms of carbon dioxide equivalent (CO<sub>2</sub>e) emissions, from each turbine shall not exceed 1.01 lbs of CO<sub>2</sub>e per hp hr on a 12-month rolling average and 90,916 tpy on 12-month rolling total.
      [45 CSR §14-8-.3.]

- b. In order to comply with PM and GHG limits in this condition, each turbine shall only be fired with pipeline-quality natural gas.
   [45 CSR §14-.8.3]
- c. In order to comply with PM, PM10, an PM2.5 limits in this condition, each turbine shall be equipped and properly maintained with a high-efficiency combustion air filtration system to remove particulates from the combustion air for each turbine. The intake of the combustion air system shall be designed to minimize the entrainment of ground level particulate matter and sized correctly to allow for the use of good combustion practices to optimize the turbine.
   [45 CSR 14-8.3]
- d. The permittee must operate and maintain each turbine, air pollution control equipment, and monitoring equipment in a manner consistent with good air pollution control practices for minimizing emissions at all times including during startup, shutdown, and malfunction.
- e. The permittee must minimize the combustion turbine's time spent during startup, not to exceed 15 minutes, after which time or once the exhaust temperature reaches the operating range for the control device, whichever occurs first, the emission standards applies to all times other than startup in items a.ii. and a.v. of this condition.
- f. Each combustion turbine shall be equipped with an oxidation catalyst air pollution control device. The oxidation catalyst shall be installed, maintained, and operated as outlined in Condition 4.1.2.
- 4.1.2. Requirements of the Oxidization Catalysts for CT-01 and CT-02.
  - a. If recommended by the catalyst manufacturer, the permittee may operate the turbine without the catalyst element for the first 200 operating hours of each turbine (burn-in period). After completing the burn-in period or the first 200 operating hours (whichever occurs first), the permittee shall install the catalyst element.
  - b. The temperature of the exhaust entering the catalyst must be at least  $450^{0}$ F and no greater than  $900^{0}$ F or within the operating range indicated by the manufacturer.
  - c. The pressure drop across the catalyst shall be no greater than 2 inches above the measured pressure drop at initial start-up with the turbine operating at 100% load ( $\pm$  10%) or as otherwise specified by the catalyst manufacturer. Load calculations may be performed using turbine manufacturers software or other means acceptable to the Director.
  - d. The permittee shall monitor the temperature to the inlet of the catalyst and in accordance with the manufacturer's specifications; a high temperature alarm shall shut off the engine before thermal deactivation of the catalyst occurs. If the engine shuts off due to high temperature, the permittee shall also check for thermal deactivation of the catalyst before normal operations are resumed. Except for the initial burn-in, period as stated in Condition 4.1.2.a., the permittee shall not cause or allow engine exhaust gases to bypass any catalytic reduction device.
  - e. The permittee shall wash or replace the catalyst in accordance with the manufacturer's guidance/recommendation intervals or develop and implement a means to determine when the catalyst is no longer capable of achieving the CO short-term limit in Condition 4.1.1.a.ii.

- 4.1.3. Within 180 days after the initial start-up of both combustion turbines (CT-01 and CT-02), the permittee shall permanently shut down compressor engines identified as 001-01 and 001-02, which are located at the Hastings Compressor Station surface site, which is adjacent and contiguous to the surface site covered by this permit.
   [45 CSR §14-2.46.h.]
- 4.1.4. Operation and Maintenance of Air Pollution Control Equipment. The permittee shall, to the extent practicable, install, maintain, and operate all pollution control equipment listed in Section 1.0 and associated monitoring equipment in a manner consistent with safety and good air pollution control practices for minimizing emissions, or comply with any more stringent limits set forth in this permit or as set forth by any State rule, Federal regulation, or alternative control plan approved by the Secretary.
   [45CSR§13-5.11.]

#### 4.2. Monitoring Requirements

- 4.2.1. For the purpose of determining compliance with the annual limits for each combustion turbine (CT-01 and CT-02), the permittee shall monitor and record the following for each calendar month:
  - a. Hours the turbine operated at normal conditions, which is when the turbine is at or above 50% load, and the ambient temperature is above  $0^{0}$ F.
  - b. Hours the turbine operated at low-load conditions, which is when the turbine load is less than 50% load.
  - c. Hours the turbine operated at low temperature conditions, which is when the ambient temperature is less than  $0^{0}$ F.
  - d. The number of startup and shutdown cycles that occurred during the month.

Such records shall be maintained in accordance with Condition 3.4.1. of this permit.

- 4.2.3. Once per year, the permittee shall sample the fuel gas consumed by the turbine and analyze the sample for hydrogen sulfide and total sulfur or total sulfur compounds using ASTM Method 4810-06 or 5504-12 or other method approved by the Director. Results of such analysis shall be maintained in accordance with Condition 3.4.1.
- 4.2.4. The permittee shall continuously monitor the temperature of the exhaust from each turbine and record all instances when the temperature was outside of the acceptable range as stated in Condition 4.1.2.b. and record what mode the turbine was operating in at the time of the instance. Such records shall be maintained in accordance with Condition 3.4.1.
- 4.2.5. Once per month, the permittee shall record the pressure drop across the oxidation catalyst, or any other means the permittee may elect to use to satisfy the catalyst monitoring requirements in Condition 4.1.2.e. for each turbine and determine if the catalyst is operating correctly or if corrective action needs to be taken to restore the catalyst. Such records shall be maintained in accordance with Condition 3.4.1.

#### 4.3. Testing Requirements

4.3.1. For the purposes of demonstrating compliance with the  $NO_x$  emission standards in Condition 4.1.1.(a)(i) and 40 CFR§60.4320(a), the permittee shall conduct an initial performance test within 60 days after achieving maximum output of each turbine, but no later than 180 days after initial startup. After the initial test, subsequent performance testing shall be conducted biannually (no

more than 26 months following the previous test) as allowed under 40 CFR §60.4340(a). Such testing shall be conducted in accordance with Condition 3.3.1. and 40 CFR §60.4400. Records of such testing shall be maintained in accordance with Condition 3.4.1. [40 CFR §60.8(a), §60.4340(a), §60.4375(b), and §60.4400]

- 4.3.2. For the purposes of demonstrating compliance with the CO emission standards in Condition 4.1.1.(a)(ii), the permittee shall conduct an initial performance test within 60 days after achieving maximum output of each turbine, but no later than 180 days after initial startup. Such testing shall be conducted concurrently with the testing as required in Condition 4.3.1. After the initial test, subsequent performance testing shall be conducted biannually (no more than 26 months following the previous test). Such testing shall be conducted in accordance with Condition 3.3.1. and U.S. EPA Test Method 10. Records of such testing shall be maintained in accordance with Condition 3.4.1.
- 4.3.3. For the purposes of demonstrating compliance with the PM, PM<sub>10</sub>, and PM<sub>2.5</sub> limits in Condition 4.1.1.a.iv. for each turbine, the permittee shall conduct an initial performance test within 120 days once the turbine has operated for 300 hours after initial start-up of the turbine and once every five years thereafter. Such testing shall be conducted in accordance with Condition 3.3.1. and U.S. EPA Test Method 201/201A to be used to measure the "front half" and Method 202 to be used to measure the "back-half" of the particulate matter. During each test, the permittee shall determine either the hydrogen sulfide or the total sulfur in the fuel consumed by the turbine. This testing shall consist of three runs of four hours for each run. Records of such testing shall be maintained in accordance with Condition 3.4.1.
- 4.3.4. During each test run conducted as required in Section 4.3., the permittee shall measure the amount of fuel consumed, power output, and operating mode of the SoLoNO<sub>x</sub> system. The measured values from each test run shall be included with the test report.

#### 4.4. Recordkeeping Requirements

- 4.4.1. **Record of Monitoring.** The permittee shall keep records of monitoring information that include the following:
  - a. The date, place as defined in this permit, and time of sampling or measurements;
  - b. The date(s) analyses were performed;
  - c. The company or entity that performed the analyses;
  - d. The analytical techniques or methods used;
  - e. The results of the analyses; and
  - f. The operating conditions existing at the time of sampling or measurement.
- 4.4.2. **Record of Maintenance of Air Pollution Control Equipment.** For all pollution control equipment listed in Section 1.0, the permittee shall maintain accurate records of all required pollution control equipment inspection and/or preventative maintenance procedures.
- 4.4.3. **Record of Malfunctions of Air Pollution Control Equipment.** For all air pollution control equipment listed in Section 1.0, the permittee shall maintain records of the occurrence and duration of any malfunction or operational shutdown of the air pollution control equipment during which excess emissions occur. For each such case, the following information shall be recorded:

- a. The equipment involved.
- b. Steps taken to minimize emissions during the event.
- c. The duration of the event.
- d. The estimated increase in emissions during the event.

For each such case associated with an equipment malfunction, the additional information shall also be recorded:

- e. The cause of the malfunction.
- f. Steps taken to correct the malfunction.
- g. Any changes or modifications to equipment or procedures that would help prevent future recurrences of the malfunction.
- 4.4.4. For each combustion turbine, the permittee shall keep records of the average daily power output, in terms of hp-hr, and fuel consumed, in terms of either MMBtu or therms, by each turbine on a daily basis. Such records shall be maintained in accordance with Condition 3.4.1.

#### 4.5. Notification Requirements

4.5.1. Within 15 days of complying with Condition 4.1.3., the permittee shall notify the Director in accordance with Condition 3.5.1. of the date that each engine (001-01 and 001-02) permanently creased to operate.
[45 CSR 14-7.7]

#### 5.0. Specific Requirements for the RICE (EG-01) for the Emergency Generator

#### 5.1. Limitations and Standards

- 5.1.1. The following conditions and requirements are specific to the internal combustion engine for the Emergency Generator #1 (ID EG-011):
  - a. Emissions shall not exceed the following:
    - i.  $NO_x$  emissions from the engine shall not exceed 2.0 grams of  $NO_x$  per horsepower-hour (g/hp-hr) or 160 ppmvd at 15 percent  $O_2$ .
    - ii. CO emissions from the engine shall not exceed 4.0 g/hp-hr or 540 ppmvd at 15 percent O<sub>2</sub>.
  - iii. VOC emissions from the engine shall not exceed 1.0 g/hp-hr or 86 ppmvd at 15 percent O<sub>2</sub>. Formaldehyde is excluded from this VOC limit.
    [40 CFR §60.4233(e), Table 1 to Subpart JJJJ of Part 60 NO<sub>x</sub>, CO, and VOC Emission Standards for Stationary Non-Emergency SI Engines ≥ 100 HP, Stationary SI Landfill/Digester Gas Engines, and Stationary Emergency Engines > 25 HP and 45 CSR §14-8.3]
  - b. There is no time limit on the use of the engine in emergency situations. The engine can operate for combined non-emergency purposes, which include maintenance and testing, and other non-emergency use for a maximum of 100 hours per year on a calendar year basis. For the non-emergency situations, this engine cannot be operated for peak shaving or non-emergency demand response, or to generate income for the facility to an electric gird or otherwise provide power as part of a financial arrangement with another entity.
    [40 CFR §§60.4243(d), (d)(1), & (d)(2)(i)]
  - c. The engine shall be equipped with a non-resettable hour-meter prior to start-up. [40 CFR §60.4237(a)]
  - d. The permittee shall keep a maintenance plan and records of conducted maintenance and must, to the extent practicable, maintain and operate the engine in a manner consistent with good air pollution control practice for minimizing emissions.
     [40 CFR §60.4243(b)(2)(ii)]
  - e. In accordance with 45 CSR §14-8.3., the permittee shall implement and maintain the following measures in applying the Best Available Control Technology for PM, PM10, PM2.5 and Greenhouse Gas emissions to the engine by:
    - i. Limiting the fuel for the engine to only pipeline quality natural gas. [45 CSR §14-8.3]
  - ii. Tune-up the engine once every five years in accordance with the manufacturer's specifications.
     [45 CSR §14-8.3]

#### 5.2. Monitoring Requirements

5.2.1. The permittee shall keep records of the hours of operation for the engine identified as EG-01. The records must document how many hours are spent for emergency operation, including what classified the operation as an emergency, and how many hours spent for non-emergency operation with corresponding reason for the non-operation. Such records shall be maintained in accordance with Condition 3.4.1. and must be in a manner to demonstrate compliance with the operating limits of Condition 5.1.1.b.
[40 CFR §60.4245(b)]

#### 5.3. Testing Requirements

5.3.1. The permittee must conduct an initial performance testing on engine EG-01 within one hundred and eighty days after initial start-up and thereafter every three years, to demonstrate compliance with the emission limits of items a.i through a.iii. of Conditions 5.1.1. Such testing shall be conducted in accordance with the applicable procedures in 40 CFR §60.4244 and Condition 3.3.1. Records of such testing shall be maintained in accordance with Condition 3.4.1. [40CFR§§60.4243(b)(2)(ii) and §60.4245(d)]

#### 5.4. Recordkeeping Requirements

5.4.1. The permittee shall maintain records of maintenance preformed on EG-01, which shall include tune-up performed as required in Condition 5.1.1.f.ii. Such records shall be maintained in accordance with Condition 3.4.1.
 [40 CFR §60.4245(a)(2)]

#### 6.0 Specific Requirements for Other Point Source Emission Units

#### 6.1. Limitations and Standards

- 6.1.1. The following conditions and requirements are specific to the boiler (WH-1):
  - a. NO<sub>x</sub> emissions emitted to the atmosphere from the boiler shall not exceed 1.87 tons per year on a rolling 12-month basis.
  - b. CO emissions emitted to the atmosphere from the boiler shall not exceed 3.15 tons per year on a rolling 12-month basis.
  - c. PM,  $PM_{10}$ , and  $PM_{2.5}$  emissions to the atmosphere from the boiler shall not exceed 0.28 tons per year on a rolling yearly total basis, which includes filterable and condensable forms of particulate matter.
  - d. The heater shall not be designed or constructed with a maximum design heat input in excess of 8.72 MMBtu/hr. This condition satisfies compliance with the limitation of 45 CSR §2-3.1.
     [45 CSR 2A-3.1.a.]
  - e. In accordance with 45 CSR §14-8.3., the permittee shall implement and maintain the following measures in applying the Best Available Control Technology for PM, PM10, PM2.5 and Greenhouse Gases emissions generated from the boiler by:
    - i. Limiting the fuel for the boiler to only pipeline quality natural gas. [45 CSR §14-8.3]
    - ii. Tune-up the boiler once every five years in accordance with the manufacturer's specifications.
       [45 CSR §14-8.3]
- 6.1.2. The venting (blowdown) of the compressors, pig receivers and launchers, station shutdown events, and filter maintenance to atmosphere shall be conducted in accordance with the following limitations:
  - a. The GHG emissions release as a result of blowdown events from the compressors shall not exceed 6,936.3 tons of CO<sub>2</sub>e during any twelve consecutive months.
     [45 CSR §14-8.3]
  - b. The VOC emissions released as a result of blowdown events from the compressors shall not exceed 7.91 tons during any twelve consecutive months.
  - c. The number of complete station-wide blowdown events due to planned station shutdowns shall not exceed 1 event during any twelve consecutive months.
     [45 CSR §14-8.3]

#### 6.2. Monitoring Requirements

6.2.1. The permittee shall record the actual amount of fuel consumed or actual operating hours for the boiler (WH-1) for each calendar month and determine actual emissions emitted during the corresponding month. Using the previous 12-months of actual emissions, the permittee shall demonstrate compliance with the annual limits of items a through c of Condition 6.1.1. Such records shall be maintained in accordance with Condition 3.4.1.

- 6.2.2. The permittee shall determine the amount of GHG, in terms of  $CO_2e$  and VOC emissions released during every compressor blowdown. At the end of each calendar month, the permittee shall determine the total GHG and VOCs emission from the previous 12 months to demonstrate compliance with the limits in Condition 6.1.2.a. and b. Such records shall be maintained in accordance with Condition 3.4.1.
- 6.2.3. For each pig chamber depressurization event, the permittee shall determine the amount of GHG emissions in terms of CO<sub>2</sub>e, and VOC emissions released during the event. Such records shall be maintained in accordance with Condition 3.4.1.
- 6.2.3. The permittee shall collect production data of condensate collected from the pipeline segment that the permittee facility supported for the first 30 days that TK01 was placed into service. The permittee must calculate the potential VOC emissions from TK01, which includes flash emissions, breathing losses, and working losses from the vessel, using a generally accepted model or calculation methodology, based on the maximum average daily throughput determined for a 30-day period of production. If the potential VOC emissions from TK01 are at or greater than 6 tpy, TK01 is an affected source subject to Subpart OOOO of 40 CFR 60 and the permittee shall comply with the following:
  - a. Determine the potential VOC emission rate as specified in 40 CFR §60.5365a(e).
  - b. Reduce the VOC emissions in accordance with 40 CFR §60.5395a(d).
  - c. Submit the information required for TK01 as specified in 40 CFR §60.5420a(b) to the Director within 60 days from placing TK01 in service.
  - d. Maintain records in accordance with Condition 3.4.1.
  - [40 CFR §60.5410a(h)]

#### 7.0. Specific Requirements for Collection of Fugitive Emissions Facility-Wide

#### 7.1. Limitations and Standards

- 7.1.1 The permittee must reduce fugitive greenhouse gas and VOC emissions from the permitted facility by complying with the following requirements.
   [40 CFR §§60.5397a, 5397a(a) and 45 CSR §14-8.3]
  - a. The permittee shall develop and implement a monitoring plan in accordance with Condition 7.1.2.
  - b. The permittee shall conduct the initial monitoring survey in accordance with the plan within 60 days after initial startup of compressor CT-01 or CT-02.
     [40 CFR §60.5397a(f)(2) and §60.5420a(b)(13)]
  - c. Subsequent monitoring surveys shall be conducted at least quarterly with at least 60 days between surveys.
     [40 CFR §60.5397a(g)(2)]
  - d. The fugitive emission components at compressor station shall include all components associated with the Mockingbird Hill Compressor Station Site, which is permitted under R13-2555C, and the Mockingbird Hill Compressor Station Expansion Site covered under this permit.
     [40 CFR §60.5397a(g)(2)]
  - Fugitive emissions are defined as: any visible emission from a fugitive emission component observed using optical gas imaging equipment or an instrument reading of 500 ppm or greater using Method 21.
     [40 CFR §60.5397a(a)]
  - f. The permittee shall repair all detected fugitive emissions in accordance with the following: [40 CFR 60.5397a(h)]
    - i. Within 30 calendar days after detection; or [40 CFR 60.5397a(h)(1)]
    - ii. If the repair or replacement is technically infeasible, would require a vent blowdown, a compressor station shutdown, or is unsafe to repair during operation of the unit, then the repair or replacement must be completed during the next scheduled compressor station shut-down, after a planned vent blowdown, or within 2 years, whichever is earlier.
       [40 CFR 60.5397a(h)(2)]
  - g. Once the repair or replacement is completed, the identified component shall be resurveyed as soon as practicable, but no later than 30 days after being repaired, to ensure that there are no fugitive emissions.
     [40 CFR 60.5397a(h)(3)]
  - h. For repairs completed after the monitoring survey, the permittee may resurvey the repaired component using either U.S. EPA Method 21, Alternative Screening Procedure of Method 21, or optical gas imaging.
     [40 CFR §§60.5397a(h) and (h)(1)]
  - **i.** When using Method 21 to resurvey a repair, the fugitive emissions component is repaired when the Method 21 instrument indicates a concentration of less than 500 ppm above the background or when no soap bubbles are observed when the Alternative Screening Procedure is used. The

procedures outlined in 40 CFR 60.5397a(c)(8)(ii) must be followed when using Method 21. Use of the Alternative Screening Procedure must be conducted in accordance with the following:

#### [40 CFR §§60.5397a(h)(3)(iii) (h)(3)(iii)(A), & (h)(3)(iii)(B)]

- i. Components that do not have continuously moving parts, that do not have surface temperatures greater than the boiling point or less than the freezing point of the soap solution, that do not have open areas to the atmosphere that the soap solution cannot bridge, or that do not exhibit evidence of liquid leakage. Components that have these conditions present cannot be surveyed using the Alternative Screening Procedure.
- Spray a soap solution over all potential leak sources. The soap solution may be a commercially available leak detection solution or may be prepared using concentrated detergent and water. A pressure sprayer or squeeze bottle may be used to dispense the solution. Observe the potential leak sites to determine if any bubbles are formed. If no bubbles are observed, the source is presumed to have no detectable emissions or leaks as applicable. If any bubbles are observed, Method 21 instructions shall be used to determine if a leak exists, or if the source has detectable emissions, as applicable.
   [Section 8.3.3. of Method 21, Appendix A to Part 60]
- j. When using optical gas imaging to resurvey a repair, the fugitive emissions component is repaired when the optical gas imaging equipment show no indication of visible emissions. The procedure outlined in Condition 7.1.2.f. must be followed.
   [40 CFR §§60.5397a(h)(3)(iv)]
- 7.1.2. The permittee shall develop a plan to monitor all fugitive emission components at the permitted facility. At a minimum, this fugitive emissions monitoring plan must include the elements specified in the following, at a minimum:[40 CFR §60.5397a(b)]
  - a. Technique for determining fugitive emissions (i.e., Method 21 at 40 CFR part 60, appendix A-7, or optical gas imaging).
    [40 CFR §60.5397a(c)(2)]
  - b. Manufacturer and model number of fugitive emissions detection equipment to be used. [40 CFR §60.5397a(c)(3)]
  - c. Procedures and timeframes for identifying and repairing fugitive emissions components from which fugitive emissions are detected, including timeframes for fugitive emission components that are unsafe to repair. The permittee's repair schedule must meet the requirements of Condition 7.1.1.f.
     [40 CFR §60.5397a(c)(4)]
  - d. Procedures and timeframes for verifying fugitive emission component repairs.
     [40 CFR §60.5397a(c)(5)]
  - e. Records that will be kept and the length of time records will be kept. [40 CFR §60.5397a(c)(6)]
- 7.1.3. If the permittee elects to use optical gas imaging techniques to conduct monitoring surveys, the plan must also include the following elements:
  - a. Initial verification that the optical gas imaging equipment used in the survey meets the following:

- The optical gas imaging equipment must be capable of imaging gases in the spectral range for the compound of highest concentration in the potential fugitive emissions.
   [40 CFR 60.5397a(c)(7)(A)]
- ii. The optical gas imaging equipment must be capable of imaging a gas that is half methane, half propane at a concentration of 10,000 ppm at a flow rate of less than 60 grams per hour from a quarter inch diameter orifice.
   [40 CFR 60.5397a(c)(7)(B)]
- b. Procedures to perform a daily verification check of the equipment. [40 CFR §60.5397a(c)(7)(ii)]
- c. Procedure for determining the operator's maximum viewing distance from the components and how the operator will ensure that this distance is maintained.
   [40 CFR §60.5397a(c)(7)(iii)]
- d. Procedure for determining maximum wind speed during which monitoring can be performed and how the operator will ensure monitoring occurs only at wind speeds below this threshold.
   [40 CFR §60.5397a(c)(7)(iv)]
- e. Procedures for conducting surveys, shall including the following: [40 CFR §60.5397a(c)(7)(v)]
  - i. How the operator will ensure an adequate thermal background is present in order to view potential fugitive emissions.
     [40 CFR §60.5397a(c)(7)(v)(A)]
  - ii. How the operator will deal with adverse monitoring conditions, such as wind.
     [40 CFR §60.5397a(c)(7)(v)(B)]
  - iii. How the operator will deal with interferences (e.g., steam).[40 CFR §60.5397a(c)(7)(v)(C)]
- f. Training and experience needed prior to performing surveys.
   [40 CFR §60.5397a(c)(7)(vi)]
- g. Procedures for calibration and maintenance. At a minimum, procedures must comply with those recommended by the manufacturer.
   [40 CFR §60.5397a(c)(7)(vii)]
- 7.1.4. If the permittee elects to use Method 21 technique to conduct monitoring surveys, the plan must also include the following elements:
  - a. Verification that the monitoring equipment meets the requirements specified in Section 6.0 of Method 21 at 40 CFR part 60, appendix A-7. For purposes of instrument capability, the fugitive emissions definition shall be 500 ppm or greater methane using a FID-based instrument. If the permittee wishes to use an analyzer other than a FID-based instrument, the permittee must develop a site-specific fugitive emission definition that would be equivalent to 500 ppm methane using a FID-based instrument (e.g., 10.6 eV PID with a specified isobutylene concentration as the fugitive emission definition would provide equivalent response to the permittee's compound of interest).
    [40 CSR 60.5397a(c)(8)(i)]

- b. Procedures for conducting surveys. At a minimum, the procedures shall ensure that the surveys comply with the relevant sections of Method 21 at 40 CFR part 60, appendix A-7, including Section 8.3.1.
   [40 CSR 60.5397a(c)(8)(ii)]
- 7.1.5. The monitoring plan must include the following elements at the permitted facility:
  - a. Sitemap. [40 CFR §60.5397a(d)(1)]
  - b. A defined observation path that ensures that all fugitive emissions components are within sight of the path. The path must include distinguishable marking that indicates or identifies where the observation is being taken with relationship to specific collection of fugitive components. The observation path must account for interferences.
     [40 CFR §60.5397a(d)(2)]
  - c. If the permittee is using Method 21, the plan must also include a list of fugitive emissions components to be monitored and the method for determining location of fugitive emissions components to be monitored in the field (e.g. tagging, identification on a process and instrumentation diagram, etc.).
     [40 CFR §60.5397a(d)(3)]
- 7.1.6. Each monitoring survey shall observe each fugitive emission component, as defined in 40 CFR 60.5430a, for fugitive emissions.
   [40 CFR §60.5397a(e)]
- 7.1.7. The permittee may elect to switch between monitoring techniques in the monitoring plan. If such an election occurs, the permittee must update the monitoring plan as required in Condition 7.1.2. for the site and notify the Director in accordance with Condition 3.5.3. within 15 days prior to the next monitoring survey as required in Condition 7.1.1.c.

#### 7.2 **Recordkeeping Requirements**

- 7.2.1. The permittee shall maintain records of each monitoring survey as required in Condition 7.1.1. Such records shall contain the following information:
   [40 CFR§60.5397a(b), (c), and (d)]
  - a. Date of the survey. [40 CFR §60.5420a(c)(15)(ii)(A)]
  - b. Beginning and end time of the survey. [40 CFR §60.5420a(c)(15)(ii)(B)]
  - Name of operator(s) performing survey. You must note the training and experience of the operator.
     140 CEP \$(0,5420-(a)(15)(2))
    - [40 CFR §60.5420a(c)(15)(ii)(C)]
  - d. Monitoring instrument used.
     [40 CFR §60.5420a(c)(15)(ii)(D)]
  - e. When optical gas imaging is used to perform the survey, one or more digital photographs or videos, captured from the optical gas imaging instrument used to conduct the monitoring, of each required monitoring survey being performed. The digital photograph must include the date the photograph was taken and the latitude and longitude of the collection of fugitive emissions components at the station imbedded within or stored with the digital file. As an

alternative to imbedded latitude and longitude within the digital file, the digital photograph or video may consist of an image of the monitoring survey being performed with a separately operating GPS device within the same digital picture or video, provided the latitude and longitude output of the GPS unit can be clearly read in the digital image. [40 CFR §60.5420a(c)(15)(ii)(E)]

- f. Ambient temperature, sky conditions, and maximum wind speed at the time of the survey. [40 CFR §60.5420a(c)(15)(ii)(G)]
- g. Any deviations from the monitoring plan or a statement that there were no deviations from the monitoring plan.
   [40 CFR §60.5420a(c)(15)(ii)(H)]
- h. Documentation of each fugitive emission, including the information specified as follows: [40 CFR §60.5420a(c)(15)(ii)(I)]
  - i. Location. [40 CFR §60.5420a(c)(15)(ii)(I)(1)]
  - ii. Any deviations from the monitoring plan or a statement that there were no deviations from the monitoring plan.
     [40 CFR §60.5420a(c)(15)(ii)(I)(2)]
  - iii. Number and type of components for which fugitive emissions were detected.[40 CFR §60.5420a(c)(15)(ii)(I)(3)]
  - iv. Number and type of fugitive emissions components that were not repaired as required in Condition 7.1.2.f.
     [40 CFR §60.5420a(c)(15)(ii)(I)(6)]
  - v. A digital photograph or video of each fugitive emissions component that could not be repaired during the monitoring survey when the fugitive emissions were initially found as required in §60.5397a(h)(3)(ii). The digital photograph or video must clearly identify the location of the component that must be repaired. Any digital photograph or video required under this paragraph can also be used to meet the requirements under paragraph (c)(15)(ii)(E) of this section, as long as the photograph or video is taken with the optical gas imaging instrument, includes the date, and the latitude and longitude are either imbedded or visible in the picture.
    [40 CFR §60.5420a(c)(15)(ii)(I)(8)]
  - vi. Repair methods applied in each attempt to repair the fugitive emissions components. [40 CFR §60.5420a(c)(15)(ii)(I)(9)]
  - vii. Number and type of fugitive emission components placed on delay of repair and explanation for each delay of repair.
     [40 CFR §60.5420a(c)(15)(ii)(I)(10)]
  - viii. The date of successful repair of the fugitive emissions component.[40 CFR §60.5420a(c)(15)(ii)(I)(11)]
  - ix. Instrumentation used to resurvey a repaired fugitive emissions component that could not be repaired during the initial fugitive emissions finding.
     [40 CFR §60.5420a(c)(15)(ii)(I)(12)]

Such records shall be maintained onsite or at the nearest local field office for at least 5 years. Any records submitted as required in Condition 7.3.1. in an electronic format shall be maintained in the electric format as submitted.

[40 CFR §§60.5420a(c), (c)(15)]

#### 7.3. Reporting Requirements

7.3.1. The permittee shall submit to the Administrator an annual report with the reporting period beginning on August 2 and ending on August 1 with the report due to be submitted by October 31 via CEDIX (*https://cdx.epa.gov*). The permittee may include other facilities in this submission. This report shall contain the records of each monitoring survey of fugitive emission components.
[40 CFR §60.5385a(d), §§60.5397a(a) & (j) and §§60.5420a(b), (b)(1), (b)(4), (b)(7), & (b)(1)]

Records of submittal shall be maintained in accordance with Condition 3.4.1. At minimum, these reports shall contain the following information:

- Permittee Name, Facility Name, addresses of the Facility;
   [40 CFR 60.5420a(b)(1)(i)]
- b. An identification of each affected facility being included in the report; [40 CFR 60.5420a(b)(1)(ii)]
- c. Beginning and ending dates of the reporting period.[40 CFR 60.5420a(b)(1)(iii)]
- d. A certification by a responsible official of truth, accuracy, and completeness. This certification shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete. [40 CFR 60.5420a(b)(1)(iv)]
- e. Date of each monitoring survey. [40 CFR §60.5420a(b)(7)(i)]
- f. Beginning and end time of each survey.[40 CFR §60.5420a(b)(7)(ii)]
- g. Name of operator(s) performing survey. If the survey is performed by optical gas imaging, the permittee must note the training and experience of the operator.
  [40 CFR §60.5420a(b)(7)(iii)]
- h. Ambient temperature, sky conditions, and maximum wind speed at the time of the survey. [40 CFR §60.5420a(b)(7)(vi)]
- i. Monitoring instrument used. [40 CFR §60.5420a(b)(7)(v)]
- j. Any deviations from the monitoring plan or a statement that there were no deviations from the monitoring plan.
   [40 CFR §60.5420a(b)(7)(vi)]
- k. Number and type of components for which fugitive emissions were detected.
   [40 CFR §60.5420a(b)(7)(vii)]
- Number and type of fugitive emissions components that were not repaired as required in Condition 7.1.1.f. (40 CFR §60.5397a(h)).
   [40 CFR §60.5420a(b)(7)(viii)]

- m. The date of successful repair of the fugitive emissions component.
   [40 CFR §60.5420a(b)(7)(x)]
- n. Number and type of fugitive emission components placed on delay of repair and explanation for each delay of repair.
   [40 CFR §60.5420a(b)(7)(ii)]
- Type of instrument used to resurvey a repaired fugitive emissions component that could not be repaired during the initial fugitive emissions finding.
   [40 CFR §60.5420a(b)(7)(xii)]

## **CERTIFICATION OF DATA ACCURACY**

	I, the undersigned, hereby certi	fy that, based of	on information and b	elief formed after reasonable
inquiry, all information contained in the attached, representing the				
period beginning		_ and ending		, and any supporting
documents appen	ded hereto, is true, accurate, and	complete.		
Signature <sup>1</sup> (please use blue ink)	Responsible Official or Authorized Representative			Date
Name & Title (please print or type)	Name		Title	
Telephone No.			Fax No	

<sup>1</sup> This form shall be signed by a "Responsible Official." "Responsible Official" means one of the following:

- a. For a corporation: The president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy or decision-making functions for the corporation, or a duly authorized representative of such person if the representative is responsible for the overall operation of one or more manufacturing, production, or operating facilities applying for or subject to a permit and either:
  - (i) the facilities employ more than 250 persons or have a gross annual sales or expenditures exceeding \$25 million (in second quarter 1980 dollars), or
  - (ii) the delegation of authority to such representative is approved in advance by the Director;
- b. For a partnership or sole proprietorship: a general partner or the proprietor, respectively;
- c. For a municipality, State, Federal, or other public entity: either a principal executive officer or ranking elected official. For the purposes of this part, a principal executive officer of a Federal agency includes the chief executive officer having responsibility for the overall operations of a principal geographic unit of the agency (e.g., a Regional Administrator of U.S. EPA); or
- d. The designated representative delegated with such authority and approved in advance by the Director.