



WEST VIRGINIA DEPARTMENT OF ENVIRONMENTAL PROTECTION

DIVISION OF AIR QUALITY

601 57th Street SE
Charleston, WV 25304
Phone: (304) 926-0475

www.wvdep.org/daq

TITLE V PERMIT APPLICATION - GENERAL FORMS

Section 1: General Information

Form with 10 numbered sections: 1. Name of Applicant, 2. Facility Name or Location, 3. DAQ Plant ID No., 4. Federal Employer ID No., 5. Permit Application Type, 6. Type of Business Entity, 7. Is the Applicant the..., 8. Number of onsite employees, 9. Governmental Code, 10. Business Confidentiality Claims.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

Emission unit ID number: 002-01	Emission unit name: Reciprocating Engine/Auxiliary Generator; Cummins GTA-743	List any control devices associated with this emission unit: N/A
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Provide a description of the emission unit (type, method of operation, design parameters, etc.):
Reciprocating Engine / Auxiliary Generator

Manufacturer: Cummins	Model number: GTA-743	Serial number:
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Construction date: 1989	Installation date: 1989	Modification date(s): N/A
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Design Capacity (examples: furnaces - tons/hr, tanks - gallons):
169 HP

Maximum Hourly Throughput:	Maximum Annual Throughput:	Maximum Operating Schedule: 8760
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Fuel Usage Data (fill out all applicable fields)

Does this emission unit combust fuel? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	If yes, is it? <input type="checkbox"/> Indirect Fired <input checked="" type="checkbox"/> Direct Fired
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Maximum design heat input and/or maximum horsepower rating: 169 HP	Type and Btu/hr rating of burners: 7500 Btu/HP-hr
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List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Natural Gas – 0.0013 MMscf/hr

Describe each fuel expected to be used during the term of the permit.

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value
Natural Gas	20 gr Sulfur/100 cu. ft.		

<i>Emissions Data</i>		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Monoxide (CO)	4.8	21.0
Nitrogen Oxides (NO _x)	5.6	24.5
Lead (Pb)	N/A	N/A
Particulate Matter (PM _{2.5})	0.013	0.056
Particulate Matter (PM ₁₀)	0.013	0.056
Total Particulate Matter (TSP)	0.013	0.056
Sulfur Dioxide (SO ₂)	0.00076	0.0033
Volatile Organic Compounds (VOC)	0.078	0.34
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Formaldehyde	0.023	0.10
Acetaldehyde	0.0015	0.0064
Acrolein	0.0013	0.0055
Benzene	0.0017	0.0075
Ethylbenzene	0.00031	0.0013
Toluene	0.0006	0.0026
Xylenes	0.00052	0.0023
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY
<p>List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).</p> <p>NO_x, CO, and VOC emission rates for the auxiliary generator were based on emission factors presented in USEPA's AP-42 (July 1993). PM emission factors and the SO₂ emission factors were obtained from USEPA's AIRS report (March 1990).</p>		

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or **construction permit** with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

- 45 CSR 10-4.1 – SO2 emissions shall not exceed 2,000 ppm by volume (TV 3.1.9)
- 45 CSR 10-5.1 – H2S emissions shall not exceed 50 gr/100 cu ft (TV 3.1.10)
- 45 CSR 30-5.1(c) – Annual analysis of Inlet Gas for Total Sulfur (TV 3.2.2).
- 45 CSR 30-5.1(c) – Annual analysis of Inlet Gas for H2S (TV 3.2.3).

____ Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

- 45 CSR 10-4.1 – SO2 emissions are limited by Operating Permit R13-1077.
- 45 CSR 10-5.1 – H2S emissions are limited by Operating Permit R13-1077.
- 45 CSR 30-5.1(c) – Annual inlet gas sampling will be conducted and records will be maintained.
- 45 CSR 30-5.1(c) – Annual inlet gas sampling will be conducted and records will be maintained.

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the **Schedule of Compliance Form** as ATTACHMENT F.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

Emission unit ID number: BLR01	Emission unit name: Boiler; Peerless G-14691-WS-1	List any control devices associated with this emission unit: N/A
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Provide a description of the emission unit (type, method of operation, design parameters, etc.):
0.52 MMBtu/hr Natural Gas-fired Boiler

Manufacturer: Peerless	Model number: G-14691-WS-1	Serial number:
Construction date: 1989	Installation date: 1989	Modification date(s): N/A

Design Capacity (examples: furnaces - tons/hr, tanks - gallons):
0.52 MMBtu/hr

Maximum Hourly Throughput: 0.52 MMBtu/hr	Maximum Annual Throughput:	Maximum Operating Schedule: 8760
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Fuel Usage Data (fill out all applicable fields)

Does this emission unit combust fuel? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	If yes, is it? <input type="checkbox"/> Indirect Fired <input checked="" type="checkbox"/> Direct Fired
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Maximum design heat input and/or maximum horsepower rating: 0.52 MMBtu/hr	Type and Btu/hr rating of burners: 0.0005 MMscf/hr
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List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Natural Gas – 0.0005 MMscf/hr

Describe each fuel expected to be used during the term of the permit.

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value
Natural Gas	20 gr Sulfur/100 cu. ft.		

<i>Emissions Data</i>		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Monoxide (CO)	0.004	0.02
Nitrogen Oxides (NO _x)	0.021	0.10
Lead (Pb)	N/A	N/A
Particulate Matter (PM _{2.5})	0.0062	0.027
Particulate Matter (PM ₁₀)	0.0062	0.027
Total Particulate Matter (TSP)	0.0062	0.027
Sulfur Dioxide (SO ₂)	0.00031	0.0014
Volatile Organic Compounds (VOC)	0.0028	0.02
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY

List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).

Emission factors used for the boiler were obtained from USEPA's AP-42 (July 1993)

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or **construction permit** with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

- 45 CSR 10-4.1 – SO2 emissions shall not exceed 2,000 ppm by volume (TV 3.1.9)
- 45 CSR 10-5.1 – H2S emissions shall not exceed 50 gr/100 cu ft (TV 3.1.10)
- 45 CSR 2-3.1 – Opacity limit of less than ten (10) percent (TV 3.1.9)
- 45 CSR 2-3.1 – Semi-Annual Opacity Readings and Records (TV 3.2.1)
- 45 CSR 30-5.1(c) – Annual analysis of Inlet Gas for Total Sulfur (TV 3.2.2).
- 45 CSR 30-5.1(c) – Annual analysis of Inlet Gas for H2S (TV 3.2.3).

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For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

- 45 CSR 10-4.1 – SO2 emissions are limited by Operating Permit R13-1077.
- 45 CSR 10-5.1 – H2S emissions are limited by Operating Permit R13-1077.
- 45 CSR 2-3.1 – Opacity readings shall be conducted on a Semi-Annual basis and records shall be maintained.
- 45 CSR 30-5.1(c) – Annual inlet gas sampling will be conducted and records will be maintained.
- 45 CSR 30-5.1(c) – Annual inlet gas sampling will be conducted and records will be maintained.

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the **Schedule of Compliance Form** as ATTACHMENT F.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

Emission unit ID number: TRB01	Emission unit name: Turbine; Solar T-4500	List any control devices associated with this emission unit: N/A
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Provide a description of the emission unit (type, method of operation, design parameters, etc.):
Natural Gas-Fired Turbine – 4390 HP

Manufacturer: Solar	Model number: T-4500	Serial number:
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Construction date: 1989	Installation date: 1989	Modification date(s): N/A
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Design Capacity (examples: furnaces - tons/hr, tanks - gallons): 4390 HP

Maximum Hourly Throughput:	Maximum Annual Throughput:	Maximum Operating Schedule: 8260 hrs
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Fuel Usage Data (fill out all applicable fields)

Does this emission unit combust fuel? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	If yes, is it? <input type="checkbox"/> Indirect Fired <input checked="" type="checkbox"/> Direct Fired
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Maximum design heat input and/or maximum horsepower rating: 4390 HP	Type and Btu/hr rating of burners:
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List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.
Pipeline Quality Natural Gas

Describe each fuel expected to be used during the term of the permit.

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value
Natural Gas	20 gr Sulfur / 100 cu. ft.	N/A	N/A

<i>Emissions Data</i>		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Monoxide (CO)	3.8	16.6
Nitrogen Oxides (NO _x)	22.6	99.0
Lead (Pb)	N/A	N/A
Particulate Matter (PM _{2.5})	0.63	2.6
Particulate Matter (PM ₁₀)	0.63	2.6
Total Particulate Matter (TSP)	0.63	2.6
Sulfur Dioxide (SO ₂)	0.04	0.18
Volatile Organic Compounds (VOC)	1.4	6.1
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Formaldehyde	0.16	0.50
Acrolein	0.018	0.07
Acetaldehyde	0.027	0.29
Benzene	0.065	0.27
Ethylbenzene	0.0081	0.03
Hexane	0.06	0.25
Toluene	0.016	0.07
Xylene	0.025	0.10
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY
<p>List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).</p> <ul style="list-style-type: none"> - NO_x, CO, and VOC emissions for turbine were based on allowable emission rates established in Operating Permit # R-13-1077. - PM, PM-10, and PM-2.5 emission factors for turbine were obtained from USEPA's AIRS report (March 1990). - SO₂ emissions from turbine were based on the allowable emission rate established in Operating Permit # R-13-1077. - HAP emission factors for turbine were based on turbine emission factors obtained from GRI's HAPCalc v1.0 (July 1994), except for ethylbenzene and xylene which were obtained from USEPA's AP -42 (July 1993). 		

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

- 40 CFR 60 Subpart GG – Standards for Nitrogen Oxides
- 40 CFR 60 Subpart GG – Standards for Sulfur Dioxide
- 45 CS R 10-4.1 – SO₂ emissions shall not exceed 2,000 ppm by volume (TV 3.1.9)
- 45 CSR 10-5.1 – H₂S emissions shall not exceed 50 gr/100 cu ft (TV 3.1.10)
- 45 CSR 13 – Turbine Emission Limits (TV 3.1.11, R13-1077, A)
- 45 CSR 13 – Compliance with 40 CFR 60 Subpart GG (TV 3.1.13, R13-1077, B.1)
- 45 CSR 30-5.1(c) – Annual analysis of Inlet Gas for Total Sulfur (TV 3.2.2).
- 45 CSR 30-5.1(c) – Annual analysis of Inlet Gas for H₂S (TV 3.2.3).
- 45 CSR 30-5.1(c) – Monthly calculations of NO_x, CO, SO₂, and VOC emissions (TV 3.2.4).
- 45 CSR 30-5.1(c) – Semi-Annual analysis of fuel sulfur content (TV 3.2.6).
- 45 CSR 13 – Monitoring of fuel nitrogen (TV 3.2.5, R13-1077, B.2).
- 45 CSR 13 – Fuel Change (TV 3.2.7, R13-1077, B.3)
- 45 CSR 13 – Recordkeeping (TV 3.4.4, R13-1077 B.4).

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For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

- 40 CFR 60 Subpart GG – NO_x compliance will be demonstrated by compliance test and recordkeeping.
- 40 CFR 60 Subpart GG – SO₂ will be limited by combusting only pipeline quality natural gas.
- 45 CSR 10-4.1 – SO₂ emissions are limited by Operating Permit R13-1077.
- 45 CSR 10-5.1 – H₂S emissions are limited by Operating Permit R13-1077.
- 45 CSR 13 – Turbine emissions are limited by Operating Permit R13-1077.
- 45 CSR 13 – Compliance will be demonstrated by compliance testing and recordkeeping.
- 45 CSR 30-5.1(c) – Annual inlet gas sampling will be conducted and records will be maintained.
- 45 CSR 30-5.1(c) – Annual inlet gas sampling will be conducted and records will be maintained.
- 45 CSR 30-5.1(c) – Monthly criteria pollutant emissions will be calculated by the 15th day of the subsequent month (TV 3.2.3).
- 45 CSR 30-5.1(c) – Semi-Annual analysis of fuel sulfur content will be conducted in the 1st and 3rd quarter of each applicable year (TV 3.2.2).
- 45 CSR 13 – If a fuel change occurs, the Administrator will be notified.
- 45 CSR 13 – Records will be kept of fuel analysis for a three year period.

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the **Schedule of Compliance Form** as ATTACHMENT F.



**L.L. TONKIN COMPRESSOR STATION
DOMINION TRANSMISSION INC.
APPLICATION FOR TITLE V OPERATING PERMIT RENEWAL
TITLE V OPERATING PERMIT NO: R30-01700003-2005**

Dominion Transmission, Inc.
L.L. Tonkin Compressor Station
HC 69
West Union, WV 26456

Prepared for:

Dominion Transmission, Inc.
445 West Main Street
Clarksburg, WV 26301

Prepared by:

AMEC Earth & Environmental
2200 Gateway Centre Blvd, Suite 205
Morrisville, NC 27560

JANUARY 2010



**L.L. TONKIN COMPRESSOR STATION
DOMINION TRANSMISSION INC.
APPLICATION FOR TITLE V OPERATING PERMIT RENEWAL
TITLE V OPERATING PERMIT NO: R30-01700003-2005**

Dominion Transmission, Inc.
L.L. Tonkin Compressor Station
HC 69
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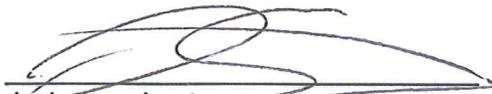
Prepared for:

Dominion Transmission, Inc.
445 West Main Street
Clarksburg, WV 26301

Prepared by:

AMEC Earth & Environmental
2200 Gateway Centre Blvd, Suite 205
Morrisville, NC 27560

JANUARY 2010


Jody Lambert
Environmental Scientist

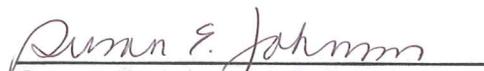

Susan E. Johnson, P.E.
Unit Manager



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Appendix B	Plot Plans
Appendix C	Process Flow Diagrams
Appendix D	Equipment Table
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ATTACHMENT:

Attachment	PE Certification
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1.0 INTRODUCTION

L.L. Tonkin Station is a natural gas compressor station used to compress gas for Dominion Transmission, Inc.'s transmission pipeline system in West Virginia. L.L. Tonkin Station is located in West Union, WV.

L.L. Tonkin Station is a major source of air emissions for nitrogen oxides (NO_x) under the West Virginia Department of Environmental Protection (WVDEP) Regulation (45 CSR Part 30) and is subject to the Title V Operating Permit provisions of Part 30.

L.L. Tonkin Station was originally issued a Title V Operating Permit (Permit No: R30-01700003-1996) in 1998 for a period of five (5) years, with an expiration date of August 17, 2003. L.L. Tonkin Station is also subject to the underlying State Operating Permit (Rule 13 Permit No: R13-1077). These Operating Permits are for the operation of one (1) 4,390-hp turbine (TBR01), one (1) 169-hp auxiliary engine (AUX01), one (1) 0.52 MMBtu/hr natural gas fired boiler (BLR01), one (1) 3,000-gallon aboveground storage tank (TK01), one (1) 1,000-gallon aboveground storage tank (TK02), and one (1) 500-gallon aboveground storage tank (TK03).

A Title V renewal application was submitted in 2003. The Title V Operating Permit Renewal 1 was issued on September 27, 2005, with an expiration date of September 27, 2010.



2.0 PROCESS DESCRIPTION

L.L. Tonkin Station began operation in 1989. The main process occurring at L.L. Tonkin Station is the compression and transmission of natural gas. The following equipment is present at the facility.

Compressor Engines

One (1) 4,390-hp Solar T-4500 Turbine

- Emission point TBR01
- Emission unit 001-01

One (1) 169-hp Cummins GTA-743 auxiliary reciprocating engine (AUX01)

- Emission point AUX01
- Emission unit 002-01

One (1) 0.52 MMBtu/hr Peerless G-14691-WS-1 natural gas fired Boiler (BLR01)

- Emission point BLR01
- Emission unit 004-01



3.0 POTENTIAL TO EMIT

L.L. Tonkin Station is a major source of nitrogen oxides under 45 CSR Part 30 of the West Virginia Code of State Regulations. L.L. Tonkin Station is currently operating at the following potential emission rates:

Process Control Equipment	Potential Emissions, Tons Per Year (tpy)		
	Carbon Monoxide	Nitrogen Oxides	Volatile Organic Compounds
Current Potential-to-Emit	40.0*	123.6	14.84**
Fugitive Emissions	--	--	8.26
One (1) 4,390-hp turbine	16.6	99.0	6.1
One (1) 169-hp auxiliary engine	21.0	24.4	0.34
One (1) 0.52 MMBtu/hr boiler	0.02	0.10	0.02

* Decrease in CO emissions are attributed to a revision of the emission factors used in the PTE calculations.

** Increase in VOC emissions are attributed to the addition of Fugitive Emissions in the PTE calculations.



4.0 PROPOSED MODIFICATIONS

Dominion does not propose any new modifications under this application.



APPENDIX A
AIR PERMIT FORMS



APPENDIX B
PLOT PLANS



APPENDIX C

PROCESS FLOW DIAGRAMS



APPENDIX D
EQUIPMENT TABLE



APPENDIX E
EMISSION UNIT FORMS

11. Mailing Address		
Street or P.O. Box: 445 West Main Street		
City: Clarksburg	State: WV	Zip: 26301
Telephone Number: (304) 627-3225	Fax Number: (304) 627-3222	

12. Facility Location		
Street: HC 69 Box 11	City: West Union	County: Doddridge
UTM Easting: 518.82 km	UTM Northing: 4351.18 km	Zone: <input checked="" type="checkbox"/> 17 or <input type="checkbox"/> 18
Directions: Take Route 50 east from Parkersburg. Approximately 35 miles take West Union Exit, Route 18 North. Go approximately 3.5 miles, the L.L. Tonkin Station is on the left.		
Portable Source? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		
Is facility located within a nonattainment area? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If yes, for what air pollutants?	
Is facility located within 50 miles of another state? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	If yes, name the affected state(s). Pennsylvania	
Is facility located within 100 km of a Class I Area ¹ ? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	If yes, name the area(s). Dolly Sobs Wilderness Area Otter Creek Wilderness Area	
If no, do emissions impact a Class I Area ¹ ? <input type="checkbox"/> Yes <input type="checkbox"/> No		
¹ Class I areas include Dolly Sods and Otter Creek Wilderness Areas in West Virginia, and Shenandoah National Park and James River Face Wilderness Area in Virginia.		

13. Contact Information		
Responsible Official: Jeffrey L. Barger		Title: Vice President, Pipeline Operations
Street or P.O. Box: 445 West main Street		
City: Clarksburg	State: WV	Zip: 26301
Telephone Number: (304) 627-3910	Fax Number: (304) 627-3323	
E-mail address: Jeffry.L.Barger@dom.com		
Environmental Contact: Richard B. Gangle		Title: Environmental Specialist III
Street or P.O. Box: 445 West main Street		
City: Clarksburg	State: WV	Zip: 26301
Telephone Number: (304) 627-3325	Fax Number: (304) 627-3222	
E-mail address: Richard.B.Gangle@dom.com		
Application Preparer: Jody B. Lambert		Title: Environmental Scientist
Company: AMEC Earth & Environmental, Inc.		
Street or P.O. Box: 2200 Gateway Centre Blvd, Suite 205		
City: Morrisville	State: NC	Zip: 27560
Telephone Number: (919) 447-2750	Fax Number: (919) 447-2751	
E-mail address: jody.lambert@amec.com		

14. Facility Description

List all processes, products, NAICS and SIC codes for normal operation, in order of priority. Also list any process, products, NAICS and SIC codes associated with any alternative operating scenarios if different from those listed for normal operation.

Process	Products	NAICS	SIC
Natural Gas Compressor Station	N/A	48612	4922

Provide a general description of operations.

The LL Tonkin Station is a compressor facility that services a natural gas pipeline system. The purpose of the facility is to recompress natural gas flowing through a pipeline for transportation. The turbine (TRB01) at the facility receives natural gas from a valve on a pipeline and compresses it to enable further transportation in the pipeline.

15. Provide an **Area Map** showing plant location as **ATTACHMENT A**.

16. Provide a **Plot Plan(s)**, e.g. scaled map(s) and/or sketch(es) showing the location of the property on which the stationary source(s) is located as **ATTACHMENT B**. For instructions, refer to "Plot Plan - Guidelines."

17. Provide a detailed **Process Flow Diagram(s)** showing each process or emissions unit as **ATTACHMENT C**. Process Flow Diagrams should show all emission units, control equipment, emission points, and their relationships.

20. Facility-Wide Applicable Requirements

List all facility-wide applicable requirements. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements).

45 CSR 6-3.1 – Open Burning prohibited (TV 3.1.1)

45 CSR 6-3.2 – Open Burning exemption (TV 3.1.2)

40 CFR Part 61 – Asbestos inspection and removal (TV 3.1.3)

45 CSR 15 – Asbestos inspection and removal (TV 3.1.3)

State Only:

45 CSR 4 – No Objectionable odors (TV 3.1.4)

45 CSR 11-5.2 – Standby plans for emergency episodes (TV 3.1.5)

WV Code 22-5-4 (a) (14) – The Secretary can request any pertinent information such as annual emission inventory reporting (TV 3.1.6)

40 CFR Part 82 Subpart F – Ozone depleting substances (TV 3.1.7)

40 CFR Part 68 – Risk Management Plan (TV 3.1.8)

45 CR 10 – Emission of Sulfur Oxides (TV 3.1.9)

45 CR 10 – Emission of Hydrogen Sulfides (TV 3.1.10)

45 CSR 2 – Indirect Heat Exchangers (TV 3.1.11)

45 CSR 13 – Operating Permit requirements (TV 3.1.12, R13-1077.A)

40 CFR 60 Subpart GG – Turbine NSPS (TV 3.1.13, R13-1077.B-1)

45 CSR 13 – Compliance with 40 CFR 60 Subpart GG (TV 3.1.13, R13-1077.B-1)

45 CSR 16 – Compliance with 40 CFR 60 Subpart GG (TV 3.1.13, R13-1077.B-1)

45 CSR 17 – Fugitive Particulate Matter (TV 3.1.14)

Permit Shield

For all facility-wide applicable requirements listed above, provide monitoring/testing / recordkeeping / reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number and/or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

45 CSR 6-3.1 – The permittee shall prohibit open burning (TV 3.1.1)

45 CSR 6-3.2 – The permittee shall prohibit open burning (TV 3.1.2)

40 CFR Part 61 – Prior to demolition/construction buildings will be inspected for asbestos (TV 3.1.3)

45 CSR 15 – Prior to demolition/construction buildings will be inspected for asbestos (TV 3.1.3)

45 CSR 4 – Permittee shall maintain records of all odor complaints received (TV 3.1.4)

45 CSR 11 – Upon request by the Secretary, the permittee shall prepare a standby plan (TV 3.1.5)

WV 22-5-4 – The permittee shall submit semi-annual emission inventory reports (TV 3.1.6)

40 CFR Part 82 Subpart F – The permittee will prohibit maintenance, service, or repair of appliances containing Ozone depleting substances (TV 3.1.7)

40 CFR Part 68 – Should the permittee become subject to 40 CFR Part 68, a RMP shall be submitted (TV 3.1.8)

45 CR 10 – Emission of Sulfur Oxides shall be limited by burning only pipeline quality Natural Gas (TV 3.1.9)

Are you in compliance with all facility-wide applicable requirements? Yes No

If no, complete the **Schedule of Compliance Form** as **ATTACHMENT F**.

20. Facility-Wide Applicable Requirements (Continued) - Attach additional pages as necessary.

List all facility-wide applicable requirements. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements).

Permit Shield

For all facility-wide applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number and/or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

45 CR 10 – Emission of Hydrogen Sulfides shall be limited by burning only pipeline quality Natural Gas (TV 3.1.10)

45 CSR 2 – The permittee will limit visible emissions from fuel burning equipment by burning only pipeline quality Natural Gas (TV 3.1.11)

45 CSR 13 – Emissions from the Turbine shall be limited by burning pipeline quality natural gas (TV 3.1.12, R13-1077.A).

40 CFR 60 Subpart GG – The permittee shall comply with the emission limits for NO_x and SO₂. (TV 3.1.13, R13-1077.B-1)

45 CSR 13 – The permittee shall install a CEMS unit or provide for an alternate compliance plan (TV 3.1.13, R13-1077.B-1)

45 CSR 16 – The permittee shall install a CEMS unit or provide for an alternate compliance plan (TV 3.1.13, R13-1077.B-1)

45 CSR 17 – The permittee will limit fugitive emissions from the facility (TV 3.1.14)

45 CSR 30-5.1.c – Semi-Annual Visible Emission readings will be conducted and records shall be maintained (TV 3.2.1)

45 CSR 30.5.1.c – Semi-Annual Inlet gas stream shall be sampled for Total Sulfur (TV 3.2.2)

45 CSR 30.5.1.c – Semi-Annual inlet gas stream shall be sampled for H₂S (TV 3.2.3)

45 CSR 30.5.1.c – The permittee shall calculate the monthly emissions from the Turbine by the 15th day of the subsequent month for NO_x, SO₂, CO, VOC (TV 3.2.4)

45 CSR 13 – The permittee shall monitor inlet fuel for nitrogen if a fuel change occurs (TV 3.2.5)

45 CSR 13 – The permittee shall analyze inlet fuel sulfur content on a semi-annual basis (TV 3.2.6)

45 CSR 13 – The permittee shall notify the State if a change in fuel occurs (TV 3.2.7)

45 CSR 30.5.1.c – The permittee shall maintain records of compliance tests for a duration of five (5) years (TV 3.4.2)

Are you in compliance with all facility-wide applicable requirements? Yes No

If no, complete the **Schedule of Compliance Form** as **ATTACHMENT F**.

21. Active Permits/Consent Orders

Permit or Consent Order Number	Date of Issuance MM/DD/YYYY	List any Permit Determinations that Affect the Permit <i>(if any)</i>
R13-1077	04/07/1989	N/A
	/ /	
	/ /	
	/ /	
	/ /	
	/ /	
	/ /	
	/ /	
	/ /	
	/ /	

22. Inactive Permits/Obsolete Permit Conditions

Permit Number	Date of Issuance	Permit Condition Number
	/ /	
	/ /	
	/ /	
	/ /	
	/ /	
	/ /	
	/ /	
	/ /	
	/ /	

Section 3: Facility-Wide Emissions

23. Facility-Wide Emissions Summary [Tons per Year]	
Criteria Pollutants	Potential Emissions
Carbon Monoxide (CO)	40.0*
Nitrogen Oxides (NO _x)	123.6
Lead (Pb)	N/A
Particulate Matter (PM _{2.5}) ¹	2.785
Particulate Matter (PM ₁₀) ¹	5.5
Total Particulate Matter (TSP)	5.5
Sulfur Dioxide (SO ₂)	0.185
Volatile Organic Compounds (VOC)	14.84**
<i>* CO emissions are decreased due to revision of PTE emission factors.</i>	
<i>** VOC emissions are increased due to the addition of Fugitive Emissions in the PTE calculations.</i>	
Hazardous Air Pollutants ²	Potential Emissions
Formaldehyde	0.25
Acrolein	0.02
Acetaldehyde	0.02
Benzene	0.02
Ethylbenzene	0.02
Hexane	0.06
Toluene	0.04
Xylene	0.02
Regulated Pollutants other than Criteria and HAP	Potential Emissions
¹ PM _{2.5} and PM ₁₀ are components of TSP. ² For HAPs that are also considered PM or VOCs, emissions should be included in both the HAPs section and the Criteria Pollutants section.	

Section 4: Insignificant Activities

24. Insignificant Activities (Check all that apply)	
<input checked="" type="checkbox"/>	1. Air compressors and pneumatically operated equipment, including hand tools.
<input type="checkbox"/>	2. Air contaminant detectors or recorders, combustion controllers or shutoffs.
<input type="checkbox"/>	3. Any consumer product used in the same manner as in normal consumer use, provided the use results in a duration and frequency of exposure which are not greater than those experienced by consumer, and which may include, but not be limited to, personal use items; janitorial cleaning supplies, office supplies and supplies to maintain copying equipment.
<input checked="" type="checkbox"/>	4. Bathroom/toilet vent emissions.
<input checked="" type="checkbox"/>	5. Batteries and battery charging stations, except at battery manufacturing plants.
<input type="checkbox"/>	6. Bench-scale laboratory equipment used for physical or chemical analysis, but not lab fume hoods or vents. Many lab fume hoods or vents might qualify for treatment as insignificant (depending on the applicable SIP) or be grouped together for purposes of description.
<input type="checkbox"/>	7. Blacksmith forges.
<input checked="" type="checkbox"/>	8. Boiler water treatment operations, not including cooling towers.
<input type="checkbox"/>	9. Brazing, soldering or welding equipment used as an auxiliary to the principal equipment at the source.
<input type="checkbox"/>	10. CO ₂ lasers, used only on metals and other materials which do not emit HAP in the process.
<input type="checkbox"/>	11. Combustion emissions from propulsion of mobile sources, except for vessel emissions from Outer Continental Shelf sources.
<input checked="" type="checkbox"/>	12. Combustion units designed and used exclusively for comfort heating that use liquid petroleum gas or natural gas as fuel.
<input checked="" type="checkbox"/>	13. Comfort air conditioning or ventilation systems not used to remove air contaminants generated by or released from specific units of equipment.
<input type="checkbox"/>	14. Demineralized water tanks and demineralizer vents.
<input type="checkbox"/>	15. Drop hammers or hydraulic presses for forging or metalworking.
<input type="checkbox"/>	16. Electric or steam-heated drying ovens and autoclaves, but not the emissions from the articles or substances being processed in the ovens or autoclaves or the boilers delivering the steam.
<input type="checkbox"/>	17. Emergency (backup) electrical generators at residential locations.
<input type="checkbox"/>	18. Emergency road flares.
<input type="checkbox"/>	19. Emission units which do not have any applicable requirements and which emit criteria pollutants (CO, NO _x , SO ₂ , VOC and PM) into the atmosphere at a rate of less than 1 pound per hour and less than 10,000 pounds per year aggregate total for each criteria pollutant from all emission units. Please specify all emission units for which this exemption applies along with the quantity of criteria pollutants emitted on an hourly and annual basis: _____ _____ _____ _____ _____ _____ _____ _____

24. Insignificant Activities (Check all that apply)	
<input type="checkbox"/>	<p>20. Emission units which do not have any applicable requirements and which emit hazardous air pollutants into the atmosphere at a rate of less than 0.1 pounds per hour and less than 1,000 pounds per year aggregate total for all HAPs from all emission sources. This limitation cannot be used for any source which emits dioxin/furans nor for toxic air pollutants as per 45CSR27.</p> <p>Please specify all emission units for which this exemption applies along with the quantity of hazardous air pollutants emitted on an hourly and annual basis:</p> <p>_____</p> <p>_____</p> <p>_____</p> <p>_____</p> <p>_____</p>
<input type="checkbox"/>	21. Environmental chambers not using hazardous air pollutant (HAP) gases.
<input checked="" type="checkbox"/>	22. Equipment on the premises of industrial and manufacturing operations used solely for the purpose of preparing food for human consumption.
<input type="checkbox"/>	23. Equipment used exclusively to slaughter animals, but not including other equipment at slaughterhouses, such as rendering cookers, boilers, heating plants, incinerators, and electrical power generating equipment.
<input type="checkbox"/>	24. Equipment used for quality control/assurance or inspection purposes, including sampling equipment used to withdraw materials for analysis.
<input type="checkbox"/>	25. Equipment used for surface coating, painting, dipping or spray operations, except those that will emit VOC or HAP.
<input type="checkbox"/>	26. Fire suppression systems.
<input type="checkbox"/>	27. Firefighting equipment and the equipment used to train firefighters.
<input type="checkbox"/>	28. Flares used solely to indicate danger to the public.
<input checked="" type="checkbox"/>	29. Fugitive emission related to movement of passenger vehicle provided the emissions are not counted for applicability purposes and any required fugitive dust control plan or its equivalent is submitted.
<input type="checkbox"/>	30. Hand-held applicator equipment for hot melt adhesives with no VOC in the adhesive formulation.
<input checked="" type="checkbox"/>	31. Hand-held equipment for buffing, polishing, cutting, drilling, sawing, grinding, turning or machining wood, metal or plastic.
<input type="checkbox"/>	32. Humidity chambers.
<input type="checkbox"/>	33. Hydraulic and hydrostatic testing equipment.
<input type="checkbox"/>	34. Indoor or outdoor kerosene heaters.
<input checked="" type="checkbox"/>	35. Internal combustion engines used for landscaping purposes.
<input type="checkbox"/>	36. Laser trimmers using dust collection to prevent fugitive emissions.
<input type="checkbox"/>	37. Laundry activities, except for dry-cleaning and steam boilers.
<input type="checkbox"/>	38. Natural gas pressure regulator vents, excluding venting at oil and gas production facilities.
<input type="checkbox"/>	39. Oxygen scavenging (de-aeration) of water.
<input type="checkbox"/>	40. Ozone generators.
<input checked="" type="checkbox"/>	41. Plant maintenance and upkeep activities (e.g., grounds-keeping, general repairs, cleaning, painting, welding, plumbing, re-tarring roofs, installing insulation, and paving parking lots) provided these activities are not conducted as part of a manufacturing process, are not related to the source's primary business activity, and not otherwise triggering a permit modification. (Cleaning and painting activities qualify if they are not subject to VOC or HAP control requirements. Asphalt batch plant

24. Insignificant Activities (Check all that apply)	
	owners/operators must still get a permit if otherwise requested.)
<input type="checkbox"/>	42. Portable electrical generators that can be moved by hand from one location to another. "Moved by Hand" means that it can be moved without the assistance of any motorized or non-motorized vehicle, conveyance, or device.
<input type="checkbox"/>	43. Process water filtration systems and demineralizers.
<input checked="" type="checkbox"/>	44. Repair or maintenance shop activities not related to the source's primary business activity, not including emissions from surface coating or de-greasing (solvent metal cleaning) activities, and not otherwise triggering a permit modification.
<input type="checkbox"/>	45. Repairs or maintenance where no structural repairs are made and where no new air pollutant emitting facilities are installed or modified.
<input type="checkbox"/>	46. Routing calibration and maintenance of laboratory equipment or other analytical instruments.
<input type="checkbox"/>	47. Salt baths using nonvolatile salts that do not result in emissions of any regulated air pollutants. Shock chambers.
<input type="checkbox"/>	48. Shock chambers.
<input type="checkbox"/>	49. Solar simulators.
<input type="checkbox"/>	50. Space heaters operating by direct heat transfer.
<input type="checkbox"/>	51. Steam cleaning operations.
<input type="checkbox"/>	52. Steam leaks.
<input type="checkbox"/>	53. Steam sterilizers.
<input type="checkbox"/>	54. Steam vents and safety relief valves.
<input type="checkbox"/>	55. Storage tanks, reservoirs, and pumping and handling equipment of any size containing soaps, vegetable oil, grease, animal fat, and nonvolatile aqueous salt solutions, provided appropriate lids and covers are utilized.
<input type="checkbox"/>	56. Storage tanks, vessels, and containers holding or storing liquid substances that will not emit any VOC or HAP. Exemptions for storage tanks containing petroleum liquids or other volatile organic liquids should be based on size limits such as storage tank capacity and vapor pressure of liquids stored and are not appropriate for this list.
<input type="checkbox"/>	57. Such other sources or activities as the Director may determine.
<input type="checkbox"/>	58. Tobacco smoking rooms and areas.
<input type="checkbox"/>	59. Vents from continuous emissions monitors and other analyzers.

Section 5: Emission Units, Control Devices, and Emission Points

25. Equipment Table
Fill out the Title V Equipment Table and provide it as ATTACHMENT D .
26. Emission Units
For each emission unit listed in the Title V Equipment Table , fill out and provide an Emission Unit Form as ATTACHMENT E .
For each emission unit not in compliance with an applicable requirement, fill out a Schedule of Compliance Form as ATTACHMENT F .
27. Control Devices
For each control device listed in the Title V Equipment Table , fill out and provide an Air Pollution Control Device Form as ATTACHMENT G .
For any control device that is required on an emission unit in order to meet a standard or limitation for which the potential pre-control device emissions of an applicable regulated air pollutant is greater than or equal to the Title V Major Source Threshold Level, refer to the Compliance Assurance Monitoring (CAM) Form(s) for CAM applicability. Fill out and provide these forms, if applicable, for each Pollutant Specific Emission Unit (PSEU) as ATTACHMENT H .

Section 6: Certification of Information

28. Certification of Truth, Accuracy and Completeness and Certification of Compliance

*Note: This Certification must be signed by a responsible official. The **original**, signed in **blue ink**, must be submitted with the application. Applications without an **original** signed certification will be considered as incomplete.*

a. Certification of Truth, Accuracy and Completeness

I certify that I am a responsible official (as defined at 45CSR§30-2.38) and am accordingly authorized to make this submission on behalf of the owners or operators of the source described in this document and its attachments. I certify under penalty of law that I have personally examined and am familiar with the statements and information submitted in this document and all its attachments. Based on my inquiry of those individuals with primary responsibility for obtaining the information, I certify that the statements and information are to the best of my knowledge and belief true, accurate, and complete. I am aware that there are significant penalties for submitting false statements and information or omitting required statements and information, including the possibility of fine and/or imprisonment.

b. Compliance Certification

Except for requirements identified in the Title V Application for which compliance is not achieved, I, the undersigned hereby certify that, based on information and belief formed after reasonable inquiry, all air contaminant sources identified in this application are in compliance with all applicable requirements.

Responsible official (type or print)

Name: Jeffrey L. Barger	Title: Vice President, Pipeline Operations
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Responsible official's signature:

Signature: _____ Signature Date: _____
 (Must be signed and dated in blue ink)

Note: Please check all applicable attachments included with this permit application:

<input checked="" type="checkbox"/>	ATTACHMENT A: Area Map
<input checked="" type="checkbox"/>	ATTACHMENT B: Plot Plan(s)
<input checked="" type="checkbox"/>	ATTACHMENT C: Process Flow Diagram(s)
<input checked="" type="checkbox"/>	ATTACHMENT D: Equipment Table
<input checked="" type="checkbox"/>	ATTACHMENT E: Emission Unit Form(s)
<input type="checkbox"/>	ATTACHMENT F: Schedule of Compliance Form(s)
<input type="checkbox"/>	ATTACHMENT G: Air Pollution Control Device Form(s)
<input type="checkbox"/>	ATTACHMENT H: Compliance Assurance Monitoring (CAM) Form(s)

All of the required forms and additional information can be found and downloaded from, the DEP website at www.wvdepo.org/daq, requested by phone (304) 926-0475, and/or obtained through the mail.