

AIR PERMIT

Permittee: **Warrior Met Coal Gas, LLC., Site 27-14-02 – Unit 410174**

Location: **Lat. 33.44215, Long. -87.26135
Adger, AL 35006**

Permit No: **4-07-3011-01**

Issuance Date: **Draft for public comment**

Nature of Business: **Coal Bed Methane Extraction**

Emissions Unit No.	Emissions Unit Description
001	Caterpillar Model G3306NA Model Year 1999 Stationary 145 Horsepower 4-Stroke Rich Burn Spark Ignition Reciprocating Internal Combustion Engine
002	No. 2 Combustor: Hero Flare Model C6030 with 20 MMBtu/hr Rated Input Capacity

This Permit is issued pursuant to and is conditioned upon the compliance with the provisions of the Jefferson County Board of Health Air Pollution Control Rules and Regulations, Section 18 of the Alabama Air Pollution Control Act of 1971, Act No. 769 (Regular Session, 1971), Section 22-28-16 of the Alabama Air Pollution Control Act as amended, Orders of the Jefferson County Board of Health, Orders of the Director of the Alabama Department of Environmental Management, and any applicable local, state or federal Court Order. This Permit is subject to the accuracy of all information submitted relating to the permit application and to the conditions appended hereto, all of which are considered a part of this Permit. It is valid from the date of issuance and shall be posted or kept under file at the source location described above and shall be made readily available for inspection at any reasonable time to any and all persons who may request to see it. This Permit is not transferable.

Jonathan Stanton, Director
Environmental Health Services

Approved: David Hicks, DO, MPH, FAAFP
Health Officer

GENERAL PERMIT CONDITIONS

In addition to compliance with Alabama Air Pollution Control Act Number 769 (Regular Session, 1971) and Act Number 612 (Regular Session, 1982) and with all applicable Air Pollution Control Rules and Regulations, the conditions which are listed below are hereby contained in and made a part of this permit:

No.	General Permit Conditions	Regulations
1.	<p><u>Basis for Permit</u> This Air Permit is issued based on provisions contained in all existing Jefferson County Board of Health Air Pollution Control Rules and Regulations (hereinafter called Rules and Regulations in this permit). In the event amendments, revisions or additions are made to these Rules and Regulations, it shall be the responsibility of the permit holder (hereinafter called the permittee in this permit) to comply with such new Rules and Regulations. Additions and revisions to the conditions in this permit will be made by the Jefferson County Department of Health (hereinafter called the Department), if necessary, to assure that the Rules and Regulations are not violated.</p>	AL Act 769 AL Act 612
2.	<p><u>Authority</u> Nothing in this Air Permit or conditions appended thereto shall negate any authority granted to this Department or the Health Officer pursuant to Alabama Air Pollution Control Act No. 769 (Regular Session, 1971) and Act No. 612 (Regular Session, 1982) or any regulations promulgated thereunder.</p>	AL Act 769 AL Act 612
3.	<p><u>Acceptance of Permit</u> Commencing construction or operation of the source under this permit shall be deemed acceptance of all conditions specified. Approval of construction pursuant to this permit is good for 2 years from the date of permit issuance, at which point construction approval will expire if construction has not commenced. The rest of the permit will remain in force.</p>	2.2.1(b) 2.1.1(g)
4.	<p><u>Display and Availability of Permit</u> The permittee shall keep this Air Permit under file or on display at all times at the site where the source is located and shall make the permit available for inspection by any and all persons who may request to see it.</p>	2.2.1(d)
5.	<p><u>Transfer</u> This permit is not transferable, whether by operation of law or otherwise, either from one location to another, from one piece of equipment to another or from one person to another. Upon sale or legal transfer of the source permitted herein, the new owner or operator must apply for a new permit within 30 days.</p>	2.1.4
6.	<p><u>New or Modified Air Pollution Sources</u> A new permit application must be made for new sources, replacements, alterations or design changes which may result in the issuance of, or an increase in the issuance of, air contaminants, or the use of which may eliminate or reduce or control the issuance of air contaminants. The Department shall determine (1) if a permit will be required and (2) if the proposed construction, change, modification or replacement will cause a variation in air contaminants and/or their emission rates.</p>	2.1.1(a) 1.5.15
7.	<p><u>Effectiveness of Permit</u> This permit shall supersede and replace all permits for air pollution previously issued by the Department to the permittee.</p>	2.2.1(b)
8.	<p><u>Notification of Completion</u> The permittee shall submit written notification of completion of construction of a new source, or modification, replacement, or alteration of an existing source and/or control device, for which this permit was issued, to the Department within 10 days of completion.</p>	2.3.1(f)
9.	<p><u>Severability</u> In case of legal challenge to any portion of this Air Permit, the remainder of the permit conditions shall continue in force.</p>	1.16

No.	General Permit Conditions	Regulations
11.	<p><u>Revocation</u> This Air Permit may be revoked at any time for any of the following reasons:</p> <ul style="list-style-type: none"> A. Failure to comply with any conditions of the permit; B. Failure to notify the Department prior to intended use or operation of any article, machine, equipment, or other contrivance, the use of which may cause the issuance of or an increase in the issuance of air contaminants or the use of which may eliminate or reduce or control the issuance of air contaminants at least 10 days prior to construction; C. Failure to establish and maintain such records, make such reports, install, use and maintain such monitoring equipment or methods; and sample such emissions in accordance with such methods at such locations, intervals and procedures as may be prescribed in accordance with Section 1.9 of the Rules and Regulations; D. Failure to comply with any provisions of any Department administrative order issued concerning the permitted facility; E. Failure to allow entry of employees of the Department upon proper identification: <ul style="list-style-type: none"> 1. To enter upon the permittee's premises where a source is located or emissions related activity is conducted or where records are kept pursuant to the permit conditions and/or the Rules and Regulations; 2. To review and/or copy at reasonable times any records kept pursuant to the permit conditions and/or the Rules and Regulations; 3. To inspect at reasonable times any facilities, equipment, practices or operations required by the permit; and 4. To sample or monitor at reasonable times any discharge of air contaminants resulting directly or indirectly from the operation of any article, machine, equipment or other contrivance, the use of which may cause the issuance of or an increase in the issuance of air contaminants or the use of which may eliminate or reduce or control the issuance of air contaminants; F. Failure to comply with the Rules and Regulations; G. Failure to pay any fees required by the Rules and Regulations or by the Jefferson County Department of Health Environmental Health Services Fees Manual; or H. For any other cause, after a hearing which establishes, in the judgment of the Department, that continuance of the permit is not consistent with the purpose of the Act or Rules and Regulations. 	2.2.4
12.	<p><u>Air Pollution Emergency</u> If the Health Officer finds that a generalized condition of air pollution exists and that it creates an emergency requiring immediate action to protect human health or safety, the Health Officer shall order persons causing or contributing to the air pollution to reduce or discontinue immediately the emission of air contaminants. Such order shall fix a time for a hearing before the Board which must take place within 24 hours from the order. Any person responsible for the operation of a source of air contaminants as determined by the Health Officer shall prepare standby plans for reducing the emissions of air contaminants during periods of an Episode Alert, Warning, and Emergency. Chapter 4 of the Rules and Regulations details the criteria for declaring an emergency as well as the requirements for standby plans.</p>	Chapter 4
13.	<p><u>Emission Reduction Plan</u> Upon notification by this Department, the permittee shall submit an Air Pollution Emission Reduction Plan in a format approved by this Department concerning air contaminant emissions reductions to be taken during declared episodes.</p>	2.3.1(b)
14.	<p><u>Prohibited Activities and Circumvention</u> The permittee must not operate any equipment at the facility in violation of the requirements of this permit. The permittee shall not bypass, without prior approval from this Department, the air pollution control devices for the source permitted herein. The permittee shall not shut down any air pollution control equipment unless such shutdown is accompanied by the corresponding shutdown of the respective source which the device</p>	1.15

No.	General Permit Conditions	Regulations
	is intended to control. The permittee must not build, erect, install or use any article, machine, equipment, or process to conceal an emission, or dilute any emission, that would otherwise constitute noncompliance with a relevant standard.	
15.	<p><u>Credible Evidence</u> Any credible evidence or information relevant to whether a source may have been in compliance with applicable requirements can be used to establish whether or a not an owner or operator has violated or is in violation of any rule or standard in these Regulations.</p>	1.18
16.	<p><u>Prevention of Accidental Releases</u> The permittee shall comply with the requirements of Section 112 (r) of the Act to prevent accidental releases of any substance listed pursuant to Paragraph (3) of Section 112 (r), as the same may be amended or revised, or any other extremely hazardous substance.</p>	Act 112 (r) 40 CFR 68
17.	<p><u>VOC/HAP Housekeeping Requirements</u> The permittee shall minimize leaks and vaporization from stored VOC/HAP materials by maintaining containers and storage tanks in a closed condition except when access to the material is needed. This provision is not intended to prohibit venting that is necessary for safety reasons or to prohibit the use of VOC/HAP materials in surface coating or cleaning.</p>	2.1.1(g)
18.	<p><u>VOC/HAP Spills or Other Mishaps</u> The permittee shall maintain a record of all spills or other mishaps of VOC/HAP materials. The record shall include the date, time, and quantity (gallons or pounds) of VOC/HAP materials involved in the spill or mishap. The permittee shall document the amount of VOC/HAP materials recovered and the amount that evaporated to the atmosphere.</p>	1.9.1 2.1.1(g)
19.	<p><u>Fugitive Dust</u></p> <p>A. The permittee shall not permit the discharge of visible fugitive dust emissions beyond the lot line of the property on which the emissions originate. The permittee shall take reasonable precautions to prevent facility operations and grounds from releasing airborne particulate matter in violation of any emission limit or visible emission restriction. Such reasonable precautions shall include, but not be limited to, the following:</p> <ol style="list-style-type: none"> 1. Use, where possible, of water or chemicals for control of dust in the demolition of existing buildings or structures, construction operations, the grading of roads or the clearing of land; 2. Application of asphalt, vegetation, water, or suitable chemicals on plant roadways, materials stock piles, and other surfaces which create airborne dust problems; and 3. Installation and use of hoods, fans, and fabric filters (or other suitable control devices) to enclose and vent the handling of dust materials. <p>B. Adequate containment methods shall be employed during abrasive blasting or other similar operations.</p> <p>C. When dust, fumes, gases, mist, odorous matter, vapors, or any combination thereof escape from a building or equipment in such a manner and amount as to cause a nuisance or to violate any rule or regulation, the Health Officer may order that the building or equipment in which processing, handling and storage are done be tightly closed and ventilated in such a way that all air and gases and air or gas-borne material leaving the building or equipment are treated by removal or destruction of air contaminants before discharge to the open air.</p>	6.2
20.	<p><u>Obnoxious Odors</u> This permit is issued with the condition that, should obnoxious odors arising from the plant operations be verified by Department inspectors, measures to abate the odorous emissions shall be taken upon determination by this Department that these measures are technically and economically feasible.</p>	6.2.3 2.1.3

No.	General Permit Conditions	Regulations
21.	<p><u>Maintenance of Control Equipment</u></p> <p>A. The permittee shall equip each particulate matter control device with a pressure differential measuring device to measure pressure drop across the filter media in the control device. This device shall be installed in a location which is easily accessible for inspection by personnel of this Department.</p> <p>B. The permittee shall equip each combustion device used to control VOC or GHG emissions with a means of ensuring proper combustion during operation.</p> <p>C. All air pollution control devices and capture systems at this facility shall be maintained and operated at all times in accordance with the manufacturer's specifications so as to minimize the emissions of air contaminants.</p> <p>D. The permittee shall conduct routine inspections on all control equipment and shall make records of inspections and repairs performed. The permittee shall document the date of installation and replacement for all filters used with pollution control equipment at the facility.</p>	<p>2.1.3 2.1.1(g)</p>
22.	<p><u>Title VI Requirements (Refrigerants)</u></p> <p>Any facility having appliances or refrigeration equipment, including air conditioning equipment, which use Class I or Class II ozone-depleting substances such as chlorofluorocarbons and hydrochlorofluorocarbons listed as refrigerants in 40 CFR 82, Subpart A, Appendices A and B, shall service, repair, and maintain such equipment according to the work practices, personnel certification requirements, and certified recycling and recovery equipment specified in 40 CFR 82, Subpart F.</p> <p>A. No person shall knowingly vent or otherwise release any Class I or Class II substance into the environment during the repair, servicing, maintenance, or disposal of any such device except as provided in 40 CFR 82, Subpart F.</p> <p>E. The responsible official shall comply with all reporting and recordkeeping requirements of 40 CFR 82.166. Reports shall be submitted to the U.S. EPA and the Department as required.</p>	<p>40 CFR 82 2.1.3</p>
23.	<p><u>Asbestos Demolition and Renovation</u></p> <p>Demolition and renovation activities at this facility are subject to the National Emission Standard for Asbestos, 40 CFR 61, Subpart M. To determine the applicable requirements of the Standard, the permittee must thoroughly inspect the affected part of the facility where the demolition or renovation operation will occur for the presence of asbestos, including Category I and Category II "nonfriable" asbestos-containing materials, prior to the commencement of the demolition or renovation operation. The permittee shall comply with all applicable sections of the Standard, including notification requirements, emission control and waste disposal procedures. The permittee shall also ensure that anyone performing asbestos-related work at the facility is trained and certified according to the Alabama Department of Environmental Management's regulations for Asbestos Contractor Certification.</p>	<p>40 CFR 61 14.2.12</p>
24.	<p><u>Title V and Major Source Thresholds</u></p> <p>If increases in emissions from the source or facility cause it to be possible that any major source threshold will be met or exceeded, the permittee must apply for a Major Source Operating Permit under Chapter 18, or may agree to institutional controls under Chapter 17 to apply for a Synthetic Minor Operating Permit. The following thresholds apply to this facility at the time of permit issuance:</p> <p>A. For Prevention of Significant Deterioration (PSD) applicability, regulated NSR pollutants as defined at 2.4.2(ww): 250 tons/year;</p> <p>B. For Title V applicability:</p> <ol style="list-style-type: none"> 1. 10 tons/year of any single HAP; 2. 25 tons/year of total HAP; and 3. 100 tons/year of any regulated air pollutant. 	<p>2.5.2 18.1.1(q) Chapter 18 Chapter 17 Appendix D</p>
25.	<p><u>Testing</u></p> <p>A source emissions test may be required by this Department at any time. The methods for such testing shall be in accordance with procedures established by 40 CFR 60. The</p>	<p>1.9.1 1.10.1 1.10.3</p>

No.	General Permit Conditions	Regulations
	<p>permittee shall notify the Department in writing at least 2 weeks prior to the actual conduction of any testing, including identification of the source to be tested, the time and date planned, and the proposed test methods. The permittee shall provide sampling ports, access, ladders and any other safety equipment needed to facilitate testing. The permittee shall submit the results of all emissions tests to the Department within 30 days from the test completion date.</p>	1.10.4
26.	<p><u>Recordkeeping</u> In addition to the records required to demonstrate compliance with the applicable requirements, the permittee shall maintain the following records:</p> <ul style="list-style-type: none"> A. The volume and type of any VOC/HAP materials which were spilled or leaked, identifying the amount recovered and the amount evaporated to the atmosphere for each spill or leak event, in addition to the time and location of the spill or leak; B. The startup, shutdown or malfunction of any equipment which would increase the emission of air pollutants; and C. The maintenance or repair of any equipment associated with venting, containing, or controlling emissions of VOC/HAP containing material, identifying whether the source was shutdown during the service period. 	1.5.15 1.9
27.	<p><u>Records Retention and Availability</u> The permittee shall establish and maintain on file at the facility permitted herein any and all records required by any permit condition in this Air Permit or any and all applicable Rules and Regulations for a minimum of 5 years after the date of record. These records include, and are not limited to, notifications, reports, emissions calculations, and records of equipment changes, replacements, additions and repairs. The permittee shall make available to the Health Officer or his authorized representative any or all records upon request.</p>	1.5.15 1.9
28.	<p><u>Prompt Reporting of Violations</u> The permittee shall submit a report to the Department within 2 working days after determining any violation of any permit condition and/or any Rule or Regulation. The notification shall include the cause of the violation or deviation and a description of the corrective actions taken.</p>	1.9.2
29.	<p><u>Reporting Maintenance or Malfunctions</u> Within 24 hours prior to scheduled maintenance on air pollution control equipment not accompanied by shutdown of the source the device controls, and within 24 hours after a malfunction, the permittee shall report to this Department the maintenance or malfunction of equipment which causes the emissions of air contaminants in violation of this permit. The notification or report shall contain all pertinent facts, including the Air Permit Number, identification of the equipment out of service, the estimation of the duration of the breakdown, steps to be taken to minimize the duration of the shutdown, and the reasons it would be impossible or impractical to shutdown the source during the maintenance operation. Additionally, the permittee shall notify the Department when the problem has been corrected and operations have resumed.</p>	1.12.1 1.12.2
30.	<p><u>Annual Production Data and Emissions Reporting</u> The permittee shall submit by February 10th of each calendar year to this Department an annual summary report for the previous calendar year in a format approved by this Department of the following production information of the source permitted herein:</p> <ul style="list-style-type: none"> A. The quantity of methane well gas combusted by the engine and by the flare; B. The quantity of methane well gas emitted without being combusted by the flare; C. The actual operating hours of the engine and of the flare; and D. The volume and type of any VOC/HAP materials which were spilled, identifying the type of material spilled, the amount recovered and the amount evaporated to the atmosphere for each spill event. <p>The permittee shall calculate the annual emissions based upon the above data. MSDS information should be updated each year when preparing the annual emissions report. Include the CAS number when identifying HAP.</p>	1.9 1.12 2.1.1(g)

No.	General Permit Conditions	Regulations
31.	<p><u>Additional Reporting</u> The permittee shall submit any additional records, or conduct any additional testing or monitoring, as may be required by the Department.</p>	1.9.2
32.	<p><u>Definitions</u> For the purposes of this Permit, the following terms will have the meanings ascribed to in this permit:</p> <p>“12-Month Rolling Total” shall mean the method of demonstrating compliance with an annual emission rate restriction or annual limit on usage or throughput of materials. At the end of each calendar month, a source shall demonstrate compliance with an annual restriction by summing the monthly emissions, usage or throughput for the previous 12 consecutive month period.</p> <p>“40 CFR 51” shall be an acronym for Part 51 of Title 40 of the Code of Federal Regulations.</p> <p>“40 CFR 60” shall be an acronym for Part 60 of Title 40 of the Code of Federal Regulations.</p> <p>“40 CFR 61” shall be an acronym for Part 61 of Title 40 of the Code of Federal Regulations.</p> <p>“40 CFR 63” shall be an acronym for Part 63 of Title 40 of the Code of Federal Regulations.</p> <p>"ADEM" shall be an acronym for the Alabama Department of Environmental Management.</p> <p>"Administrator" shall mean the Administrator of the Environmental Protection Agency or his or her authorized representative.</p> <p>"Air Contaminant" shall mean any solid, liquid, gaseous matter, any odor, or any other combination thereof, from whatever source.</p> <p>“Annual Rolling Average” shall mean the method of demonstrating compliance with an annual emission rate restriction of a permit condition of an Air Permit, or, to keep annual emissions below a regulation's emissions applicability level. At the end of each calendar month, a source shall demonstrate compliance with an annual emission rate restriction for the previous 12 consecutive month period.</p> <p>“Asbestos” means the asbestiform varieties of serpentinite (chrysolite), riebeckite (crocidolite), cummingtonite-grunerite, anthophyllite, and actionlite-tremolite.</p> <p>"ASTM" is an acronym for American Society for Testing and Materials. This organization publishes reference test methods.</p> <p>“CAA” shall mean the Clean Air Act, as amended, 42 U.S.C. 7401, et seq.</p> <p>“Department” shall mean the Jefferson County Department of Health.</p> <p>“EPA” shall mean the Environmental Protection Agency.</p>	1.3

No.	General Permit Conditions	Regulations
	<p>“GHG” shall be an acronym for greenhouse gases.</p> <p>"HAP" shall be an acronym for hazardous air pollutant listed in or pursuant to section 112(c) of the Act. The list is reproduced in Appendix D of the Rules and Regulations.</p> <p>“Modification” shall mean any physical change in, or change in the method of operation of, an affected source which increases the amount of any air contaminant (to which a rule or regulation applies) not previously emitted, except that routine maintenance, repair, and replacement shall not be considered physical changes, and the following shall not be considered a change in the method of operation: an increase in the production rate, increase in the hours of operation, or use of an alternate fuel or raw material.</p> <p>"NESHAP" shall be an acronym for National Emission Standard for Hazardous Air Pollutants established pursuant to section 112 of the Act and published in 40 CFR 61 or 40 CFR 63.</p> <p>"NSPS" shall be an acronym for New Source Performance Standards published in 40 CFR 60.</p> <p>“Permittee” shall mean the holder of a permit issued by the Department.</p> <p>“Regulated NSR pollutant” means the following:</p> <ol style="list-style-type: none"> 1. Any pollutant for which a national ambient air quality standard has been promulgated and any constituents or precursors for such pollutants identified by the Administrator of EPA (e.g., volatile organic compounds and NO_x are precursors for ozone); 2. Any pollutant that is subject to any standard promulgated under section 111 of the Clean Air Act; 3. Any Class I or II substance subject to a standard promulgated under or established by title VI of the Clean Air Act; or 4. Any pollutant that otherwise is subject to regulation under the Clean Air Act; except that any or all hazardous air pollutants either listed in section 112 of the Clean Air Act, including compounds listed in 40 CFR Part 68 pursuant to Section 112(r) of the Clean Air Act, or added to the list pursuant to section 112(b)(2) of the Clean Air Act, which have not been delisted pursuant to section 112(b)(3) of the Clean Air Act, are not regulated NSR pollutants unless the listed hazardous air pollutant is also regulated as a constituent or precursor of a general pollutant listed under section 108 of the Clean Air Act. 5. Particulate matter (PM), PM_{2.5} and PM₁₀ emissions shall include gaseous emissions from a source or activity which condense to form particulate matter at ambient temperatures. Such condensable particulate matter shall be accounted for in applicability determinations and in establishing emissions limitations for PM, PM_{2.5} and PM₁₀. Applicability determinations made prior to January 1, 2011 without accounting for condensable particulate matter shall not be considered invalid. <p>“Responsible Official” means one of the following:</p> <ol style="list-style-type: none"> A. For a corporation: <ol style="list-style-type: none"> 1. A president, secretary, treasurer, or vice president of the corporation in charge of a principal business function, or any other person who performs similar policy or decision-making functions for the corporation; or 2. A duly authorized representative of such person if the representative is responsible for the overall operation of one or more manufacturing, production, or operating facilities and either: 	

No.	General Permit Conditions	Regulations
	<p>i. The facilities employ more than 250 persons or have gross annual sales or expenditures exceeding \$25 million (in second quarter 1980 dollars); or</p> <p>ii. The delegation of authority to such representative is approved in advance by the Department.</p> <p>B. For a partnership or sole proprietorship: A general partner or the proprietor, respectively.</p> <p>“Rules and Regulations” shall mean the Jefferson County Board of Health Air Pollution Control Regulations, as the same may be amended or revised.</p> <p>“Source” shall mean any building, structure, facility, installation, article, machine, equipment, device, or other contrivance which emits or may emit any air contaminant. Any activity which utilizes abrasives or chemicals for cleaning or any other purpose (such as cleaning the exterior of buildings) which emits air contaminants shall be considered a source.</p> <p>“VOC” shall be an acronym for volatile organic compound.</p> <p>"Volatile Organic Compound" shall mean any organic compound excluding carbon monoxide, carbon dioxide, carbonic acid, metallic carbides or carbonates, and ammonium carbonate, which participates in atmospheric photochemical reactions. This includes any such organic compound other than those listed as exempt at Part 1.3 of the Rules and Regulations and/or at 40 CFR 51.100(s)(1).</p> <p>“Volatile organic liquid (VOL)” means any organic liquid which can emit volatile organic compounds (as defined in 40 CFR 51.100) into the atmosphere.</p>	

DRAFT

Emissions Unit No.	Emissions Unit Description
001	Caterpillar Model G3306NA Model Year 1999 Stationary 145 Horsepower 4-Stroke Rich Burn Spark Ignition Reciprocating Internal Combustion Engine

No.	Permit Conditions for RICE	Regulation
1.	<p><u>Applicability</u> The emissions unit permitted herein is subject to Part 6.1, “Visible Emissions,” Part 6.3, “Fuel Burning Equipment,” and Part 7.1, “Fuel Combustion,” of the Rules and Regulations. The emissions unit is also subject to 40 CFR 63, Subpart ZZZZ, “National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines.”</p>	6.1 6.3 7.1 63.6590(a)(3)(iii)
2.	<p><u>Visible Emissions Restriction</u> The permittee shall not discharge into the atmosphere from any source of emission, particulate exhaust of opacity greater than 20%, as determined by a 6-minute average, except as allowed by Section 6.1.1 of the Rules and Regulations. Opacity shall be determined by EPA Method 9 of 40 CFR 60, Appendix A. Records demonstrating only methane well gas is used as fuel for the emissions unit are sufficient for demonstrating compliance.</p>	1.9.1 2.1.1(g) 6.1.1
3.	<p><u>Fuel Restriction</u> The permittee shall combust only methane well gas in the engine. This restriction shall ensure compliance with the emission limitations of Part 6.3 and 7.1 of the Rules and Regulations without additional controls.</p>	2.1.1(g) 6.3 7.1
4.	<p><u>40 CFR 63, Subpart ZZZZ Requirements</u> The permittee shall comply with the following requirements at all times: A. Conduct maintenance as follows:</p> <ol style="list-style-type: none"> 1. Change oil and filter every 1,440 hours of operation or within one year plus 30 days, whichever comes first or utilize an oil analysis program as described in §63.6625(j) in order to extend the specified oil change requirement. 2. Inspect spark plugs every 1,440 hours of operation or within one year plus 30 days, whichever comes first, and replace as necessary. 3. Inspect all hoses and belts every 1,440 hours of operation or within one year plus 30 days, whichever comes first, and replace as necessary. 4. The permittee may use an oil analysis program, as follows, to extend the specified oil and filter change requirements. <ol style="list-style-type: none"> a. The oil analysis must be performed at the same frequency specified for changing the oil and filter. b. The analysis program must, at a minimum, analyze the following three parameters, which shall have the indicated condemning limits: <ol style="list-style-type: none"> i. Total Acid Number increases by more than 3.0 milligrams of potassium hydroxide (KOH) per gram from Total Acid Number of the oil when new; ii. Viscosity changes by more than 20% from the viscosity of the oil when new; and iii. Percent water content (by volume) is greater than 0.5 c. If all condemning limits are not exceeded, the permittee is not required to change the oil and filter. If any of the limits are exceeded, the permittee must change the oil and filter within 2 business days or before commencing operation, whichever is later. d. The permittee must keep records of the parameters that are analyzed as part of the program, the results of the analysis, and the oil and filter changes for the engine. The analysis program must be part of the maintenance plan for the engine. 	63.6603(a) 63.6605 63.6625(e)(8) 63.6625(h) 63.6625(j) 63.6640(a) Table 2d

Emissions Unit No.	Emissions Unit Description
002	No. 2 Combustor: Hero Flare Model C6030 with 20 MMBtu/hr Rated Input Capacity

No.	Permit Conditions for Flares	Regulation
1.	<p><u>Applicability</u> The emissions unit permitted herein is subject to Part 6.1, “Visible Emissions,” Part 6.3, “Fuel Burning Equipment,” and Part 7.1, “Fuel Combustion.”</p>	6.1 6.3 7.1
2.	<p><u>Visible Emissions Restriction</u> The permittee shall not discharge into the atmosphere from any source of emission, particulate exhaust of opacity greater than 20%, as determined by a 6-minute average, except as allowed by Section 6.1.1 of the Rules and Regulations. Opacity shall be determined by EPA Method 9 of 40 CFR 60, Appendix A. Records demonstrating only methane well gas (or propane for the pilot) is combusted by the emissions unit are sufficient for demonstrating compliance.</p>	1.9.1 2.1.1(g) 6.1.1
3.	<p><u>Fuel Restriction</u> The permittee shall combust only methane well gas in the flare, except that propane may be used to ignite the flare pilot. This restriction shall ensure compliance with the emission limitations of Part 6.3 and 7.1 of the Rules and Regulations without additional controls.</p>	2.1.1(g) 6.3 7.1
4.	<p><u>Recordkeeping</u> The permittee shall keep records of the following information for annual emissions reporting:</p> <ul style="list-style-type: none"> A. The hours of operation of the flare; B. The hours of operation of the exhauster when the flare is bypassed or otherwise not operated, as well as the corresponding amount of gas emitted during this time; and C. The type and amount of fuel(s) combusted. 	1.9 1.12 2.1.1(g)

Jefferson County Department of Health
Environmental Health Services
Air Pollution Control Program

Warrior Met Coal Gas, LLC. Site 27-14-02 – Unit 410174
Coal Bed Methane Extraction
February 16, 2026

Introduction

Warrior Met Coal Gas, LLC. (WMCG) has submitted an application to install and operate a compressor and engine to remove coal mine methane and combust the gas with a flare at an existing methane gas well pad.

The site is located at Latitude 33.44215, Longitude -87.26135 in Adger, AL 35006. The well is located within Section 27, Township 18 South, Range 7 West. The mailing address for WMCG is P.O. Box 133, Brookwood, Alabama 35444. The Responsible Official and Plant Contact is Eric Hutchens, VP of Operations, (205) 554-6682. The best for the NAICS and SIC codes are 48621, Pipeline Transportation of Natural Gas, and 4922, Natural Gas Transmission.

Process Description

The operations will consist of a reciprocating internal combustion engine (RICE) to power a gas compressor and a flare to combust excess well gas. The compressor will be located on an existing methane gas well pad and used to remove methane gas from the underground coal seams. Gas that is not combusted to power the RICE will be combusted by the flare to reduce methane emissions.

The engine is a 4-stroke, rich-burn RICE, with a maximum horsepower of 145. The engine is equipped with a catalyst that reduces NO_x, CO, and non-methane hydrocarbon compounds from the exhaust. The flare has a rated capacity of 20 MMBTU/hr with a VOC destruction efficiency of 98%. The flare is equipped with a pilot light that can be natural gas or propane-fired. The primary combustible compound in well gas is methane. The well gas is expected to be about 97.5% methane with a heating value of 1012 MMBTU/MMSCF, according to analysis provided by the facility.

The table below summarizes potential to emit, as calculated by the Department for 8,760 hours of operation per year. Only HAPs with a potential to emit greater than 1 pound per year have been included.

For the engine, vendor factors for the catalyst were used for estimating NO_x, CO, and non-methane hydrocarbon compounds (presented as VOC) emissions. AP-42 Chapter 3.2 factors were used for all other emissions for the engine. Vendor factors provided by the facility were used for estimating NO_x and CO emissions from the flare. VOC emissions from the flare and pilot light were estimated using the VOC factor from AP-42 Chapter 13.5 and the rated destruction efficiency. For all other emissions factors for the flare and pilot light, AP-42 Chapter 1.4 was used.

Pollutant	Engine (tpy)	Flare and Pilot Light (tpy)	Facility-Wide (tpy)
PM/PM₁₀/PM_{2.5}	0.1	0.7	0.8
NO_x	0.7	13.2	13.9
CO	1.1	26.3	27.4
VOC	0.1	0.6	0.7
SO₂	0.003	0.052	0.055
1,3-Butadiene	0.004	-	0.004
Acetaldehyde	0.015	-	0.015
Acrolein	0.014	-	0.014
Benzene	0.009	<0.001	0.009
Formaldehyde	0.112	0.007	0.119
Hexane	-	0.156	0.156
Naphthalene	0.001	<0.001	0.001
Total PAH	0.001	<0.001	0.001
Toluene	0.003	<0.001	0.003
Xylenes	0.001	-	0.001
Total HAPs	0.160	0.163	0.323

New Source Review and PSD Applicability

WMCG is a new facility located in Jefferson County, Alabama, which is part of the greater Birmingham area for designating attainment status for criteria pollutants regarding the National Ambient Air Quality Standards (NAAQS). At the present time, the Birmingham area is designated attainment for all criteria pollutants. The provisions of Part 2.4, “Air Permits Authorizing Construction in Clean Areas (Prevention of Significant Deterioration Permitting (PSD))” of the Rules and Regulations determine the major source threshold for all NSR regulated pollutants. WMCG is not a source listed under Subdivision 2.4.2(a)(1)(i) of the Rules and Regulations. Therefore, the major source threshold for WMCG is 250 tons for regulated NSR pollutants except lead. WMCG is a minor source of regulated NSR pollutants.

Title V Applicability

Fugitive emissions are not required to be included in the Title V major source determination for WMCG because it does not belong to a listed source category under Subparagraph 18.1.1(q)(2) of the Rules and Regulations. Under Subparagraph 18.1.1(q)(2) of the Rules and Regulations, the Title V threshold for criteria pollutants is 100 tons/year. The major source thresholds for HAPs are 10 tons/year single HAP and 25 tons/year total HAP, respectively (Subdivision 18.1.1(q)(1)(i) of the Rules and Regulations). WMCG is a minor source for Title V purposes.

Applicable Local Regulations

WMCG is subject to the following Chapters of the Jefferson County Board of Health Air Pollution Control Rules and Regulations (“Rules and Regulations”) which include general permit conditions:

- Chapter 1, “General Provisions”
- Chapter 2, “Permits”

WMCG is also subject to provisions of other Chapters of the Rules and Regulations as follows:

- Part 6.1, “Visible Emissions”
- Part 6.2, “Fugitive Emissions”
- Part 6.3, “Fuel Burning Equipment”
- Part 7.1, “Fuel Combustion”

WMCG is subject to the visible emissions opacity requirement for all equipment which releases particulate matter to the atmosphere. The well gas is expected to have minimal particulate matter and its combustion is not expected to result in visible emissions during normal operation.

WMCG is required to take appropriate measures to prevent airborne dust problems by Section 6.2.1 of the Rules and Regulations. WMCG is prohibited from allowing visible fugitive dust emissions to cross beyond their property lines by Section 6.2.2 of the Rules and Regulations. The Department may require the abatement of nuisance odors under Section 6.2.3 of the Rules and Regulations.

Parts 6.3 and 7.1 of the Rules and Regulations provide emission limits for particulate matter and sulfur dioxide due to fuel combustion. The potential emissions are below the applicable limits.

Applicable Federal Requirements

The flare and pilot light are not subject to any federal regulations.

The engine is subject to the area source requirements of 40 CFR 63, “National Emission Standards for Hazardous Air Pollutants for Source Categories (NESHAP),” Subpart ZZZZ, “Stationary Reciprocating Internal Combustion Engines,” as an existing engine located at an area source of HAP. WMCG is required to operate and maintain the engine in accordance with the engine’s emissions-related instructions or develop a maintenance plan. WMCG must also conduct maintenance at intervals as required by Subpart ZZZZ.

40 CFR 60, Subpart OOOO, “Standards of Performance for Crude Oil and Natural Gas Facilities for Which Construction, Modification, or Reconstruction Commenced After August 23, 2011 and on or Before September 18, 2015,” Subpart OOOOa, “Standards of Performance for Crude Oil and Natural Gas Facilities for Which Construction, Modification, or Reconstruction Commenced After September 18, 2015 and On or Before December 6, 2022,” and Subpart OOOOb, “Standards of Performance for Crude Oil and Natural Gas Facilities for Which

Construction, Modification, or Reconstruction Commenced After December 6, 2022,” do not apply as the facility is not an affected source.

CBM wells are installed to exhaust natural gas-laden mine air to the atmosphere for mine safety reasons. Historically, CBM has not been captured, compressed, or otherwise prepared for introduction into the natural gas transmission segment, because the portion of methane in the air exhausted from the mine is small and not economical to recover. However, a recent trend has been to combust the gas exhausted from the mine, to reduce the greenhouse gas emissions. This activity, regardless of whether a permit to combust the CBM gas is applied for, is not the production of natural gas. Therefore, CBM combustors are not an affected source under the NSPS OOOO/OOOOa/OOOOb/OOOOc series.

Additionally, affected compressors under the subparts are only reciprocating or centrifugal compressors (§60.5365(b) and (c), §60.5365a(b) and (c), and §60.5365b(b) and (c)). Rotary screw compressors are not considered centrifugal compressors under the definition of each subpart. Further, reciprocating or centrifugal compressors located at a well site / wellhead, as defined under the subparts, are not subject. Only those compressors which are located between the wellhead and the point of custody transfer to the natural gas transmission and storage segment are subject.

Public Comment

A public comment period of 30 days is required because no air permit has previously been issued for this site. Public notice will be given by publication in a local newspaper regarding the availability of the draft permit, application, and engineering evaluation on the Department’s website. Additional community outreach measures include providing a copy of the public notice to the appropriate city and county executives, and to other persons who submitted a written request to be notified of permit actions. The Department has established an email list for persons who wish to be notified of public comments periods by email. To request to be added to this list, send an email to airpermitcomments@jcdh.org.

Permitting Fees

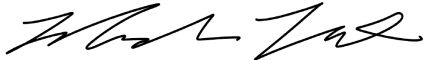
The following fee has been charged for this permit, as allowed by Chapter 15 of the Rules and Regulations.

Application Submittal Fee	\$ 410.00
State Regulation Review	\$ 320.00
NESHAPS Review	\$ 1,555.00
Greenfield Site Fee	\$ 895.00
Public Comment Period	\$ 410.00
Permit Preparation	\$ 410.00
TOTAL FEE	<u>\$ 4,000.00</u>

Recommendations

It is recommended that Warrior Met Coal Gas, LLC. be issued an air permit for Site 27-14-02 – Unit 410174 located in Adger, AL.

Prepared by:



Madison North
Air Pollution Control Engineer
Air & Radiation Protection Division
Environmental Health Services

Total Emissions for Site 27-14-02

Pollutant	Potential Emissions (tpy)
PM	0.713070305
PM10	0.710820787
PM2.5	0.710820787
NOx	13.88669516
CO	27.38874979
VOC	0.715509295
SO2	0.055228597
1,3-Butadiene	0.003637635
Acetaldehyde	0.015307695
Acrolein	0.014429834
Benzene	0.008850882
Formaldehyde	0.1189762
Hexane	0.156007377
Naphthalene	0.000585621
PAH	0.000773615
Toluene	0.00335622
Xylene	0.001069893
Total HAPs	0.32299497

4SRB Engine						
Annual Hours of Operation	8760				hours/yr	
Conversion Factor	2000				lb/ton	
Conversion Factor	0.00220462				g/lb	
Engine Power Rating	145				hp	
Fuel Consumption	8639				BTU/hp-hr	
Converted Fuel Consumption	1.252655				MMBTU/hr	
Heating Value	1012				MMBTU/MMSCF	
Part 6.3 PM Limit	2.74331445				tpy	
Part 7.1 SO2 Limit	9.87593202				tpy	
Pollutant	Emissions Factor	Unit	Source	Potential Emissions (tpy)	Potential Emissions (lb/yr)	
NOx	0.52	g/bhp-hr	Catalyst Vendor	0.728080164	1456.160328	
CO	0.79	g/bhp-hr	Catalyst Vendor	1.106121788	2212.243576	
NMNEHC	0.04	g/bhp-hr	Catalyst Vendor	0.056006166	112.012333	
HCHO	0.06	g/bhp-hr	Catalyst Vendor	0.08400925	168.0184994	
SO2	0.000588	lb/MMBTU	AP-42 3.2.-3	0.003226138	6.452275586	
PM10	0.0095	lb/MMBTU	AP-42 3.2.-3	0.052122975	104.2459491	
PM2.5	0.0095	lb/MMBTU	AP-42 3.2.-3	0.052122975	104.2459491	
PM	0.00991	lb/MMBTU	AP-42 3.2.-3	0.054372492	108.7449848	
1,1,2,-Tetrachloroethane	0.0000253	lb/MMBTU	AP-42 3.2.-3	0.000138812	0.277623422	
1,1,2-Trichloroethane	0.0000153	lb/MMBTU	AP-42 3.2.-3	8.39454E-05	0.167890844	
1,3-Butadiene	0.000663	lb/MMBTU	AP-42 3.2.-3	0.003637635	7.275269921	
1,3-Dichloropropene	0.0000127	lb/MMBTU	AP-42 3.2.-3	6.96802E-05	0.139360374	
Acetaldehyde	0.00279	lb/MMBTU	AP-42 3.2.-3	0.015307695	30.61538926	
Acrolein	0.00263	lb/MMBTU	AP-42 3.2.-3	0.014429834	28.85966801	
Benzene	0.00158	lb/MMBTU	AP-42 3.2.-3	0.008668874	17.33774732	
Carbon tetrachloride	0.0000177	lb/MMBTU	AP-42 3.2.-3	9.71133E-05	0.194226663	
Chlorobenzene	0.0000129	lb/MMBTU	AP-42 3.2.-3	7.07775E-05	0.141555026	
Chloroform	0.0000137	lb/MMBTU	AP-42 3.2.-3	7.51668E-05	0.150333632	
Ethylbenzene	0.0000248	lb/MMBTU	AP-42 3.2.-3	0.000136068	0.272136793	
Formaldehyde	0.0205	lb/MMBTU	AP-42 3.2.-3	0.112475892	224.9517849	
Methylene Chloride	0.0000412	lb/MMBTU	AP-42 3.2.-3	0.000226049	0.452098221	
Naphthalene	0.0000971	lb/MMBTU	AP-42 3.2.-3	0.000532752	1.065503332	
PAH	0.000141	lb/MMBTU	AP-42 3.2.-3	0.000773615	1.54722935	
Styrene	0.0000119	lb/MMBTU	AP-42 3.2.-3	6.52909E-05	0.130581768	
Toluene	0.000558	lb/MMBTU	AP-42 3.2.-3	0.003061539	6.123077852	
Vinyl Chloride	0.0000718	lb/MMBTU	AP-42 3.2.-3	0.00039394	0.78787991	
Xylene	0.000195	lb/MMBTU	AP-42 3.2.-3	0.001069893	2.139785271	
			Total HAP	0.161314571	322.6291419	

Hero Flare					
Heat Capacity	20	MMBTU/hr			
VOC Destruction Efficiency	0.98				
Annual Hours of Operation	8760	hours/yr			
Conversion Factor	2000	lb/ton			
Heating Value	1012	MMBTU/MMSCF			
Part 6.3 PM Limit	32.412	tpy			
Part 7.1 SO2 Limit	157.68	tpy			
Pollutant	Emissions Factor	Unit	Source	Potential Emissions (tpy)	Potential Emissions (lb/yr)
NOx	0.15	lb/MMBTU	Vendor	13.14	26280
CO	0.3	lb/MMBTU	Vendor	26.28	52560
Lead	0.0005	lb/MMSCF	AP-42 1.4	4.32806E-05	0.086561265
PM	7.6	lb/MMSCF	AP-42 1.4	0.657865613	1315.731225
PM10	7.6	lb/MMSCF	AP-42 1.4	0.657865613	1315.731225
PM2.5	7.6	lb/MMSCF	AP-42 1.4	0.657865613	1315.731225
SO2	0.6	lb/MMSCF	AP-42 1.4	0.051936759	103.8735178
VOC	332	lb/MMSCF	AP-42 13.5	0.574766798	1149.533597
2-Methylnaphthalene	2.40E-05	lb/MMSCF	AP-42 1.4	2.07747E-06	0.004154941
3-Methylcholanthrene	1.80E-06	lb/MMSCF	AP-42 1.4	1.5581E-07	0.000311621
7,12-Dimethylbenz(a)anthracene	1.60E-05	lb/MMSCF	AP-42 1.4	1.38498E-06	0.00276996
Acenaphthene	1.80E-05	lb/MMSCF	AP-42 1.4	1.5581E-06	0.003116206
Acenaphthylene	1.80E-06	lb/MMSCF	AP-42 1.4	1.5581E-07	0.000311621
Anthracene	2.40E-06	lb/MMSCF	AP-42 1.4	2.07747E-07	0.000415494
Benz(a)anthracene	1.80E-06	lb/MMSCF	AP-42 1.4	1.5581E-07	0.000311621
Benzene	2.10E-03	lb/MMSCF	AP-42 1.4	0.000181779	0.363557312
Benzo(a)pyrene	1.20E-06	lb/MMSCF	AP-42 1.4	1.03874E-07	0.000207747
Benzo(b)fluoranthene	1.80E-06	lb/MMSCF	AP-42 1.4	1.5581E-07	0.000311621
Benzo(g,h,i)perylene	1.20E-06	lb/MMSCF	AP-42 1.4	1.03874E-07	0.000207747
Benzo(k)fluoranthene	1.80E-06	lb/MMSCF	AP-42 1.4	1.5581E-07	0.000311621
Chrysene	1.80E-06	lb/MMSCF	AP-42 1.4	1.5581E-07	0.000311621
Dibenzo(a,h)anthracene	1.20E-06	lb/MMSCF	AP-42 1.4	1.03874E-07	0.000207747
Dichlorobenzene	1.20E-03	lb/MMSCF	AP-42 1.4	0.000103874	0.207747036
Fluoranthene	3.00E-06	lb/MMSCF	AP-42 1.4	2.59684E-07	0.000519368
Fluorene	2.80E-06	lb/MMSCF	AP-42 1.4	2.42372E-07	0.000484743
Formaldehyde	7.50E-02	lb/MMSCF	AP-42 1.4	0.006492095	12.98418972
Hexane	1.80E+00	lb/MMSCF	AP-42 1.4	0.155810277	311.6205534
Indeno(1,2,3-cd)pyrene	1.80E-06	lb/MMSCF	AP-42 1.4	1.5581E-07	0.000311621
Naphthalene	6.10E-04	lb/MMSCF	AP-42 1.4	5.28024E-05	0.105604743
Phenanthrene	1.70E-05	lb/MMSCF	AP-42 1.4	1.47154E-06	0.002943083
Pyrene	5.00E-06	lb/MMSCF	AP-42 1.4	4.32806E-07	0.000865613
Toluene	3.40E-03	lb/MMSCF	AP-42 1.4	0.000294308	0.588616601
Total PAH				6.18394E-05	0.123678735
Total HAP				0.162944171	325.8883428

Pilot Light					
Flow Rate	25	SCF/hr			
Converted Flow Rate	0.0253	MMBTU/hr			
VOC Destruction Efficiency	0.98				
Annual Hours of Operation	8760	hours/yr			
Conversion Factor	2000	lb/ton			
Part 6.3 PM Limit	0.055407	tpy			
Part 7.1 SO2 Limit	0.1994652	tpy			
Pollutant	Emissions Factor	Unit	Source	Potential Emissions (tpy)	Potential Emissions (lb/yr)
NOx	170	lb/MMSCF	AP-42 1.4	0.018615	37.23
CO	24	lb/MMSCF	AP-42 1.4	0.002628	5.256
Lead	0.0005	lb/MMSCF	AP-42 1.4	5.475E-08	0.0001095
PM	7.6	lb/MMSCF	AP-42 1.4	0.0008322	1.6644
PM10	7.6	lb/MMSCF	AP-42 1.4	0.0008322	1.6644
PM2.5	7.6	lb/MMSCF	AP-42 1.4	0.0008322	1.6644
SO2	0.6	lb/MMSCF	AP-42 1.4	0.0000657	0.1314
VOC	332	lb/MMSCF	AP-42 13.5	0.00072708	1.45416
2-Methylnaphthalene	2.40E-05	lb/MMSCF	AP-42 1.4	2.628E-09	0.000005256
3-Methylcholanthrene	1.80E-06	lb/MMSCF	AP-42 1.4	1.971E-10	3.942E-07
7,12-Dimethylbenz(a)anthracene	1.60E-05	lb/MMSCF	AP-42 1.4	1.752E-09	0.000003504
Acenaphthene	1.80E-05	lb/MMSCF	AP-42 1.4	1.971E-09	0.000003942
Acenaphthylene	1.80E-06	lb/MMSCF	AP-42 1.4	1.971E-10	3.942E-07
Anthracene	2.40E-06	lb/MMSCF	AP-42 1.4	2.628E-10	5.256E-07
Benz(a)anthracene	1.80E-06	lb/MMSCF	AP-42 1.4	1.971E-10	3.942E-07
Benzene	2.10E-03	lb/MMSCF	AP-42 1.4	2.2995E-07	0.0004599
Benzo(a)pyrene	1.20E-06	lb/MMSCF	AP-42 1.4	1.314E-10	2.628E-07
Benzo(b)fluoranthene	1.80E-06	lb/MMSCF	AP-42 1.4	1.971E-10	3.942E-07
Benzo(g,h,i)perylene	1.20E-06	lb/MMSCF	AP-42 1.4	1.314E-10	2.628E-07
Benzo(k)fluoranthene	1.80E-06	lb/MMSCF	AP-42 1.4	1.971E-10	3.942E-07
Chrysene	1.80E-06	lb/MMSCF	AP-42 1.4	1.971E-10	3.942E-07
Dibenzo(a,h)anthracene	1.20E-06	lb/MMSCF	AP-42 1.4	1.314E-10	2.628E-07
Dichlorobenzene	1.20E-03	lb/MMSCF	AP-42 1.4	1.314E-07	0.0002628
Fluoranthene	3.00E-06	lb/MMSCF	AP-42 1.4	3.285E-10	0.000000657
Fluorene	2.80E-06	lb/MMSCF	AP-42 1.4	3.066E-10	6.132E-07
Formaldehyde	7.50E-02	lb/MMSCF	AP-42 1.4	8.2125E-06	0.016425
Hexane	1.80E+00	lb/MMSCF	AP-42 1.4	0.0001971	0.3942
Indeno(1,2,3-cd)pyrene	1.80E-06	lb/MMSCF	AP-42 1.4	1.971E-10	3.942E-07
Naphthalene	6.10E-04	lb/MMSCF	AP-42 1.4	6.6795E-08	0.00013359
Phenanthrene	1.70E-05	lb/MMSCF	AP-42 1.4	1.8615E-09	0.000003723
Pyrene	5.00E-06	lb/MMSCF	AP-42 1.4	5.475E-10	0.000001095
Toluene	3.40E-03	lb/MMSCF	AP-42 1.4	3.723E-07	0.0007446
Total PAH				7.82268E-08	0.000156454
Total HAP				0.000206124	0.412248754