

West Virginia Department of Environmental Protection
Division of Air Quality

Earl Ray Tomblin
Governor

Randy C. Huffman
Cabinet Secretary

Permit to Operate



Pursuant to
Title V
of the Clean Air Act

Issued to:
Columbia Gas Transmission, LLC
Glady Compressor Station
R30-08300017-2012

John A. Benedict
Director

Issued: October 31, 2012 • Effective: November 14, 2012
Expiration: October 31, 2017 • Renewal Application Due: April 30, 2017

Permit Number: **R30-08300017-2012**
Permittee: **Columbia Gas Transmission, LLC**
Facility Name: **Gladly Compressor Station**
Permittee Mailing Address: **1700 MacCorkle Avenue SE, Charleston, WV 25314**

This permit is issued in accordance with the West Virginia Air Pollution Control Act (West Virginia Code §§ 22-5-1 et seq.) and 45CSR30 — Requirements for Operating Permits. The permittee identified at the above-referenced facility is authorized to operate the stationary sources of air pollutants identified herein in accordance with all terms and conditions of this permit.

Facility Location:	Gladly, Randolph County, West Virginia
Facility Mailing Address:	Route 22, Gladly, WV 26268
Telephone Number:	(304) 357-2196
Type of Business Entity:	LLC
Facility Description:	Natural gas compressor station
SIC Codes:	4922
UTM Coordinates:	615.52 km Easting • 4,293.19 km Northing • Zone 17

Permit Writer: Denton B. McDerment

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

Issuance of this Title V Operating Permit does not supersede or invalidate any existing permits under 45CSR13, 14 or 19, although all applicable requirements from such permits governing the facility's operation and compliance have been incorporated into the Title V Operating Permit.

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1.0 Emission Units and Listing of Applicable Requirements

Please note that not all sections of this permit may be applicable to this facility. The applicable requirements column in the table below indicates which of the requirements in Sections 2.0 through 24.0 of this permit are applicable to each emissions unit.

Emission Unit ID	Emission Point ID	Emission Unit Description (Make, Model, Serial No.)	Year Installed	Design Capacity	Control Device	Applicable Requirements
Facility-Wide						Sections 2.0, 3.0, 23.0 Section 21.0: R13-2218C – Conditions A.4., B.6.
BLR1*	BL1	TEG Dehydrator Reboiler; NATCO Model SB24/20-14	1990	1.4 mmBtu/hr	N/A	Section 4.0.
BLR2*	BL2	TEG Dehydrator Reboiler; NATCO Model SB24/20-14	1990	1.4 mmBtu/hr	N/A	Section 4.0.
BLR4*	BL4	Glycol Reclaimer/Reboiler; Flamco SB12-8	1999	0.15 mmBtu/hr	N/A	Section 4.0.
BLR5*	BL5	Heating System Boiler; Peerless 211A-10-WS-1	2001	1.5 mmBtu/hr	N/A	Section 4.0.
HTR3*	H3	Indirect-Fired Line Heater; NATCO	1998	15 mmBtu/hr	N/A	Section 5.0 Section 18.0 (40 C.F.R. 60 Subpart Dc) (1) As an alternative to meeting the requirements of paragraph (g)(1) of 40 C.F.R. §60.48c, the owner or operator of an affected facility that combusts only natural gas may elect to record and maintain records of the amount of each fuel combusted during each calendar month. [40 C.F.R. §60.48c(g)(2); 45CSR16] (2) All records required under 40 C.F.R. §60.48c shall be maintained by the owner or operator of the affected facility for a period of two years following the date of such record. [40 C.F.R. §60.48c(i); 45CSR16]

Emission Unit ID	Emission Point ID	Emission Unit Description (Make, Model, Serial No.)	Year Installed	Design Capacity	Control Device	Applicable Requirements
HTR3 (cont'd)						Section 21.0: R13-2218C – Conditions A.1., A.6., B.1., B.2., B.6., B.7., B.9., C.3., C.4. <i>Note: Compliance with the more stringent PM limit in R13-2218C, Condition A.1. ensures compliance with condition 5.1.3. of this permit.</i>
HTR4*	H4	Indirect-Fired Line Heater; NATCO	1998	15 mmBtu/hr	N/A	Section 5.0 Section 18.0 (40 C.F.R. 60 Subpart Dc) (1) As an alternative to meeting the requirements of paragraph (g)(1) of 40 C.F.R. §60.48c, the owner or operator of an affected facility that combusts only natural gas may elect to record and maintain records of the amount of each fuel combusted during each calendar month. [40 C.F.R. §60.48c(g)(2); 45CSR16] (2) All records required under 40 C.F.R. §60.48c shall be maintained by the owner or operator of the affected facility for a period of two years following the date of such record. [40 C.F.R. §60.48c(i); 45CSR16] Section 21.0: R13-2218C – Conditions A.1., A.7., B.1., B.2., B.6., B.7., B.9., C.3., C.4. <i>Note: Compliance with the more stringent PM limit in R13-2218C, Condition A.1. ensures compliance with condition 5.1.3. of this permit.</i>
16801*	E01	Reciprocating Engine/Integral Compressor; Ingersoll-Rand 48KVS; 4-cycle, lean burn	1965	1,320 hp	N/A	Section 10.0.1 (40 C.F.R. 63 Subpart ZZZZ) (1) Compliance date October 19, 2013. [40 C.F.R. §63.6595(a)] <i>Note: All subsequent Subpart ZZZZ requirements for emission unit 16801 are subject to this compliance date.</i> (2) For each non-emergency 4SLB stationary RICE > 500 HP, you must limit the concentration of CO in the stationary RICE exhaust to 47 ppmvd at 15 percent O ₂ ; or

Emission Unit ID	Emission Point ID	Emission Unit Description (Make, Model, Serial No.)	Year Installed	Design Capacity	Control Device	Applicable Requirements
16801 (cont'd)						<p>reduce CO emissions by 93 percent or more. [40 C.F.R. §63.6603(a), Table 2d, Item #8]</p> <p>(3) For each 4SLB stationary RICE complying with the requirement to reduce CO emissions or limit the concentration of CO in the stationary RICE exhaust and using an oxidation catalyst, you must meet the following operating limitation:</p> <p>(i) maintain your catalyst so that the pressure drop across the catalyst does not change by more than 2 inches of water at 100 percent load plus or minus 10 percent from the pressure drop across the catalyst that was measured during the initial performance test; and</p> <p>(ii) maintain the temperature of your stationary RICE exhaust so that the catalyst inlet temperature is greater than or equal to 450 °F and less than or equal to 1350 °F.¹</p> <p>¹ Sources can petition the Administrator pursuant to the requirements of 40 CFR §63.8(g) for a different temperature range. [40 C.F.R. §63.6603(a), Table 2b, Item #1; 40 C.F.R. §63.6630(b)]</p> <p>(4) You must be in compliance with the emission limitations and operating limitations in 40 C.F.R. 63 Subpart ZZZZ that apply to you at all times. [40 C.F.R. §63.6605(a)]</p> <p>(5) At all times you must operate and maintain any affected source, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. The</p>

Emission Unit ID	Emission Point ID	Emission Unit Description (Make, Model, Serial No.)	Year Installed	Design Capacity	Control Device	Applicable Requirements
16801 (cont'd)						<p>general duty to minimize emissions does not require you to make any further efforts to reduce emissions if levels required by this standard have been achieved. Determination of whether such operation 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, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source. [40 C.F.R. §63.6605(b)]</p> <p>(6) You must conduct any initial performance test or other initial compliance demonstration according to Table 4 to 40 C.F.R. 63 Subpart ZZZZ that apply to you within 180 days after the compliance date that is specified for your stationary RICE in §63.6595 and according to the provisions in 40 C.F.R. §63.7(a)(2).</p> <p><u>Item #1 – Reducing CO by at least 93%</u> For each 4SLB stationary RICE complying with the requirement to reduce CO emissions, you must (i) Measure the O₂ at the inlet and outlet of the control device using a portable CO and O₂ analyzer using Using ASTM D6522–00 (2005)^a(incorporated by reference, see §63.14). Measurements to determine O₂ must be made at the same time as the measurements for CO concentration. (ii) You must measure the CO at the inlet and the outlet of the control device using a portable CO and O₂ analyzer using ASTM D6522–00 (2005)^{ab}(incorporated by reference, see §63.14) or Method 10 of 40 CFR appendix A. The CO concentration must be at 15 percent O₂, dry basis.</p>

Emission Unit ID	Emission Point ID	Emission Unit Description (Make, Model, Serial No.)	Year Installed	Design Capacity	Control Device	Applicable Requirements
16801 (cont'd)						<p><u>Item #3 – Limiting CO to 47 ppmv</u> For each stationary RICE complying with the requirement to limit the concentration of CO in the stationary RICE exhaust, you must (i) Select the sampling port location and the number of traverse points using to Method 1 or 1A of 40 CFR part 60, appendix A §63.7(d)(1)(i); and (ii) Determine the O₂ concentration of the stationary RICE exhaust at the sampling port location using Method 3 or 3A or 3B of 40 CFR part 60, appendix A, or ASTM Method D6522-00 (2005); and (iii) Measure moisture content of the stationary RICE exhaust at the sampling port location using Method 4 of 40 CFR part 60, appendix A, or Test Method 320 of 40 CFR part 63, appendix A, or ASTM D 6348-03; and (iv) measure CO at the exhaust of the stationary RICE using Method 10 of 40 CFR part 60, appendix A, ASTM Method D6522-00 (2005), Method 320 of 40 CFR part 63, appendix A, or ASTM D6348-03, according to the following requirements: CO Concentration must be at 15 percent O₂, dry basis. Results of this test consist of the average of the three 1-hour longer runs. [40 C.F.R. §63.6612(a), Table 4, Items # 1 and #3; 40 C.F.R. §§63.6620(a) and (b)]</p> <p>(7) You must conduct any initial performance test or other initial compliance demonstration according to Table 5 to 40 C.F.R. 63 Subpart ZZZZ that apply to you within 180 days after the compliance date that is specified for your stationary RICE in §63.6595 and according to the provisions in 40 C.F.R. §63.7(a)(2).</p>

Emission Unit ID	Emission Point ID	Emission Unit Description (Make, Model, Serial No.)	Year Installed	Design Capacity	Control Device	Applicable Requirements
16801 (cont'd)						<p><u>Item #1 – Reducing CO by at least 93%</u> For each existing non-emergency 4SLB stationary RICE >500 HP located at an area source of HAP that are operated more than 24 hours per calendar year, complying with the requirement to reduce CO emissions and using oxidation catalyst, and using a CPMS, you have demonstrated initial compliance if (i) The average reduction of emissions of CO determined from the initial performance test achieves the required CO percent reduction; and (ii) You have installed a CPMS to continuously monitor catalyst inlet temperature according to the requirements in §63.6625(b); and (iii) You have recorded the catalyst pressure drop and catalyst inlet temperature during the initial performance test.</p> <p><u>Item #2 – Limiting CO to 47 ppmv</u> For each existing non-emergency 4SLB stationary RICE >500 HP located at an area source of HAP that are operated more than 24 hours per calendar year, complying with the requirement to limit the concentration of CO, using oxidation catalyst, and using a CPMS, you have demonstrated initial compliance if (i) The average CO concentration determined from the initial performance test is less than or equal to the CO emission limitation; and (ii) You have installed a CPMS to continuously monitor catalyst inlet temperature according to the requirements in §63.6625(b); and (iii) You have recorded the catalyst pressure drop and catalyst inlet temperature during the initial performance test.</p>

Emission Unit ID	Emission Point ID	Emission Unit Description (Make, Model, Serial No.)	Year Installed	Design Capacity	Control Device	Applicable Requirements
16801 (cont'd)						<p>[40 C.F.R. §63.6612(a), Table 5, Items #1 and #2; 40 C.F.R. §63.6630(a)]</p> <p>(8) For each existing non-emergency, non-black start 4SLB stationary RICE located at an area source of HAP emissions with a brake horsepower >500 that is operated more than 24 hours per calendar year that is not limited use stationary RICE complying with the requirement to limit CO emissions, you must conduct subsequent performance tests every 8,760 hrs. or 3 years, whichever comes first. [40 C.F.R. §63.6615, Table 3, Item #4; 40 C.F.R. §63.6620(a)]</p> <p>(9) You must conduct three separate test runs for each performance test required in 40 C.F.R. §63.6620, as specified in §63.7(e)(3). Each test run must last at least 1 hour. [40 C.F.R. §63.6620(d)]</p> <p>(10) You must use Equation 1 of 40 C.F.R. §63.6620(e)(1) to determine compliance with the percent reduction requirement. You must normalize the carbon monoxide (CO) or formaldehyde concentrations at the inlet and outlet of the control device to a dry basis and to 15 percent oxygen, or an equivalent percent carbon dioxide (CO₂). If pollutant concentrations are to be corrected to 15 percent oxygen and CO₂ concentration is measured in lieu of oxygen concentration measurement, a CO₂ correction factor is needed. Calculate the CO₂ correction factor as described in paragraphs (e)(2)(i) through (iii) of 40 C.F.R. §63.6620. [40 C.F.R. §§63.6620(e)(1) and (2)]</p> <p>(11) If you comply with the emission limitation to reduce CO and you are not using an oxidation catalyst, you must petition the</p>

Emission Unit ID	Emission Point ID	Emission Unit Description (Make, Model, Serial No.)	Year Installed	Design Capacity	Control Device	Applicable Requirements
16801 (cont'd)						<p>Administrator for operating limitations to be established during the initial performance test and continuously monitored thereafter; or for approval of no operating limitations. You must not conduct the initial performance test until after the petition has been approved by the Administrator. [40 C.F.R. §63.6620(f)]</p> <p>(12) If you petition the Administrator for approval of operating limitations, your petition must include the information described in paragraphs (1) through (5) of 40 C.F.R. §63.6620(g). [40 C.F.R. §63.6620(g)]</p> <p>(13) If you petition the Administrator for approval of no operating limitations, your petition must include the information described in paragraphs (1) through (7) of 40 C.F.R. §63.6620(h). [40 C.F.R. §63.6620(h)]</p> <p>(14) The engine percent load during a performance test must be determined by documenting the calculations, assumptions, and measurement devices used to measure or estimate the percent load in a specific application. A written report of the average percent load determination must be included in the notification of compliance status. The following information must be included in the written report: the engine model number, the engine manufacturer, the year of purchase, the manufacturer's site-rated brake horsepower, the ambient temperature, pressure, and humidity during the performance test, and all assumptions that were made to estimate or calculate percent load during the performance test must be clearly explained. If measurement devices such as flow meters, kilowatt meters, beta</p>

Emission Unit ID	Emission Point ID	Emission Unit Description (Make, Model, Serial No.)	Year Installed	Design Capacity	Control Device	Applicable Requirements
16801 (cont'd)						<p>analyzers, stain gauges, etc. are used, the model number of the measurement device, and an estimate of its accurate in percentage of true value must be provided. [40 C.F.R. §63.6620(i)]</p> <p>(15) If you elect to install a CEMS as specified in Table 5 of 40 C.F.R. 63 Subpart ZZZZ, you must install, operate, and maintain a CEMS to monitor CO and either oxygen or CO₂ at both the inlet and the outlet of the control device according to the requirements in paragraphs (a)(1) through (4) of 40 C.F.R. §63.6625(a). [40 C.F.R. §63.6625(a)]</p> <p>(16) If you are required to install a continuous parameter monitoring system (CPMS) as specified in Table 5 of 40 C.F.R. 63 Subpart ZZZZ, you must install, operate, and maintain each CPMS according to the requirements in paragraphs (i) through (v) of this condition:</p> <p>(i) You must prepare a site-specific monitoring plan that addresses the monitoring system design, data collection, and the quality assurance and quality control elements outlined in paragraphs (i)(a) through (e) of this condition and in §63.8(d). As specified in §63.8(f)(4), you may request approval of monitoring system quality assurance and quality control procedures alternative to those specified in paragraphs (i) through (v) of this condition in your site-specific monitoring plan.</p> <p>(a) The performance criteria and design specifications for the monitoring system equipment, including the</p>

Emission Unit ID	Emission Point ID	Emission Unit Description (Make, Model, Serial No.)	Year Installed	Design Capacity	Control Device	Applicable Requirements
16801 (cont'd)						<p>sample interface, detector signal analyzer, and data acquisition and calculations;</p> <ul style="list-style-type: none"> (b) Sampling interface (e.g., thermocouple) location such that the monitoring system will provide representative measurements; (c) Equipment performance evaluations, system accuracy audits, or other audit procedures; (d) Ongoing operation and maintenance procedures in accordance with provisions in §63.8(c)(1) and (c)(3); and (e) Ongoing reporting and recordkeeping procedures in accordance with provisions in §63.10(c), (e)(1), and (e)(2)(i). <ul style="list-style-type: none"> (ii) You must install, operate, and maintain each CPMS in continuous operation according to the procedures in your site-specific monitoring plan. (iii) The CPMS must collect data at least once every 15 minutes (see also §63.6635). (iv) For a CPMS for measuring temperature range, the temperature sensor must have a minimum tolerance of 2.8 degrees Celsius (5 degrees Fahrenheit) or 1 percent of the measurement range, whichever is larger. (v) You must conduct the CPMS equipment performance evaluation, system accuracy audits, or other audit procedures specified in your site-specific monitoring plan at least annually. (vi) You must conduct a performance

Emission Unit ID	Emission Point ID	Emission Unit Description (Make, Model, Serial No.)	Year Installed	Design Capacity	Control Device	Applicable Requirements
16801 (cont'd)						<p>evaluation of each CPMS in accordance with your site-specific monitoring plan.</p> <p>[40 C.F.R. §63.6625(b)]</p> <p>(17) If you operate an existing stationary engine, you must minimize the engine's time spent at idle during startup and minimize the engine's startup time to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes, after which time the emission standards applicable to all times other than startup in Table 2d to 40 C.F.R. 63 Subpart ZZZZ apply. [40 C.F.R. §63.6625(h)]</p> <p>(18) Continuous Compliance Demonstration. (a) If you must comply with emission and operating limitations, you must monitor and collect data according to 40 C.F.R. §63.6635. (b) Except for monitor malfunctions, associated repairs, required performance evaluations, and required quality assurance or control activities, you must monitor continuously at all times that the stationary RICE is operating. A monitoring malfunction is any sudden, infrequent, not reasonably preventable failure of the monitoring to provide valid data. Monitoring failures that are caused in part by poor maintenance or careless operation are not malfunctions. (c) You may not use data recorded during monitoring malfunctions, associated repairs, and required quality assurance or control activities in data averages and calculations used to report emission or operating levels. You must, however, use all the valid data collected during all other periods. [40 C.F.R. §§63.6635(a) through (c)]</p> <p>(19) For each existing 4SLB stationary RICE ></p>

Emission Unit ID	Emission Point ID	Emission Unit Description (Make, Model, Serial No.)	Year Installed	Design Capacity	Control Device	Applicable Requirements
16801 (cont'd)						<p>500 HP located at an area source of HAP that operate more than 24 hours per calendar year and are not limited use stationary RICE, and complying with the requirement to reduce CO emissions, or limit the concentration CO in the stationary RICE exhaust, and using oxidation catalyst, you must demonstrate continuous compliance by:</p> <ul style="list-style-type: none"> (i) Conducting performance tests every 8,760 hours or 3 years, whichever comes first, for CO to demonstrate that the required CO percent reduction is achieved or that your emissions remain at or below the CO concentration limit; and (ii) Collecting the catalyst inlet temperature data according to §63.6625(b); and (iii) Reducing these data to 4-hour rolling averages; and (iv) Maintaining the 4-hour rolling averages within the operating limitations for the catalyst inlet temperature; and (v) Measuring the pressure drop across the catalyst once per month and demonstrating that the pressure drop across the catalyst is within the operating limitation established during the performance test. <p>[40 C.F.R. §63.6640(a), Table 6, Item #10]</p> <p>(20) You must report each instance in which you did not meet each emission limitation or operating limitation in Table 2d and Table 2b to 40 C.F.R. 63 Subpart ZZZZ that apply to you. These instances are deviations from the emission and operating limitations in 40 C.F.R. 63 Subpart ZZZZ. These deviations must be reported according to the</p>

Emission Unit ID	Emission Point ID	Emission Unit Description (Make, Model, Serial No.)	Year Installed	Design Capacity	Control Device	Applicable Requirements
16801 (cont'd)						<p>requirements in 40 C.F.R. §63.6650. If you change your catalyst, you must reestablish the values of the operating parameters measured during the initial performance test. When you reestablish the values of your operating parameters, you must also conduct a performance test to demonstrate that you are meeting the required emission limitation applicable to your stationary RICE. [40 C.F.R. §63.6640(b)]</p> <p>(21) You must also report each instance in which you did not meet the requirements in Table 8 to 40 C.F.R. 63 Subpart ZZZZ that apply to you. [40 C.F.R. §63.6640(e)]</p> <p>(22) You must submit all of the notifications in 40 C.F.R. §§63.7(b) and (c), 63.8(e), (f)(4) and (f)(6), 63.9(b) through (e), and (g) and (h) that apply to you by the dates specified if you own or operate an existing stationary RICE located at an area source of HAP emissions. [40 C.F.R. §63.6645(a)]</p> <p>(23) If you are required to conduct a performance test, you must submit a Notification of Intent to conduct a performance test at least 60 days before the performance test is scheduled to begin as required in 40 C.F.R. §63.7(b)(1). [40 C.F.R. §63.6645(g)]</p> <p>(24) If you are required to conduct a performance test or other initial compliance demonstration as specified in Tables 4 and 5 to 40 C.F.R. 63 Subpart ZZZZ, you must submit a Notification of Compliance Status according to 40 C.F.R. §63.9(h)(2)(ii).</p> <p>(i) For each initial compliance demonstration required in Table 5 to 40 C.F.R. 63 Subpart ZZZZ that does not include a performance test,</p>

Emission Unit ID	Emission Point ID	Emission Unit Description (Make, Model, Serial No.)	Year Installed	Design Capacity	Control Device	Applicable Requirements
16801 (cont'd)						<p>you must submit the Notification of Compliance Status before the close of business on the 30th day following the completion of the initial compliance demonstration.</p> <p>(ii) For each initial compliance demonstration required in Table 5 to 40 C.F.R. 63 Subpart ZZZZ that includes a performance test conducted according to the requirements in Table 3 to 40 C.F.R. 63 Subpart ZZZZ, you must submit the Notification of Compliance Status, including the performance test results, before the close of business on the 60th day following the completion of the performance test according to 40 C.F.R. §63.10(d)(2).</p> <p>[40 C.F.R. §63.6645(h); 40 C.F.R. §63.6630(c)]</p> <p>(25) For each existing non-emergency, 4SLB stationary RICE >500 HP located at an area source of HAP and operated more than 24 hours per calendar year, you must submit a compliance report. The report must contain:</p> <p>(a) If there are no deviations from any emission limitations or operating limitations that apply to you, a statement that there were no deviations from the emission limitations or operating limitations during the reporting period. If there were no periods during which the CMS, including CEMS and CPMS, was out-of-control, as specified in §63.8(c)(7), a statement that there were not periods during which the CMS was</p>

Emission Unit ID	Emission Point ID	Emission Unit Description (Make, Model, Serial No.)	Year Installed	Design Capacity	Control Device	Applicable Requirements
16801 (cont'd)						<p>out-of-control during the reporting period; or</p> <p>(b) If you had a deviation from any emission limitation or operating limitation during the reporting period, the information in §63.6650(d). If there were periods during which the CMS, including CEMS and CPMS, was out-of-control, as specified in §63.8(c)(7), the information in §63.6650(e); or</p> <p>(c) If you had a malfunction during the reporting period, the information in §63.6650(c)(4).</p> <p>You must submit the report semiannually according to the requirements in §§63.6650(b)(1)–(5) for engines that are not limited use stationary RICE subject to numerical emission limitations.</p> <p>[40 C.F.R. §63.6650(a)]</p> <p>(26) Unless the Administrator has approved a different schedule for submission of reports under §63.10(a), you must submit each report by the date in Table 7 of 40 C.F.R. 63 Subpart ZZZZ and according to the requirements in paragraphs (a) through (e) of this condition.</p> <p>(a) For semiannual Compliance reports, the first Compliance report must cover the period beginning on the compliance date that is specified for your affected source in 40 C.F.R. §63.6595 and ending on June 30 or December 31, whichever date is the first date following the end of the first calendar half after the compliance date that is specified for your source in 40 C.F.R. §63.6595.</p> <p>(b) For semiannual Compliance reports, the</p>

Emission Unit ID	Emission Point ID	Emission Unit Description (Make, Model, Serial No.)	Year Installed	Design Capacity	Control Device	Applicable Requirements
16801 (cont'd)						<p>first Compliance report must be postmarked or delivered no later than July 31 or January 31, whichever date follows the end of the first calendar half after the compliance date that is specified for your affected source in 40 C.F.R. §63.6595.</p> <p>(c) For semiannual Compliance reports, each subsequent Compliance report must cover the semiannual reporting period from January 1 through June 30 or the semiannual reporting period from July 1 through December 31.</p> <p>(d) For semiannual Compliance reports, each subsequent Compliance report must be postmarked or delivered no later than July 31 or January 31, whichever date is the first date following the end of the semiannual reporting period.</p> <p>(e) You may submit the first and subsequent compliance reports according to the dates in permit condition 3.5.6. instead of according to the dates in paragraphs (a) through (d) of this condition.</p> <p>[40 C.F.R. §§63.6650(b)(1) though (5)]</p> <p>(27) The Compliance report must contain the information in paragraphs (a) through (f) of this condition.</p> <p>(a) Company name and address.</p> <p>(b) Statement by a responsible official, with that official's name, title, and signature, certifying the accuracy of the content of the report.</p> <p>(c) Date of report and beginning and ending dates of the reporting period.</p> <p>(d) If you had a malfunction during the reporting period, the compliance report</p>

Emission Unit ID	Emission Point ID	Emission Unit Description (Make, Model, Serial No.)	Year Installed	Design Capacity	Control Device	Applicable Requirements
16801 (cont'd)						<p>must include the number, duration, and a brief description for each type of malfunction which occurred during the reporting period and which caused or may have caused any applicable emission limitation to be exceeded. The report must also include a description of actions taken by an owner or operator during a malfunction of an affected source to minimize emissions in accordance with §63.6605(b), including actions taken to correct a malfunction.</p> <p>(e) If there are no deviations from any emission or operating limitations that apply to you, a statement that there were no deviations from the emission or operating limitations during the reporting period.</p> <p>(f) If there were no periods during which the continuous monitoring system (CMS), including CEMS and CPMS, was out-of-control, as specified in §63.8(c)(7), a statement that there were no periods during which the CMS was out-of-control during the reporting period.</p> <p>[40 C.F.R. §§63.6650(c)(1) though (6)]</p> <p>(28) For each deviation from an emission or operating limitation that occurs for a stationary RICE where you are not using a CMS to comply with the emission or operating limitations in 40 C.F.R. 63 Subpart ZZZZ, the Compliance report must contain the information in paragraphs (c)(1) through (4) of §63.6650 and the information in paragraphs (d)(1) and (2) of §63.6650. [40 C.F.R. §§63.6650(d)(1) though (2)]</p>

Emission Unit ID	Emission Point ID	Emission Unit Description (Make, Model, Serial No.)	Year Installed	Design Capacity	Control Device	Applicable Requirements
16801 (cont'd)						<p>(29) For each deviation from an emission or operating limitation occurring for a stationary RICE where you are using a CMS to comply with the emission and operating limitations in 40 C.F.R. 63 Subpart ZZZZ, you must include information in paragraphs (c)(1) through (4) and (e)(1) through (12) of §63.6650. [40 C.F.R. §§63.6650(e)(1) through (12)]</p> <p>(30) The permittee must report all deviations as defined in 40 C.F.R. 63 Subpart ZZZZ in the semiannual monitoring report required by permit condition 3.5.6. [40 C.F.R. §63.6650(f)]</p> <p>(31) If you must comply with the emission and operating limitations, you must keep the records described in paragraphs (a) through (e) of this condition, and (b)(1) through (b)(3) of §63.6655.</p> <ul style="list-style-type: none"> (a) A copy of each notification and report that you submitted to comply with this subpart, including all documentation supporting any Initial Notification or Notification of Compliance Status that you submitted, according to the requirement in §63.10(b)(2)(xiv). (b) Records of the occurrence and duration of each malfunction of operation (<i>i.e.</i>, process equipment) or the air pollution control and monitoring equipment. (c) Records of performance tests and performance evaluations as required in §63.10(b)(2)(viii). (d) Records of all required maintenance performed on the air pollution control and monitoring equipment. (e) Records of actions taken during periods

Emission Unit ID	Emission Point ID	Emission Unit Description (Make, Model, Serial No.)	Year Installed	Design Capacity	Control Device	Applicable Requirements
16801 (cont'd)						<p>of malfunction to minimize emissions in accordance with §63.6605(b), including corrective actions to restore malfunctioning process and air pollution control and monitoring equipment to its normal or usual manner of operation.</p> <p>[40 C.F.R. §63.6655(a)]</p> <p>(32) For each CEMS or CPMS, you must keep the records listed in paragraphs (a) through (c) of this condition.</p> <p>(a) Records described in §63.10(b)(2)(vi) through (xi).</p> <p>(b) Previous (<i>i.e.</i>, superseded) versions of the performance evaluation plan as required in §63.8(d)(3).</p> <p>(c) Requests for alternatives to the relative accuracy test for CEMS or CPMS as required in §63.8(f)(6)(i), if applicable.</p> <p>[40 C.F.R. §63.6655(b)]</p> <p>(33) You must keep the records required in Table 6 of 40 C.F.R. 63 Subpart ZZZZ (permit condition (19)) to show continuous compliance with each emission or operating limitation that applies to you. [40 C.F.R. §63.6655(d)]</p> <p>(34) Format and Retention of Records</p> <p>(a) Your records must be in a form suitable and readily available for expeditious review according to §63.10(b)(1).</p> <p>(b) As specified in §63.10(b)(1), you must keep each record for 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record.</p> <p>(c) You must keep each record readily accessible in hard copy or electronic form for at least 5 years after the date of</p>

Emission Unit ID	Emission Point ID	Emission Unit Description (Make, Model, Serial No.)	Year Installed	Design Capacity	Control Device	Applicable Requirements
16801 (cont'd)						each occurrence, measurement, maintenance, corrective action, report, or record, according to §63.10(b)(1). [40 C.F.R. §§63.6660(a), (b), and (c)] (35) The permittee shall comply with the applicable General Provisions in §§63.1 through 63.15. [40 C.F.R. §63.6665, Table 8]
16802*	E02	Reciprocating Engine/Integral Compressor; Ingersoll-Rand 48KVS; 4-cycle, lean burn	1965	1,320 hp	N/A	Same as for Emission Unit 16801
16803*	E03	Reciprocating Engine/Integral Compressor; Ingersoll-Rand 48KVS; 4-cycle, lean burn	1965	1,320 hp	N/A	Same as for Emission Unit 16801
168G1*	G1	Reciprocating Engine/Generator; Waukesha F2895GL; 4-cycle, rich burn; Non-emergency type	1992	336 hp	N/A	Section 10.0.1. (40 C.F.R. 63 Subpart ZZZZ) (1) Compliance date October 19, 2013. [40 C.F.R. §63.6595(a)(1)] <i>Note: All subsequent Subpart ZZZZ requirements for emission unit 168G1 are subject to this compliance date.</i> (2) For each non-emergency 4SRB stationary RICE ≤ 500 HP, you must (a) Change oil and filter every 1,440 hours of operation or annually, whichever comes first ¹ ; (b) Inspect spark plugs every 1,440 hours of operation or annually, whichever comes first; and (c) Inspect all hoses and belts every 1,440 hours of operation or annually, whichever comes first, and replace as necessary. ¹ <i>Sources have the option to utilize an oil analysis program as described in 40 C.F.R. §63.6625(i) in order to extend the specified oil change requirement in Table 2d of 40 C.F.R. 63 Subpart ZZZZ. [40 C.F.R. §63.6603(a), Table 2d, Item #9]</i> (3) If you own or operate an existing non-emergency 4SRB stationary RICE with a site rating less than or equal to 500 HP located at

Emission Unit ID	Emission Point ID	Emission Unit Description (Make, Model, Serial No.)	Year Installed	Design Capacity	Control Device	Applicable Requirements
168G1 (cont'd)						<p>an area source of HAP emissions, you must operate and maintain the stationary RICE and after-treatment control device (if any) according to the manufacturer's emission-related written instructions or develop your own maintenance plan which must provide to the extent practicable for the maintenance and operation of the engine in a manner consistent with good air pollution control practice for minimizing emissions. [40 C.F.R. §§63.6625(e) and (e)(8); 40 C.F.R. §63.6640(a), Table 6, Item #9]</p> <p>(4) If you operate an existing stationary engine, you must minimize the engine's time spent at idle during startup and minimize the engine's startup time to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes. [40 C.F.R. §63.6625(h)]</p> <p>(5) If you own or operate a stationary SI engine that is subject to the work, operation or management practices in Item #9 of Table 2d to 40 CFR 63 Subpart ZZZZ, you have the option of utilizing an oil analysis program in order to extend the specified oil change requirement in Table 2d to 40 CFR 63 Subpart ZZZZ. The oil analysis must be performed at the same frequency specified for changing the oil in Table 2d to 40 CFR 63 Subpart ZZZZ. The analysis program must at a minimum analyze the following three parameters: Total Acid Number, viscosity, and percent water content. The condemning limits for these parameters are as follows: Total Acid Number increases by more than 3.0 milligrams of potassium hydroxide (KOH) per gram from Total Acid</p>

Emission Unit ID	Emission Point ID	Emission Unit Description (Make, Model, Serial No.)	Year Installed	Design Capacity	Control Device	Applicable Requirements
168G1 (cont'd)						<p>Number of the oil when new; viscosity of the oil has changed by more than 20 percent from the viscosity of the oil when new; or percent water content (by volume) is greater than 0.5. If all of these condemning limits are not exceeded, the engine owner or operator is not required to change the oil. If any of the limits are exceeded, the engine owner or operator must change the oil within 2 days of receiving the results of the analysis; if the engine is not in operation when the results of the analysis are received, the engine owner or operator must change the oil within 2 days or before commencing operation, whichever is later. The owner or operator must keep records of the parameters that are analyzed as part of the program, the results of the analysis, and the oil changes for the engine. The analysis program must be part of the maintenance plan for the engine. [40 C.F.R. §63.6625(j)]</p> <p>(6) At all times you must operate and maintain any affected source, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. The general duty to minimize emissions does not require you to make any further efforts to reduce emissions if levels required by this standard have been achieved. Determination of whether such operation 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, review of operation and maintenance procedures, review of operation</p>

Emission Unit ID	Emission Point ID	Emission Unit Description (Make, Model, Serial No.)	Year Installed	Design Capacity	Control Device	Applicable Requirements
168G1 (cont'd)						<p>and maintenance records, and inspection of the source. [40 C.F.R. §63.6605(b)]</p> <p>(7) You must report each instance in which you did not meet each limitation in Table 2d to 40 C.F.R. 63 Subpart ZZZZ that apply to you. These deviations must be reported according to the requirements in 40 C.F.R. §63.6650. [40 C.F.R. §63.6640(b)]</p> <p>(8) The permittee must report all deviations as defined in 40 C.F.R. 63 Subpart ZZZZ in the semiannual monitoring report required by permit condition 3.5.6. [40 C.F.R. §63.6650(f)]</p> <p>(9) You must keep records of the maintenance conducted on the stationary RICE in order to demonstrate that you operated and maintained the stationary RICE and after-treatment control device (if any) according to your own maintenance plan if you own or operate an existing stationary RICE located at an area source of HAP emissions subject to the management practices in Table 2d to 40 C.F.R. 63 Subpart ZZZZ. [40 C.F.R. §§63.6655(e) and (e)(3)]</p> <p>(10) Format and Retention of Records</p> <p>(i) Your records must be in a form suitable and readily available for expeditious review according to §63.10(b)(1).</p> <p>(ii) As specified in §63.10(b)(1), you must keep each record for 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record.</p> <p>(iii) You must keep each record readily accessible in hard copy or electronic form for at least 5 years after the date of each occurrence, measurement,</p>

Emission Unit ID	Emission Point ID	Emission Unit Description (Make, Model, Serial No.)	Year Installed	Design Capacity	Control Device	Applicable Requirements
168G1 (cont'd)						maintenance, corrective action, report, or record, according to §63.10(b)(1). [40 C.F.R. §§63.6660(a), (b) and (c)] (11) The permittee shall comply with the applicable General Provisions in §§63.1 through 63.15. [40 C.F.R. §63.6665, Table 8]
168G3*	G3	Reciprocating Engine/Generator; Waukesha VGF-H24GL; 4-cycle, lean burn; Emergency type	1998	608 hp	N/A	Sections 6.2.1., 6.3.1., and 6.4.1. Section 10.0.1. (40 C.F.R. 63 Subpart ZZZZ) (1) Compliance date October 19, 2013. [40 C.F.R. §63.6595(a)] <i>Note: All subsequent Subpart ZZZZ requirements for emission unit 168G3 are subject to this compliance date.</i> (2) For each emergency stationary RICE, you must (a) Change oil and filter every 500 hours of operation or annually, whichever comes first ¹ ; (b) Inspect spark plugs every 1,000 hours of operation or annually, whichever comes first; and (c) Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary. ¹ <i>Sources have the option to utilize an oil analysis program as described in 40 C.F.R. §63.6625(i) in order to extend the specified oil change requirement in Table 2d of 40 C.F.R. 63 Subpart ZZZZ. [40 C.F.R. §63.6603(a), Table 2d, Item #5]</i> (3) If you own or operate an existing emergency stationary RICE located at an area source of HAP emissions, you must operate and maintain the stationary RICE and after-treatment control device (if any) according to the manufacturer's emission-related written instructions or develop your own

Emission Unit ID	Emission Point ID	Emission Unit Description (Make, Model, Serial No.)	Year Installed	Design Capacity	Control Device	Applicable Requirements
168G3 (cont'd)						<p>maintenance plan which must provide to the extent practicable for the maintenance and operation of the engine in a manner consistent with good air pollution control practice for minimizing emissions. [40 C.F.R. §§63.6625(e) and (e)(3); 40 C.F.R. §63.6640(a), Table 6, Item #9]</p> <p>(4) If you own or operate an existing emergency stationary RICE located at an area source of HAP emissions, you must install a non-resettable hour meter if one is not already installed. [40 C.F.R. §63.6625(f)]</p> <p>(5) If you operate an existing stationary engine, you must minimize the engine's time spent at idle during startup and minimize the engine's startup time to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes. [40 C.F.R. §63.6625(h)]</p> <p>(6) If you own or operate a stationary SI engine that is subject to the work, operation or management practices in item 5 of Table 2d to 40 CFR 63 Subpart ZZZZ, you have the option of utilizing an oil analysis program in order to extend the specified oil change requirement in Table 2d to 40 CFR 63 Subpart ZZZZ. The oil analysis must be performed at the same frequency specified for changing the oil in Table 2d to 40 CFR 63 Subpart ZZZZ. The analysis program must at a minimum analyze the following three parameters: Total Acid Number, viscosity, and percent water content. The condemning limits for these parameters are as follows: Total Acid Number increases by more than 3.0 milligrams of potassium hydroxide (KOH) per gram from Total Acid</p>

Emission Unit ID	Emission Point ID	Emission Unit Description (Make, Model, Serial No.)	Year Installed	Design Capacity	Control Device	Applicable Requirements
168G3 (cont'd)						<p>Number of the oil when new; viscosity of the oil has changed by more than 20 percent from the viscosity of the oil when new; or percent water content (by volume) is greater than 0.5. If all of these condemning limits are not exceeded, the engine owner or operator is not required to change the oil. If any of the limits are exceeded, the engine owner or operator must change the oil within 2 days of receiving the results of the analysis; if the engine is not in operation when the results of the analysis are received, the engine owner or operator must change the oil within 2 days or before commencing operation, whichever is later. The owner or operator must keep records of the parameters that are analyzed as part of the program, the results of the analysis, and the oil changes for the engine. The analysis program must be part of the maintenance plan for the engine. [40 C.F.R. §63.6625(j)]</p> <p>(7) At all times you must operate and maintain any affected source, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. The general duty to minimize emissions does not require you to make any further efforts to reduce emissions if levels required by this standard have been achieved. Determination of whether such operation 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, review of operation and maintenance procedures, review of operation</p>

Emission Unit ID	Emission Point ID	Emission Unit Description (Make, Model, Serial No.)	Year Installed	Design Capacity	Control Device	Applicable Requirements
168G3 (cont'd)						<p>and maintenance records, and inspection of the source. [40 C.F.R. §63.6605(b)]</p> <p>(8) You must report each instance in which you did not meet each limitation in Table 2d to 40 C.F.R. 63 Subpart ZZZZ that apply to you. These deviations must be reported according to the requirements in 40 C.F.R. §63.6650. [40 C.F.R. §63.6640(b)]</p> <p>(9) <i>Requirements for emergency stationary RICE.</i> (1) If you own or operate an existing emergency stationary RICE located at an area source of HAP emissions, you must operate the emergency stationary RICE according to the requirements in paragraphs (f)(1)(i) through (iii) of §63.6640. Any operation other than emergency operation, maintenance and testing, and operation in non-emergency situations for 50 hours per year, as described in paragraphs (f)(1)(i) through (iii) of §63.6640, is prohibited. If you do not operate the engine according to the requirements in paragraphs (f)(1)(i) through (iii) of §63.6640, the engine will not be considered an emergency engine under this subpart and will need to meet all requirements for non-emergency engines.</p> <p>(i) There is no time limit on the use of emergency stationary RICE in emergency situations.</p> <p>(ii) You may operate your emergency stationary RICE for the purpose of maintenance checks and readiness testing, provided that the tests are recommended by Federal, State or local government, the manufacturer, the vendor, or the insurance company</p>

Emission Unit ID	Emission Point ID	Emission Unit Description (Make, Model, Serial No.)	Year Installed	Design Capacity	Control Device	Applicable Requirements
168G3 (cont'd)						<p>associated with the engine. Maintenance checks and readiness testing of such units is limited to 100 hours per year. The owner or operator may petition the Administrator for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the owner or operator maintains records indicating that Federal, State, or local standards require maintenance and testing of emergency RICE beyond 100 hours per year.</p> <p>(iii) You may operate your emergency stationary RICE up to 50 hours per year in non-emergency situations, but those 50 hours are counted towards the 100 hours per year provided for maintenance and testing.</p> <p>[40 C.F.R. §63.6640(f)(1)]</p> <p>(10) The permittee must report all deviations as defined in 40 C.F.R. 63 Subpart ZZZZ in the semiannual monitoring report required by permit condition 3.5.6. [40 C.F.R. §63.6650(f)]</p> <p>(11) You must keep records of the maintenance conducted on the stationary RICE in order to demonstrate that you operated and maintained the stationary RICE and after-treatment control device (if any) according to your own maintenance plan if you own or operate an existing stationary RICE located at an area source of HAP emissions subject to the management practices in Table 2d to 40 C.F.R. 63 Subpart ZZZZ. [40 C.F.R. §§63.6655(e) and (e)(2)]</p> <p>(12) If you own or operate any of the stationary RICE in paragraphs (f)(1) or (2) of §63.6655,</p>

Emission Unit ID	Emission Point ID	Emission Unit Description (Make, Model, Serial No.)	Year Installed	Design Capacity	Control Device	Applicable Requirements
168G3 (cont'd)						<p>you must keep records of the hours of operation of the engine that is recorded through the non-resettable hour meter. The owner or operator must document how many hours are spent for emergency operation, including what classified the operation as emergency and how many hours are spent for non-emergency operation. If the engines are used for demand response operation, the owner or operator must keep records of the notification of the emergency situation, and the time the engine was operated as part of demand response. [40 C.F.R. §§63.6655(f) and (f)(2)]</p> <p>(13) Format and Retention of Records</p> <ul style="list-style-type: none"> (i) Your records must be in a form suitable and readily available for expeditious review according to §63.10(b)(1). (ii) As specified in §63.10(b)(1), you must keep each record for 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record. (iii) You must keep each record readily accessible in hard copy or electronic form for at least 5 years after the date of each occurrence, measurement, maintenance, corrective action, report, or record, according to §63.10(b)(1). <p>[40 C.F.R. §§63.6660(a), (b) and (c)]</p> <p>(14) The permittee shall comply with the applicable General Provisions in §§63.1 through 63.15. [40 C.F.R. §63.6665, Table 8]</p> <p>Section 21.0: R13-2218C – Conditions A.1., A.5., B.1., B.2., B.6., C.3., C.4.</p>

Emission Unit ID	Emission Point ID	Emission Unit Description (Make, Model, Serial No.)	Year Installed	Design Capacity	Control Device	Applicable Requirements
TEGDEHY1-1* TEGDEHY1-2*	FL3	TEG Dehydrator; BS&B - packing type; NATCO 5.74 mmBtu/hr SHV-6 flare	2000 2002	312 mmscf/day	Flare (FL3)	Section 14.0 Section 21.0: R13-2218C – Conditions A.1., A.2., A.3., B.2., B.3., B.4., B.5., B.6., B.8., B.9., C.3., C.4.
A21	A21	Horizontal Fixed Roof Tank Pipeline/ Storage Field Liquids (Maximum vapor pressure less than 15.0 kPa) Brine (Water mixture)	1990	30,000 gallons	N/A	Section 13.0 (40 C.F.R. 60 Subpart Kb) (1) The owner or operator of each storage vessel as specified in 40 C.F.R §60.110b(a) shall keep readily accessible records showing the dimension of the storage vessel and an analysis showing the capacity of the storage vessel. [40 C.F.R. §60.116b(b); 45CSR16] (2) The record required by condition (1) above will be kept for the life of the source. [40 C.F.R. §60.116b(a); 45CSR16]
A25	A25	Horizontal Fixed Roof Tank Pipeline/ Storage Field Liquids (Maximum vapor pressure less than 15.0 kPa)	2002	30,000 gallons	N/A	Same as Emission Unit A21.

2.0 General Conditions

2.1 Definitions

- 2.1.1. All references to the "West Virginia Air Pollution Control Act" or the "Air Pollution Control Act" mean those provisions contained in W.Va. Code §§ 22-5-1 to 22-5-18.
- 2.1.2. The "Clean Air Act" means those provisions contained in 42 U.S.C. §§ 7401 to 7671q, and regulations promulgated thereunder.
- 2.1.3. "Secretary" means the Secretary of the Department of Environmental Protection or such other person to whom the Secretary has delegated authority or duties pursuant to W.Va. Code §§ 22-1-6 or 22-1-8 (45CSR§30-2.12.). The Director of the Division of Air Quality is the Secretary's designated representative for the purposes of this permit.
- 2.1.4. Unless otherwise specified in a permit condition or underlying rule or regulation, all references to a "rolling yearly total" shall mean the sum of the monthly data, values or parameters being measured, monitored, or recorded, at any given time for the previous twelve (12) consecutive calendar months.

2.2 Acronyms

CAAA	Clean Air Act Amendments	NSPS	New Source Performance Standards
CBI	Confidential Business Information	PM	Particulate Matter
CEM	Continuous Emission Monitor	PM₁₀	Particulate Matter less than 10µm in diameter
CES	Certified Emission Statement	pph	Pounds per Hour
C.F.R. or CFR	Code of Federal Regulations	ppm	Parts per Million
CO	Carbon Monoxide	PSD	Prevention of Significant Deterioration
C.S.R. or CSR	Codes of State Rules	psi	Pounds per Square Inch
DAQ	Division of Air Quality	SIC	Standard Industrial Classification
DEP	Department of Environmental Protection	SIP	State Implementation Plan
FOIA	Freedom of Information Act	SO₂	Sulfur Dioxide
HAP	Hazardous Air Pollutant	TAP	Toxic Air Pollutant
HON	Hazardous Organic NESHAP	TPY	Tons per Year
HP	Horsepower	TRS	Total Reduced Sulfur
lbs/hr or lb/hr	Pounds per Hour	TSP	Total Suspended Particulate
LDAR	Leak Detection and Repair	USEPA	United States Environmental Protection Agency
m	Thousand	UTM	Universal Transverse Mercator
MACT	Maximum Achievable Control Technology	VEE	Visual Emissions Evaluation
mm	Million	VOC	Volatile Organic Compounds
mmBtu/hr	Million British Thermal Units per Hour		
mmft³/hr or mmcf/hr	Million Cubic Feet Burned per Hour		
NA or N/A	Not Applicable		
NAAQS	National Ambient Air Quality Standards		
NESHAPS	National Emissions Standards for Hazardous Air Pollutants		
NO_x	Nitrogen Oxides		

2.3. Permit Expiration and Renewal

- 2.3.1. Permit duration. This permit is issued for a fixed term of five (5) years and shall expire on the date specified on the cover of this permit, except as provided in 45CSR§30-6.3.b. and 45CSR§30-6.3.c.
[45CSR§30-5.1.b.]
- 2.3.2. A permit renewal application is timely if it is submitted at least six (6) months prior to the date of permit expiration.
[45CSR§30-4.1.a.3.]
- 2.3.3. Permit expiration terminates the source's right to operate unless a timely and complete renewal application has been submitted consistent with 45CSR§30-6.2. and 45CSR§30-4.1.a.3.
[45CSR§30-6.3.b.]
- 2.3.4. If the Secretary fails to take final action to deny or approve a timely and complete permit application before the end of the term of the previous permit, the permit shall not expire until the renewal permit has been issued or denied, and any permit shield granted for the permit shall continue in effect during that time.
[45CSR§30-6.3.c.]

2.4. Permit Actions

- 2.4.1. This permit may be modified, revoked, reopened and reissued, or terminated for cause. The filing of a request by the permittee 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.
[45CSR§30-5.1.f.3.]

2.5. Reopening for Cause

- 2.5.1. This permit shall be reopened and revised under any of the following circumstances:
- a. Additional applicable requirements under the Clean Air Act or the Secretary's legislative rules become applicable to a major source with a remaining permit term of three (3) or more years. Such a reopening shall be completed not later than eighteen (18) months after promulgation of the applicable requirement. No such reopening is required if the effective date of the requirement is later than the date on which the permit is due to expire, unless the original permit or any of its terms and conditions has been extended pursuant to 45CSR§§30-6.6.a.1.A. or B.
 - b. Additional requirements (including excess emissions requirements) become applicable to an affected source under Title IV of the Clean Air Act (Acid Deposition Control) or other legislative rules of the Secretary. Upon approval by U.S. EPA, excess emissions offset plans shall be incorporated into the permit.
 - c. The Secretary or U.S. EPA determines that the permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of the permit.
 - d. The Secretary or U.S. EPA determines that the permit must be revised or revoked and reissued to assure compliance with the applicable requirements.
[45CSR§30-6.6.a.]

2.6. Administrative Permit Amendments

- 2.6.1. The permittee may request an administrative permit amendment as defined in and according to the procedures specified in 45CSR§30-6.4.
[45CSR§30-6.4.]

2.7. Minor Permit Modifications

- 2.7.1. The permittee may request a minor permit modification as defined in and according to the procedures specified in 45CSR§30-6.5.a.
[45CSR§30-6.5.a.]

2.8. Significant Permit Modification

- 2.8.1. The permittee may request a significant permit modification, in accordance with 45CSR§30-6.5.b., for permit modifications that do not qualify for minor permit modifications or as administrative amendments.
[45CSR§30-6.5.b.]

2.9. Emissions Trading

- 2.9.1. 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 the permit and that are in accordance with all applicable requirements.
[45CSR§30-5.1.h.]

2.10. Off-Permit Changes

- 2.10.1. Except as provided below, a facility may make any change in its operations or emissions that is not addressed nor prohibited in its permit and which is not considered to be construction nor modification under any rule promulgated by the Secretary without obtaining an amendment or modification of its permit. Such changes shall be subject to the following requirements and restrictions:
- a. The change must meet all applicable requirements and may not violate any existing permit term or condition.
 - b. The permittee must provide a written notice of the change to the Secretary and to U.S. EPA within two (2) business days following the date of the change. Such written notice shall describe each such change, including the date, any change in emissions, pollutants emitted, and any applicable requirement that would apply as a result of the change.
 - c. The change shall not qualify for the permit shield.
 - d. The permittee shall keep records describing all changes made at the source that result in emissions of regulated air pollutants, but not otherwise regulated under the permit, and the emissions resulting from those changes.
 - e. No permittee may make any change subject to any requirement under Title IV of the Clean Air Act (Acid Deposition Control) pursuant to the provisions of 45CSR§30-5.9.

- f. No permittee may make any changes which would require preconstruction review under any provision of Title I of the Clean Air Act (including 45CSR14 and 45CSR19) pursuant to the provisions of 45CSR§30-5.9.

[45CSR§30-5.9.]

2.11. Operational Flexibility

- 2.11.1. The permittee may make changes within the facility as provided by § 502(b)(10) of the Clean Air Act. Such operational flexibility shall be provided in the permit in conformance with the permit application and applicable requirements. No such changes shall be a modification under any rule or any provision of Title I of the Clean Air Act (including 45CSR14 and 45CSR19) promulgated by the Secretary in accordance with Title I of the Clean Air Act and the change shall not result in a level of emissions exceeding the emissions allowable under the permit.

[45CSR§30-5.8]

- 2.11.2. Before making a change under 45CSR§30-5.8., the permittee shall provide advance written notice to the Secretary and to U.S. EPA, describing the change to be made, the date on which the change will occur, any changes in emissions, and any permit terms and conditions that are affected. The permittee shall thereafter maintain a copy of the notice with the permit, and the Secretary shall place a copy with the permit in the public file. The written notice shall be provided to the Secretary and U.S. EPA at least seven (7) days prior to the date that the change is to be made, except that this period may be shortened or eliminated as necessary for a change that must be implemented more quickly to address unanticipated conditions posing a significant health, safety, or environmental hazard. If less than seven (7) days notice is provided because of a need to respond more quickly to such unanticipated conditions, the permittee shall provide notice to the Secretary and U.S. EPA as soon as possible after learning of the need to make the change.

[45CSR§30-5.8.a.]

- 2.11.3. The permit shield shall not apply to changes made under 45CSR§30-5.8., except those provided for in 45CSR§30-5.8.d. However, the protection of the permit shield will continue to apply to operations and emissions that are not affected by the change, provided that the permittee complies with the terms and conditions of the permit applicable to such operations and emissions. The permit shield may be reinstated for emissions and operations affected by the change:

- a. If subsequent changes cause the facility's operations and emissions to revert to those authorized in the permit and the permittee resumes compliance with the terms and conditions of the permit, or
- b. If the permittee obtains final approval of a significant modification to the permit to incorporate the change in the permit.

[45CSR§30-5.8.c.]

- 2.11.4. "Section 502(b)(10) changes" are changes that contravene an express permit term. Such changes do not include changes that would violate applicable requirements or contravene enforceable permit terms and conditions that are monitoring (including test methods), recordkeeping, reporting, or compliance certification requirements.

[45CSR§30-2.39]

2.12. Reasonably Anticipated Operating Scenarios

- 2.12.1. The following are terms and conditions for reasonably anticipated operating scenarios identified in this permit.
- a. Contemporaneously with making a change from one operating scenario to another, the permittee shall record in a log at the permitted facility a record of the scenario under which it is operating and to document the change in reports submitted pursuant to the terms of this permit and 45CSR30.
 - b. The permit shield shall extend to all terms and conditions under each such operating scenario; and
 - c. The terms and conditions of each such alternative scenario shall meet all applicable requirements and the requirements of 45CSR30.

[45CSR§30-5.1.i.]

2.13. Duty to Comply

- 2.13.1. The permittee must comply with all conditions of this permit. Any permit noncompliance constitutes a violation of the West Virginia Code and the Clean Air Act and is grounds for enforcement action by the Secretary or USEPA; for permit termination, revocation and reissuance, or modification; or for denial of a permit renewal application.

[45CSR§30-5.1.f.1.]

2.14. Inspection and Entry

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

[45CSR§30-5.3.b.]

2.15. Schedule of Compliance

- 2.15.1. For sources subject to a compliance schedule, certified progress reports shall be submitted consistent with the applicable schedule of compliance set forth in this permit and 45CSR§30-4.3.h., but at least every six (6) months, and no greater than once a month, and shall include the following:
- a. Dates for achieving the activities, milestones, or compliance required in the schedule of compliance, and dates when such activities, milestones or compliance were achieved; and
 - b. An explanation of why any dates in the schedule of compliance were not or will not be met, and any preventative or corrective measure adopted.

[45CSR§30-5.3.d.]

2.16. Need to Halt or Reduce Activity not a Defense

- 2.16.1. It shall not be a defense for a permittee 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. However, nothing in this paragraph shall be construed as precluding consideration of a need to halt or reduce activity as a mitigating factor in determining penalties for noncompliance if the health, safety, or environmental impacts of halting or reducing operations would be more serious than the impacts of continued operations.

[45CSR§30-5.1.f.2.]

2.17. Emergency

- 2.17.1. An "emergency" means any situation arising from sudden and reasonably unforeseeable events beyond the control of the source, including acts of God, which situation requires immediate corrective action to restore normal operation, and that causes the source to exceed a technology-based emission limitation under the permit, due to unavoidable increases in emissions attributable to the emergency. An emergency shall not include noncompliance to the extent caused by improperly designed equipment, lack of preventative maintenance, careless or improper operation, or operator error.

[45CSR§30-5.7.a.]

- 2.17.2. Effect of any emergency. An emergency constitutes an affirmative defense to an action brought for noncompliance with such technology-based emission limitations if the conditions of 45CSR§30-5.7.c. are met.

[45CSR§30-5.7.b.]

- 2.17.3. The affirmative defense of emergency shall be demonstrated through properly signed, contemporaneous operating logs, or other relevant evidence that:

- a. An emergency occurred and that the permittee can identify the cause(s) of the emergency;
- b. The permitted facility was at the time being properly operated;
- c. During the period of the emergency the permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards, or other requirements in the permit; and

- d. Subject to the requirements of 45CSR§30-5.1.c.3.C.1, the permittee submitted notice of the emergency to the Secretary within one (1) working day of the time when emission limitations were exceeded due to the emergency and made a request for variance, and as applicable rules provide. This notice, report, and variance request fulfills the requirement of 45CSR§30-5.1.c.3.B. This notice must contain a detailed description of the emergency, any steps taken to mitigate emissions, and corrective actions taken.

[45CSR§30-5.7.c.]

- 2.17.4. In any enforcement proceeding, the permittee seeking to establish the occurrence of an emergency has the burden of proof.

[45CSR§30-5.7.d.]

- 2.17.5. This provision is in addition to any emergency or upset provision contained in any applicable requirement.

[45CSR§30-5.7.e.]

2.18. Federally-Enforceable Requirements

- 2.18.1. All terms and conditions in this permit, including any provisions designed to limit a source's potential to emit and excepting those provisions that are specifically designated in the permit as "State-enforceable only", are enforceable by the Secretary, USEPA, and citizens under the Clean Air Act.

[45CSR§30-5.2.a.]

- 2.18.2. Those provisions specifically designated in the permit as "State-enforceable only" shall become "Federally-enforceable" requirements upon SIP approval by the USEPA.

2.19. Duty to Provide Information

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

[45CSR§30-5.1.f.5.]

2.20. Duty to Supplement and Correct Information

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

[45CSR§30-4.2.]

2.21. Permit Shield

2.21.1. Compliance with the conditions of this permit shall be deemed compliance with any applicable requirements as of the date of permit issuance provided that such applicable requirements are included and are specifically identified in this permit or the Secretary has determined that other requirements specifically identified are not applicable to the source and this permit includes such a determination or a concise summary thereof.

[45CSR§30-5.6.a.]

2.21.2. Nothing in this permit shall alter or affect the following:

- a. The liability of an owner or operator of a source for any violation of applicable requirements prior to or at the time of permit issuance; or
- b. The applicable requirements of the Code of West Virginia and Title IV of the Clean Air Act (Acid Deposition Control), consistent with § 408 (a) of the Clean Air Act.
- c. The authority of the Administrator of U.S. EPA to require information under § 114 of the Clean Air Act or to issue emergency orders under § 303 of the Clean Air Act.

[45CSR§30-5.6.c.]

2.22. Credible Evidence

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

[45CSR§30-5.3.e.3.B. and 45CSR38]

2.23. Severability

2.23.1. The provisions of this permit are severable. If any provision of this permit, or the application of any provision of this permit to any circumstance is held invalid by a court of competent jurisdiction, the remaining permit terms and conditions or their application to other circumstances shall remain in full force and effect.

[45CSR§30-5.1.e.]

2.24. Property Rights

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

[45CSR§30-5.1.f.4]

2.25. Acid Deposition Control

2.25.1. Emissions shall not exceed any allowances that the source lawfully holds under Title IV of the Clean Air Act (Acid Deposition Control) or rules of the Secretary promulgated thereunder.

- a. No permit revision shall be required for increases in emissions that are authorized by allowances acquired pursuant to the acid deposition control program, provided that such increases do not require a permit revision under any other applicable requirement.
- b. No limit shall be placed on the number of allowances held by the source. The source may not, however, use allowances as a defense to noncompliance with any other applicable requirement.
- c. Any such allowance shall be accounted for according to the procedures established in rules promulgated under Title IV of the Clean Air Act.

[45CSR§30-5.1.d.]

- 2.25.2. Where applicable requirements of the Clean Air Act are more stringent than any applicable requirement of regulations promulgated under Title IV of the Clean Air Act (Acid Deposition Control), both provisions shall be incorporated into the permit and shall be enforceable by the Secretary and U. S. EPA.

[45CSR§30-5.1.a.2.]

3.0 Facility-Wide Requirements

3.1 Limitations and Standards

- 3.1.1. **Open burning.** The open burning of refuse by any person is prohibited except as noted in 45CSR§6-3.1.
[45CSR§6-3.1.]
- 3.1.2. **Open burning exemptions.** The exemptions listed in 45CSR§6-3.1 are subject to the following stipulation: Upon notification by the Secretary, no person shall cause or allow any form of open burning during existing or predicted periods of atmospheric stagnation. Notification shall be made by such means as the Secretary may deem necessary and feasible.
[45CSR§6-3.2.]
- 3.1.3. **Asbestos.** The permittee is responsible for thoroughly inspecting the facility, or part of the facility, prior to commencement of demolition or renovation for the presence of asbestos and complying with 40 C.F.R. § 61.145, 40 C.F.R. § 61.148, and 40 C.F.R. § 61.150. The permittee, owner, or operator must notify the Secretary at least ten (10) working days prior to the commencement of any asbestos removal on the forms prescribed by the Secretary if the permittee is subject to the notification requirements of 40 C.F.R. § 61.145(b)(3)(i). The USEPA, the Division of Waste Management and the Bureau for Public Health - Environmental Health require a copy of this notice to be sent to them.
[40 C.F.R. §61.145(b) and 45CSR34]
- 3.1.4. **Odor.**
- 3.1.4.1. No person shall cause, suffer, allow or permit the discharge of air pollutants which cause or contribute to an objectionable odor at any location occupied by the public.
[45CSR§4-3.1 State-Enforceable only.]
- 3.1.4.2. Accidental and other infrequent discharges which cause or contribute to objectionable odors will be considered on an individual basis and shall be reported by the person responsible therefore to the Director in the manner to be prescribed by the Director.
[45CSR§4-4.1 State-Enforceable only.]
- 3.1.4.3. When a process or operation results in the discharge of an air pollutant or pollutants which causes or contributes to an objectionable odor, an acceptable control program shall be developed and offered to the Director by the person responsible for the discharge of such air pollutant or pollutants. This control program shall be submitted in the manner prescribed by the Director and within such time as shall be fixed by the Director. If such a control program has been approved by the Director by the issuance of a variance, the person responsible for said discharge shall not be considered to be in violation of this rule in connection with said discharge so long as the program is observed.
[45CSR§4-6.1 State-Enforceable only.]
- 3.1.4.4. The Director may permit, under emergency circumstances, the discharge of air pollutants which causes or contributes to an objectionable odor under specific conditions for specific time periods. Any person who desires such a variance shall make application to the Director in the manner prescribed by the Director.
[45CSR§4-6.2 State-Enforceable only.]

- 3.1.5. **Standby plan for reducing emissions.** When requested by the Secretary, the permittee shall prepare standby plans for reducing the emissions of air pollutants in accordance with the objectives set forth in Tables I, II, and III of 45CSR11.
[45CSR§11-5.2]
- 3.1.6. **Emission inventory.** The permittee is responsible for submitting, on an annual basis, an emission inventory in accordance with the submittal requirements of the Division of Air Quality.
[W.Va. Code § 22-5-4(a)(14)]
- 3.1.7. **Ozone-depleting substances.** For those facilities performing maintenance, service, repair or disposal of appliances, the permittee shall comply with the standards for recycling and emissions reduction pursuant to 40 C.F.R. Part 82, Subpart F, except as provided for Motor Vehicle Air Conditioners (MVACs) in Subpart B:
- a. Persons opening appliances for maintenance, service, repair, or disposal must comply with the prohibitions and required practices pursuant to 40 C.F.R. §§ 82.154 and 82.156.
 - b. Equipment used during the maintenance, service, repair, or disposal of appliances must comply with the standards for recycling and recovery equipment pursuant to 40 C.F.R. § 82.158.
 - c. Persons performing maintenance, service, repair, or disposal of appliances must be certified by an approved technician certification program pursuant to 40 C.F.R. § 82.161.

[40 C.F.R. 82, Subpart F]

- 3.1.8. **Risk Management Plan.** Should this stationary source, as defined in 40 C.F.R. § 68.3, become subject to Part 68, then the owner or operator shall submit a risk management plan (RMP) by the date specified in 40 C.F.R. § 68.10 and shall certify compliance with the requirements of Part 68 as part of the annual compliance certification as required by 40 C.F.R. Part 70 or 71.
[40 C.F.R. 68]
- 3.1.9. Facilities using Mercaptan Tanks shall use proper odor control methods to comply with 45CSR4.
[45CSR§30-12.7 State-Enforceable only.]
- 3.1.10. Emergency Operating Condition/Unit Replacement:
- For emergency situations which interrupt the critical supply of natural gas to the public, and which pose a life threatening circumstance to the customer, the permittee is allowed to temporarily replace failed engine(s) as long as all of the following conditions are met:
- a. The replacement engine(s) is only allowed to operate until repair of the failed engine(s) is complete, but under no circumstance may the replacement engine(s) operate in excess of sixty (60) days;
 - b. Both the replacement engine(s) and the repaired failed engine(s) shall not operate at the same time with the exception of any necessary testing of the repaired engine(s) and this testing may not exceed five (5) hours;
 - c. Potential hourly emissions from the replacement engine(s) are less than or equal to the potential hourly emissions from the engine(s) being replaced;

- d. Credible performance emission test data verifying the emission rates associated with the operation of the substitute engine shall be submitted to the Director within five (5) business days;
- e. The permittee must provide written notification to the Director within five (5) business days of the replacement. This notification must contain:
 - i. Information to support the claim of life threatening circumstances to justify applicability of this emergency provision;
 - ii. Identification of the engine(s) being temporarily replaced;
 - iii. The design parameters of the replacement engine(s) including, but not limited to, the design horsepower and emission factors;
 - iv. Projected duration of the replacement engine(s); and
 - v. The appropriate certification by a responsible official.

[45CSR§30-12.7]

3.2. Monitoring Requirements

- 3.2.1. None.

3.3. Testing Requirements

- 3.3.1. **Stack testing.** As per provisions set forth in this permit or as otherwise required by the Secretary, in accordance with the West Virginia Code, underlying regulations, permits and orders, the permittee shall conduct test(s) to determine compliance with the emission limitations set forth in this permit and/or established or set forth in underlying documents. The Secretary, or his duly authorized representative, may at his option witness or conduct such test(s). Should the Secretary exercise his option to conduct such test(s), the operator shall provide all necessary sampling connections and sampling ports to be located in such manner as the Secretary may require, power for test equipment and the required safety equipment, such as scaffolding, railings and ladders, to comply with generally accepted good safety practices. Such tests shall be conducted in accordance with the methods and procedures set forth in this permit or as otherwise approved or specified by the Secretary in accordance with the following:
 - a. The Secretary may on a source-specific basis approve or specify additional testing or alternative testing to the test methods specified in the permit for demonstrating compliance with 40 C.F.R. Parts 60, 61, and 63, if applicable, in accordance with the Secretary's delegated authority and any established equivalency determination methods which are applicable.
 - b. The Secretary may on a source-specific basis approve or specify additional testing or alternative testing to the test methods specified in the permit for demonstrating compliance with applicable requirements which do not involve federal delegation. In specifying or approving such alternative testing to the test methods, the Secretary, to the extent possible, shall utilize the same equivalency criteria as would be used in approving such changes under Section 3.3.1.a. of this permit.

- c. All periodic tests to determine mass emission limits from or air pollutant concentrations in discharge stacks and such other tests as specified in this permit shall be conducted in accordance with an approved test protocol. Unless previously approved, such protocols shall be submitted to the Secretary in writing at least thirty (30) days prior to any testing and shall contain the information set forth by the Secretary. In addition, the permittee shall notify the Secretary at least fifteen (15) days prior to any testing so the Secretary may have the opportunity to observe such tests. This notification shall include the actual date and time during which the test will be conducted and, if appropriate, verification that the tests will fully conform to a referenced protocol previously approved by the Secretary.
- d. The permittee shall submit a report of the results of the stack test within 60 days of completion of the test. The test report shall provide the information necessary to document the objectives of the test and to determine whether proper procedures were used to accomplish these objectives. The report shall include the following: the certification described in paragraph 3.5.1; a statement of compliance status, also signed by a responsible official; and, a summary of conditions which form the basis for the compliance status evaluation. The summary of conditions shall include the following:
 1. The permit or rule evaluated, with the citation number and language.
 2. The result of the test for each permit or rule condition.
 3. A statement of compliance or non-compliance with each permit or rule condition.

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

3.4. Recordkeeping Requirements

- 3.4.1. **Monitoring information.** The permittee shall keep records of monitoring information that include the following:
 - a. The date, place as defined in this permit and time of sampling or measurements;
 - b. The date(s) analyses were performed;
 - c. The company or entity that performed the analyses;
 - d. The analytical techniques or methods used;
 - e. The results of the analyses; and
 - f. The operating conditions existing at the time of sampling or measurement.

[45CSR§30-5.1.c.2.A.]

- 3.4.2. **Retention of records.** The permittee shall retain records of all required monitoring data and support information for a period of at least five (5) years from the date of monitoring sample, measurement, report, application, or record creation date. 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. Where appropriate, records may be maintained in computerized form in lieu of the above records.

[45CSR§30-5.1.c.2.B.]

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

[45CSR§30-5.1.c. State-Enforceable only.]

- 3.4.4. a. No person shall cause, suffer, allow or permit fugitive particulate matter to be discharged beyond the boundary lines of the property on which the discharge originates or at any public or residential location, which causes or contributes to statutory air pollution.
- b. When a person is found in violation of this rule, the Director may require the person to utilize a system to minimize fugitive particulate matter. This system to minimize fugitive particulate matter may include, but is not limited to, the following:
- i. Use, where practicable, of water or chemicals for control of particulate matter in demolition of existing buildings or structures, construction operations, grading of roads or the clearing of land;
 - ii. Application of asphalt, water or suitable chemicals on unpaved roads, material stockpiles and other surfaces which can create airborne particulate matter;
 - iii. Covering of material transport vehicles, or treatment of cargo, to prevent contents from dripping, sifting, leaking or otherwise escaping and becoming airborne, and prompt removal of tracked material from roads or streets; or
 - iv. Installation and use of hoods, fans and fabric filters to enclose and vent the handling of materials, including adequate containment methods during sandblasting, abrasive cleaning or other similar operations.

[45CSR§17-3. State-Enforceable only.]

3.5. Reporting Requirements

- 3.5.1. **Responsible official.** Any application form, report, or compliance certification required by this permit to be submitted to the DAQ and/or USEPA shall contain a certification by the responsible official that states that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate and complete.

[45CSR§§30-4.4. and 5.1.c.3.D.]

- 3.5.2. A permittee may request confidential treatment for the submission of reporting required under 45CSR§30-5.1.c.3. pursuant to the limitations and procedures of W. Va. Code § 22-5-10 and 45CSR31.

[45CSR§30-5.1.c.3.E.]

- 3.5.3. Except for the electronic submittal of the annual certification to the USEPA as required in 3.5.5 below, all notices, requests, demands, submissions and other communications required or permitted to be made to the Secretary of DEP and/or USEPA shall be made in writing and shall be deemed to have been duly given when delivered by hand, mailed first class or by private carrier with postage prepaid to the address(es) set forth below or to such other person or address as the Secretary of the Department of Environmental Protection may designate:

If to the DAQ:

Director
WVDEP
Division of Air Quality
601 57th Street SE
Charleston, WV 25304

Phone: 304/926-0475
FAX: 304/926-0478

If to the US EPA:

Associate Director
Office of Air Enforcement and Compliance
Assistance (3AP20)
U. S. Environmental Protection Agency
Region III
1650 Arch Street
Philadelphia, PA 19103-2029

- 3.5.4. **Certified emissions statement.** The permittee shall submit a certified emissions statement and pay fees on an annual basis in accordance with the submittal requirements of the Division of Air Quality.
[45CSR§30-8.]
- 3.5.5. **Compliance certification.** The permittee shall certify compliance with the conditions of this permit on the forms provided by the DAQ. In addition to the annual compliance certification, the permittee may be required to submit certifications more frequently under an applicable requirement of this permit. The annual certification shall be submitted to the DAQ and USEPA on or before March 15 of each year, and shall certify compliance for the period ending December 31. The annual certification to the USEPA shall be submitted in electronic format only. It shall be submitted by e-mail to the following address: R3_APD_Permits@epa.gov. The permittee shall maintain a copy of the certification on site for five (5) years from submittal of the certification.
[45CSR§30-5.3.e.]
- 3.5.6. **Semi-annual monitoring reports.** The permittee shall submit reports of any required monitoring on or before September 15 for the reporting period January 1 to June 30 and on or before March 15 for the reporting period July 1 to December 31. All instances of deviation from permit requirements must be clearly identified in such reports. All required reports must be certified by a responsible official consistent with 45CSR§30-4.4.
[45CSR§30-5.1.c.3.A.]
- 3.5.7. **Emergencies.** For reporting emergency situations, refer to Section 2.17 of this permit.
- 3.5.8. **Deviations.**
- a. In addition to monitoring reports required by this permit, the permittee shall promptly submit supplemental reports and notices in accordance with the following:

1. Any deviation resulting from an emergency or upset condition, as defined in 45CSR§30-5.7., shall be reported by telephone or telefax within one (1) working day of the date on which the permittee becomes aware of the deviation, if the permittee desires to assert the affirmative defense in accordance with 45CSR§30-5.7. A written report of such deviation, which shall include the probable cause of such deviations, and any corrective actions or preventative measures taken, shall be submitted and certified by a responsible official within ten (10) days of the deviation.
2. Any deviation that poses an imminent and substantial danger to public health, safety, or the environment shall be reported to the Secretary immediately by telephone or telefax. A written report of such deviation, which shall include the probable cause of such deviation, and any corrective actions or preventative measures taken, shall be submitted by the responsible official within ten (10) days of the deviation.
3. Deviations for which more frequent reporting is required under this permit shall be reported on the more frequent basis.
4. All reports of deviations shall identify the probable cause of the deviation and any corrective actions or preventative measures taken.

[45CSR§30-5.1.c.3.C.]

- b. The permittee shall, in the reporting of deviations from permit requirements, including those attributable to upset conditions as defined in this permit, report the probable cause of such deviations and any corrective actions or preventive measures taken in accordance with any rules of the Secretary.

[45CSR§30-5.1.c.3.B.]

- 3.5.9. **New applicable requirements.** If any applicable requirement is promulgated during the term of this permit, the permittee will meet such requirements on a timely basis, or in accordance with a more detailed schedule if required by the applicable requirement.

[45CSR§30-4.3.h.1.B.]

- 3.5.10. During compliance certification, the facility shall certify that the facility burns natural gas in all stationary equipment regulated under this permit except, when applicable, for emergency equipment (i.e. diesel generators).

[45CSR§30-5.1.c.3.C.]

4.0 Miscellaneous Indirect Heat Exchangers including Reboilers, Natural Gas Heaters and Regeneration Gas Heaters less than 10 MMBtu/hr

4.1. Limitations and Standards

4.1.1. No person shall cause, suffer, allow or permit emission of smoke and/or particulate matter into the open air from any fuel burning unit which is greater than ten (10) percent opacity based on a six minute block average.

[45CSR§2-3.1.]

4.1.2. Compliance with the visible emission requirements of 45CSR§2-3.1 (Section 4.1.1 of this permit) shall be determined in accordance with 40 C.F.R. Part 60, Appendix A, Method 9 or by using measurements from continuous opacity monitoring systems approved by the Director. The Director may require the installation, calibration, maintenance and operation of continuous opacity monitoring systems and may establish policies for the evaluation of continuous opacity monitoring results and the determination of compliance with the visible emission requirements of 45CSR§2-3.1 (Section 4.1.1 of this permit). Continuous opacity monitors shall not be required on fuel burning units which employ wet scrubbing systems for emission control.

[45CSR§2-3.2.]

4.2. Monitoring Requirements

4.2.1. At such reasonable times as the Secretary may designate, the permittee shall conduct visible emissions observations using Method 22 for the purpose of demonstrating compliance with Section 4.1.1. If visible emissions are observed, the permittee shall conduct a Method 9 reading unless the cause for visible emissions is corrected within 24 hours. Records of observation will be kept for at least 5 years from the date of observation.

[45CSR§30-5.1.c.]

4.3. Testing Requirements

4.3.1. N/A

4.4. Recordkeeping Requirements

4.4.1. N/A

4.5. Reporting Requirements

4.5.1. N/A

5.0 Miscellaneous Indirect Heat Exchangers including Reboilers (with Natural Gas Heaters) and Regeneration Gas Heaters greater than or equal to 10 MMBtu/hr and less than 100 MMBtu/hr

5.1. Limitations and Standards

- 5.1.1. No person shall cause, suffer, allow or permit emission of smoke and/or particulate matter into the open air from any fuel burning unit which is greater than ten (10) percent opacity based on a six minute block average.
[45CSR§2-3.1.]
- 5.1.2. Compliance with the visible emission requirements of 45CSR§2-3.1 (Section 5.1.1 of this permit) shall be determined in accordance with 40 C.F.R. Part 60, Appendix A, Method 9 or by using measurements from continuous opacity monitoring systems approved by the Director. The Director may require the installation, calibration, maintenance and operation of continuous opacity monitoring systems and may establish policies for the evaluation of continuous opacity monitoring results and the determination of compliance with the visible emission requirements of 45CSR§2-3.1 (Section 5.1.1 of this permit). Continuous opacity monitors shall not be required on fuel burning units which employ wet scrubbing systems for emission control.
[45CSR§2-3.2, 45CSR§2A-6]
- 5.1.3. No person shall cause, suffer, allow or permit the discharge of particulate matter into the open air from all fuel burning units located at one plant, measured in terms of pounds per hour in excess of the amount determined as follows:
For Gas-fired fuel burning units, the product of 0.09 and the total design heat inputs for such units in million B.T.U.'s per hour, provided however that no more than six hundred (600) pounds per hour of particulate matter shall be discharged into the open air from all such units;
[45CSR§2-4.1.b.]
- 5.1.4. Subject to the provisions of 45CSR2, allowable emission rates for individual stacks shall be determined by the owner and/or operator and registered with the Director at the request of, and on forms provided by, the Director. Such rates shall be subject to review and approval by the Director. The approved set of individual stack allowable emission rates shall become an official part of the compliance schedule and/or any permits concerning such source(s), and shall not be changed without the prior written approval of the Director
[45CSR§2-4.2]
- 5.1.5. If the number of similar fuel burning units located at one plant, each of which is meeting the requirements of this rule, is expanded by the addition of a new unit(s), the total allowable emission rate for the new unit(s) shall be determined according to 45CSR§2-4.3.
[45CSR§2-4.3]
- 5.1.6. The addition of sulfur oxides to a combustion unit exit gas stream for the purpose of improving emissions control equipment efficiency shall be reviewed by the Director. No person shall cause, suffer, allow or permit the addition of sulfur oxides as described above unless written approval for such addition is provided by the Director.
[45CSR§2-4.4.]
- 5.1.7. The provisions of section 5.1.6 shall not apply to combustion units in operation on or before September 1, 1974.
[45CSR§2-4.5.]

- 5.1.8. The visible emission standards set forth in 45CSR§2-3.1 (Section 5.1.1 of this permit) shall apply at all times except in periods of start-ups, shutdowns and malfunctions. Where the Director believes that start-ups and shutdowns are excessive in duration and/or frequency, the Director may require an owner or operator to provide a written report demonstrating that such frequent start-ups and shutdowns are necessary.
[45CSR§2-9.1.]
- 5.1.9. At all times, including periods of start-ups, shutdowns and malfunctions, owners and operators shall, to the extent practicable, maintain and operate any fuel burning unit(s) 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 Director which may include, but is not limited to, monitoring results, visible emission observations, review of operating and maintenance procedures and inspection of the source.
[45CSR§2-9.2.]
- 5.1.10. Total Allowable Emission Rates for Similar Units in Priority I and Priority II Regions -- No person shall cause, suffer, allow or permit the discharge of sulfur dioxide into the open air from all stacks located at one plant, measured in terms of pounds per hour, in excess of the amount determined as follows: the product of 3.1 and the total design heat inputs for such units discharging through those stacks in million BTU's per hour.
[45CSR§10-3.1.e]
- 5.1.11. Maximum Allowable Emission Rates for Similar Units in Region IV (Kanawha Valley Air Quality Control Region: Kanawha County, Putnam County, and Falls and Kanawha Magisterial Districts of Fayette County)--No person shall cause, suffer, allow or permit the discharge of sulfur dioxide into the open air from all stacks located at one plant, measured in terms of pounds per hour, in excess of the amount determined as follows: the product of 1.6 and the total design heat inputs for such units discharging through those stacks in million BTU's per hour, provided however, that no more than 5,500 pounds per hour of sulfur dioxide shall be discharged into the open air from all such stacks.
[45CSR§10-3.2.c]
- 5.1.12. Maximum Allowable Emission Rates for Similar Units in All Priority III Regions Except Region IV. No person shall cause, suffer, allow or permit the discharge of sulfur dioxide into the open air from all stacks located at one plant, measured in terms of pounds per hour, in excess of the amount determined as follows: the product of 3.2 and the total design heat inputs for such units discharging through those stacks in million BTU's per hour.
[45CSR§10-3.3.f.]

5.2. Monitoring Requirements

- 5.2.1. If periodic testing or instrumental or noninstrumental monitoring (which may consist of recordkeeping designed to serve as monitoring), is not already required by a state rule, federal regulation, 45CSR13 or 45CSR14 permit, or consent order, then compliance with emission limits for NO_x, CO, VOC, SO₂, PM, PM₁₀, and/or applicable HAP's shall be determined based on the fuel usage and one of the following methods:
- a. Stack Test Data;
 - b. AP-42 factors; or
 - c. Manufacturer's guaranteed emission factors;
 - d. Other method/data approved by DAQ.
 - e. GRI Gly-Calc version 3.0 or higher; or
 - f. GRI HAP-Calc.

If a monitoring timeframe is not already established and there are hourly emission limits, monthly records indicating hourly average emissions shall be available for a period of no less than five (5) years. If a monitoring timeframe is not already established and there are yearly emission limits, monthly records indicating the twelve month rolling total emissions shall be available for a period of no less than five (5) years.

[45CSR§30-5.1.c.]

- 5.2.2. At such reasonable times as the Secretary may designate, the permittee shall conduct visible emissions observations using Method 22 For the purpose of demonstrating compliance with Section 5.1.1. If visible emissions are observed, the permittee shall conduct a Method 9 reading unless the cause for visible emissions is corrected within 24 hours. Records of observation will be kept for at least 5 years from the date of observation.

[45CSR§30-5.1.c.]

5.3. Testing Requirements

- 5.3.1. At such reasonable times as the Secretary may designate, the permittee may be required to conduct or have conducted tests to determine compliance with any applicable emission limitations. Tests shall be conducted in accordance with the methods set forth below unless the method is already specified in a state rule, federal regulation, 45CSR13 or 45CSR14 permit, or consent order. The permittee may request an alternative test procedure with a written submittal to the Director.

- a. Tests to determine compliance with NO_x emission limits shall be conducted in accordance with Method 7E or 20 as set forth in 40 C.F.R.60, Appendix A.
- b. Tests to determine compliance with CO emission limits shall be conducted in accordance with Method 10, 10A, or 10B as set forth in 40 C.F.R.60, Appendix A.
- c. Tests to determine compliance with VOC emission limits shall be conducted in accordance with Method 25, or 25A as set forth in 40 C.F.R.60, Appendix A.
- d. Tests to determine compliance with SO₂ emission limits shall be conducted in accordance with Method 20 as set forth in 40 C.F.R. 60 Subpart GG or 40 C.F.R. 60 Appendix A, Method 6 or 15.
- e. Tests to determine compliance with PM₁₀ and PM emission limits shall be conducted in accordance with Method 5 as set forth in 40 C.F.R. 60, Appendix A or Appendix A of 45CSR2.
- f. Tests to determine compliance with Benzene emission limits shall be conducted in accordance with Method 18 as set forth in 40 C.F.R. 60, Appendix A. Testing for formaldehyde shall be conducted using EPA Methods 320 or 323.

[45CSR§30-5.1.c; 45CSR§§2-8.1.b and 8.1.c]

5.4. Recordkeeping Requirements

- 5.4.1. The owner or operator of a fuel burning unit(s) shall maintain records of the operating schedule, and the quality and quantity of fuel burned in each fuel burning unit as the following:

For fuel burning unit(s) which burn only pipeline quality natural gas, such records shall include, but not be limited to, the date and time of start-up and shutdown, and the quantity of fuel consumed on a monthly basis. Such records are to be maintained and made available to the Director or his duly authorized representative upon request.

[45CSR§2-8.3.c, 45CSR§2A-7.1.]

5.5. Reporting Requirements

5.5.1. The owner or operator of a fuel burning unit(s) subject to 45CSR2 shall report to the Director any malfunction of such unit or its air pollution control equipment which results in any excess particulate matter emission rate or excess opacity [i.e., emissions exceeding the standards in sections 3 and 4 of 45CSR2 (Section 5.1.1 & 5.1.3 of this permit)] as provided in one of the following subdivisions:

5.5.1.1. Excess opacity periods meeting the following conditions may be reported on a quarterly basis unless otherwise required by the Director:

The excess opacity period does not exceed thirty (30) minutes within any 24-hour period; and Excess opacity does not exceed 40%.

5.5.1.2. The owner or operator shall report to the Director any malfunction resulting in excess particulate matter or excess opacity, not meeting the criteria set forth in 45CSR§2-9.3a (Section 5.5.1.1 of this permit), by telephone, telefax, or e-mail by the end of the next business day after becoming aware of such condition. The owner or operator shall file a certified written report concerning the malfunction with the Director within thirty (30) days providing the following information:

A detailed explanation of the factors involved or causes of the malfunction;

The date and time of duration (with starting and ending times) of the period of excess emissions;

An estimate of the mass of excess emissions discharged during the malfunction period;

The maximum opacity measured or observed during the malfunction;

Immediate remedial actions taken at the time of the malfunction to correct or mitigate the effects of the malfunction; and

A detailed explanation of the corrective measures or program that will be implemented to prevent a recurrence of the malfunction and a schedule for such implementation.

[45CSR§2-9.3.]

6.0 Reciprocating Internal Combustion Engines, Emergency Generators and Combustion Turbines

6.1 Limitations and Standards

6.1.1. N/A

6.2 Monitoring Requirements

6.2.1. If periodic testing or instrumental or noninstrumental monitoring (which may consist of recordkeeping designed to serve as monitoring), is not already required by a state rule, federal regulation, 45CSR13 or 45CSR14 permit, or consent order, continued compliance with the emission limits for NO_x, CO, VOC, SO₂, PM, PM₁₀ and/or applicable HAPs shall be determined based on compliance with the fuel usage and/or brake hp and one of the following methods:

- a. Stack Test Data;
- b. AP-42 factors;
- c. Manufacturer's guaranteed emission factors;
- d. Other method/data approved by DAQ; or
- e. GRI HAP-Calc.

If a monitoring timeframe is not already established and there are hourly emission limits, monthly records indicating hourly average emissions shall be available for a period of no less than five (5) years. If a monitoring timeframe is not already established and there are yearly emission limits, monthly records indicating the twelve month rolling total emissions shall be available for a period of no less than five (5) years.

[45CSR§30-5.1.c.]

6.3 Testing Requirements

6.3.1. At such reasonable times as the Secretary may designate, the permittee may be required to conduct or have conducted tests to determine compliance with any applicable emission limitations. Tests shall be conducted in accordance with the methods set forth below unless the method is already specified in a state rule, federal regulation, 45CSR13 or 45CSR14 permit, or consent order. The permittee may request an alternative test procedure with a written submittal to the Director.

- a. Tests to determine compliance with NO_x emission limits shall be conducted in accordance with Method 7E or 20 as set forth in 40 C.F.R.60, Appendix A.
- b. Tests to determine compliance with CO emission limits shall be conducted in accordance with Method 10, 10A, or 10B as set forth in 40 C.F.R.60, Appendix A.
- c. Tests to determine compliance with VOC emission limits shall be conducted in accordance with Method 25, or 25A as set forth in 40 C.F.R.60, Appendix A.
- d. Tests to determine compliance with SO₂ emission limits shall be conducted in accordance with Method 20 as set forth in 40 C.F.R. 60, Subpart GG or 40 C.F.R. 60 Appendix A, Method 6 or 15.
- e. Tests to determine compliance with PM and PM₁₀ emission limits shall be conducted in accordance with Method 5 as set forth in 40 C.F.R. 60, Appendix A.

- f. Tests to determine compliance with Benzene emission limits shall be conducted in accordance with Method 18 as set forth in 40 C.F.R. 60, Appendix A. Testing for formaldehyde shall be conducted using EPA Methods 320 or 323.

[45CSR§30-5.1.c.]

6.4. Recordkeeping Requirements

- 6.4.1. If recordkeeping is not already required by a state rule, federal regulation, 45CSR13 or 45CSR14 permit, or consent order to demonstrate compliance with the emission limits for NO_x, CO, VOC, SO₂, PM, PM₁₀ and/or applicable HAPs, the permittee shall maintain a record of equipment fuel consumption and/or bhp-hrs developed and hours of operation for all the Reciprocating Internal Combustion Engines, Emergency Generators & Combustion Turbines. If a monitoring timeframe is not already established, a twelve month rolling total shall be maintained to verify compliance with the long term emission limitations. Each calendar month a new twelve month total shall be calculated using the previous twelve months data. If a monitoring timeframe is not already established and there are hourly emission limits, monthly records indicating the hourly average emissions shall be available for a period of no less than five (5) years. If a monitoring timeframe is not already established and there are yearly emission limits, records indicating the twelve month rolling total emissions shall be available for a period of no less than five (5) years. Upon request by the Secretary the records will be certified by the responsible official.

[45CSR§30-5.1.c.]

6.5. Reporting Requirements

- 6.5.1. N/A

7.0 Turbines subject to 40 C.F.R. 60 Subpart GG

7.0.1. The provisions of 40 C.F.R. 60 Subpart GG applicable to the emission unit are specified in the Emission Units Table in Section 1.0.

8.0 Turbines subject to 40 C.F.R. 60 Subpart KKKK

8.0.1. The provisions of 40 C.F.R. 60 Subpart KKKK applicable to the emission unit are specified in the Emission Units Table in Section 1.0.

9.0 Turbines subject to 40 C.F.R. 63 Subpart YYYY

9.0.1. The provisions of 40 C.F.R. 63 Subpart YYYY applicable to the emission unit are specified in the Emission Units Table in Section 1.0.

10.0 Stationary Reciprocating Internal Combustion Engines (RICE) subject to 40 C.F.R. 63 Subpart ZZZZ

10.0.1. The provisions of 40 C.F.R. Part 63 Subpart ZZZZ applicable to the emission unit are specified in the Emission Units Table in Section 1.0.

11.0 Stationary Spark Ignition Internal Combustion Engines subject to 40 C.F.R. 60 Subpart JJJJ

11.0.1. The provisions of 40 C.F.R. Part 60 Subpart JJJJ applicable to the emission unit are specified in the Emission Units Table in Section 1.0.

12.0 Stationary Compression Ignition Internal Combustion Engines subject to 40 C.F.R. 60 Subpart IIII

12.0.1. The provisions of 40 C.F.R. Part 60 Subpart IIII applicable to the emission unit are specified in the Emission Units Table in Section 1.0.

13.0 Storage Vessels subject to 40 C.F.R. 60 Subpart Kb

13.0.1. The provisions of 40 C.F.R. Part 60 Subpart Kb applicable to the emission unit are specified in the Emission Units Table in Section 1.0.

14.0 Natural Gas Dehydration Units

14.1. Limitations and Standards

- 14.1.1. (a) Potential HAP emissions from the entire facility shall be less than 10 TPY of any single HAP or 25 TPY of any combination of HAPs. For purposes of determining potential HAP emissions at transmission and storage facilities, the methods specified in 40 CFR 63, Subpart HHH shall be used unless HAPs are specifically limited by a federally enforceable permit condition. For purposes of determining potential HAP emissions at production-related facilities, the methods specified in 40 CFR 63, Subpart HH shall be used unless HAPs are specifically limited by a federally enforceable permit condition.

And / Or,

- (b) Actual average emissions shall be less than 1.0 tons/yr (or 0.9 Mg/yr) of Benzene per dehydration unit either thru 45CSR13 limit or by this condition. For purposes of determining actual average benzene emissions at transmission and storage facilities, the methods specified in 40 CFR 63, Subpart HHH shall be used unless Benzene emissions are specifically limited by a federally enforceable permit condition. For purposes of determining actual average Benzene emissions at production-related facilities, the methods specified in 40 CFR 63, Subpart HH shall be used unless Benzene emissions are specifically limited by a federally enforceable permit condition.

[45CSR§30-12.7]

The following requirements for flares make the flare federally and practically enforceable. If a flare is being used to provide the natural gas source with synthetic minor status or reduce the potential HAPs to below major source levels, the one ton of benzene exemption for MACT, or even if the source is minor without the flare, but would like to reduce their PTE by the use of a flare, the following control device requirements shall be used.

- 14.1.2. Flare, subject to this section shall be designed and operated in accordance with the following:

14.1.2.a. Flares shall be steam-assisted, air-assisted, or non-assisted.

14.1.2.b. Flares shall be designed for and operated with no visible emissions, except for periods not to exceed a total of 5 minutes during any 2 consecutive hours. This streamlined limit of no visible emissions will ensure compliance with 45CSR§6-4.3. During the exception period when visible emissions are allowed, the visible emissions shall not exceed 20% opacity except for periods of start-up as outlined in 45CSR§6-4.4. (i.e., less than forty (40%) percent opacity, for a period or periods aggregating no more than eight (8) minutes per start-up).

14.1.2.c. Flares shall be operated and with a flame present at all times when emissions may be vented to them, except during SSM (Startup, Shutdown, Malfunctions) events.

14.1.2.d. Flares shall be used only with the net heating value of the gas being combusted at 11.2 MJ/scm (300 Btu/scf) or greater if the flare is steam-assisted or air-assisted; or with the net heating value of the gas being combusted at 7.45 MJ/scm (200 Btu/scf) or greater if the flares is non-assisted. The net heating value of the gas being combusted in a flare shall be calculated using the following equation:

$$H_T = K \sum_{i=1}^n C_i H_i$$

Where:

H_T =Net heating value of the sample, MJ/scm; where the net enthalpy per mole of off gas is based on combustion at 25 °C and 760 mm Hg, but the standard temperature for determining the volume corresponding to one mole is 20 °C.

$$K=\text{Constant}=\frac{1.740 \times 10^{-7}}{\left(\frac{1}{\text{ppmv}}\right)} \left(\frac{\text{g-mole}}{\text{scm}}\right) \left(\frac{\text{MJ}}{\text{kcal}}\right)$$

where the standard temperature for (g-mole/scm) is 20 °C.

C_i =Concentration of sample component i in ppmv on a wet basis, which may be measured for organics by Test Method 18, but is not required to be measured using Method 18 (unless designated by the Director).

H_i =Net heat of combustion of sample component i , kcal/g-mole at 25 °C and 760 mm Hg. The heats of combustion may be determined using ASTM D2382–76 or 88 or D4809–95 if published values are not available or cannot be calculated.

n =Number of sample components.

14.1.2.e. Steam-assisted and nonassisted flares shall be designed for and operated with an exit velocity less than 18.3 m/sec (60 ft/sec), except as provided by 14.1.2.f and 14.1.2.g of this section. The actual exit velocity of a flare shall be determined by dividing by the volumetric flow rate of gas being combusted (in units of emission standard temperature and pressure), by the unobstructed (free) cross-sectional area of the flare tip, which may be determined by Test Method 2, 2A, 2C, or 2D in appendix A to 40 CFR part 60, as appropriate, but is not required to be determined using these Methods (unless designated by the Director).

14.1.2.f. Steam-assisted and nonassisted flares designed for and operated with an exit velocity, as determined by the method specified in 14.1.2.e. of this section, equal to or greater than 18.3 m/sec (60 ft/sec) but less than 122 m/sec (400 ft/sec), are allowed if the net heating value of the gas being combusted is greater than 37.3 MJ/scm (1,000 Btu/scf).

14.1.2.g. Steam-assisted and nonassisted flares designed for and operated with an exit velocity, as determined by the method specified in 14.1.2.e. of this section, less than the velocity V_{\max} , as determined by the method specified in this paragraph, but less than 122 m/sec (400 ft/sec) are allowed. The maximum permitted velocity, V_{\max} , for flares complying with this paragraph shall be determined by the following equation:

$$\text{Log}_{10}(V_{\max})=(H_T+28.8)/31.7$$

Where:

V_{\max} =Maximum permitted velocity, m/sec.

28.8=Constant.

31.7=Constant.

H_T =The net heating value as determined in 14.1.2.d of this section

14.1.2.h. Air-assisted flares shall be designed and operated with an exit velocity less than the velocity V_{max} . The maximum permitted velocity, V_{max} , for air-assisted flares shall be determined by the following equation:

$$V_{max} = 8.71 + 0.708(H_T)$$

Where:

V_{max} = Maximum permitted velocity, m/sec.

8.71 = Constant.

0.708 = Constant.

H_T = The net heating value as determined in 14.1.2.d of this section.

[45CSR§30-12.7; 45CSR§§6-4.3 and 4.4]

14.1.3. Flares are not required to conduct a flare compliance assessment for concentration of sample (i.e. Method 18) and tip velocity (i.e. Method 2), until such time as the Director requests a flare compliance assessment to be conducted in accordance with section 14.3.3, but the permittee is required to conduct a flare design evaluation in accordance with section 14.3.2.

[45CSR§30-5.1.c.]

14.1.4. No person shall cause or allow particulate matter to be discharged from any incinerator into the open air in excess of the quantity determined by use of the following formula:

$$\text{Emissions (lb/hr)} = F \times \text{Incinerator Capacity (tons/hr)}$$

Where, the factor, F, is as indicated in Table I below:

Table I: Factor, F, for Determining Maximum Allowable Particulate Emissions.

	Incinerator Capacity	Factor F
A.	Less than 15,000 lbs/hr	5.43
B.	15,000 lbs/hr or greater	2.72

[45CSR§6-4.1]

14.1.5. No person shall cause, suffer, allow or permit the emission of particles of unburned or partially burned refuse or ash from any incinerator which are large enough to be individually distinguished in the open air.

[45CSR§6-4.5]

14.1.6. Incinerators, including all associated equipment and grounds, shall be designed, operated and maintained so as to prevent the emission of objectionable odors.

[45CSR§6-4.6]

14.1.7. No person shall cause, suffer, allow or permit the emission into the open air from any source operation an in-stack sulfur dioxide concentration exceeding 2,000 parts per million by volume from existing source operations, except as provided in 45CSR§10-4.1.a through 45CSR§10-4.1.e.

[45CSR§10-4.1]

- 14.1.8. No person shall cause, suffer, allow or permit the combustion of any refinery process gas stream or any other process gas stream that contains hydrogen sulfide in a concentration greater than 50 grains per 100 cubic feet of gas except in the case of a person operating in compliance with an emission control and mitigation plan approved by the Director and U. S. EPA. In certain cases very small units may be considered exempt from this requirement if, in the opinion of the Director, compliance would be economically unreasonable and if the contribution of the unit to the surrounding air quality could be considered negligible.
[45CSR§10-5.1]

14.2. Monitoring Requirements

- 14.2.1. In order to demonstrate compliance with the requirements of 14.1.2.c, the permittee shall monitor the presence or absence of a flare pilot flame using a thermocouple or any other equivalent device, except during SSM events.
[45CSR§30-5.1.c.]
- 14.2.2. Compliance with emission limits for NO_x, CO, VOC, SO₂, PM, PM₁₀, and/or applicable HAPs shall be determined based on compliance with either the underlying 45CSR13 or 45CSR14 permit(s) authorizing construction of the source or the gas and/or liquid throughput & gas usage. If a monitoring timeframe is not already established and there are hourly emission limits, records indicating the hourly average emissions shall be available for a period of no less than five (5) years. If a monitoring timeframe is not already established and there are yearly emission limits, monthly records indicating the twelve month rolling total emissions shall be available for a period of no less than five (5) years.
[45CSR§30-5.1.c.]
- 14.2.3. Compliance with the emission limits for CO and NO_x from the flare shall be determined by using the emission factors listed in 13.5 for Industrial Flares of the 5th edition of USEPA's AP-42 (or more recent version).
[45CSR§30-5.1.c.]
- 14.2.4. Compliance with the emission limits for PM-10 from the flare shall be determined by using the emission factors listed in Section 1.4-2 for Natural Gas Combustion of the 5th edition of USEPA's AP-42 (or more recent version) and the design heat input of the flare.
[45CSR§30-5.1.c.]
- 14.2.5. To show compliance with Section 14.1.7 and 14.1.8, the owner or operator may elect not to monitor the total sulfur content of the fuel combusted, if the gaseous fuel is demonstrated to meet the definition of natural gas in 40 C.F.R. § 60.331(u). The owner or operator shall use one of the following sources of information to make the required demonstration:

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

Representative fuel sampling data which show that the sulfur content of the gaseous fuel does not exceed 20 grains/100 scf. At a minimum, representative fuel data specified in either section 2.3.1.4 or 2.3.2.4 of appendix D to 40 C.F.R.75 is required. **[45CSR§30-5.1.c.]**

14.3. Testing Requirements

- 14.3.1. In order to demonstrate compliance with the flare opacity requirements of 14.1.2.b the permittee shall conduct a Method 22 opacity test for at least two hours. This test shall demonstrate no visible emissions are observed for more than a total of 5 minutes during any 2 consecutive hour period using 40CFR60 Appendix A Method 22. The permittee shall conduct this test within one (1) year of permit issuance or initial startup whichever is later and a second opacity test within one (1) year from the time the permit expires. The visible emission checks shall determine the presence or absence of visible emissions. At a minimum, the observer must be trained and knowledgeable regarding the effects of background contrast, ambient lighting, observer position relative to lighting, wind, and the presence of uncombined water (condensing water vapor) on the visibility of emissions. This training may be obtained from written materials found in the References 1 and 2 from 40 CFR part 60, appendix A, Method 22 or from the lecture portion of 40 CFR part 60, appendix A, Method 9 certification course.
[45CSR§30-5.1.c.]
- 14.3.2. In order to demonstrate compliance with the flare design criteria requirements of section 14.1.2, the permittee shall conduct a flare design evaluation demonstrating compliance with the criteria set forth by section 14.1.2. The flare design evaluation shall include, but not limited to, net heat value calculations, exit (tip) velocity calculations, and all supporting concentration calculations. The permittee may elect to demonstrate compliance with the flare design criteria requirements of section 14.1.2 by complying with the compliance assessment testing requirements of section 14.3.3.
[45CSR§30-5.1.c.]
- 14.3.3. The Director may require the permittee to conduct a flare compliance assessment to demonstrate compliance with the flare requirements of section 14.1.2 and the flare design evaluation. This compliance assessment testing shall be conducted in accordance with Test Method 18 for organics and Test Method 2, 2A, 2C, or 2D in appendix A to 40 CFR part 60, as appropriate, or other equivalent testing approved in writing by the Director. Also, Test Method 18 may require the permittee to conduct Test Method 4 in conjunction with Test Method 18.
[45CSR§30-5.1.c.]

14.4. Recordkeeping Requirements

- 14.4.1. For the purpose of demonstrating compliance with section 14.1.2.c and 14.2.1, the permittee shall maintain records of the times and duration of all periods which the pilot flame was absent. Said records shall be maintained on-site or in a readily accessible off-site location maintained by the permittee for a period of five (5) years. Said records shall be readily available to the Director of the Division of Air Quality or his/her duly authorized representative for expeditious inspection and review.
[45CSR§30-5.1.c.]
- 14.4.2. For the purpose of demonstrating compliance with section 14.1.2 and 14.3.2, the permittee shall maintain a record of the flare design evaluation. The flare design evaluation shall include, net heat value calculations, exit (tip) velocity calculations, and all supporting concentration calculations and other related information requested. Said records shall be maintained on-site or in a readily accessible off-site location maintained by the permittee for a period of five (5) years. Said records shall be readily available to the Director of the Division of Air Quality or his/her duly authorized representative for expeditious inspection and review.
[45CSR§30-5.1.c.]
- 14.4.3. For the purpose of demonstrating compliance with the requirements set forth in sections 14.1.2 and 14.3.3., the permittee shall maintain records of testing conducted in accordance with 14.3.3. Said records shall be maintained on-site or in a readily accessible off-site location maintained by the permittee for a period of five (5) years. Said records shall be readily available to the Director of the Division of Air Quality or his/her duly authorized representative for expeditious inspection and review.
[45CSR§30-5.1.c.]

- 14.4.4. The permittee shall document and maintain the corresponding records specified by the on-going monitoring requirements of 14.2 and testing requirements of 14.3. Said records shall be maintained on-site or in a readily accessible off-site location maintained by the permittee for a period of five (5) years. Said records shall be readily available to the Director of the Division of Air Quality or his/her duly authorized representative for expeditious inspection and review.
[45CSR§30-5.1.c.]
- 14.4.5. For the purpose of demonstrating compliance with section 14.1.2.b, the permittee shall maintain records of the visible emission opacity tests conducted per Section 14.3.1. Said records shall be maintained on-site or in a readily accessible off-site location maintained by the permittee for a period of five (5) years. Said records shall be readily available to the Director of the Division of Air Quality or his/her duly authorized representative for expeditious inspection and review.
[45CSR§30-5.1.c.]
- 14.4.6. For the purpose of demonstrating compliance with section 14.1.1.a, the permittee shall maintain a record of all potential to emit (PTE) HAP calculations for the entire facility. These records shall include the natural gas compressor engines and ancillary equipment. Said records shall be maintained on-site or in a readily accessible off-site location maintained by the permittee for a period of five (5) years. Said records shall be readily available to the Director of the Division of Air Quality or his/her duly authorized representative for expeditious inspection and review.
[45CSR§30-5.1.c.]
- 14.4.7. The permittee shall maintain a record of the wet natural gas throughput through the dehydration system. Said records shall be maintained on-site or in a readily accessible off-site location maintained by the permittee for a period of five (5) years. Said records shall be readily available to the Director of the Division of Air Quality or his/her duly authorized representative for expeditious inspection and review.
[45CSR§30-5.1.c.]
- 14.4.8. The permittee shall maintain records of monthly hours of operation for the Glycol Dehydration Unit. Said records shall be maintained on-site or in a readily accessible off-site location maintained by the permittee for a period of five (5) years. Said records shall be readily available to the Director of the Division of Air Quality or his/her duly authorized representative for expeditious inspection and review.
[45CSR§30-5.1.c.]
- 14.4.9. For the purpose of demonstrating compliance with section 14.1.1.b, the permittee shall maintain a record of actual average Benzene emissions calculations for the entire facility. These records shall include the natural gas compressor engines and ancillary equipment. Said records shall be maintained on-site or in a readily accessible off-site location maintained by the permittee for a period of five (5) years. Said records shall be readily available to the Director of the Division of Air Quality or his/her duly authorized representative for expeditious inspection and review.
[45CSR§30-5.1.c.]

14.5. Reporting Requirements

- 14.5.1. If permittee is required by the Director or chooses to demonstrate compliance with section 14.3.3, then the permittee shall submit a testing protocol thirty (30) days prior to testing and shall submit a notification of the testing date fifteen (15) days prior to testing. Also, the permittee shall submit the testing results within sixty (60) days of testing and provide all supporting calculations and testing data.
[45CSR§30-5.1.c.]

- 14.5.2. Any deviation(s) of the allowable visible emission requirement for any emission source discovered during observations using 40CFR Part 60, Appendix A, Method 9 or 22 shall be reported in writing to the Director of the Division of Air Quality as soon as practicable, but within ten (10) calendar days of the occurrence and shall include, at a minimum, the following information: the results of the visible determination of opacity of emissions, the cause or suspected cause of the violation(s), and any corrective measures taken or planned. **[45CSR§30-5.1.c.]**
- 14.5.3. Any deviation(s) of the flare design and operation criteria in Section 14.1.2 shall be reported in writing to the Director of the Division of Air Quality as soon as practicable, but within ten (10) calendar days of discovery of such deviation. **[45CSR§30-5.1.c.]**

15.0 Natural Gas Transmission and Storage Facilities which are major sources of HAPs subject to 40 C.F.R. 63 Subpart HHH

- 15.0.1. The provisions of 40 C.F.R. Part 63 Subpart HHH applicable to the emission unit are specified in the Emission Units Table in Section 1.0.

16.0 Natural Gas Production Facilities subject to 40 C.F.R.63 Subpart HH

- 16.0.1. The provisions of 40 C.F.R. Part 63 Subpart HH applicable to the emission unit are specified in the Emission Units Table in Section 1.0.

17.0 Boilers and Process Heaters subject to 40 C.F.R.63 Subpart DDDDD

- 17.0.1. The boiler or process heater shall comply with all applicable requirements for existing affected sources, pursuant to 40 C.F.R. 63, Subpart DDDDD, “National Emission Standards for Hazardous Air Pollutants for Major Sources: Industrial, Commercial, and Institutional Boilers and Process Heaters” no later than the existing source compliance date of March 21, 2014, or as amended by US EPA.

If required to submit a Notification of Compliance Status (NOCS) pursuant to 40 C.F.R. 63, Subpart DDDDD, the permittee shall also submit a complete application for significant modification to the Title V permit to incorporate the specific requirements of the rule no later than the maximum time allowed for the NOCS submittal in 40 C.F.R. §63.7545(e).

If requested, this Title V permitting deadline may be changed upon written approval by the Director. The permittee shall request the change in writing at least 30 days prior to the application due date.

[40 C.F.R. 63, Subpart DDDDD, 45CSR§30-6.5.b.]

18.0 Small Industrial-Commercial-Institutional Steam Generating Units subject to 40 C.F.R.60 Subpart Dc

- 18.0.1. The provisions of 40 C.F.R. Part 60 Subpart Dc applicable to the emission unit are specified in the Emission Units Table in Section 1.0.

19.0 Boiler subject to 40 C.F.R. 63 Subpart JJJJJ

- 19.0.1. The provisions of 40 C.F.R. Part 63 Subpart JJJJJ applicable to the emission unit are specified in the Emission Units Table in Section 1.0.

20.0 45CSR40 requirements applicable to Stationary Internal Combustion Engines

- 20.0.1. The provisions of 45CSR40 applicable to Stationary Internal Combustion Engines are specified in the Emission Units Table in Section 1.0.

21.0 45CSR13, 45CSR14, and Consent Order Requirements

- 21.0.1. R13-2218C

22.0 Other Specific Requirements

22.1 Limitations and Standards

22.1.1. Reserved.

22.2 Monitoring Requirements

22.2.1. Reserved.

22.3 Testing Requirements

22.3.1. Reserved.

22.4 Recordkeeping Requirements

22.4.1. Reserved.

22.5 Reporting Requirements

22.5.1. Reserved.

23.0 Permit Shield

- 23.1. The permittee is hereby granted a permit shield in accordance with 45CSR§30-5.6. The permit shield applies provided the permittee operates in accordance with the information contained within this permit.
- 23.2. The following requirements specifically identified are not applicable to the source based on the determinations set forth below. The permit shield shall apply to the following requirements provided the conditions of the determinations are met.
- a. 45CSR4 shall not apply to the following sources of objectionable odor until such time as feasible control methods are developed: Internal combustion engines.
[45CSR§4-7.1 State-Enforceable only.]
 - b. 40 C.F.R. 60 Subparts K,Ka; *Standards of Performance for Storage Vessels for Petroleum Liquids* - All tanks at Gladly station are below 40,000 gallons in capacity.
 - c. 40 C.F.R. 60 Subpart KKK; *Standards of Performance for Equipment Leaks of VOC From Onshore Natural Gas Processing Plant* - Gladly station is not engaged in the extraction or fractionation of natural gas liquids from field gas, the fractionation of mixed natural gas liquids to natural gas products, or both.
 - d. 45CSR21; *To Prevent and Control Air Pollution from the Emission of Volatile Organic Compounds*: This facility is not located in one of the affected counties.
 - e. 45CSR27; *To Prevent and Control the Emissions of Toxic Air Pollutants*: Natural gas is included as a petroleum product and contains less than 5% benzene by weight. 45CSR§27-2.4 exempts equipment “used in the production and distribution of petroleum products providing that such equipment does not produce or contact materials containing more than 5% benzene by weight.”
 - f. WVDEP has determined that 45CSR10 does not apply to gas fired engines. Also 45CSR10 is not applicable to BL1, BL2, BL4, BL5 because they are less than 10 MMBtu/hr.
 - g. 40 CFR 64 – The reboilers (BLR1, BLR2, BLR4) do not have any add-on control; therefore, in accordance with 40 C.F.R §64.2(a)(2), CAM is not applicable to these sources. The Heating System Boiler (BLR5) is not a major source and does not utilize a control device; therefore, CAM is not applicable. The line heaters (HTR3, HTR4) do not have any add-on control; therefore, in accordance with 40 C.F.R §64.2(a)(2), CAM is not applicable to these sources. The engines (16801, 16802, 16803, 168G1, 168G3) do not have any add-on control; therefore, in accordance with 40 C.F.R §64.2(a)(2), CAM is not applicable to these sources. The TEG Dedydrator is not a pre-control major source for any pollutant for which it has an emission limitation; therefore, in accordance with 40 C.F.R §64.2(a)(3), CAM is not applicable to this source.
 - h. Due to installation of a federally enforceable flare this facility is not a major source of HAPs; hence, 40 C.F.R 63 (MACT) is not applicable to this facility (with the exception of the engines being subject to 40 C.F.R. 63 Subpart ZZZZ).
 - i. According to 45CSR§2-11.1, BL1, BL2, BL4, BL5 are exempted from MRR (Monitoring, recordkeeping and reporting) because they each have a heat input less than 10 MMBtu/hr.

24.0 Compliance Plan

None.

APPENDIX A

Permit R13-2218C



Division of Air Quality
7012 MacCorkle Avenue, South East
Charleston, WV 25304-2943
Telephone Number: (304) 926-3727
Fax Number: (304) 926-3739

West Virginia Department of Environmental Protection

Bob Wise
Governor

Stephanie R. Timmermeyer
Acting Cabinet Secretary

**PERMIT TO MODIFY
A NATURAL GAS COMPRESSOR STATION**

IN ACCORDANCE WITH THE WEST VIRGINIA AIR POLLUTION CONTROL LAW (W. Va. Code §§22-5-1 et seq.), AND REGULATIONS PROMULGATED THEREUNDER, THE FOLLOWING PERMITTEE IS AUTHORIZED TO CONSTRUCT, SUBJECT TO THE TERMS AND CONDITIONS OF THIS PERMIT, THE SOURCE DESCRIBED BELOW.

This permit will supersede and replace Permit R13-2218B.

Name of Permittee: Columbia Gas Transmission Corporation
Name of Facility: Gladly Compressor Station
Permit No.: R13-2218C
Plant ID No.: 083-00017
Effective Date of Permit: March 11, 2003
Permit Writer: Toby Scholl
Facility Mailing Address: P.O. Box 1273
Charleston, WV 25325-1273
County: Randolph
Nearest City or Town: Gladly
UTM Coordinates: Easting: 612.52 km Northing: 4,293.19 km Zone: 17
Directions to Exact Location: Traveling US Route 33 East, turn right on secondary route 27 at Alpena. Proceed approximately 10 miles to Gladly, turn left on Route 22, travel 1 mile to station.
Type of Facility or Modification: Incorporation of fuel usage limitations for G3, H3 and H4, which were inadvertently dropped from subsequent amendments to the original version of permit no. R13-2218. Also to correct equipment descriptions for G3, H3 and H4.

THE SOURCE IS SUBJECT TO 45CSR30. THE PERMITTED FACILITY'S TITLE V (45CSR30) PERMIT R30-08300017-1996, ISSUED ON 12/1/97, MUST BE REVISED BEFORE COMMENCING OPERATION OF THE ACTIVITY AUTHORIZED BY THIS PERMIT.



West Virginia Department
of Environmental Protection

"Promoting a healthy environment."

IN ACCORDANCE WITH THE PERMIT APPLICATION AND ITS AMENDMENTS, THIS PERMIT IS LIMITED AS FOLLOWS:

A. SPECIFIC REQUIREMENTS

1. Emissions to the atmosphere shall not exceed the emission rate limits from the emission points listed in the following table. In accordance with the information filed in permit applications R13-2218A and R13-2218B, all amendments attached thereto, and all subsequent revisions submitted, the following equipment shall be modified, and the following control equipment shall be installed, maintained, and operated to achieve, at a minimum, a 95% reduction of hazardous air pollutants (HAP):

Emission Point ID	Equipment Description [Control Device]	Emission Rates		
		Pollutant	PPH	TPY
FL3	Triethylene Glycol Contact Tower (312 Mmscf/day) (TEGDEHY1-1/TEGDEHY1-2) [NATCO Dehydrator Flare (5.74 MMBTU/hr) (FL3)]	NO _x	0.39	1.71
		CO	2.13	9.30
		SO ₂	0.33	0.02
		PM ₁₀	0.02	0.05
		VOC	1.91	8.33
		Benzene	0.48	2.09
		Toluene	0.51	2.22
		Ethylbenzene	0.16	0.68
		Xylene	0.23	1.01
		Hexane	0.02	0.08
G3	Waukesha VGF-H24GL, 608 HP Engine (Generator)	NO _x	3.48	15.26
		CO	2.34	10.27
		SO ₂	0.34	1.50
		PM ₁₀	0.17	0.76
		VOC	1.00	4.40
H3	Natco 15 MMBTU/hr Line Heater	NO _x	2.10	9.20
		CO	0.53	2.30
		SO ₂	0.01	0.04
		PM ₁₀	0.21	0.90
		VOC	0.04	0.18
H4	Natco 15 MMBTU/hr Line Heater	NO _x	2.10	9.20
		CO	0.53	2.30
		SO ₂	0.01	0.04
		PM ₁₀	0.21	0.90
		VOC	0.04	0.18

2. The maximum quantity of wet gas processed through the Triethylene Glycol Contact Tower (TEGDEHY1-1/TEGDEHY1-2) shall not exceed 13 MMscf/hr, 312 MMscf/day, and 113,880 MMscf/yr on a rolling twelve (12) month total.

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 Columbia Gas Transmission Corporation
 Gladly Compressor Station

3. The permittee shall operate and maintain a control device to control and reduce emissions of Hazardous Air Pollutants below the applicability threshold specified in 40CFR63 Subpart HHH. The flare shall be designed and operated as follows:
 - a. The TEG dehydrator shall be equipped with a flare to control organic compound emissions. The flare shall be fired with natural gas and shall be operated with 95% or greater control efficiency and in accordance with 40CFR60.18 "General Control Device Requirements" paragraphs (c) through (f).
 - b. The flare controlling the TEG dehydrator emissions shall be designed and operated in a manner that will ensure no visible emissions, as determined by 40CFR60.18(f), except for periods not to exceed a total of five (5) minutes during any two (2) consecutive hours.
 - c. The flare and pilot flame shall be operated at all times when emissions may be vented to it, as determined by methods specified in 40CFR60.18(f).
 - d. The flare shall be used only when the net heating value of the gas being combusted is 200 BTU/scf or greater. The net heating value of the gas being combusted shall be determined by the methods specified in 40CFR60.18(f).
 - e. The flare shall be designed and operated with an exit velocity that satisfies the requirements of 40CFR60.18(f).
4. Facility-wide emissions to the atmosphere of Benzene, Toluene, Ethylbenzene, Xylene, and Hexane shall not exceed, on a per HAP basis, ten (10) tons per year or, on a total HAP basis, twenty-five (25) tons per year.
5. The quantity of natural gas that is consumed in 608-HP natural gas compressor engine (G3) shall not exceed 5,997 cubic feet per hour or 52.53×10^6 cubic feet per year.
6. The quantity of natural gas that is consumed in 15 MM Btu/hr natural gas fired line heater (H3) shall not exceed 15,000 cubic feet per hour or 131.40×10^6 cubic feet per year.
7. The quantity of natural gas that is consumed in 15 MM Btu/hr natural gas fired line heater (H4) shall not exceed 15,000 cubic feet per hour or 131.40×10^6 cubic feet per year.

B. OTHER REQUIREMENTS

1. Tests that are required by the Director to determine compliance with the emission limitations for G3, H3, and H4 of this permit shall be conducted in

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accordance with the methods as set forth below. The Director may require a different test method or approve an alternative method in light of any new technology advancements that may occur. Compliance testing shall be conducted at 100% of the peak load unless otherwise specified by the Director.

- a. Tests to determine compliance with PM emission limits shall be conducted in accordance with Method 5, 5A, 5B, 5C, 5D, 5E, 5F, 5G, or 5H as set forth in 40 CFR 60, Appendix A.
 - b. Tests to determine compliance with SO₂ emission limits shall be conducted in accordance with Method 6, 6A, 6B, or 6C as set forth in 40 CFR 60, Appendix A.
 - c. Tests to determine compliance with CO emission limits shall be conducted in accordance with Method 10, 10A, or 10B as set forth in 40 CFR 60, Appendix A.
 - d. Tests to determine compliance with NO_x emission limits shall be conducted in accordance with Method 7, 7A, 7B, 7C, 7D, or 7E as set forth in 40 CFR 60, Appendix A.
 - e. Tests to determine compliance with VOC emission limits shall be conducted in accordance with Method 25 or 25A as set forth in 40 CFR 60, Appendix A.
 - f. Tests to determine compliance with Opacity of emissions shall be conducted in accordance with Method 9 as set forth in 40 CFR 60, Appendix A.
2. With regard to any testing required by the Director, the permittee shall be submit to the Director of Air Quality a test protocol detailing the proposed test methods, the date, and the time the proposed testing is to take place, as well as identifying the sampling locations and other relevant information. The test protocol must be received by the Director no less than thirty (30) days prior to the date the testing is to take place. Test results shall be submitted to the Director no more than sixty (60) days after the date the testing takes place.
 3. Compliance with the emission limits for Triethylene Glycol Contact Tower (TEGDEHY1-1/TEGDEHY1-2) will be demonstrated using GRI-GLYCal Version 3.0 and the design throughput of the dehydration unit (312 MMscf/day or 13 MMscf/hr).
 4. The permittee shall record the following information for the flare each month during TEG Dehydration unit operation.
 - a) Maintain records of the presence of a pilot flame, and

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- b) The amount of assist gas (natural gas) added to the uncondensed vapor/hydrocarbon and burned in the flare shall be metered.
5. Compliance with the design and operating conditions set forth in SPECIFIC REQUIREMENT A.3 shall be determined by maintaining design records/calculations indicating the minimum assist gas flare flow rate and the maximum allowable flare exit gas velocity.
6. All records required by this permit shall be kept and maintained onsite for a period of not less than five (5) years from the date of the observation. Certified copies of these records shall be made available, upon request, to the Director of the Division of Air Quality or his or her duly authorized representative.
7. The permittee shall comply with all applicable provisions of 45CSR2 provided that the permittee shall comply with any more stringent requirements as may be set forth under SPECIFIC REQUIREMENTS of this permit. The pertinent sections of 45CSR2 applicable to this facility include, but are not limited to, the following:

§45-2-3.1

No person shall cause, suffer, allow or permit emission of smoke into the open air from any fuel burning unit which is darker in shade or appearance than ten (10) percent opacity.

§45-2-3.2

Compliance with the visible emission requirements of §45-2-3.1 shall be determined in accordance with 40 CFR Part 60, Appendix A, Method 9 or by using measurements from continuous opacity monitoring systems approved by the Director. The Director may require the installation, calibration, and operation of continuous opacity monitoring systems and may establish policies for the evaluation of continuous opacity monitoring results and the determination of compliance with the visible emission requirements of §45-2-3.1.

§45-2-3.4

The Director may approve an alternative visible emission standard to that required under §45-2-3.1, not to exceed twenty (20) percent opacity, upon the filing of a written petition by the owner or operator, which petition shall include a demonstration satisfactory to the Director.

8. The permittee shall comply with all applicable provisions of 45CSR6 provided that the permittee shall comply with any more stringent requirements as may be set forth under SPECIFIC REQUIREMENTS of this permit. The pertinent sections of 45CSR6 applicable to this facility include, but are not limited to, the following:

§45-6-4.1

No person shall cause, suffer, allow or permit particulate matter to be discharged

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from any incinerator into the open air in excess of the quantity determined by use of the following formula:

$$\text{Emissions (lb/hr)} = F \times \text{Incinerator Capacity (tons/hr)}$$

Where, the factor, F, is as indicated in Table I below:

Incinerator Capacity	Factor F
A. Less than 15,000 lbs/hr	5.43
B. 15,000 lbs/hr or greater	2.72

§45-6-4.3

Emission of Visible Particulate Matter – No person shall cause, suffer, allow or permit emission of smoke into the atmosphere from any incinerator which is twenty (20%) percent opacity or greater.

§45-6-4.4

The provisions of subsection 4.3 shall not apply to smoke which is less than forty (40%) percent opacity, for a period or periods aggregating no more than eight (8) minutes per start-up, or six (6) minutes in any sixty (60) -minute period for stoking operations.

9. The permittee shall comply with all applicable provisions of 45CSR10 provided that the permittee shall comply with any more stringent requirements as may be set forth under SPECIFIC REQUIREMENTS of this permit. The pertinent sections of 45CSR10 applicable to this facility include, but are not limited to, the following:

§45-10-4.1

No person shall cause, suffer, allow or permit the emission into the open air from any source operation an in-stack sulfur dioxide concentration exceeding 2,000 parts per million by volume from any existing source operations.

§45-10-5.1

No person shall cause, suffer, allow or permit the combustion of any refinery process gas stream or any other process gas stream that contains hydrogen sulfide in a concentration greater than 50 grains per 100 cubic feet of gas.

10. The pertinent sections of 45CSR13 applicable to this facility include, but are not limited to, the following:

§45-13-6.1

At the time a stationary source is alleged to be in compliance with an applicable emission standard and at reasonable times to be determined by the Director thereafter, appropriate tests consisting of visual determinations

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or conventional in-stack measurements or such other tests the Director may specify shall be conducted to determine compliance.

§45-13-10.2

The Director may suspend or revoke a permit if, after six (6) months from the date of issuance, the holder of the permit cannot provide the Director, at the Director's request, with written proof of a good faith effort that construction, modification, or relocation, if applicable, has commenced. Such proof shall be provided not later than thirty (30) days after the Director's request. If construction or modification of a stationary source is discontinued for a period of eighteen (18) months or longer, the Director may suspend or revoke the permit.

§45-13-10.3

The Director may suspend or revoke a permit if the plans and specifications upon which the approval was based or the conditions established in the permit are not adhered to. Upon notice of the Director's intent to suspend, modify or revoke a permit, the permit holder may request a conference with the Director in accordance with the provisions of W.Va Code § 22-5-5 to show cause why the permit should not be suspended, modified or revoked.

C. GENERAL REQUIREMENTS

1. In accordance with 45CSR30 - "Operating Permit Program", the permittee shall not operate nor cause to operate the permitted facility or other associated facilities on the same or contiguous sites comprising the plant without first filing a Certified Emissions Statement (CES) and paying the appropriate fee. Such Certified Emissions Statement (CES) shall be filed and the appropriate fee paid annually. A receipt for the appropriate fee shall be maintained on the premises for which the receipt has been issued, and shall be made immediately available for inspection by the Director or his/her duly authorized representative.
2. Approval of this permit does not relieve the permittee herein of the responsibility to apply for and obtain all other permits, licenses, and/or approvals from other agencies; i.e., local, state, and federal, which may have jurisdiction over the construction and/or operation of the source(s) and/or facility herein permitted.
3. The permitted facility shall be constructed and operated in accordance with information filed in Permit Applications R13-2218, R13-2218A, and R13-2218B and any amendments thereto. The Director may suspend or revoke a permit if the plans and specifications upon which the approval was based are not adhered to.
4. At such reasonable time(s) as the Director may designate, the permittee shall conduct or have conducted test(s) to determine compliance with the emission

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Gladly Compressor Station

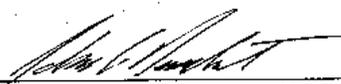
limitations established in the permit application and/or applicable regulations. Test(s) shall be conducted in such a manner as the Director may specify or approve and shall be filed in a manner acceptable to the Director. The Director, or his/her duly authorized representative, may at his option witness or conduct such test. Should the Director exercise his option to conduct such test(s), the permittee shall provide all the necessary sampling connections and sampling ports to be located in such manner as the Director may require, power for test equipment, and the required safety equipment such as scaffolding, railings, and ladders to comply with generally accepted good safety practices. For any tests to be conducted by the permittee, a test protocol shall be submitted to the DAQ by the permittee at least thirty (30) days prior to the test and shall be approved by the Director. The Director shall be notified at least fifteen (15) days in advance of the actual dates and times during which the test will be conducted.

5. In the event the permittee should deem it necessary to suspend, for a period in excess of sixty (60) consecutive calendar days, the operations, either in whole or in part, authorized by this permit, the permittee shall notify the Director, in writing, within two (2) calendar weeks of the passing of the sixtieth (60) day of the suspension period.
6. The provisions of this permit are severable and should any provision(s) be declared by a court of competent jurisdiction to be invalid or unenforceable, all other provisions shall remain in full force and effect.
7. The permittee shall notify the Director, in writing, within fifteen (15) calendar days of the commencement of the construction, modification, or relocation activities authorized under this permit.
8. The permittee shall notify the Director, in writing, at least fifteen (15) calendar days prior to actual startup of the operations authorized under this permit.
9. This permit is transferable in accordance with the requirements outlined in Section 10.1 of 45CSR13.
10. Violations of any of the conditions contained in this permit, or incorporated herein by reference, may subject the permittee to civil and/or criminal penalties for each violation and further action or remedies as provided by West Virginia Code 22-5-6 and 22-5-7.

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11. At such time(s) as the Director may designate, the permittee herein shall prepare and submit an emission inventory for the previous calendar year, addressing the emissions from the facility and/or process(es) authorized herein, in accordance with the emission inventory submittal requirements of the Division of Air Quality. After the initial submittal, the Director may, based upon the type and quantity of the pollutants emitted, establish a submittal frequency other than on an annual basis.

ISSUED BY: _____


JOHN A. BENEDICT, DEPUTY DIRECTOR
WV DEPARTMENT OF ENVIRONMENTAL PROTECTION
DIVISION OF AIR QUALITY

DATE SIGNED: _____

3-11-03

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