



**ORMA COMPRESSOR STATION  
DOMINION TRANSMISSION INC.  
APPLICATION FOR TITLE V OPERATING PERMIT RENEWAL  
TITLE V OPERATING PERMIT NO: R30-01300002-2006**

**Dominion Transmission, Inc.**  
Orma Compressor Station  
Crooked Run Road  
Orma, WV 25268

*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

**JULY 2010**

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Environmental Engineer

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Unit Manager



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## 1.0 INTRODUCTION

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

Orma Station is a major source of air emissions for nitrogen oxides (NO<sub>x</sub>) and Volatile Organic Compounds (VOCs) 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.

The Title V Operating Permit Renewal 1 (Permit No: R30-01300002-2006) was issued on May 16, 2006, with an expiration date of May 16, 2011. The Title V Operating Permit is for the operation of two (2) 660 HP natural gas fired reciprocating engines (EN01 and EN02), one (1) dehydrator unit still (DEHY01), one (1) dehydration unit still flare (DEHY), one (1) 0.50 MMBtu/hr natural gas fired reboiler (RBR01) and seven (7) aboveground storage tanks of various sizes.



## 2.0 PROCESS DESCRIPTION

Orma Station began operation in 1965. The main process occurring at Orma Station is the compression and transmission of natural gas. The compressor engines (EN01 – EN02) at the facility receive natural gas flowing through a valve on the pipeline and recompresses the natural gas in order to further transport the natural gas through the pipeline system. Prior to exiting the facility through the pipeline, the compressed natural gas is processed by the dehydration unit. The dehydration unit removes moisture and impurities from the gas stream.

The dehydration process begins with the compressed natural gas entering the unit and then being passed through a triethylene glycol dehydration system consisting of a contactor bed, a reboiler (RBR01), and associated equipment. As a result of this process, the natural gas is stripped of moisture and impurities, along with a small amount of hydrocarbons. The wet gas enters the contactor where moisture and some hydrocarbons are absorbed into the lean glycol. The glycol, which has become rich with absorbed moisture and hydrocarbons, is regenerated in the still column (DEHY01) using the heat generated from the natural gas-fired reboiler (RBR01) to liberate the moisture and hydrocarbon vapors. The regenerator vapors are vented to the flare (F1) for odor control only (i.e., the flare is not used to control emissions and enforceable conditions are not imposed). The compressed, dehydrated gas then enters the pipeline.

The following emission units are present at the facility.

Two (2) 660-hp Cooper GMXE-8 Reciprocating Engines/Integral Compressors

- Emission points EN01 and EN02
- Emission unit EN01 and EN02

Dehydration Unit/Still; Production Equipment, Inc. 7 mmscf/day

- Emission point DEHY01
- Emission unit DEHY01

Dehydration Unit Still Flare 15.8 cfm

- Emission point DEHY
- Emission unit DEHY

Dehydration Unit Reboiler; Production Equipment, Inc. 0.50 MMBTU/hr

- Emission point RBR01
- Emission unit RBR01



One (1) 1,000-gallon horizontal, above ground tank containing triethylene glycol (TK01)

- Emission point TK01
- Emission unit TK01

One (1) 3,740-gallon horizontal, above ground tank containing drip gas (TK02)

- Emission point TK02
- Emission unit TK02

One (1) 2,100-gallon vertical, above ground tank containing ethylene glycol (TK03)

- Emission point TK03
- Emission unit TK03

One (1) 2,730-gallon vertical, above ground tank containing lube oil (TK04)

- Emission point TK04
- Emission unit TK04

One (1) 2,730-gallon vertical, above ground tank containing lube oil (TK05)

- Emission point TK05
- Emission unit TK05

One (1) 550-gallon horizontal, above ground tank containing used oil (TK06)

- Emission point TK06
- Emission unit TK06

One (1) 500-gallon vertical, above ground tank containing waste water (TK07)

- Emission point TK07
- Emission unit TK07



### 3.0 POTENTIAL TO EMIT

Orma Station is a major source of nitrogen oxides under 45 CSR 30 of the West Virginia Code of State Regulations. Orma 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	38.4	259.0	176.6
Fugitive Emissions	--	--	76.86
One (1) 660-hp reciprocating engine	19.1	129.4	14.7
One (1) 660-hp reciprocating engine	19.1	129.4	14.7
Dehydration Unit	--	--	70.4
Reboiler	0.18	0.22	0.01

*According to 45 CSR 2-11, the Reboiler is exempt from Monitoring, recordkeeping and reporting requirements because its heat input is less than ten (10) million B.T.U.'s per hour.*

*The Dehydration Unit Flare is solely utilized to control odor. Even without the flare, the facility is not a major source of Hazardous Air Pollutants. Therefore, 40 CFR 60.18 is not applicable.*

*Onsite storage tanks are not regulated as a potential source for VOC emissions.*

### 4.0 PROPOSED MODIFICATIONS

Dominion does not propose any new modifications under this application.



**APPENDIX A**  
**AIR PERMIT APPLICATION FORMS**



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 (Dominion Transmission, Inc.), 2. Facility Name (Orma Station), 3. DAQ Plant ID No. (013-00002), 4. Federal Employer ID No. (FEIN) (550629203), 5. Permit Application Type (Renewal), 6. Type of Business Entity (Corporation), 7. Is the Applicant the: (Both), 8. Number of onsite employees (0), 9. Governmental Code (Privately owned), 10. Business Confidentiality Claims (No).

<b>11. Mailing Address</b>		
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	

<b>12. Facility Location</b>		
Street: Crooked Run Road	City: Orma	County: Calhoun County
UTM Easting: 492.68 km	UTM Northing: 4288.86 km	Zone: <input checked="" type="checkbox"/> 17 or <input type="checkbox"/> 18
<b>Directions:</b> From intersection of Rt. 33/Rt. 119 West & Rt. 16 South at Arnoldsburg take Rt. 16 South 4.7 miles to Orma, turn left onto Euclid/Nicut Road and travel 1.0 mile, turn left onto Crooked Run Road and go 0.1 mile, station is on 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). Ohio	
Is facility located within 100 km of a Class I Area <sup>1</sup> ? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If yes, name the area(s).	
If no, do emissions impact a Class I Area <sup>1</sup> ? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		
<sup>1</sup> 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.		

<b>13. Contact Information</b>		
<b>Responsible Official:</b> Jeffrey L. Barger		<b>Title:</b> Vice President, Pipeline Operations
<b>Street or P.O. Box:</b> 445 West Main Street		
<b>City:</b> Clarksburg	<b>State:</b> WV	<b>Zip:</b> 26301
<b>Telephone Number:</b> (304) 627-3910	<b>Fax Number:</b> (304) 627-3323	
<b>E-mail address:</b> Jeffrey.L.Barger@dom.com		
<b>Environmental Contact:</b> Richard B. Gangle		<b>Title:</b> Environmental Specialist III
<b>Street or P.O. Box:</b> 445 West Main Street		
<b>City:</b> Clarksburg	<b>State:</b> WV	<b>Zip:</b> 26301
<b>Telephone Number:</b> (304) 627-3325	<b>Fax Number:</b> (304) 627-3222	
<b>E-mail address:</b> Richard.B.Gangle@dom.com		
<b>Application Preparer:</b> Beth D. Espitia		<b>Title:</b> Environmental Engineer
<b>Company:</b> AMEC Earth & Environmental, Inc.		
<b>Street or P.O. Box:</b> 2200 Gateway Centre Blvd, Suite 205		
<b>City:</b> Morrisville	<b>State:</b> NC	<b>Zip:</b> 27560
<b>Telephone Number:</b> (919) 447-2750	<b>Fax Number:</b> (919) 447-2751	
<b>E-mail address:</b> beth.espitia@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 Orma 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 reciprocating engines (EN01 and EN02) at the facility receives natural gas from a valve on a pipeline and compress 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.

**Section 2: Applicable Requirements**

<b>18. Applicable Requirements Summary</b>	
Instructions: Mark all applicable requirements.	
<input type="checkbox"/> SIP	<input type="checkbox"/> FIP
<input checked="" type="checkbox"/> Minor source NSR (45CSR13)	<input type="checkbox"/> PSD (45CSR14)
<input type="checkbox"/> NESHAP (45CSR15)	<input type="checkbox"/> Nonattainment NSR (45CSR19)
<input type="checkbox"/> Section 111 NSPS	<input type="checkbox"/> Section 112(d) MACT standards
<input type="checkbox"/> Section 112(g) Case-by-case MACT	<input type="checkbox"/> 112(r) RMP
<input type="checkbox"/> Section 112(i) Early reduction of HAP	<input type="checkbox"/> Consumer/commercial prod. reqts., section 183(e)
<input type="checkbox"/> Section 129 Standards/Reqts.	<input type="checkbox"/> Stratospheric ozone (Title VI)
<input type="checkbox"/> Tank vessel reqt., section 183(f)	<input type="checkbox"/> Emissions cap 45CSR§30-2.6.1
<input type="checkbox"/> NAAQS, increments or visibility (temp. sources)	<input type="checkbox"/> 45CSR27 State enforceable only rule
<input checked="" type="checkbox"/> 45CSR4 State enforceable only rule	<input type="checkbox"/> Acid Rain (Title IV, 45CSR33)
<input type="checkbox"/> Emissions Trading and Banking (45CSR28)	<input type="checkbox"/> Compliance Assurance Monitoring (40CFR64)
<input type="checkbox"/> NO <sub>x</sub> Budget Trading Program Non-EGUs (45CSR1)	<input type="checkbox"/> NO <sub>x</sub> Budget Trading Program EGUs (45CSR26)

<b>19. Non Applicability Determinations</b>
<p><b>List all requirements which the source has determined not applicable and for which a permit shield is requested. The listing shall also include the rule citation and the reason why the shield applies.</b></p> <p>40 CFR 64 – Engines do not have any control; Glycol Dehydration unit is not a major source of HAPs. Therefore, in accordance with 40 C.F.R 64.2(a), CAM is not applicable to this facility.</p> <p>40 CFR 60.18 – Flare is used only to control the odor. Even without flare the facility is not a major source of HAPs. Therefore, 40 C.F.R. 60.18 is not applicable.</p>
<p><input type="checkbox"/> Permit Shield</p>

**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)
- 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)

State Only:

- 45 CSR 4 – No Objectionable odors (TV 3.1.4)
- 45 CSR 17-3.1 – Fugitive Particulate Matter (TV 3.1.11)

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 – The permittee is responsible for thoroughly inspecting the facility, prior to commencement of demolition or renovation for the presence of 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 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 CSR 17-3 – The permittee will limit fugitive emissions from the facility (TV 3.1.11)

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).

45 CSR 13 and WV Code 22-5-4(a)(15) – Stack Testing Requirement (TV 3.3.1)  
 45 CSR 30 - Record keeping and Reporting (TV 3.4 and 3.5)

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 13 – The permittee shall maintain records of compliance tests for a duration of five (5) years (TV 3.3.1, WV Code 22-5.4 (a) (15)).

45 CSR 30-5.1 - The permittee shall maintain records of maintenance, complaints, monitoring, and malfunctions (TV 3.4).

45 CSR 30-8 – The permittee shall certify and submit monitoring reports, compliance reports, and emissions statements as specified (TV 3.5).

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 (if any)
N/A	/ /	

**22. Inactive Permits/Obsolete Permit Conditions**

Permit Number	Date of Issuance	Permit Condition Number
N/A	/ /	

**Section 3: Facility-Wide Emissions**

<b>23. Facility-Wide Emissions Summary [Tons per Year]</b>	
Criteria Pollutants	Potential Emissions
Carbon Monoxide (CO)	38.4
Nitrogen Oxides (NO <sub>x</sub> )	259.0
Lead (Pb)	N/A
Particulate Matter (PM <sub>2.5</sub> ) <sup>1</sup>	<0.01
Particulate Matter (PM <sub>10</sub> ) <sup>1</sup>	0.49
Total Particulate Matter (TSP)	0.49
Sulfur Dioxide (SO <sub>2</sub> )	0.03
Volatile Organic Compounds (VOC)	176.6
Hazardous Air Pollutants <sup>2</sup>	Potential Emissions
Formaldehyde	1.77
Benzene	3.97
Toluene	6.37
Ethylbenzene	0.93
n-Hexane	1.28
Xylene	6.31
Acetaldehyde	0.37
Acrolein	0.37
Regulated Pollutants other than Criteria and HAP	Potential Emissions
<sup>1</sup> PM <sub>2.5</sub> and PM <sub>10</sub> are components of TSP. <sup>2</sup> 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**

<b>24. Insignificant Activities (Check all that apply)</b>	
<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 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 <sub>2</sub> 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 <sub>x</sub> , SO <sub>2</sub> , 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"/>	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.  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:  _____ _____ _____ _____ _____
<input type="checkbox"/>	21. Environmental chambers not using hazardous air pollutant (HAP) gases.
<input 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

<b>24. Insignificant Activities (Check all that apply)</b>	
	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**

<b>25. Equipment Table</b>
Fill out the <b>Title V Equipment Table</b> and provide it as <b>ATTACHMENT D</b> .
<b>26. Emission Units</b>
For each emission unit listed in the <b>Title V Equipment Table</b> , fill out and provide an <b>Emission Unit Form</b> as <b>ATTACHMENT E</b> .
For each emission unit not in compliance with an applicable requirement, fill out a <b>Schedule of Compliance Form</b> as <b>ATTACHMENT F</b> .
<b>27. Control Devices</b>
For each control device listed in the <b>Title V Equipment Table</b> , fill out and provide an <b>Air Pollution Control Device Form</b> as <b>ATTACHMENT G</b> .
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 <b>Compliance Assurance Monitoring (CAM) Form(s)</b> for CAM applicability. Fill out and provide these forms, if applicable, for each Pollutant Specific Emission Unit (PSEU) as <b>ATTACHMENT H</b> .

**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

**Responsible official's signature:**

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

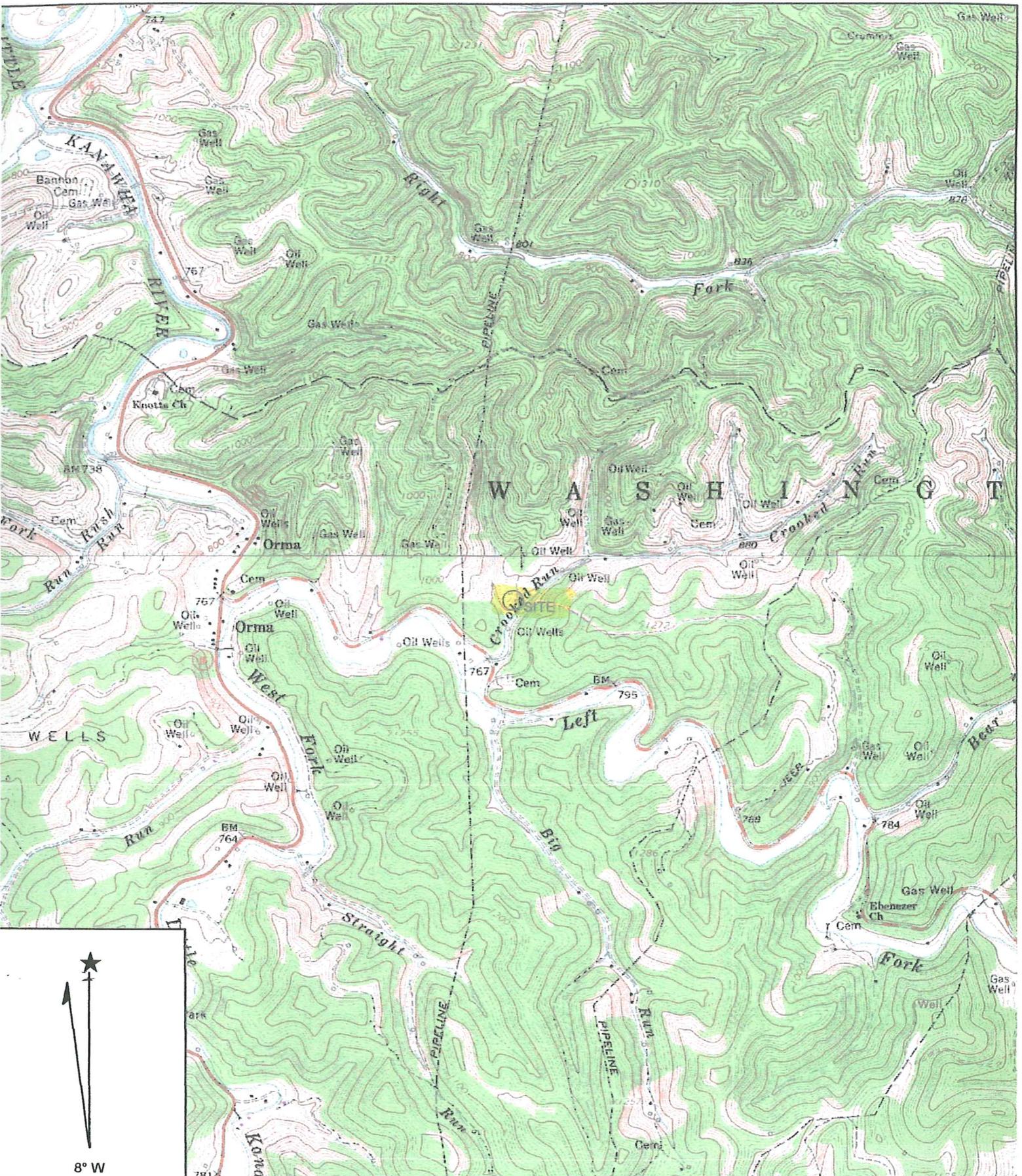
**Note: Please check all applicable attachments included with this permit application:**

<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.wvdeq.org/daq](http://www.wvdeq.org/daq), requested by phone (304) 926-0475, and/or obtained through the mail.**

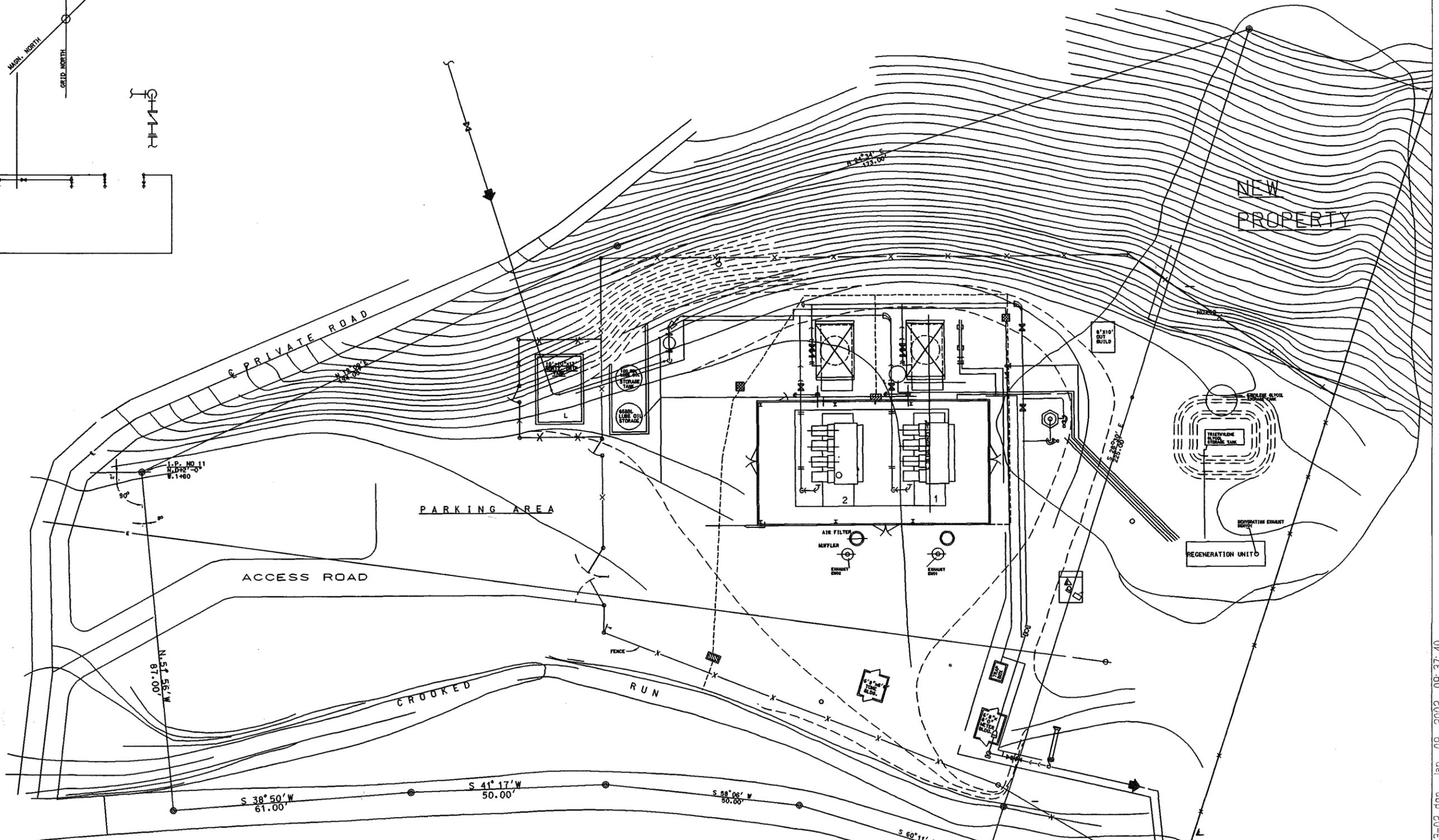
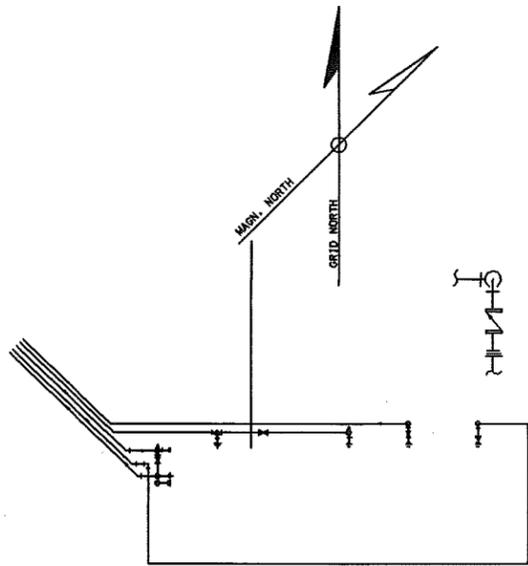


**APPENDIX B**  
**PLOT PLANS**



Name: CHLOE  
 Date: 1/7/2002  
 Scale: 1 inch equals 2000 feet

Location: 038° 44' 54.2" N 081° 05' 03.1" W  
 Caption: ORMA STATION  
 SITE LOCATION  
 DOMINION TRANSMISSION CORP.

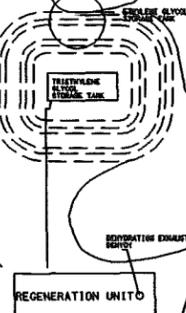


NEW  
PROPERTY

PARKING AREA

ACCESS ROAD

CROOKED  
RUN



S 38° 50' W 61.00'  
S 41° 17' W 50.00'  
S 58° 06' W 50.00'  
S 60° 11' W 50.00'

N 57° 56' W 87.00'

I.P. NO 11  
N 01° 12' W 1480

DOMINION TRANSMISSION CORP.  
PITTSBURGH, PA.  
FOR  
ORMA STATION  
TITLE  
TITLE V SITE PLAN

REVISION NOTE:  
POTESTA & ASSOCIATES, INC., CHANGED THE OWNER  
NAME FROM HOPE NATURAL GAS COMPANY, CLARKSBURG W.V.  
TO DOMINION TRANSMISSION CORP., PITTSBURGH, PA.  
ON JANUARY 3, 2002. PROJECT NO. 01-0383-005

NO.	DATE	BY	REVISION DESCRIPTION
1	3/2/02	RHL	CHANGED FUEL GAS SUPPLY SOURCE
2	3/4/02	RHL	DEHYDRATION PLANT ADDED
3	3/7/02	PROG	CATCH PLACED ON FIREGATE & END OF

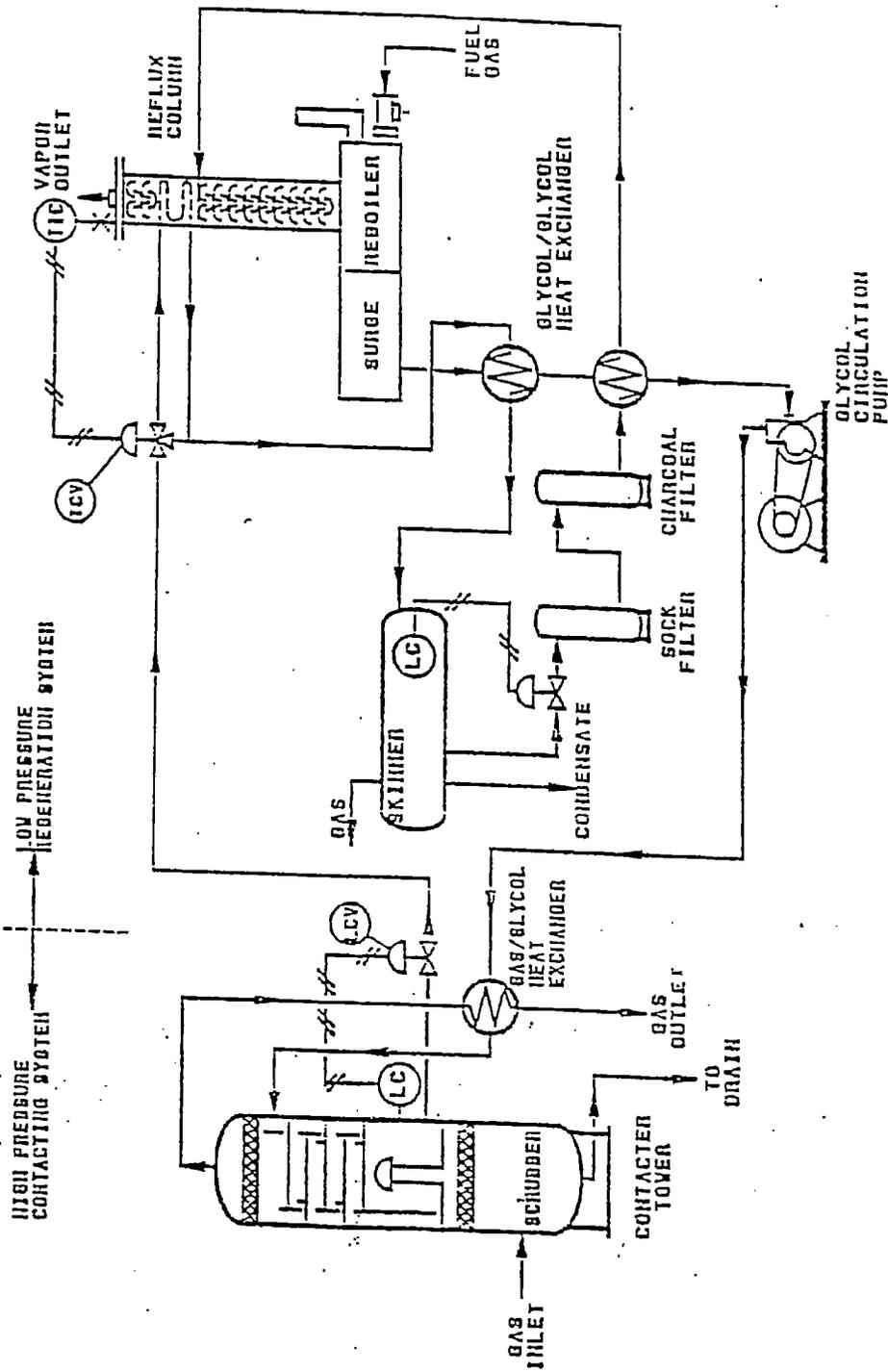
SCALE	1" = 10'	DATE	3/7/02	BUDGET P-#		R.O. C-11-410
DRAWN	RHL	CHECKED	RHL	DEPARTMENT	STATION	
ENGINEER		APPROVED		DIV.	III	
APP.		DATE	3/7/02	NO. NO.	4483	REV. 5

R:\01-0383-HNTB\010383-02.dgn Jan. 09, 2002 09:37:40



**APPENDIX C**  
**PROCESS FLOW DIAGRAMS**

SEE DETAIL FOR STACK NUMBERS



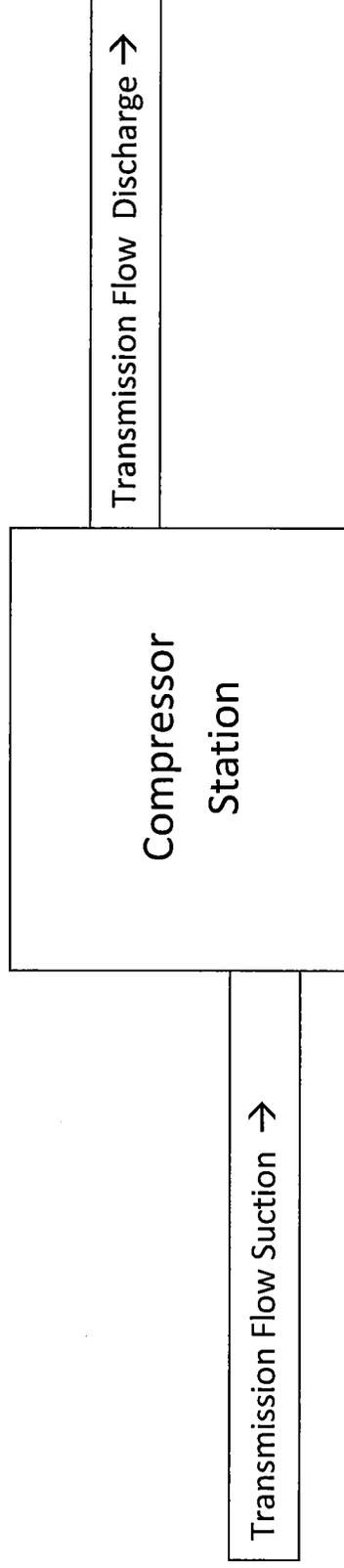
TYPICAL FLOW DIAGRAM  
GLYCOL DEHYDRATION UNIT

# Natural Gas Compression Station Process Flow Diagram

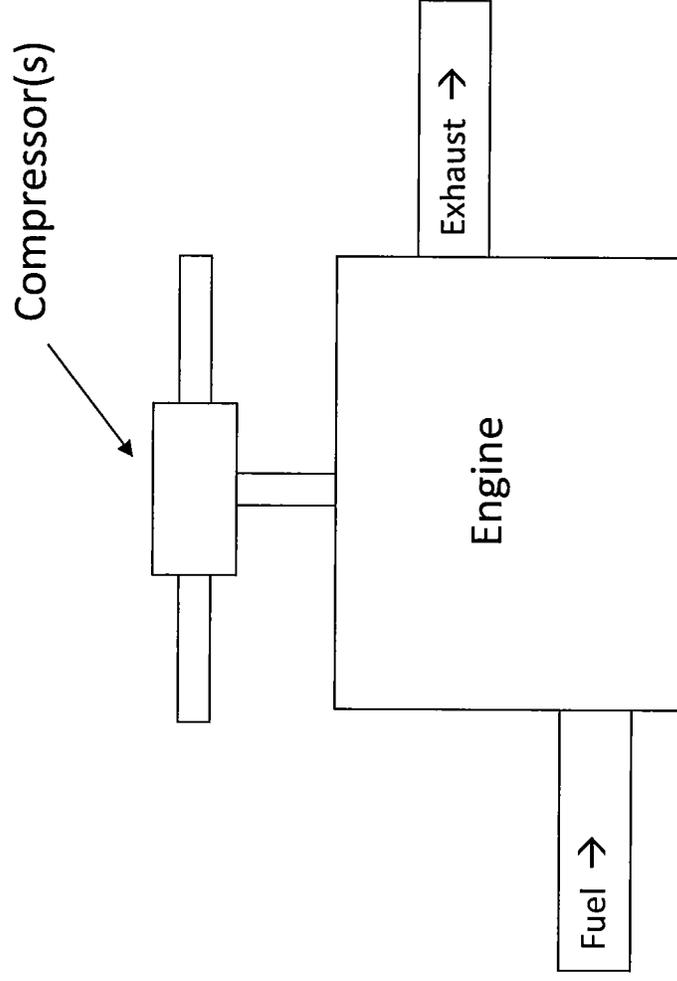
## Orma Station

Fugitive sources are described in application.

Fugitive sources are for the entire facility.



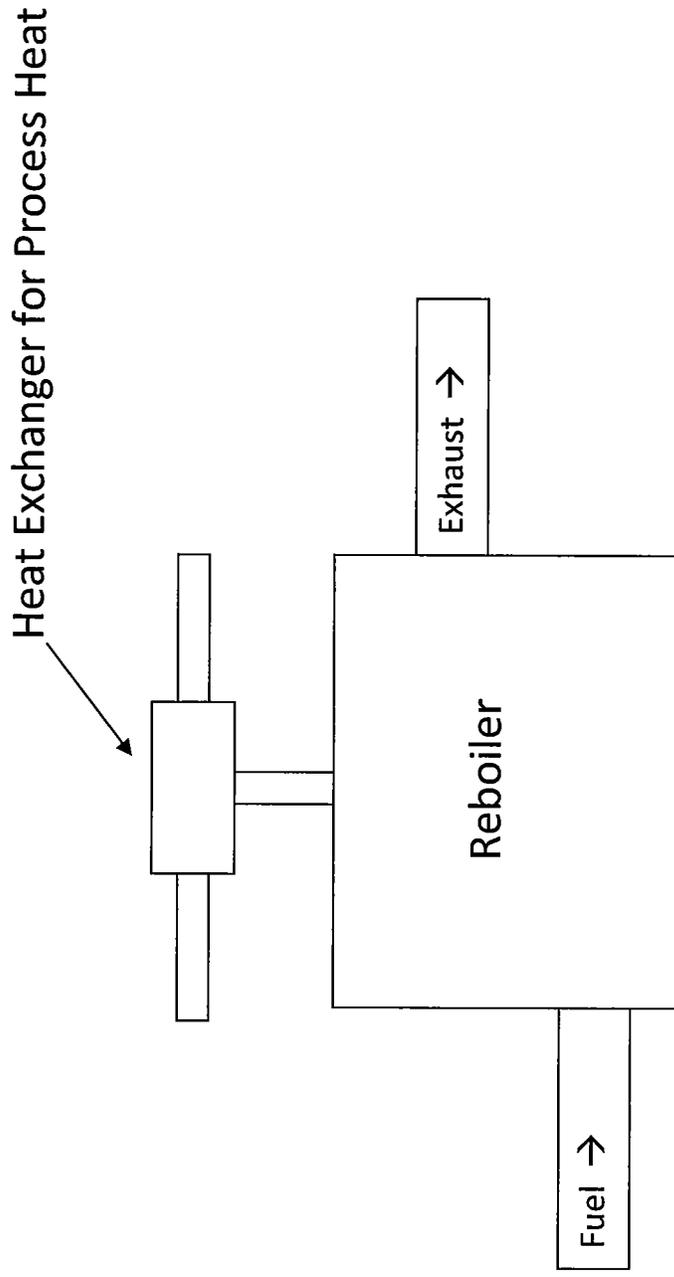
# Natural Gas Compression Station Process Flow Diagram - Engine



Orma Station  
Stack ID Number: EN01  
EN02

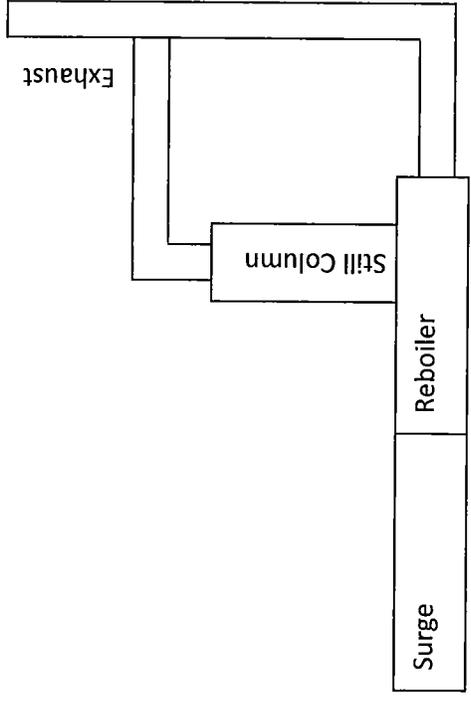
# Natural Gas Compression Station Process Flow Diagram -

## Reboiler



Orma Station  
Stack ID Number: RBR01

# Natural Gas Compression Station Process Flow Diagram – Glycol Dehy



Orma Station  
Stack ID Number: DEHY01



**APPENDIX D**  
**EQUIPMENT TABLE**

**ATTACHMENT D - Emission Units Table**  
(includes all emission units at the facility except those designated as  
insignificant activities in Section 4, Item 24 of the General Forms)

Emission Unit ID <sup>1</sup>	Emission Point ID <sup>1</sup>	Emission Unit Description	Year Installed/ Modified	Design Capacity	Control Device <sup>1</sup>
EN01*	EN01	Reciprocating Engine/Integral Compressor; Cooper GMXE-8	1965	660 HP	N/A
EN02*	EN02	Reciprocating Engine/Integral Compressor; Cooper GMXE-8	1965	660 HP	N/A
DEHY01*	DEHY01	Dehydration unit still; Production Equipment, Inc.	1980	7 mmscf/day	Flare
DEHY*	DEHY	Dehydration unit still flare	1980	15.8 cfm	N/A
RBR01*	RBR01	Dehydration unit reboiler; Production Equipment, Inc.	1980	0.50 MMBTU/hr	N/A
TK01	TK01	Horizontal, above ground tank containing Triethylene glycol	1983	1000 gallon	N/A
TK02	TK02	Horizontal, above ground tank containing Drip Gas	1991	3740 gallon	N/A
TK03	TK03	Vertical, above ground tank containing Ethylene Glycol	1990	2100 gallon	N/A
TK04	TK04	Vertical, above ground tank containing Lube Oil	1965	2730 gallon	N/A
TK05	TK05	Vertical, above ground tank containing Lube Oil	1965	2730 gallon	N/A
TK06	TK06	Horizontal, above ground tank containing Used Oil	2003	550 gallon	N/A
TK07	TK07	Vertical, above ground tank containing Waste Water	2003	500 gallon	N/A

\* Equipment burns or combusts pipeline quality natural gas only.

<sup>1</sup>For 45CSR13 permitted sources, the numbering system used for the emission points, control devices, and emission units should be consistent with the numbering system used in the 45CSR13 permit. For grandfathered sources, the numbering system should be consistent with registrations or emissions inventory previously submitted to DAQ. For emission points, control devices, and emissions units which have not been previously labeled, use the following 45CSR13 numbering system: 1S, 2S, 3S,... or other appropriate description for emission units; 1C, 2C, 3C,... or other appropriate designation for control devices; 1E, 2E, 3E, ... or other appropriate designation for emission points.



**APPENDIX E**  
**EMISSION UNIT FORMS**

## ATTACHMENT E - Emission Unit Form

**Emission Unit Description**

<b>Emission unit ID number:</b> EN01	<b>Emission unit name:</b> EN01	<b>List any control devices associated with this emission unit:</b> N/A
---	------------------------------------	--

**Provide a description of the emission unit (type, method of operation, design parameters, etc.):**  
Cooper 660-hp Natural Gas Fired Reciprocating Engine/Integral Compressor.

<b>Manufacturer:</b> Cooper	<b>Model number:</b> GMXE-8	<b>Serial number:</b>
--------------------------------	--------------------------------	-----------------------

<b>Construction date:</b>	<b>Installation date:</b> 1965	<b>Modification date(s):</b> N/A
---------------------------	-----------------------------------	-------------------------------------

**Design Capacity (examples: furnaces - tons/hr, tanks - gallons):**  
8,200 Btu/HP-hrs

<b>Maximum Hourly Throughput:</b> 0.0054 MMscf/hr	<b>Maximum Annual Throughput:</b>	<b>Maximum Operating Schedule:</b> 8760 hrs/yr
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**Fuel Usage Data (fill out all applicable fields)**

<b>Does this emission unit combust fuel?</b> <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<b>If yes, is it?</b> <input type="checkbox"/> Indirect Fired <input checked="" type="checkbox"/> Direct Fired
--	---

<b>Maximum design heat input and/or maximum horsepower rating:</b> 660 HP	<b>Type and Btu/hr rating of burners:</b> 8,200 Btu/HP-hrs 0.0054 MMscf/hr
--	--

**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 – 0.0054 MMscf/hr, 8,200 Btu/HP-hrs

**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/100 ft <sup>3</sup>	N/A	1,000 BTU/ft <sup>3</sup>

<b>Emissions Data</b>		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Monoxide (CO)	4.4	19.1
Nitrogen Oxides (NO <sub>x</sub> )	29.5	129.4
Lead (Pb)	N/A	N/A
Particulate Matter (PM <sub>2.5</sub> )	0.0005	0.002
Particulate Matter (PM <sub>10</sub> )	0.054	0.24
Total Particulate Matter (TSP)	0.054	0.24
Sulfur Dioxide (SO <sub>2</sub> )	0.003	0.014
Volatile Organic Compounds (VOC)	3.4	14.7
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Formaldehyde	0.20	0.89
Benzene	0.25	1.09
Toluene	0.005	0.02
Ethylbenzene	0.00	0.00
n-Hexane	0.002	0.01
Xylene	0.001	0.01
Acetaldehyde	0.04	0.18
Acrolein	0.04	0.18
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY
<p><b>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.).</b></p> <p>CO, NO<sub>x</sub>, and VOC based on annual emission statement submittals to WVDEP.  PM10, PM2.5, and SO<sub>2</sub> Emission Factors were obtained from USEPA's AIRS Report (March 1990).  HAPs Emission Rates obtained from AP-42.</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.

\_\_\_ 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.*)

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**

<b>Emission unit ID number:</b> EN02	<b>Emission unit name:</b> EN02	<b>List any control devices associated with this emission unit:</b> N/A
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**Provide a description of the emission unit (type, method of operation, design parameters, etc.):**  
Cooper 660-hp Natural Gas Fired Reciprocating Engine/Integral Compressor.

<b>Manufacturer:</b> Cooper	<b>Model number:</b> GMXE-8	<b>Serial number:</b>
<b>Construction date:</b>	<b>Installation date:</b> 1965	<b>Modification date(s):</b> N/A

**Design Capacity (examples: furnaces - tons/hr, tanks - gallons):**  
8,200 Btu/HP-hrs

<b>Maximum Hourly Throughput:</b> 0.0054 MMscf/hr	<b>Maximum Annual Throughput:</b>	<b>Maximum Operating Schedule:</b> 8760 hrs/yr
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**Fuel Usage Data (fill out all applicable fields)**

<b>Does this emission unit combust fuel?</b> <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<b>If yes, is it?</b> <input type="checkbox"/> Indirect Fired <input checked="" type="checkbox"/> Direct Fired
<b>Maximum design heat input and/or maximum horsepower rating:</b> 660 HP	<b>Type and Btu/hr rating of burners:</b> 8,200 Btu/HP-hrs 0.0054 MMscf/hr

**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 – 0.0054 MMscf/hr, 8,200 Btu/HP-hrs

**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/100 ft <sup>3</sup>	N/A	1,000 BTU/ft <sup>3</sup>

<b>Emissions Data</b>		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Monoxide (CO)	4.4	19.1
Nitrogen Oxides (NO <sub>x</sub> )	29.5	129.4
Lead (Pb)	N/A	N/A
Particulate Matter (PM <sub>2.5</sub> )	0.0005	0.002
Particulate Matter (PM <sub>10</sub> )	0.054	0.24
Total Particulate Matter (TSP)	0.054	0.24
Sulfur Dioxide (SO <sub>2</sub> )	0.003	0.014
Volatile Organic Compounds (VOC)	3.4	14.7
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Formaldehyde	0.20	0.89
Benzene	0.25	1.09
Toluene	0.005	0.02
Ethylbenzene	0.00	0.00
n-Hexane	0.002	0.01
Xylene	0.001	0.01
Acetaldehyde	0.04	0.18
Acrolein	0.04	0.18
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY
<p><b>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.).</b></p> <p>CO, NO<sub>x</sub>, VOC and HAPs Emission Rates based on annual emission statement submittals to WVDEP. PM10, PM2.5, and SO2 Emission Factors were obtained from USEPA's AIRS Report (March 1990). HAPs Emission Rates obtained from AP-42.</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.

\_\_\_ 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.*)

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

<b>Emission Unit Description</b>			
<b>Emission unit ID number:</b> DEHY01	<b>Emission unit name:</b> DEHY01	<b>List any control devices associated with this emission unit:</b> Flare	
<b>Provide a description of the emission unit (type, method of operation, design parameters, etc.):</b> Dehydration unit still column			
<b>Manufacturer:</b> Production Equipment, Inc.	<b>Model number:</b> 1514R	<b>Serial number:</b>	
<b>Construction date:</b>	<b>Installation date:</b> 1980	<b>Modification date(s):</b> N/A	
<b>Design Capacity (examples: furnaces - tons/hr, tanks - gallons):</b> 7 MMSCF/day			
<b>Maximum Hourly Throughput:</b> 7 MMSCF/day	<b>Maximum Annual Throughput:</b>	<b>Maximum Operating Schedule:</b> 8760 hrs/yr	
<b>Fuel Usage Data (fill out all applicable fields)</b>			
<b>Does this emission unit combust fuel?</b> <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		<b>If yes, is it?</b>  <input type="checkbox"/> Indirect Fired <input type="checkbox"/> Direct Fired	
<b>Maximum design heat input and/or maximum horsepower rating:</b> N/A		<b>Type and Btu/hr rating of burners:</b> unknown	
<b>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.</b>			
<b>Describe each fuel expected to be used during the term of the permit.</b>			
Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value

<b>Emissions Data</b>		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Monoxide (CO)	0.0	0.0
Nitrogen Oxides (NO <sub>x</sub> )	0.0	0.0
Lead (Pb)	N/A	N/A
Particulate Matter (PM <sub>2.5</sub> )	0.0	0.0
Particulate Matter (PM <sub>10</sub> )	0.0	0.0
Total Particulate Matter (TSP)	0.0	0.0
Sulfur Dioxide (SO <sub>2</sub> )	0.0	0.0
Volatile Organic Compounds (VOC)	16.1	70.4
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Benzene	0.41	1.80
Toluene	1.44	6.31
Ethylbenzene	0.21	0.93
n-Hexane	0.27	1.19
Xylene	1.44	6.30
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY
<p><b>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.).</b></p> <p>VOC and HAP Emission Rates were calculated using GRI –GLYCalc Version 4.0.</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).
- 45 CSR 6-4.1 – Flare: particulate matter will not exceed quantity determined (TV 5.1.1).
- 45 CSR 6-4.3 – Flare: visible emissions limit (less than twenty (20) percent opacity) (TV 5.1.2)
- 45 CSR 6-4.5 – Flare: no particles will be emitted from incinerator refuse that can be individually distinguished in open air (TV 5.1.3).
- 45 CSR 6-4.6 – Flare: incinerators shall not emit objectionable odors (TV 5.1.4).
- 40 CFR 63.10(b)(3), Subpart HH – Flare: maintain Minor Source of HAPs classification (TV 5.1.5).
- 45 CSR 30-5.1.c – Monitoring, testing, recordkeeping and reporting requirements(TV 5.2, TV 5.3, TV 5.4, TV 5.5)

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 shall be complied with by annual sampling of inlet natural gas stream.
- 45 CSR 10-5.1 shall be complied with by annual sampling of inlet natural gas stream.
- 45 CSR 30-5.1(c) shall be complied with by annual sampling of inlet natural gas stream.
- 45 CSR 6-4.1 – shall be complied with by maintaining records of flare design evaluation and testing results.
- 45 CSR 6-4.3 – shall be complied with by maintaining records of flare design evaluation and testing results.
- 45 CSR 6-4.5 – shall be complied with by maintaining records of flare design evaluation and testing results.
- 45 CSR 6-4.6 – shall be complied with by maintaining records of flare design evaluation and testing results.
- 40 CFR 63.10(b)(3) – shall be complied with by conducting monitoring, testing and reporting.

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**

<b>Emission unit ID number:</b> RBR01	<b>Emission unit name:</b> RBR01	<b>List any control devices associated with this emission unit:</b> N/A
--	-------------------------------------	--

**Provide a description of the emission unit (type, method of operation, design parameters, etc.):**  
Dehydration unit reboiler

<b>Manufacturer:</b> Production Equipment, Inc.	<b>Model number:</b>	<b>Serial number:</b>
<b>Construction date:</b>	<b>Installation date:</b> 1980	<b>Modification date(s):</b> N/A

**Design Capacity (examples: furnaces - tons/hr, tanks - gallons):**  
0.50 MMBTU/hr

<b>Maximum Hourly Throughput:</b> 0.50 MMBTU/hr	<b>Maximum Annual Throughput:</b>	<b>Maximum Operating Schedule:</b> 8760 hrs/yr
--	-----------------------------------	---

**Fuel Usage Data (fill out all applicable fields)**

<b>Does this emission unit combust fuel?</b> <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<b>If yes, is it?</b> <input type="checkbox"/> Indirect Fired <input checked="" type="checkbox"/> Direct Fired
<b>Maximum design heat input and/or maximum horsepower rating:</b> 0.50 MMBTU/hr	<b>Type and Btu/hr rating of burners:</b>

**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 – 0.50 MMBTU/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/100 ft <sup>3</sup>	N/A	

<b>Emissions Data</b>		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Monoxide (CO)	0.0	0.2
Nitrogen Oxides (NO <sub>x</sub> )	0.05	0.2
Lead (Pb)	N/A	N/A
Particulate Matter (PM <sub>2.5</sub> )	0.00	0.00
Particulate Matter (PM <sub>10</sub> )	0.004	0.02
Total Particulate Matter (TSP)	0.004	0.02
Sulfur Dioxide (SO <sub>2</sub> )	0.0	0.001
Volatile Organic Compounds (VOC)	0.003	0.01
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Formaldehyde	0.00	0.00
Benzene	0.00	0.00
Toluene	0.00	0.00
Ethylbenzene	0.00	0.00
n-Hexane	0.00	0.00
Xylene	0.00	0.00
Acetaldehyde	0.00	0.00
Acrolein	0.00	0.00
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<sub>x</sub>, CO, PM, VOC, SO<sub>2</sub>, and HAPs emission factors were obtained from AP-42 (7/98).</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 2-3.1 – Opacity limit of less than ten (10) percent (TV 4.1.1)

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 2-3.1 - Upon request from Department perform opacity readings.

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.



**APPENDIX F**  
**P.E. CERTIFICATION**



## P.E. Certification

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 as they pertain to the practice of engineering. This is defined as the performance of a professional service such as consultation, investigation, evaluation, planning, design or supervision of construction or operation in connection with any utilities, structures, buildings, machines, equipment, processes, works, or projects wherein the safeguarding of life, health and property is concerned, when such service or work requires the application of engineering principals and data. Based on my inquiry of those individuals with primary responsibility for obtaining such 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 or imprisonment.

Name of P.E. Susan E. Johnson

Signature of P.E. *Susan E. Johnson*

Date 7 / 20 / 2010

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