SC DEPARTMENT *of*
ENVIRONMENTAL
SERVICES

# Bureau of Air Quality
# Title V Operating Permit

**Carolina Gas Transmission LLC - Southern Compressor Station**
**2314 W Dibble Road Southwest**
**Warrenville, South Carolina 29851**
**Aiken County**

In accordance with the provisions of the Pollution Control Act, Sections 48-1-50(5), 48-1-100(A), and 48-1-110(a), the 1976 Code of Laws of South Carolina, as amended, and South Carolina Regulation 61-62, Air Pollution Control Regulations and Standards, the Bureau of Air Quality authorizes the operation of this facility and the equipment specified herein in accordance with valid construction permits, and the plans, specifications, and other information submitted in the Title V permit application received on March 20, 2018, as amended. All official correspondence, plans, permit applications, and written statements are an integral part of the permit. Any false information or misrepresentation in the application for a construction permit may be grounds for permit revocation.

The operation of this facility is subject to and conditioned upon the terms, limitations, standards, and schedules contained herein or as specified by this permit and its accompanying attachments.

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| **Permit Number:** | **TV-0080-0107 v1.1** |
| **Agency Air Number:** | **0080-0107** |
| **Issue Date:** | **July 8, 2020** |
| **Effective Date:** | **October 1, 2020** |
| **Expiration Date:** | **September 30, 2025** |

**Steve McCaslin, P. E., Director**
**Air Permitting Division**
**Bureau of Air Quality**

**RECORD OF REVISIONS**

| Date | Type | Description of Changes |
|---|---|---|
| 01-19-2021 | AA | Updated facility name from Dominion Energy Carolina Gas Transmission LLC – Southern Compressor Station to Carolina Gas Transmission LLC – Southern Compressor Station |
| | MM | Minor modification to the Title V operating permit to incorporate changes made at the facility in construction permit CP-50000120 v1.0. At the time of the construction permit issuance, combustion turbine 14 (CT14) was subject to NSPS OOOOa; however, regulations have since been modified and CT14 is now subject to NSPS OOOOb because construction commenced after December 6, 2022. NSPS OOOOb will be rolled into the operating permit. |

AA Administrative Amendment
MM Minor Modification
SM Significant Modification

## A. EMISSION UNIT(S), EQUIPMENT, AND CONTROL DEVICE(S)

| Emission Unit ID | Emission Unit Description |
|---|---|
| 01 | Combustion Turbines |
| 02 | Combustion Turbine (NSPS GG) |
| 03 | Combustion Turbine (NSPS KKKK) |

Equipment and control device capacities provided under the Description columns of Equipment and Control Device Tables below are not intended to be permit limits unless otherwise specified within the Table "Limitations, Monitoring, and Reporting." However, this condition does not exempt the facility from the construction permitting process, from PSD review, nor from any other applicable requirements that must be addressed prior to increasing production rates.

## A.1 EQUIPMENT FOR EMISSION UNIT 01 – COMBUSTION TURBINES

| Equipment ID | Equipment Description | Installation Date | Control Device ID | Emission Point ID |
|---|---|---|---|---|
| CT4 | 13.1 million Btu/hr Simple Combustion Turbine Fired on Natural Gas | 1985 | None | S-4 |
| CT5 | 13.1 million Btu/hr Simple Combustion Turbine Fired on Natural Gas | 1985 | None | S-5 |
| CT6 | 13.1 million Btu/hr Simple Combustion Turbine Fired on Natural Gas | 1985 | None | S-6 |
| CT7 | 13.1 million Btu/hr Simple Combustion Turbine Fired on Natural Gas | 1985 | None | S-7 |
| CT8 | 13.1 million Btu/hr Simple Combustion Turbine Fired on Natural Gas | 1985 | None | S-8 |
| CT9 | 13.1 million Btu/hr Simple Combustion Turbine Fired on Natural Gas | 1985 | None | S-9 |
| CT10 | 13.1 million Btu/hr Simple Combustion Turbine Fired on Natural Gas | 1985 | None | S-10 |
| CT11 | 13.1 million Btu/hr Simple Combustion Turbine Fired on Natural Gas | 1985 | None | S-11 |

## A.2 EQUIPMENT FOR EMISSION UNIT 02 – COMBUSTION TURBINE (NSPS GG)

| Equipment ID | Equipment Description | Installation Date | Control Device ID | Emission Point ID |
|---|---|---|---|---|
| CT13 | 13.1 million Btu/hr Simple Combustion Turbine Fired on Natural Gas | 1985 | None | S-13 |

## A.3 EQUIPMENT FOR EMISSION UNIT 03 – COMBUSTION TURBINE (NSPS KKKK)

| Equipment ID | Equipment Description | Installation Date | Control Device ID | Emission Point ID |
|---|---|---|---|---|
| CT14 | 52.8 million Btu/hr SCCT Fired on Natural Gas | 2024 | None | S-14 |

## B. LIMITATIONS, MONITORING, AND REPORTING

| Condition Number | Conditions |
|---|---|
| B.1 | **Emission Unit ID:** All<br>**Equipment ID:** All<br><br>Equipment capacities provided under the Equipment Description column of the Equipment Tables above are not intended to be permit limits unless otherwise specified within the Table of Conditions for the particular equipment. However, this condition does not exempt the facility from the construction permitting process, from PSD review, nor from any other applicable requirements that must be addressed prior to increasing production rates**.** |
| B.2 | **Emission Unit ID:** 01, 02<br>**Equipment ID:** CT4, CT5, CT6, CT7, CT8, CT9, CT10, CT11, CT13<br><br>(S.C. Regulation 61-62.5, Standard No. 4, Section IX) Where construction or modification began on or before December 31, 1985, emissions from these sources (including fugitive emissions) shall not exhibit an opacity greater than 40%, each. |
| B.3 | **Emission Unit ID:** 03<br>**Equipment ID:** CT14<br><br>(S.C. Regulation 61-62.5, Standard No. 4, Section IX) Where construction or modification began after December 31, 1985, emissions from this source (including fugitive emissions) shall not exhibit an opacity greater than 20%. |
| B.4 | **Emission Unit ID:** 01, 02, 03<br>**Equipment ID:** CT4, CT5, CT6, CT7, CT8, CT9, CT10, CT11, CT13, CT14<br><br>These sources are permitted to burn only natural gas as fuel. The use of any other substances as fuel is prohibited without prior written approval from the Department. |
| B.5 | **Emission Unit ID:** 02<br>**Equipment ID:** CT13<br><br>This source is subject to New Source Performance Standards (NSPS), 40 CFR 60 and S.C. Regulation 61-62.60 Subpart A, General Provisions and Subpart GG, Standards of Performance for Stationary Gas Turbines, as applicable. This source shall comply with all applicable requirements of Subparts A and GG. |

| **B. LIMITATIONS, MONITORING, AND REPORTING** | |
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| **Condition Number** | **Conditions** |
| B.6 | **Emission Unit ID:** 02<br>**Equipment ID:** CT13<br><br>§ 60.333 Standard for sulfur dioxide.<br><br>On and after the date on which the performance test required to be conducted by § 60.8 is completed, every owner or operator subject to the provision of this subpart shall comply with one or the other of the following conditions:<br><br>(a) No owner or operator subject to the provisions of this subpart shall cause to be discharged into the atmosphere from any stationary gas turbine any gases which contain sulfur dioxide in excess of 0.015 percent by volume at 15 percent oxygen and on a dry basis.<br><br>(b) No owner or operator subject to the provisions of this subpart shall burn in any stationary gas turbine any fuel which contains total sulfur in excess of 0.8 percent by weight (8000 ppmw). |
| B.7 | **Emission Unit ID:** 02<br>**Equipment ID:** CT13<br><br>§ 60.334 Monitoring of operations<br><br>(h) The owner or operator of any stationary gas turbine subject to the provisions of this subpart:<br><br>(1) Shall monitor the total sulfur content of the fuel being fired in the turbine, except as provided in paragraph (h)(3) of this section. The sulfur content of the fuel must be determined using total sulfur methods described in § 60.335(b)(10). Alternatively, if the total sulfur content of the gaseous fuel during the most recent performance test was less than 0.4 weight percent (4000 ppmw), ASTM D4084-82, 94, D5504-01, D6228-98, or Gas Processors Association Standard 2377-86 (all of which are incorporated by reference-see § 60.17), which measure the major sulfur compounds may be used; and<br><br>(3) Notwithstanding the provisions of paragraph (h)(1) of this section, the owner or operator may elect not to monitor the total sulfur content of the gaseous fuel combusted in the turbine, if the gaseous fuel is demonstrated to meet the definition of natural gas in § 60.331(u), regardless of whether an existing custom schedule approved by the administrator for subpart GG requires such monitoring. The owner or operator shall use one of the following sources of information to make the required demonstration:<br><br>(i) The gas quality characteristics in a current, valid purchase contract, tariff sheet or transportation contract for the gaseous fuel, specifying that the maximum total sulfur content of the fuel is 20.0 grains/100 scf or less; or |

**B. LIMITATIONS, MONITORING, AND REPORTING**

<table>
<tr><th>Condition Number</th><th>Conditions</th></tr>
<tr><td></td><td>(ii) Representative fuel sampling data which show that the sulfur content of the gaseous fuel does not exceed 20 grains/100 scf. At a minimum, the amount of fuel sampling data specified in section 2.3.1.4 or 2.3.2.4 of appendix D to part 75 of this chapter is required.</td></tr>
<tr><td>B.8</td><td>Emission Unit ID: 03<br>Equipment ID: CT14<br><br>This source is subject to New Source Performance Standards (NSPS), 40 CFR 60 and S.C. Regulation 61-62.60 Subpart A, General Provisions and Subpart KKKK, Standards of Performance for Stationary Combustion Turbines, as applicable. This source shall comply with all applicable requirements of Subparts A and KKKK.</td></tr>
<tr><td>B.9</td><td>Emission Unit ID: 03<br>Equipment ID: CT14<br><br>(40 CFR 60 Subpart KKKK § 60.4340) Within 60 calendar days after achieving the maximum production rate at which this facility will be operated, but no later than 180 calendar days after its initial startup and at such other times as may be required by the Department under section 114 of the Clean Air Act, the owner or operator of this facility shall conduct performance tests. Performance tests shall be conducted on CT14 to show compliance with the $NO_X$ standard. Subsequent $NO_X$ performance tests shall be conducted on an annual basis (no more than 14 calendar months following the previous performance test). If the $NO_X$ emission result from the performance test is less than or equal to 75 percent of the $NO_X$ emission limit for the turbine, you may reduce the frequency of subsequent performance tests to once every 2 years (no more than 26 calendar months following the previous performance test). If the results of any subsequent performance test exceed 75 percent of the $NO_X$ emission limit for the turbine, you must resume annual performance tests. Compliance with the $NO_X$ standards shall be determined by conducting performance tests in accordance with the procedures and methods specified in 40 CFR 60 Subpart KKKK.</td></tr>
<tr><td>B.10</td><td>Emission Unit ID: 03<br>Equipment ID: CT14<br><br>§ 60.4320 What emission limits must I meet for nitrogen oxides ($NO_X$)?<br><br>(a) You must meet the emission limits for $NO_X$ specified in Table 1 to this subpart.<br><br>Table 1 to Subpart KKKK of Part 60—Nitrogen Oxide Emission Limits for New Stationary Combustion Turbines
<table>
<tr><th>Combustion turbine type</th><th>Combustion turbine heat input at peak load (HHV)</th><th>$NO_X$ emission standard</th></tr>
<tr><td>New turbine firing natural gas</td><td>> 50 MMBtu/h and ≤ 850 MMBtu/h</td><td>25 ppm at 15 percent O2 or 150 ng/J of useful output (1.2 lb/MWh).</td></tr>
</table></td></tr>
<tr><td>B.11</td><td>Emission Unit ID: 03</td></tr>
</table>

| **B. LIMITATIONS, MONITORING, AND REPORTING** | |
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| **Condition Number** | **Conditions** |
| | **Equipment ID:** CT14<br><br>§ 60.4330 What emission limits must I meet for sulfur dioxide ($SO_2$)?<br><br>(a) If your turbine is located in a continental area, you must comply with either paragraph (a)(1), (a)(2), or (a)(3) of this section. If your turbine is located in Alaska, you do not have to comply with the requirements in paragraph (a) of this section until January 1, 2008.<br><br>(1) You must not cause to be discharged into the atmosphere from the subject stationary combustion turbine any gases which contain $SO_2$ in excess of 110 nanograms per Joule (ng/J) (0.90 pounds per megawatt-hour (lb/MWh)) gross output;<br><br>(2) You must not burn in the subject stationary combustion turbine any fuel which contains total potential sulfur emissions in excess of 26 ng $SO_2$/J (0.060 lb $SO_2$/MMBtu) heat input. If your turbine simultaneously fires multiple fuels, each fuel must meet this requirement; |
| B.12 | **Emission Unit ID:** 03<br>**Equipment ID:** CT14<br><br>§ 60.4333 What are my general requirements for complying with this subpart?<br><br>(a) You must operate and maintain your stationary combustion 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. |
| B.13 | **Emission Unit ID:** 03<br>**Equipment ID:** CT14<br><br>§ 60.4340 How do I demonstrate continuous compliance for $NO_X$ if I do not use water or steam injection?<br><br>(a) If you are not using water or steam injection to control $NO_X$ emissions, you must perform annual performance tests in accordance with § 60.4400 to demonstrate continuous compliance. If the $NO_X$ emission result from the performance test is less than or equal to 75 percent of the $NO_X$ emission limit for the turbine, you may reduce the frequency of subsequent performance tests to once every 2 years (no more than 26 calendar months following the previous performance test). If the results of any subsequent performance test exceed 75 percent of the $NO_X$ emission limit for the turbine, you must resume annual performance tests. |
| B.14 | **Emission Unit ID:** 03<br>**Equipment ID:** CT14 |

| **B. LIMITATIONS, MONITORING, AND REPORTING** | |
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| **Condition Number** | **Conditions** |
| | § 60.4365 How can I be exempted from monitoring the total sulfur content of the fuel?<br><br>You may elect not to monitor the total sulfur content of the fuel combusted in the turbine, if the fuel is demonstrated not to exceed potential sulfur emissions of 26 ng $SO_2$/J (0.060 lb $SO_2$/MMBtu) heat input for units located in continental areas and 180 ng $SO_2$/J (0.42 lb $SO_2$/MMBtu) heat input for units located in noncontinental areas or a continental area that the Administrator determines does not have access to natural gas and that the removal of sulfur compounds would cause more environmental harm than benefit. You must use one of the following sources of information to make the required demonstration:<br><br>(a) The fuel quality characteristics in a current, valid purchase contract, tariff sheet or transportation contract for the fuel, specifying that the maximum total sulfur content for oil use in continental areas is 0.05 weight percent (500 ppmw) or less and 0.4 weight percent (4,000 ppmw) or less for noncontinental areas, the total sulfur content for natural gas use in continental areas is 20 grains of sulfur or less per 100 standard cubic feet and 140 grains of sulfur or less per 100 standard cubic feet for noncontinental areas, has potential sulfur emissions of less than less than 26 ng $SO_2$/J (0.060 lb $SO_2$/MMBtu) heat input for continental areas and has potential sulfur emissions of less than less than 180 ng $SO_2$/J (0.42 lb $SO_2$/MMBtu) heat input for noncontinental areas; or<br><br>(b) Representative fuel sampling data which show that the sulfur content of the fuel does not exceed 26 ng $SO_2$/J (0.060 lb $SO_2$/MMBtu) heat input for continental areas or 180 ng $SO_2$/J (0.42 lb $SO_2$/MMBtu) heat input for noncontinental areas. At a minimum, the amount of fuel sampling data specified in section 2.3.1.4 or 2.3.2.4 of appendix D in 40 CFR Part 75 is required. |
| B.15 | **Emission Unit ID:** 03<br>**Equipment ID:** CT14<br><br>§ 60.4375 What reports must I submit?<br><br>(b) For each affected unit that performs annual performance tests in accordance with § 60.4340(a), you must submit a written report of the results of each performance test before the close of business on the 60th day following the completion of the performance test. |
| B.16 | **Emission Unit ID:** 03<br>**Equipment ID:** CT14<br><br>§ 60.4400 How do I conduct the initial and subsequent performance tests, regarding $NO_X$?<br><br>(a) You must conduct an initial performance test, as required in § 60.8. Subsequent $NO_X$ performance tests shall be conducted on an annual basis (no more than 14 calendar months |

**B. LIMITATIONS, MONITORING, AND REPORTING**

| Condition Number | Conditions |
|---|---|
| | following the previous performance test).<br><br>(1) There are two general methodologies that you may use to conduct the performance tests. For each test run:<br><br>(i) Measure the $NO_X$ concentration (in parts per million (ppm)), using EPA Method 7E or EPA Method 20 in appendix A of this part. For units complying with the output based standard, concurrently measure the stack gas flow rate, using EPA Methods 1 and 2 in appendix A of this part, and measure and record the electrical and thermal output from the unit. Then, use the following equation to calculate the $NO_X$ emission rate:<br><br>$$E = \frac{1.194 \times 10^{-7} + (NO_X)_c + Q_{std}}{P} \qquad (Eq. 5)$$<br><br>Where:<br><br>E = $NO_X$ emission rate, in lb/MWh<br><br>$1.194 \times 10^{-7}$ = conversion constant, in lb/dscf-ppm<br><br>$(NO_X)_c$ = average $NO_X$ concentration for the run, in ppm<br><br>$Q_{std}$ = stack gas volumetric flow rate, in dscf/hr<br><br>P = gross electrical and mechanical energy output of the combustion turbine, in MW (for simple-cycle operation), for combined-cycle operation, the sum of all electrical and mechanical output from the combustion and steam turbines, or, for combined heat and power operation, the sum of all electrical and mechanical output from the combustion and steam turbines plus all useful recovered thermal output not used for additional electric or mechanical generation, in MW, calculated according to § 60.4350(f)(2); or<br><br>(ii) Measure the $NO_X$ and diluent gas concentrations, using either EPA Methods 7E and 3A, or EPA Method 20 in appendix A of this part. Concurrently measure the heat input to the unit, using a fuel flowmeter (or flowmeters), and measure the electrical and thermal output of the unit. Use EPA Method 19 in appendix A of this part to calculate the $NO_X$ emission rate in lb/MMBtu. Then, use Equations 1 and, if necessary, 2 and 3 in § 60.4350(f) to calculate the $NO_X$ emission rate in lb/MWh.<br><br>(2) Sampling traverse points for $NO_X$ and (if applicable) diluent gas are to be selected following EPA Method 20 or EPA Method 1 (non-particulate procedures), and sampled for equal time intervals. The sampling must be performed with a traversing single-hole probe, or, if feasible, with a stationary multi-hole probe that samples each of the points sequentially. Alternatively, a |

**B. LIMITATIONS, MONITORING, AND REPORTING**

| Condition Number | Conditions |
|---|---|
| | multi-hole probe designed and documented to sample equal volumes from each hole may be used to sample simultaneously at the required points.<br><br>(3) Notwithstanding paragraph (a)(2) of this section, you may test at fewer points than are specified in EPA Method 1 or EPA Method 20 in appendix A of this part if the following conditions are met:<br><br>(i) You may perform a stratification test for $NO_X$ and diluent pursuant to<br><br>(A) [Reserved], or<br><br>(B) The procedures specified in section 6.5.6.1(a) through (e) of appendix A of part 75 of this chapter.<br><br>(ii) Once the stratification sampling is completed, you may use the following alternative sample point selection criteria for the performance test:<br><br>(A) If each of the individual traverse point $NO_X$ concentrations is within ±10 percent of the mean concentration for all traverse points, or the individual traverse point diluent concentrations differs by no more than ±5ppm or ±0.5 percent $CO_2$ (or $O_2$) from the mean for all traverse points, then you may use three points (located either 16.7, 50.0 and 83.3 percent of the way across the stack or duct, or, for circular stacks or ducts greater than 2.4 meters (7.8 feet) in diameter, at 0.4, 1.2, and 2.0 meters from the wall). The three points must be located along the measurement line that exhibited the highest average $NO_X$ concentration during the stratification test; or<br><br>(B) For turbines with a $NO_X$ standard greater than 15 ppm @ 15% $O_2$, you may sample at a single point, located at least 1 meter from the stack wall or at the stack centroid if each of the individual traverse point $NO_X$ concentrations is within ±5 percent of the mean concentration for all traverse points, or the individual traverse point diluent concentrations differs by no more than ±3ppm or ±0.3 percent $CO_2$ (or $O_2$) from the mean for all traverse points; or<br><br>(b) The performance test must be done at any load condition within plus or minus 25 percent of 100 percent of peak load. You may perform testing at the highest achievable load point, if at least 75 percent of peak load cannot be achieved in practice. You must conduct three separate test runs for each performance test. The minimum time per run is 20 minutes.<br><br>(4) Compliance with the applicable emission limit in § 60.4320 must be demonstrated at each tested load level. Compliance is achieved if the three-run arithmetic average $NO_X$ emission rate |

| **B. LIMITATIONS, MONITORING, AND REPORTING** | |
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| **Condition Number** | **Conditions** |
| | at each tested level meets the applicable emission limit in § 60.4320.<br><br>(6) The ambient temperature must be greater than 0 °F during the performance test. |
| B.17 | **Emission Unit ID:** 03<br>**Equipment ID:** CT14<br><br>This source is subject to New Source Performance Standards (NSPS), 40 CFR 60 and S.C. Regulation 61-62.60 Subpart A, General Provisions and Subpart OOOOb, Standards of Performance for Crude Oil and Natural Gas Facilities for Which Construction, Modification or Reconstruction Commenced After December 6, 2022, as applicable. This source shall comply with all applicable requirements of Subparts A and OOOOb. |
| B.18 | **Emission Unit ID:** 03<br>**Equipment ID:** CT14<br><br>§ 60.5365b Am I subject to this subpart?<br><br>You are subject to the applicable provisions of this subpart if you are the owner or operator of one or more of the onshore affected facilities listed in paragraphs (a) through (i) of this section, that is located within the Crude Oil and Natural Gas source category, as defined in § 60.5430b, for which you commence construction, modification, or reconstruction after December 6, 2022. Facilities located inside and including the Local Distribution Company (LDC) custody transfer station are not subject to this subpart.<br><br>(b) Each centrifugal compressor affected facility, which is a single centrifugal compressor. A centrifugal compressor located at a well site is not an affected facility under this subpart. A centrifugal compressor located at a centralized production facility is an affected facility under this subpart.<br><br>(i) Each fugitive emissions components affected facility, which is the collection of fugitive emissions components at a well site, centralized production facility, or a compressor station.<br><br>(3) For purposes of §§ 60.5397b and 60.5398b, a "modification" to a compressor station occurs when:<br><br>(i) An additional compressor is installed at a compressor station; or<br><br>(ii) One or more compressors at a compressor station is replaced by one or more compressors of greater total horsepower than the compressor(s) being replaced. When one or more compressors is replaced by one or more compressors of an equal or smaller total horsepower than the compressor(s) being replaced, installation of the replacement compressor(s) does not trigger a modification of the compressor station for purposes of §§ 60.5397b and |

| **B. LIMITATIONS, MONITORING, AND REPORTING** | |
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| **Condition Number** | **Conditions** |
| | 60.5398b. |
| B.19 | **Emission Unit ID:** 03<br>**Equipment ID:** CT14<br><br>§ 60.5370b When must I comply with this subpart?<br><br>(a) You must be in compliance with the standards of this subpart no later than May 7, 2024 or upon initial startup, whichever date is later, except as specified in paragraph (a)(1) of this section for reciprocating compressor affected facilities, paragraphs (a)(2) and (3) of this section for storage vessel affected facilities, paragraph (a)(4) of this section for process unit equipment affected facilities at onshore natural gas processing plants, paragraph (a)(5) of this section for process controllers, paragraph (a)(6) of this section for pumps, paragraph (a)(7) of this section for centrifugal compressor affected facilities, and paragraphs § 60.5377b(b) or (c) for associated gas wells.<br><br>(7) For centrifugal compressor affected facilities, you must comply with the requirements of paragraph (a)(7)(i) or (ii) of this section, as applicable.<br><br>(i) You must comply with the requirements of § 60.5380b(a)(1) and (2) or (a)(3) for your centrifugal compressor upon initial startup.<br><br>(ii) Each centrifugal compressor affected facility that uses dry seals, each self-contained wet seal compressor, and each centrifugal compressor on the Alaska North Slope equipped with sour seal oil separator and capture system, complying with one of the alternatives in § 60.5380b(a)(4), (5), or (6), must comply with the specified performance-based volumetric flow rate work practice standards on or before 8,760 hours of operation after May 7, 2024, on or before 8,760 hours of operation after last seal replacement, or on or before 8,760 hours of operation after startup, whichever date is later.<br><br>(b) At all times, including periods of startup, shutdown, and malfunction, owners and operators shall maintain and operate any affected facility including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Administrator which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source. The provisions for exemption from compliance during periods of startup, shutdown and malfunctions provided for in 40 CFR 60.8(c) do not apply to this subpart. |
| B.20 | **Emission Unit ID:** 03<br>**Equipment ID:** CT14 |

§ 60.5380b What GHG and VOC standards apply to centrifugal compressor affected facilities?

Each centrifugal compressor affected facility must comply with the GHG and VOC standards in paragraphs (a) through (d) of this section.

(a) Each centrifugal compressor affected facility that uses wet seals must comply with the GHG and VOC standards in paragraphs (a)(1), (2), or (3) of this section. Each self-contained wet seal compressor, and each centrifugal compressor on the Alaska North Slope equipped with sour seal oil separator and capture system, must comply with the GHG and VOC standards in paragraphs (a)(1) and (2) of this section, or one of the alternatives in (a)(3) through (5) of this section, as applicable, and (a)(8) of this section. Each centrifugal compressor affected facility that uses dry seals must comply with paragraphs (a)(6) through (8) of this section, or with of the alternatives in paragraph (a)(9) of this section.

(6) If you own or operate a centrifugal compressor equipped with dry seals, you must comply with the GHG and VOC requirements as specified in paragraphs (a)(6)(i) through (iii), using volumetric flow rate as a surrogate. You must determine the volumetric flow rate in accordance with paragraph (a)(7)(iii) of this section.

(i) The volumetric flow rate per seal must not exceed 10 standard cubic feet per minute (scfm) per seal. If the individual seals are manifolded to a single open-ended vent line, the volumetric flow rate must not exceed the sum of the individual seals multiplied by 10 scfm. If the volumetric flow rate, measured in accordance with paragraph (a)(7)(iii) of this section exceeds 10 scfm multiplied by the number of dry seals connected to the vent, the seals connected to the measured vent must be repaired as provided in paragraph (a)(8) of this section.

(ii) You must conduct your first volumetric flow rate measurement from your centrifugal compressor equipped with a dry seal on or before 8,760 hours of operation after May 7, 2024 or on or before 8,760 hours of operation after startup, whichever date is later.

(iii) You must conduct subsequent volumetric flow rate measurements from your centrifugal compressor equipped with dry seals on or before 8,760 hours of operation after the previous measurement which demonstrates compliance with the 10 scfm volumetric flow rate per seal. If the individual seals are manifolded to a single open-ended vent line, the volumetric flow rate must not exceed the sum of the individual seals multiplied by 10 scfm.

(7) You must determine the volumetric flow rate for your centrifugal compressor, as specified in paragraphs (a)(7)(i) through (iii) of this section.

(iii) You must determine the volumetric flow rate from your centrifugal compressor equipped with dry seals as specified in paragraph (a)(7)(iii)(A) or (B) of this section. If the volumetric flow rate exceeds 10 scfm multiplied by the number of dry seals connected to the vent, the dry seals connected to the measured vent must be repaired as provided in paragraph (a)(8) of this

| **B. LIMITATIONS, MONITORING, AND REPORTING** | |
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| | section.<br><br>(A) For centrifugal compressors equipped with dry seals in operating-mode or in standby-pressurized-mode, determine volumetric flow rate at standard conditions from each centrifugal compressor equipped with dry seals using one of the methods specified in paragraphs (a)(7)(iii)(A)(*1*) through (*3*) of this section.<br><br>(*1*) You may choose to use any of the methods set forth in § 60.5386b(a) to screen for leaks/emissions. For the purposes of this paragraph, when using any of the methods in § 60.5386b(a), emissions are detected whenever a leak is detected according to the method. If emissions are detected using the methods set forth in § 60.5386b(a), then you must use one of the methods specified in paragraph (a)(7)(iii)(A)(*2*) or (*3*) of this section to determine the volumetric flow rate. If emissions are not detected using the methods in § 60.5386b(a), then you may assume that the volumetric emissions are zero.<br><br>(*2*) Use a temporary or permanent flow meter according to methods set forth in § 60.5386b(b).<br><br>(*3*) Use a high-volume sampler according to the method set forth in § 60.5386b(c).<br><br>(B) For conducting measurements on manifolded groups of centrifugal compressors equipped with dry seals, you must determine the volumetric flow rate from the dry seal centrifugal compressors as specified in paragraph (a)(7)(iii)(B)(*1*) or (*2*) of this section.<br><br>(*1*) Measure at a single point in the manifold downstream of all centrifugal compressors equipped with dry seals inputs and, if practical, prior to comingling with other non-compressor emission sources.<br><br>(*2*) Determine the volumetric flow rate at standard conditions from the common stack using one of the methods specified in paragraph (a)(7)(iii)(A)(*1*) through (*3*) of this section.<br><br>(8) The seal must be repaired within 90 calendar days after the date of the volumetric emissions measurement that exceeds the applicable required flow rate per seal. You must conduct follow-up volumetric flow rate measurements from seal vents using the methods specified in paragraph (a)(7) of this section within 15 days after the repair to document that the rate has been reduced to less than the applicable required flow rate per seal. If the individual seals are manifolded to a single open-ended vent line or vent, the volumetric flow rate must be reduced to less than the sum of the individual seals multiplied by the applicable required flow rate per seal specified in paragraph (a)(4) through (6) of this section, as applicable. Delay of repair will be allowed if the conditions in paragraphs (a)(8)(i) or (ii) of this section are met. |

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| | (i) If the repair of the wet or dry seal is technically infeasible, would require a vent blowdown, a compressor station shutdown, or would be unsafe to repair during operation of the unit, the repair must be completed during the next scheduled compressor station shutdown for maintenance, after a scheduled vent blowdown, or within 2 years of the date of the volumetric emissions measurement that exceeds the applicable required flow rate per seal, whichever is earliest. A vent blowdown is the opening of one or more blowdown valves to depressurize major production and processing equipment, other than a storage vessel.<br><br>(ii) If the repair requires replacement of the compressor seal or a part thereof, but the replacement cannot be acquired and installed within the repair timelines specified under this section due to the condition specified in paragraph (a)(8)(ii)(A) of this section, the repair must be completed in accordance with paragraph (a)(8)(ii)(B) of this section and documented in accordance with § 60.5420b(c)(4)(iii)(F) through (H).<br><br>(A) Seal or part thereof supplies had been sufficiently stocked but are depleted at the time of the required repair.<br><br>(B) The required replacement must be ordered no later than 10 calendar days after the centrifugal compressor seal is added to the delay of repair list due to parts unavailability. The repair must be completed as soon as practicable, but no later than 30 calendar days after receipt of the replacement seal or part, unless the repair requires a compressor station shutdown. If the repair requires a compressor station shutdown, the repair must be completed in accordance with the timeframe specified in paragraph (a)(8)(i) of this section.<br><br>(9) As an alternative to meeting the requirements for centrifugal compressors with dry seals specified in paragraphs (a)(6) through (8) of this section, owners or operators are allowed to comply with the standard by meeting the requirements specified in paragraphs (a)(9)(i) and (ii), or (a)(9)(iii) of this section.<br><br>(i) You must reduce methane and VOC emissions from each centrifugal compressor dry seal system by 95.0 percent.<br><br>(ii) If you use a control device to reduce emissions, you must equip the dry seal system with a cover that meets the requirements of § 60.5411b(b). The cover must be connected through a closed vent system that meets the requirements of § 60.5411b(a) and (c) and the closed vent system must be routed to a control device that meets the conditions specified in § 60.5412b.<br><br>(iii) As an alternative to routing the closed vent system to a control device, you may route the closed vent system to a process. If you route the emissions to a process, you must equip the dry seal system with a cover that meets the requirements of § 60.5411b(b). The cover must be connected through a closed vent system that meets the requirements of § 60.5411b(a) and |

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| | (c).<br><br>(b) You must demonstrate initial compliance with the standards that apply to centrifugal compressor affected facilities as required by § 60.5410b(d).<br><br>(c) You must demonstrate continuous compliance with the standards that apply to centrifugal compressor affected facilities as required by § 60.5415b(d).<br><br>(d) You must perform the reporting as required by § 60.5420b(b)(1) and (5), and (b)(11) through (13), as applicable; and the recordkeeping as required by § 60.5420b(c)(4), and (8) through (13), as applicable. |
| B.21 | **Emission Unit ID:** 03<br>**Equipment ID:** CT14<br><br>§ 60.5386b What test methods and procedures must I use for my centrifugal compressor and reciprocating compressor affected facilities?<br><br>(a) You must use one of the methods described in paragraph (a)(1) and (2) of this section to screen for emissions or leaks from the reciprocating compressor rod packing when complying with § 60.5385b(b)(1)(iii) and from applicable wet seal centrifugal compressor and dry seal centrifugal compressor vents when complying with § 60.5380b(a)(3) through (6).<br><br>(1) *OGI instrument.* Use an OGI instrument for equipment leak detection as specified in either paragraph (a)(1)(i) or (ii) of this section. For the purposes of paragraphs (a)(1)(i) and (ii) of this section, any visible emissions observed by the OGI instrument from reciprocating rod packing or compressor dry or wet seal vent is a leak.<br><br>(ii) *OGI instrument as specified in § 60.5397b of this subpart.* For reciprocating compressor, applicable wet seal centrifugal compressor, and dry seal centrifugal compressor affected facilities located at centralized production facilities, compressor stations, or other location that is not an onshore natural gas processing plant, use an OGI instrument to screen for emissions from reciprocating rod packing or compressor dry seals in accordance with the elements of § 60.5397b(c)(7).<br><br>(2) *Method 21.* Use Method 21 in appendix A-7 to this part according to § 60.5403b(b)(1) and (2). For the purposes of this section, an instrument reading of 500 parts per million by volume (ppmv) above background or greater is a leak.<br><br>(b) You must determine natural gas volumetric flow rate using a rate meter which meets the requirement in Method 2D in appendix A-1 of this part. Rate meters must be calibrated on an |

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| | annual basis according to the requirements in Method 2D.<br><br>(c) You must use a high-volume sampler to measure emissions of the reciprocating compressor rod packing, applicable centrifugal compressor wet seal vent, or centrifugal compressor dry seal vent in accordance with paragraphs (c)(1) through (7) of this section.<br><br>(1) You must use a high-volume sampler designed to capture the entirety of the emissions from the applicable vent and measure the entire range of methane concentrations being emitted as well as the total volumetric flow at standard conditions. You must develop a standard operating procedure for this device and document these procedures in the appropriate monitoring plan. In order to get reliable results, persons using this device should be knowledgeable in its operation and the requirements in this section.<br><br>(2) This procedure may involve hazardous materials, operations, and equipment. This procedure may not address all of the safety problems associated with its use. It is the responsibility of the user of this procedure to establish appropriate safety and health practices and determine the applicability of regulatory limitations prior to performing this procedure.<br><br>(3) The high-volume sampler must include a methane gas sensor(s) which meets the requirements in paragraphs (c)(3)(i) through (iii) of this section.<br><br>(i) The methane sensor(s) must be selective to methane with minimal interference, less than 2.5 percent for the sum of responses to other compounds in the gas matrix. You must document the minimal interference though empirical testing or through data provided by the manufacturer of the sensor.<br><br>(ii) The methane sensor(s) must have a measurement range over the entire expected range of concentrations.<br><br>(iii) The methane sensor(s) must be capable of taking a measurement once every second, and the data system must be capable of recording these results for each sensor at all times during operation of the sampler.<br><br>(4) The high-volume sampler must be designed such that it is capable of sampling sufficient volume in order to capture all emissions from the applicable vent. Your high-volume sampler must include a flow measurement sensor(s) which meets the requirements of paragraphs (c)(4)(i) and (ii) of this section.<br><br>(i) The flow measurement sensor must have a measurement range over the entire expected range of flow rates sampled. If needed multiple sensors may be used to capture the entire |

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| | range of expected flow rates.<br><br>(ii) The flow measurement sensor(s) must be capable of taking a measurement once every second, and the data system must be capable of recording these results for each sensor at all times during operation of the sampler.<br><br>(5) You must calibrate your methane sensor(s) according to the procedures in paragraphs (c)(5)(i)(A) and (B) of this section, and flow measurement sensors must be calibrated according to the procedures in paragraph (c)(5)(ii) of this section.<br><br>(i) For Methane Sensor Calibration:<br><br>(A) Initially and on a semi-annual basis, determine the linearity at four points through the measurement range for each methane sensor using methane gaseous calibration cylinder standards. At each point, the difference between the cylinder value and the sensor reading must be less than 5 percent of the respective calibration gas value. If the sensor does not meet this requirement, perform corrective action on the sensor, and do not use the sampler until these criteria can be met.<br><br>(B) Prior to and at the end of each testing day, challenge each sensor at two points, a low point, and a mid-point, using methane gaseous calibration cylinder standards. At each point, the difference between the cylinder value and the sensor reading must be less than 5 percent of the respective calibration gas value. If the sensor does not meet this requirement, perform corrective action on the sensor and do not use the sampler again until these criteria can be met. If the post-test calibration check fails at either point, invalidate the data from all tests performed subsequent to the last passing calibration check.<br><br>(ii) Flow measurement sensors must meet the requirements in Method 2D in appendix A-1 of this part. Rate meters must be calibrated on an annual basis according to the requirements in Method 2D. If your flow sensor relies on ancillary temperature and pressure measurements to correct the flow rate to standard conditions, the temperature and pressure sensors must also be calibrated on an annual basis. Standard conditions are defined as 20 °C (68 °F) and 760 mm Hg (29.92 in. Hg).<br><br>(6) You must conduct sampling of the reciprocating compressor rod packing, applicable wet seal centrifugal compressor, or dry seal centrifugal compressor vent in accordance with the procedures in paragraphs (c)(6)(i) through (v) of this section.<br><br>(i) The instrument must be operated consistent with manufacturer recommendations; users are encouraged to develop a standard operating procedure to document the exact |

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| | procedures used for sampling.<br><br>(ii) Identify the rod packing, applicable wet seal centrifugal compressor, or dry seal centrifugal compressor vent to be measured and record the signal to noise ratio (S/N) of the engine. Collect a background methane sample in ppmv for a minimum of one minute and record the result along with the date and time.<br><br>(iii) Approach the vent with the sample hose and adjust the sampler so that you are measuring at the full flow rate. Then, adjust the flow rate to ensure the measured methane concentration is within the calibrated range of the methane sensor and minimum methane concentration is at least 2 ppmv higher than the background concentration. Sample for a period of at least one minute and record the average flow rate in standard cubic feet per minute and the methane sample concentration in ppmv, along with the date and time. Standard conditions are defined as 20 °C (68 °F) and 760 mm Hg (29.92 in. Hg).<br><br>(iv) Calculate the leak rate according to the following equation:<br><br>$$Q = V\left(\frac{CH4_S - CH4_B}{1000000}\right) \qquad (Eq.\ 1)$$<br><br>Where:<br><br>$CH4_B$ = background methane concentration, ppmv<br><br>$CH4_S$ = methane sample concentration, ppmv<br><br>V = Average flow rate of the sampler, scfm<br><br>Q = Methane emission rate, scfm<br><br>(v) You must collect at least three separate one-minute measurements and determine the average leak rate. The relative percent difference of these three separate samples should be less than 10 percent.<br><br>(7) If the measured natural gas flow determined as specified in paragraph (c)(6) of this section exceeds 70.0 percent of the manufacturer's reported maximum sampling flow rate you must either use a temporary or permanent flow meter according to paragraph (b) of this section or use another method meeting the requirements in paragraph (d) of this section to determine the leak or flow rate.<br><br>(d) As an alternative to a high-volume sampler, you may use any other method that has been validated in accordance with the procedures specified in Method 301 in appendix A in 40 CFR part 63, subject to Administrator approval, as specified in § 60.8(b). |

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| B.22 | **Emission Unit ID:** 03<br>**Equipment ID:** CT14<br><br>§ 60.5397b What GHG and VOC standards apply to fugitive emissions components affected facilities?<br><br>This section applies to fugitive emissions components affected facilities. You must comply with the requirements of paragraphs (a) through (l) of this section to reduce fugitive emissions of methane and VOC. The requirements of this section are independent of the cover and closed vent system requirements of § 60.5411b.<br><br>(a) *General requirements.* You must monitor all fugitive emissions components affected facilities in accordance with paragraphs (b) through (g) of this section. You must repair all sources of fugitive emissions in accordance with paragraph (h) of this section. You must demonstrate initial compliance in accordance with paragraph (i) of this section. You must keep records in accordance with paragraph (j) of this section and report in accordance with paragraph (k) of this section. You must meet the requirements for well closures in accordance with paragraph (l) of this section.<br><br>(b) *Develop fugitive emissions monitoring plan.* You must develop a fugitive emissions monitoring plan that covers all fugitive emissions components affected facilities within each company-defined area in accordance with paragraphs (c) and (d) of this section.<br><br>(c) *Elements of fugitive emissions monitoring plan.* Your fugitive emissions monitoring plan must include the elements specified in paragraphs (c)(1) through (8) of this section, at a minimum.<br><br>(1) Frequency for conducting surveys. Surveys must be conducted at least as frequently as required by paragraphs (f) and (g) of this section.<br><br>(2) Technique for determining fugitive emissions (*i.e.,* AVO or other detection methods, Method 21 of appendix A-7 to this part, and/or OGI and meeting the requirements of paragraphs (c)(7)(i) through (vii) of this section).<br><br>(3) Manufacturer and model number of fugitive emissions detection equipment to be used, if applicable.<br><br>(4) 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. Your repair schedule must meet the requirements of paragraph (h) of this section at a minimum.<br><br>(5) Procedures and timeframes for verifying fugitive emission component repairs. |

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| | (6) Records that will be kept and the length of time records will be kept.<br><br>(7) If you are using OGI, your plan must also include the elements specified in paragraphs (c)(7)(i) through (vii) of this section.<br><br>(i) Verification that your OGI equipment meets the specifications of paragraphs (c)(7)(i)(A) and (B) of this section. This verification is an initial verification, and may either be performed by the facility, by the manufacturer, or by a third party. For the purposes of complying with the fugitive emissions monitoring program with OGI, fugitive emissions are defined as any visible emissions observed using OGI.<br><br>(A) Your OGI equipment must be capable of imaging gases in the spectral range for the compound of highest concentration in the potential fugitive emissions.<br><br>(B) Your OGI 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 ≤60 g/hr from a quarter inch diameter orifice.<br><br>(ii) Procedure for a daily verification check.<br><br>(iii) Procedure for determining the operator's maximum viewing distance from the equipment and how the operator will ensure that this distance is maintained.<br><br>(iv) 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.<br><br>(v) Procedures for conducting surveys, including the items specified in paragraphs (c)(7)(v)(A) through (C) of this section.<br><br>(A) How the operator will ensure an adequate thermal background is present in order to view potential fugitive emissions.<br><br>(B) How the operator will deal with adverse monitoring conditions, such as wind.<br><br>(C) How the operator will deal with interferences (*e.g.,* steam).<br><br>(vi) Training and experience needed prior to performing surveys.<br><br>(vii) Procedures for calibration and maintenance. At a minimum, procedures must comply with |

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| | those recommended by the manufacturer.<br><br>(8) If you are using Method 21 of appendix A-7 to this part, your plan must also include the elements specified in paragraphs (c)(8)(i) through (iv) of this section. For the purposes of complying with the fugitive emissions monitoring program using Method 21 of appendix A-7 to this part a fugitive emission is defined as an instrument reading of 500 ppmv or greater.<br><br>(i) *Verification that your monitoring equipment meets the requirements specified in Section 6.0 of Method 21 of appendix A-7 to this part.* For purposes of instrument capability, the fugitive emissions definition shall be 500 ppmv or greater methane using a FID-based instrument. If you wish to use an analyzer other than an FID-based instrument, you must develop a site-specific fugitive emission definition that would be equivalent to 500 ppmv 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 your compound of interest).<br><br>(ii) *Procedures for conducting surveys.* At a minimum, the procedures shall ensure that the surveys comply with the relevant sections of Method 21 of appendix A-7 to this part, including Section 8.3.1.<br><br>(iii) *Procedures for calibration.* The instrument must be calibrated before use each day of its use by the procedures specified in Method 21 of appendix A-7 to this part. At a minimum, you must also conduct precision tests at the interval specified in Method 21 of appendix A-7 to this part, Section 8.1.2, and a calibration drift assessment at the end of each monitoring day. The calibration drift assessment must be conducted as specified in paragraph (c)(8)(iii)(A) of this section. Corrective action for drift assessments is specified in paragraphs (c)(8)(iii)(B) and (C) of this section.<br><br>(A) Check the instrument using the same calibration gas that was used to calibrate the instrument before use. Follow the procedures specified in Method 21 of appendix A-7 to this part, Section 10.1, except do not adjust the meter readout to correspond to the calibration gas value. If multiple scales are used, record the instrument reading for each scale used. Divide the arithmetic difference of the initial and post-test calibration response by the corresponding calibration gas value for each scale and multiply by 100 to express the calibration drift as a percentage.<br><br>(B) If a calibration drift assessment shows a negative drift of more than 10 percent, then all equipment with instrument readings between the fugitive emission definition multiplied by (100 minus the percent of negative drift) divided by 100 and the fugitive emission definition that was monitored since the last calibration must be re-monitored.<br><br>(C) If any calibration drift assessment shows a positive drift of more than 10 percent from |

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| | the initial calibration value, then, at the owner/operator's discretion, all equipment with instrument readings above the fugitive emission definition and below the fugitive emission definition multiplied by (100 plus the percent of positive drift) divided by 100 monitored since the last calibration may be re-monitored.<br><br>(iv) *Procedures for monitoring yard piping (other than buried yard piping).* At a minimum, place the probe inlet at the surface of the yard piping and run the probe down the length of the piping. Connection points on the piping must be monitored following the procedures specified in Method 21 of appendix A-7 to this part.<br><br>(d) *Additional elements of fugitive emissions monitoring plan.* Each fugitive emissions monitoring plan must include the elements specified in paragraphs (d)(1) and (2) of this section, at a minimum, as applicable.<br><br>(1) If you are using OGI, your plan must include procedures to ensure that all fugitive emissions components, except buried yard piping and associated components (*e.g.,* connectors), are monitored during each survey. Example procedures include, but are not limited to, a sitemap with an observation path, a written narrative of where the fugitive emissions components are located and how they will be monitored, or an inventory of fugitive emissions components.<br><br>(2) If you are using Method 21 of appendix A-7 to this part, your plan must include a list of fugitive emissions components to be monitored and method for determining the location of fugitive emissions components to be monitored in the field (*e.g.,* tagging, identification on a process and instrumentation diagram, etc.). Your fugitive emissions monitoring plan must include the written plan developed for all of the fugitive emissions components designated as difficult-to-monitor in accordance with paragraph (g)(2) of this section, and the written plan for fugitive emissions components designated as unsafe-to-monitor in accordance with paragraph (g)(3) of this section.<br><br>(e) *Monitoring of fugitive emissions components.* Each fugitive emissions component, except buried yard piping and associated components (*e.g.,* connectors), shall be observed or monitored for fugitive emissions during each monitoring survey.<br><br>(f) *Initial monitoring survey.* You must conduct initial monitoring surveys according to the requirements specified in paragraphs (f)(1) through (4) of this section.<br><br>(2) For multi-wellhead only well sites, well sites or centralized production facilities that contain the major production and processing equipment specified in paragraphs (g)(1)(iv)(A), (B), (C), or (D) of this section, and compressor station sites, you must conduct an initial monitoring survey using OGI or Method 21 of appendix A-7 to this part within 90 days of the startup of production, for each fugitive emissions components affected facility or by June 6, 2024 whichever date is |

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| | later.<br><br>(g) *Monitoring frequency.* A monitoring survey of each fugitive emissions components affected facility must be performed as specified in paragraph (g)(1) of this section, with the exceptions noted in paragraphs (g)(2) through (4) of this section. Monitoring for fugitive emissions components affected facilities located at well sites and centralized production facilities that have wells located onsite must continue at the specified frequencies in paragraphs (g)(1)(i), (ii), (iii), (iv) and (vi) of this section until the well closure requirements of paragraph (l) of this section are completed.<br><br>(1) A monitoring survey of the fugitive emissions components affected facilities must be conducted using the methods and at the frequencies specified in paragraphs (g)(1)(i) through (vi) of this section.<br><br>(v) A monitoring survey of the fugitive emissions components affected facility located at a compressor station must be conducted at the frequencies in paragraphs (g)(1)(v)(A) and (B) of this section, except as specified in paragraph (g)(1)(vi) of this section,<br><br>(A) A monitoring survey must be conducted at least monthly using AVO, or any other detection method, after the initial survey. Any indications of fugitive emissions using these methods are considered fugitive emissions that must be repaired in accordance with paragraph (h) of this section.<br><br>(B) A monitoring survey must be conducted at least quarterly using OGI or Method 21 of appendix A-7 to this part after the initial survey. Consecutive quarterly monitoring surveys must be conducted at least 60 calendar days apart.<br><br>(2) If you are using Method 21 of appendix A-7 to this part, fugitive emissions components that cannot be monitored without elevating the monitoring personnel more than 2 meters above the surface may be designated as difficult-to-monitor. Fugitive emissions components that are designated difficult-to-monitor must meet the specifications of paragraphs (g)(2)(i) through (iv) of this section.<br><br>(i) A written plan must be developed for all the fugitive emissions components designated difficult-to-monitor. This written plan must be incorporated into the fugitive emissions monitoring plan required by paragraphs (b), (c), and (d) of this section.<br><br>(ii) The plan must include the identification and location of each fugitive emissions component designated as difficult-to-monitor.<br><br>(iii) The plan must include an explanation of why each fugitive emissions component |

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| | designated as difficult-to-monitor is difficult-to-monitor.<br><br>(iv) The plan must include a schedule for monitoring the difficult-to-monitor fugitive emissions components at least once per calendar year.<br><br>(3) If you are using Method 21 of appendix A-7 to this part, fugitive emissions components that cannot be monitored because monitoring personnel would be exposed to immediate danger while conducting a monitoring survey may be designated as unsafe-to-monitor. Fugitive emissions components that are designated unsafe-to-monitor must meet the specifications of paragraphs (g)(3)(i) through (iv) of this section.<br><br>(i) A written plan must be developed for all the fugitive emissions components designated unsafe-to-monitor. This written plan must be incorporated into the fugitive emissions monitoring plan required by paragraphs (b), (c), and (d) of this section.<br><br>(ii) The plan must include the identification and location of each fugitive emissions component designated as unsafe-to-monitor.<br><br>(iii) The plan must include an explanation of why each fugitive emissions component designated as unsafe-to-monitor is unsafe-to-monitor.<br><br>(iv) The plan must include a schedule for monitoring the fugitive emissions components designated as unsafe-to-monitor.<br><br>(4) The requirements of paragraphs (g)(1)(iv)(F) and (g)(1)(v)(B) of this section are waived during a quarterly monitoring period for any fugitive emissions components affected facility located within an area that has an average calendar month temperature below 0 degrees Fahrenheit for two of three consecutive calendar months of a quarterly monitoring period. The calendar month temperature average for each month within the quarterly monitoring period must be determined using historical monthly average temperatures over the previous three years as reported by a National Oceanic and Atmospheric Administration source or other source approved by the Administrator. The requirements of paragraph (g)(1)(iv) and (v) of this section shall not be waived for two consecutive quarterly monitoring periods.<br><br>(h) *Repairs.* Each identified source of fugitive emissions shall be repaired in accordance with paragraphs (h)(1) and (2) of this section.<br><br>(1) A first attempt at repair shall be made in accordance with paragraphs (h)(1)(i) and (ii) of this section.<br><br>(i) A first attempt at repair shall be made no later than 15 calendar days after detection of |

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| | fugitive emissions that were identified using AVO.<br><br>(ii) If you are complying with paragraph (g)(1)(i) through (vi) of this section using OGI or Method 21 of appendix A-7 to this part, a first attempt at repair shall be made no later than 30 calendar days after detection of the fugitive emissions.<br><br>(2) Repair shall be completed as soon as practicable, but no later than 15 calendar days after the first attempt at repair as required in paragraph (h)(1)(i) of this section, and 30 calendar days after the first attempt at repair as required in paragraph (h)(1)(ii) of this section.<br><br>(3) Delay of repair will be allowed if the conditions in paragraphs (h)(3)(i) or (ii) of this section are met.<br><br>(i) If the repair is technically infeasible, would require a vent blowdown, a compressor station shutdown, a well shutdown or well shut-in, or would be unsafe to repair during operation of the unit, the repair must be completed during the next scheduled compressor station shut down for maintenance, scheduled well shutdown, scheduled well shut-in, after a scheduled vent blowdown, or within 2 years of detecting the fugitive emissions, whichever is earliest. A vent blowdown is the opening of one or more blowdown valves to depressurize major production and processing equipment, other than a storage vessel.<br><br>(ii) If the repair requires replacement of a fugitive emissions component or a part thereof, but the replacement cannot be acquired and installed within the repair timelines specified in paragraphs (h)(1) and (2) of this section due to either of the conditions specified in paragraph (h)(3)(ii)(A) or (B) of this section, the repair must be completed in accordance with paragraph (h)(3)(ii)(C) of this section and documented in accordance with § 60.5420b(c)(14)(v)(I).<br><br>(A) Valve assembly supplies had been sufficiently stocked but are depleted at the time of the required repair.<br><br>(B) A replacement fugitive emissions component or a part thereof requires custom fabrication.<br><br>(C) The required replacement must be ordered no later than 10 calendar days after the first attempt at repair. The repair must be completed as soon as practicable, but no later than 30 calendar days after receipt of the replacement component, unless the repair requires a compressor station or well shutdown. If the repair requires a compressor station or well shutdown, the repair must be completed in accordance with the timeframe specified in paragraph (h)(3)(i) of this section.<br><br>(4) Each identified source of fugitive emissions must be resurveyed to complete repair according |

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| | to the requirements of paragraphs (h)(4)(i) through (v) of this section, to ensure that there are no fugitive emissions.<br><br>(i) The operator may resurvey the fugitive emissions components to verify repair using either Method 21 of appendix A-7 to this part or OGI, except as specified in paragraph (h)(4)(v) of this section.<br><br>(ii) For each repair that cannot be made during the monitoring survey when the fugitive emissions are initially found, a digital photograph must be taken of that component, or the component must be tagged during the monitoring survey when the fugitive emissions were initially found for identification purposes and subsequent repair. The digital photograph must include the date that the photograph was taken and must clearly identify the component by location within the site (*e.g.,* the latitude and longitude of the component or by other descriptive landmarks visible in the picture).<br><br>(iii) Operators that use Method 21 of appendix A-7 to this part to resurvey the repaired fugitive emissions components are subject to the resurvey provisions specified in paragraphs (h)(4)(iii)(A) and (B) of this section.<br><br>(A) A fugitive emissions component is repaired when the Method 21 instrument indicates a concentration of less than 500 ppmv above background or when no soap bubbles are observed when the alternative screening procedures specified in section 8.3.3 of Method 21 of appendix A-7 to this part are used.<br><br>(B) Operators must use the Method 21 monitoring requirements specified in paragraph (c)(8)(ii) of this section or the alternative screening procedures specified in section 8.3.3 of Method 21 of appendix A-7 to this part.<br><br>(iv) Operators that use OGI to resurvey the repaired fugitive emissions components are subject to the resurvey provisions specified in paragraphs (h)(4)(iv)(A) and (B) of this section.<br><br>(A) A fugitive emissions component is repaired when the OGI instrument shows no indication of visible emissions.<br><br>(B) Operators must use the OGI monitoring requirements specified in paragraph (c)(7) of this section.<br><br>(v) For fugitive emissions identified using AVO detection methods, the operator may resurvey using those same methods, Method 21 of appendix A-7 to this part, or OGI. For operators that use AVO detection methods, a fugitive emissions component is repaired when there are no |

| **B. LIMITATIONS, MONITORING, AND REPORTING** | |
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| | indications of fugitive emissions using these methods.<br><br>(i) *Initial compliance.* You must demonstrate initial compliance with the standards that apply to fugitive emissions components affected facilities as required by § 60.5410b(k).<br><br>(j) *Continuous compliance.* You must demonstrate continuous compliance with the standards that apply to fugitive emissions components affected facilities as required by § 60.5415b(l).<br><br>(k) *Reporting and recordkeeping.* You must comply with the reporting requirements as specified in § 60.5420b(b)(1) and (9), and the recordkeeping requirements as specified in § 60.5420b(c)(14). |
| B.23 | **Emission Unit ID:** 03<br>**Equipment ID:** CT14<br><br>§ 60.5410b How do I demonstrate initial compliance with the standards for each of my affected facilities?<br><br>You must determine initial compliance with the standards for each affected facility using the requirements of paragraphs (a) through (k) of this section. Except as otherwise provided in this section, the initial compliance period begins on the date specified in § 60.5370b and ends no later than 1 year after that date. The initial compliance period may be less than 1 full year.<br><br>(d) *Centrifugal compressor affected facility.* To demonstrate initial compliance with the GHG and VOC standards for your centrifugal compressor affected facility that uses a wet seal as required by § 60.5380b, you must comply with paragraphs (d)(1) through (5) and paragraphs (d)(7) and (8) of this section. To demonstrate initial compliance with the GHG and VOC alternative standards for your centrifugal compressor affected facility that is a self-contained wet seal centrifugal compressor or a centrifugal compressor at the Alaska North Slope equipped with sour seal oil separator and capture system as allowed by § 60.5380b, you must comply with paragraphs (d)(6) through (8) of this section. To demonstrate initial compliance with the GHG and VOC alternative standards for your dry seal centrifugal compressor as required by § 60.5380b, you must comply with paragraphs (d)(6) through (8) of this section.<br><br>(6) You must maintain the volumetric flow rates for your centrifugal compressors as specified in paragraphs (d)(6)(i) through (iii) of this section, as applicable.<br><br>(iii) For your dry seal centrifugal compressor, you must maintain the volumetric flow rate at or below 10 scfm per seal. You must conduct your initial annual volumetric measurement as required by § 60.5380b(a)(6).<br><br>(7) You must submit the initial annual report for your centrifugal compressor affected facility as |

| **B. LIMITATIONS, MONITORING, AND REPORTING** | |
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| **Condition Number** | **Conditions** |
| | required in § 60.5420b(b)(1) and (5) and (b)(11) through (13), as applicable.<br><br>(8) You must maintain the records as specified in § 60.5420b(c)(4) and (c)(8) through (13), as applicable.<br><br>(k) *Fugitive emission components affected facility.* To achieve initial compliance with the GHG and VOC standards for fugitive emissions components affected facilities as required by § 60.5397b, you must comply with paragraphs (k)(1) through (5) of this section.<br><br>(1) You must develop a fugitive emissions monitoring plan as required in § 60.5397b(b), (c), and (d).<br><br>(2) You must conduct an initial monitoring survey as required in § 60.5397b(e) and (f).<br><br>(3) You must repair each identified source of fugitive emissions for each affected facility as required in § 60.5397b(h).<br><br>(4) You must submit the initial annual report for each fugitive emissions components affected facility as required in § 60.5420b(b)(1) and (9).<br><br>(5) You must maintain the records specified in § 60.5420b(c)(14). |
| B.24 | **Emission Unit ID:** 03<br>**Equipment ID:** CT14<br><br>§ 60.5415b How do I demonstrate continuous compliance with the standards for each of my affected facilities?<br><br>(d) *Centrifugal compressor affected facility.* For each wet seal centrifugal compressor affected facility complying with § 60.5380b(a)(1) and (2), or with § 60.5380b(a)(3) by routing emissions to a control device or to a process, you must demonstrate continuous compliance according to paragraph (d)(1) and paragraphs (d)(3) and (4) of this section. For each self-contained wet seal centrifugal compressor complying with the requirements in § 60.5380b(a)(4), you must demonstrate continuous compliance according to paragraphs (d)(2) through (4) of this section. For each centrifugal compressor on the Alaska North Slope equipped with sour seal oil separator and capture system, complying with the requirements of § 60.5380b(a)(5), you must demonstrate continuous compliance according to paragraphs (d)(2) through (4) of this section. For each dry seal centrifugal compressor complying with the requirements in § 60.5380b(a)(6), you must demonstrate continuous compliance according to paragraphs (d)(2) through (4) of this section.<br><br>(2) You must maintain volumetric flow rate at or below the flow rates specified in § 60.5380b(a)(4) for you self-contained centrifugal compressor, § 60.5380b(a)(5) for your Alaska North Slope |

| **B. LIMITATIONS, MONITORING, AND REPORTING** | |
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| **Condition Number** | **Conditions** |
| | centrifugal compressor equipped with a sour seal oil separator and capture system, and § 60.5380b(a)(6) for your centrifugal compressor equipped with dry seals, as applicable. You must conduct the required volumetric flow rate measurement of your self-contained wet seal centrifugal compressor in accordance with § 60.5380b(a)(4), your Alaska North Slope centrifugal compressor equipped with a sour seal oil separator and capture system in accordance with § 60.5380b(a)(5), and your dry seal centrifugal compressor in accordance with § 60.5380b(a)(6), as applicable, on or before 8,760 hours of operation after your last volumetric flow rate measurement which demonstrates compliance with the volumetric flow rate specified in § 60.5380b(a)(4) for your self-contained centrifugal compressor, § 60.5380b(a)(5) for your Alaska North Slope centrifugal compressor equipped with a sour seal oil separator and capture system and § 60.5380b(a)(6) for your centrifugal compressor equipped with dry seals, as applicable.<br><br>(3) You must submit the annual reports as required in § 60.5420b(b)(1), (5), and (11)(i) through (iv), as applicable.<br><br>(4) You must maintain records as required in § 60.5420b(c)(4), (8) through (10), and (12), as applicable.<br><br>(l) *Continuous compliance.* For each fugitive emissions components affected facility, you must demonstrate continuous compliance with the requirements of § 60.5397b(a) according to paragraphs (l)(1) through (4) of this section.<br><br>(1) *Monitoring.* You must conduct periodic monitoring surveys as required in § 60.5397b(e) and (g).<br><br>(2) *Repairs.* You must repair each identified source of fugitive emissions as required in § 60.5397b(h).<br><br>(3) *Reports.* You must submit annual reports for fugitive emissions components affected facilities as required in § 60.5420b(b)(1) and (9).<br><br>(4) *Record*s. You must maintain records as specified in § 60.5420b(c)(14). |
| B.25 | **Emission Unit ID:** 03<br>**Equipment ID:** CT14<br><br>§ 60.5420b What are my notification, reporting, and recordkeeping requirements?<br><br>(b) *Reporting requirements.* You must submit annual reports containing the information specified in paragraphs (b)(1) through (14) of this section following the procedure specified in paragraph (b)(15) of this section. You must submit performance test reports as specified in paragraph (b)(12) or (13) of this section, if applicable. The initial annual report is due no later than 90 days after the end of |

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| **Condition Number** | **Conditions** |
| | the initial compliance period as determined according to § 60.5410b. Subsequent annual reports are due no later than the same date each year as the initial annual report. If you own or operate more than one affected facility, you may submit one report for multiple affected facilities provided the report contains all of the information required as specified in paragraphs (b)(1) through (14) of this section. Annual reports may coincide with title V reports as long as all the required elements of the annual report are included. You may arrange with the Administrator a common schedule on which reports required by this part may be submitted as long as the schedule does not extend the reporting period. You must submit the information in paragraph (b)(1)(v) of this section, as applicable, for your well affected facility which undergoes a change of ownership during the reporting period, regardless of whether reporting under paragraphs (b)(2) through (4) of this section is required for the well affected facility.<br><br>(1) The general information specified in paragraphs (b)(1)(i) through (v) of this section is required for all reports.<br><br>(i) The company name, facility site name associated with the affected facility, U.S. Well ID or U.S. Well ID associated with the affected facility, if applicable, and address of the affected facility. If an address is not available for the site, include a description of the site location and provide the latitude and longitude coordinates of the site in decimal degrees to an accuracy and precision of five (5) decimals of a degree using the North American Datum of 1983.<br><br>(ii) An identification of each affected facility being included in the annual report.<br><br>(iii) Beginning and ending dates of the reporting period.<br><br>(iv) A certification by a certifying 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. If your report is submitted via CEDRI, the certifier's electronic signature during the submission process replaces the requirement in this paragraph (b)(1)(iv).<br><br>(5) For each wet seal centrifugal compressor affected facility, the information specified in paragraphs (b)(5)(i) through (v) of this section. For each self-contained wet seal centrifugal compressor, Alaska North Slope centrifugal compressor equipped with sour seal oil separator and capture system, or dry seal centrifugal compressor affected facility, the information specified in paragraphs (b)(5)(vi) through (ix) of this section.<br><br>(vi) If complying with § 60.5380b(a)(4), (5), or (6) for a self-contained wet seal centrifugal compressor, Alaska North Slope centrifugal compressor equipped with sour seal oil separator and capture system, or dry seal centrifugal compressor requirements, the cumulative number of hours of operation since initial startup, since May 7, 2024, or since the previous volumetric |

| **B. LIMITATIONS, MONITORING, AND REPORTING** | |
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| **Condition Number** | **Conditions** |
| | flow rate emissions measurement, as applicable, which have elapsed prior to conducting your volumetric flow rate emission measurement or emissions screening.<br><br>(vii) A description of the method used and the results of the volumetric emissions measurement or emissions screening, as applicable.<br><br>(viii) Number and type of seals on delay of repair and explanation for each delay of repair.<br><br>(ix) Date of planned shutdown(s) that occurred during the reporting period if there are any seals that have been placed on delay of repair.<br><br>(9) For the fugitive emissions components affected facility, report the information specified in paragraphs (b)(9)(i) through (v) of this section, as applicable.<br><br>(i)<br><br>(A) Designation of the type of site (*i.e.,* well site, centralized production facility, or compressor station) at which the fugitive emissions components affected facility is located.<br><br>(B) For the fugitive emissions components affected facility at a well site or centralized production facility that became an affected facility during the reporting period, you must include the date of the startup of production or the date of the first day of production after modification. For the fugitive emissions components affected facility at a compressor station that became an affected facility during the reporting period, you must include the date of startup or the date of modification.<br><br>(ii) For each fugitive emissions monitoring survey performed during the annual reporting period, the information specified in paragraphs (b)(9)(ii)(A) through (G) of this section.<br><br>(A) Date of the survey.<br><br>(B) Monitoring instrument or, if the survey was conducted by AVO methods, notation that AVO was used.<br><br>(C) Any deviations from the monitoring plan elements under § 60.5397b(c)(1), (2), and (7), (c)(8)(i), or (d) or a statement that there were no deviations from these elements of the monitoring plan.<br><br>(D) Number and type of components for which fugitive emissions were detected.<br><br>(E) Number and type of fugitive emissions components that were not repaired as required |

| **B. LIMITATIONS, MONITORING, AND REPORTING** | |
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| **Condition Number** | **Conditions** |
| | in § 60.5397b(h).<br><br>(F) Number and type of fugitive emission components (including designation as difficult-to-monitor or unsafe-to-monitor, if applicable) on delay of repair and explanation for each delay of repair.<br><br>(G) Date of planned shutdown(s) that occurred during the reporting period if there are any components that have been placed on delay of repair. |

| **C. NESHAP (40 CFR 61 AND 40 CFR 63)** | |
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| **Condition Number** | **Conditions** |
| C.1 | (40 CFR §61.04(b); 40 CFR §63.9(a)(4)(ii) and §63.10(a)(4)(ii) All NESHAP notifications and reports shall be sent to the Department. Electronic submission of notifications or reports to the United States Environmental Protection Agency (US EPA) via CEDRI (Compliance and Emissions Data Reporting Interface) shall serve as the submission to the Department. CEDRI can be accessed through the EPA's Central Data Exchange (CDX). |
| C.2 | (40 CFR §61.04(b); 40 CFR §63.9(a)(4)(ii) and §63.10(a)(4)(ii) All NESHAP notifications and reports requiring electronic submission to US EPA shall be submitted to EPA via CEDRI. Notifications and reports for specific NESHAP subparts not yet requiring electronic submission may also be submitted via CEDRI. Notifications and the accompanying cover letter for periodic reports not submitted via CEDRI shall be sent to the US EPA Region 4 Air and Radiation Division as required by the applicable subpart. |
| C.3 | Emergency engines less than or equal to 150 kilowatt (kW) rated capacity, emergency engines greater than 150 kW rated capacity designated for emergency use only and operated a total of 500 hours per year or less for testing and maintenance and have a method to record the actual hours of use, such as an hour meter, and diesel engine driven emergency fire pumps that are operated a total of 500 hours per year or less for testing and maintenance and have a method to record the actual hours of use, such as an hour meter, have been determined to be exempt from construction permitting requirements in accordance with S.C. Regulation 61-62.1.<br><br>(40 CFR 60; 40 CFR 63) If present, these sources shall still comply with the requirements of all applicable regulations, including but not limited to the following:<br><br>New Source Performance Standards (NSPS) 40 CFR 60 Subpart A (General Provisions);<br>NSPS 40 CFR 60 Subpart IIII (Stationary Compression Ignition Internal Combustion Engines);<br>NSPS 40 CFR 60 Subpart JJJJ (Stationary Spark Ignition Internal Combustion Engines);<br>National Emission Standards for Hazardous Air Pollutants (NESHAP) 40 CFR 63 Subpart A (General Provisions); and |

**C. NESHAP (40 CFR 61 AND 40 CFR 63)**

| Condition Number | Conditions |
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| | NESHAP 40 CFR 63 Subpart ZZZZ (Stationary Reciprocating Internal Combustion Engines). |

**D. GENERAL FACILITY WIDE**

| Condition Number | Conditions |
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| D.1 | The owner or operator shall comply with S.C. Regulation 61-62.2, Prohibition of Open Burning. |
| D.2 | The owner or operator shall comply with S.C. Regulation 61-62.3, Air Pollution Episodes. |
| D.3 | The owner or operator shall comply with S.C. Regulation 61-62.4, Hazardous Air Pollution Conditions. |
| D.4 | The owner or operator shall comply with S.C. Regulation 61-62.6, Control of Fugitive Particulate Matter, Section III Control of Fugitive Particulate Matter Statewide. |
| D.5 | The owner or operator shall comply with the standards of performance for asbestos abatement operations pursuant to 40 CFR Part 61.145 and S.C. Regulation 61-86.1, including, but not limited to, requirements governing training, licensing, notification, work practice, cleanup, and disposal. |
| D.6 | The owner or operator shall comply with the standards for recycling and emissions reduction pursuant to 40 CFR Part 82, Subpart F, Protection of Stratospheric Ozone, Recycling and Emissions Reduction, except as provided for motor vehicle air conditioners (MVACs) in Subpart B. If the owner or operator performs a service on motor vehicles (fleet) that involves ozone-depleting substance refrigerant in MVACs, the owner or operator is subject to all applicable requirements of 40 CFR Part 82, Subpart B, Servicing of MVACs. |
| D.7 | (S.C. Regulation 61-62.70.6(a)(5)) The provisions of this permit are severable, and if any provision of this permit, or application of any provision of this permit to any circumstance is held invalid, the application of such provision to other circumstances, and the remainder of this permit shall not be affected thereby. |
| D.8 | (S.C. Regulation 61-62.70.6(a)(6)(i)) The owner or operator must comply with all of the conditions of this permit. Any permit noncompliance constitutes a violation of the S.C. Pollution Control Act and/or the Federal Clean Air Act and is grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or for denial of permit renewal application. |
| D.9 | (S.C. Regulation 61-62.70.6(a)(6)(ii)) It shall not be a defense for an owner or operator in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit. |
| D.10 | (S.C. Regulation 61-62.70.6(a)(6)(iii)) The permit may be modified, revoked, reopened and reissued, or terminated for cause by the Department. The filing of a request by the owner or operator for a permit modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any permit condition. |
| D.11 | (S.C. Regulation 61-62.70.6(a)(6)(iv)) The permit does not convey any property rights of any sort, or any exclusive privilege. |
| D.12 | (S.C. Regulation 61-62.70.6(a)(6)(v)) The owner or operator shall furnish to the Department, within a reasonable time, any information that the Department may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit or to determine |

**D. GENERAL FACILITY WIDE**

| Condition Number | Conditions |
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| | compliance with the permit. Upon request, the owner or operator shall also furnish to the Department copies of records required to be kept by the permit or, for information claimed to be confidential, the owner or operator may furnish such records directly to the Administrator along with a claim of confidentiality. The Department may also request that the owner or operator furnish such records directly to the Administrator along with a claim of confidentiality. |
| D.13 | (S.C. Regulation 61-62.70.6(a)(8)) No permit revision shall be required, under any approved economic incentives, marketable permits, emissions trading and other similar programs or processes for changes that are provided for in this permit. |
| D.14 | (S.C. Regulation 61-62.70.6(c)(2)) Upon presentation of credentials and other documents as may be required by law, the owner or operator shall allow the Department or an authorized representative to perform the following:<br>1. Enter upon the owner or operator's premises where a Part 70 source is located or emissions-related activity is conducted, or where records must be kept under the conditions of the permit.<br>2. Have access to and copy, at reasonable times, any records that must be kept under the conditions of the permit.<br>3. Inspect any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit.<br>4. As authorized by the Act and/or the S.C. Pollution Control Act, sample or monitor, at reasonable times, substances or parameters for the purpose of assuring compliance with the permit or applicable requirements. |
| D.15 | (S.C. Regulation 61-62.70.6(a)(1)(ii)) Where an applicable requirement of the Act is more stringent than an applicable requirement of regulations promulgated under Title IV of the Act, both provisions shall be incorporated into the permit and shall be enforceable by the Administrator. |
| D.16 | (S.C. Regulation 61-62.70.6(a)(4)) The owner or operator is prohibited from emissions exceeding any allowances that the source lawfully holds under Title IV of the Act or the regulations promulgated thereunder. No permit revision shall be required for increases in emissions that are authorized by allowances acquired pursuant to the acid rain program, provided that such increases do not require a permit revision under any other applicable requirement. No limit shall be placed on the number of allowances held by a source. The source may not, however, use allowances as a defense to noncompliance with any other applicable requirement. Any such allowances shall be accounted for according to the procedures established in regulations promulgated under Title IV of the Act. |
| D.17 | (S.C. Regulation 61-62.70.7(c)(1)(ii)) Permit expiration terminates the source's right to operate unless a timely and complete renewal application has been submitted consistent with S.C. Regulation 61-62.70.5(a)(1)(iii), 62.70.5(a)(2)(iv), and 62.70.7(b). In this case, the permit shall not expire until the renewal permit has been issued or denied. All terms and conditions of the permit including any permit shield that may be granted pursuant to S.C. Regulation 61-62.70.6(f) shall remain in effect until the renewal permit has been issued or denied. |
| D.18 | (S.C. Regulation 61-62.70.7) Requests for permit modification and amendments shall be submitted on the appropriate Department approved Title V Modification Form(s). |

**D. GENERAL FACILITY WIDE**

| Condition Number | Conditions |
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| D.19 | (S.C. Regulation 61-62.70.6(a)(7)) The owners or operators of Part 70 sources shall pay fees to the Department consistent with the fee schedule approved pursuant to S.C. Regulation 61-62.70.9; and in accordance with S.C. Regulation 61-30, Environmental Protection Fees. Failure to pay applicable fees can be considered grounds for permit revocation. |
| D.20 | (S.C. Regulation 61-62.1, Section III) The owners or operators of Part 70 sources shall complete and submit a new updated emissions inventory consistent with the schedule approved pursuant to S.C. Regulation 61-62.1, Section III. These reports shall be submitted to the Department.<br><br>This requirement notwithstanding, an emissions inventory may be required at any time in order to determine the compliance status of any facility. |
| D.21 | This permit expressly incorporates insignificant activities. Emissions from insignificant activities shall be included in the emissions inventory submittals as required by S.C. Regulation 61-62.1, Section III(B)(2)(g). |
| D.22 | (S.C. Regulation 61-62.1, Section II(J)(1)(a)) No applicable law, regulation, or standard will be contravened. |
| D.23 | (S.C. Regulation 61-62.1, Section II(J)(1)(e)) Any owner or operator who constructs or operates a source or modification not in accordance with the application submitted pursuant to S.C. Regulation 61-62.1 or with the terms of any approval to construct, or who commences construction after the effective date of S.C. Regulation 61-62.1 without applying for and receiving approval hereunder, shall be subject to enforcement action. |

**E. GENERAL RECORD KEEPING AND REPORTING**

| Condition Number | Conditions |
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| E.1 | (S.C. Regulation 61-62.1, Section II(J)(1)(g)) A copy of the Department issued construction and/or operating permit must be kept readily available at the facility at all times. The owner or operator shall maintain such operational records; make reports; install, use, and maintain monitoring equipment or methods; sample and analyze emissions or discharges in accordance with prescribed methods at locations, intervals, and procedures as the Department shall prescribe; and provide such other information as the Department reasonably may require. All records required to demonstrate compliance with the limits established under this permit shall be maintained on site for a period of at least five (5) years from the date the record was generated and shall be made available to a Department representative upon request. |
| E.2 | (S.C. Regulation 61-62.70.6(a)(3)(iii)(A)) The owner or operator shall submit reports required in this permit in a timely manner and according to the reporting schedule that has previously been established through the Department's approved electronic permitting system.<br><br>All required reports must be certified by a responsible official consistent with S.C. Regulation 61-62.70.5(d). |

## E. GENERAL RECORD KEEPING AND REPORTING

| Condition Number | Conditions |
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| E.3 | (S.C. Regulation 61-62.70.6(a)(3)(iii)) All reports and notifications required under this permit shall be submitted to the Department. |
| E.4 | (S.C. Regulation 61-62.70.6(c)(5)(iv)) All Title V Annual Compliance Certifications shall be sent to the US EPA, Region 4, Air Enforcement Branch and to the Department. These reports can be submitted electronically to EPA through CEDRI. |
| E.5 | (S.C. Regulation 61-62.70.6(a)(3)(ii)) The owner or operator shall comply, where applicable, with the following monitoring/support information collection and retention record keeping requirements:<br>1. Records of required monitoring information shall include the following:<br>a. The date, place as defined in the permit, and time of sampling or measurements;<br>b. The date(s) analyses were performed;<br>c. The company or entity that performed the analyses;<br>d. The analytical techniques or methods used;<br>e. The results of such analyses; and<br>f. The operating conditions as existing at the time of sampling or measurement;<br>2. Records of all required monitoring data and support information shall be retained for a period of at least five (5) years from the date of the monitoring sample, measurement, report, or application. Support information includes all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by the permit. |
| E.6 | (S.C. Regulation 61-62.1, Section II(J)(1)(c)) For sources not required to have continuous emission monitors, any malfunction of air pollution control equipment or system, process upset, or other equipment failure which results in discharges of air contaminants lasting for one (1) hour or more and which are greater than those discharges described for normal operation in the permit application, shall be reported to the Department within twenty-four (24) hours after the beginning of the occurrence and a written report shall be submitted to the Department within thirty (30) days. The written report shall include, at a minimum, the following:<br>1. The identity of the stack and/or emission point where the excess emissions occurred;<br>2. The magnitude of excess emissions expressed in the units of the applicable emission limitation and the operating data and calculations used in determining the excess emissions;<br>3. The time and duration of excess emissions;<br>4. The identity of the equipment causing the excess emissions;<br>5. The nature and cause of such excess emissions;<br>6. The steps taken to remedy the malfunction and the steps taken or planned to prevent the recurrence of such malfunction; |

| **E. GENERAL RECORD KEEPING AND REPORTING** | |
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| **Condition Number** | **Conditions** |
| | 7. The steps taken to limit the excess emissions; and,<br>8. Documentation that the air pollution control equipment, process equipment, or processes were at all times maintained and operated, to the maximum extent practicable, in a manner consistent with good practice for minimizing emissions.<br><br>The initial twenty-four (24) hour notification should be made to the Department's local Regional Office.<br><br>The written report should be sent to the Department. |
| E.7 | (S.C. Regulation 61-62.70.6(c)(5)(iii)) The responsible official shall certify annually, compliance with the conditions of this permit as required under S.C. Regulation 61-62.70.6(c). The compliance certification shall include the following:<br>1. The identification of each term or condition of the permit that is the basis of the certification.<br>2. The identification of the method(s) or means used by the owner or operator for determining the compliance status with each term and condition of the permit during the certification period.<br>3. The status of compliance with the terms and conditions of the permit for the period covered by the certification, including whether compliance during the period was continuous or intermittent. The certification shall be based on the method or means designated in S.C. Regulation 61-62.70.6(c)(5)(iii)(B). The certification shall identify each deviation and take it into account in the compliance certification.<br>4. Such other facts as the Department may require to determine the compliance status of the source. |
| E.8 | (S.C. Regulation 61-62.1, Section II(M)) Within thirty (30) days of the transfer of ownership/operation of a facility, the current permit holder and prospective new owner or operator shall submit to the Department a written request for transfer of the source operating or construction permits. The written request for transfer of the source operating or construction permit shall include any changes pertaining to the facility name and mailing address; the name, mailing address, and telephone number of the owner or operator for the facility; and any proposed changes to the permitted activities of the source. Transfer of the operating or construction permits will be effective upon written approval by the Department. |

| **F. INSIGNIFICANT ACTIVITIES** | |
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| **Condition Number** | **Conditions** |
| F.1 | The facility may install, remove, and modify insignificant activities as defined in S.C. Regulation 61- |

## F. INSIGNIFICANT ACTIVITIES

| Condition Number | Conditions |
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| | 62.70.5(c), without revising or reopening the Title V Operating Permit. A list of insignificant activities/exempt sources must be maintained on site, along with any necessary documentation to support the determination that the activity is insignificant and shall be made available to a Department representative upon request. The list shall be submitted with the next renewal application. |

## G. PERMIT SHIELD

| Condition Number | Conditions |
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| G.1 | No Shield Requested. |
| G.2 | (S.C. Regulation 61-62.70.6(f)) A copy of the "applicability determination" submitted with the Part 70 permit application is included as Applicable and Non-Applicable Federal and State Regulations. With the exception of those listed below, compliance with the terms and conditions of this permit shall be deemed compliance with the applicable requirements specified in Applicable and Non-Applicable Federal and State Regulations as of the date of permit issuance provided that such applicable requirements are included and are specifically identified in the permit. The owner or operator shall also be shielded from the non-applicable requirements specified in Applicable and Non-Applicable Federal and State Regulations. Exceptions to this are stated below in the Permit Shield Exceptions Table. This permit shield does not extend to applicable requirements which are promulgated after permit issuance, unless the permit has been appropriately modified to reflect such new requirements.<br><br>Nothing in the permit shield or in any Part 70 permit shall alter or affect the provisions of Section 303 of the Act, Emergency Orders of the Clean Air Act; the liability of the owner or operator for any violation of applicable requirements prior to or at the time of permit issuance; the applicable requirements of the Acid Rain Program, consistent with Section 408(a) of the Clean Air Act; or the ability of US EPA to obtain information from a source pursuant to Section 114 of the Clean Air Act. In addition, the permit shield shall not apply to emission units in noncompliance at the time of permit issuance, minor permit modifications (S.C. Regulation 61-62.70.7(e)(2)), group processing of minor permit modifications (S.C. Regulation 61-62.70.7(e)(3)), or operational flexibility (S.C. Regulation 61-62.70.7(e)(5)(i)), except as specified in S.C. Regulation 61-62.70.7(e)(5)(iii). |

| Permit Shield Exceptions |
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| SC Regulation 61-62.1, Section II - Permit Requirements |
| SC Regulation 61-62.5, Standard No. 7 - Prevention of Significant Deterioration |
| SC Regulation 61-62.5, Standard No. 7.1 - Nonattainment New Source Review |
| SC Regulation 61-86.1 - Standards of Performance for Asbestos Projects |
| 40 CFR 61, Subpart A – General Provisions |
| SC Regulation 61-62.61, Subpart A – General Provisions |
| 40 CFR 61, Subpart M - National Emission Standard for Asbestos |

| Permit Shield Exceptions |
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| SC Regulation 61-62.61, Subpart M - National Emission Standard for Asbestos |
| 40 CFR 70 - State Operating Permit Programs |
| SC Regulation 61-62.5, Standard No. 1, Section I – Emissions from Fuel Burning Operations (Visible Emissions) |
| SC Regulation 61-62.5, Standard No. 1, Section II – Emissions from Fuel Burning Operations (Particulate Matter Emissions) |
| SC Regulation 61-62.5, Standard No. 1, Section III – Emissions from Fuel Burning Operations (Sulfur Dioxide Emissions) |
| 40 CFR 63, Subpart CCCC – National Emission Standards for Hazardous Air Pollutants: Manufacturing of Nutritional Yeast |

## H. AMBIENT AIR STANDARDS

| Condition Number | Conditions |
|---|---|
| H.1 | (S.C. Regulation 61-62.1, Section II(J)(2)) Air dispersion modeling (or other method) has previously demonstrated that this facility's operation will not interfere with the attainment and maintenance of any state or federal ambient air standard. Any changes in the parameters used in this demonstration may require a review by the facility to determine continuing compliance with these standards. These potential changes include any decrease in stack height, decrease in stack velocity, increase in stack diameter, decrease in stack exit temperature, increase in building height or building additions, increase in emission rates, decrease in distance between stack and property line, changes in vertical stack orientation, and installation of a rain cap that impedes vertical flow. Parameters that are not required in the determination will not invalidate the demonstration if they are modified. Variations from the input parameters in the demonstration shall not constitute a violation unless the maximum allowable ambient concentrations identified in the standard are exceeded.<br><br>The owner or operator shall maintain this facility at or below the emission rates used in the most recent air dispersion modeling (or other method) demonstration submitted to and approved by the Department, not to exceed the pollutant limitations of this permit. Should the facility wish to increase the emission rates used in the demonstration, not to exceed the pollutant limitations in the body of this permit, it may do so by submitting a new demonstration for approval. This condition along with the referenced modeling demonstration will also serve to meet the intent of S.C. Regulation 61-62.5, Standard No. 8, Section II(D). This is a State Only enforceable requirement. |

## I. COMPLIANCE SCHEDULE - RESERVED