Permit / Application Information Sheet
Division of Environmental Protection
West Virginia Office of Air Quality

Company:	EQT Gathering, LLC			**Facility:**	Janus Station
Region:	8	**Plant ID:**	017-00158	**Application #:**	13-3269A
Engineer:	Kessler, Joe			**Category:**	
Physical Address:	Off Left Fork Run Rd West Union WV			**SIC:** [1311] OIL AND GAS EXTRACTION - CRUDE PETROLEUM & NATURAL GAS **NAICS:** [211111] Crude Petroleum and Natural Gas Extraction	
County:	Doddridge				
Other Parties:	ENV_COOR - Bosiljevac, Alex 412-395-3699 VICE PRES - Charletta, Diana 304-348-7661				

Information Needed for Database and AIRS
1. Need valid physical West Virginia address with zip

Regulated Pollutants

VOC	Volatile Organic Compounds (Reactive organic gases)	114.500 TPY
VHAP	VOLATILE ORGANIC HAZARDOUS AIR POLLUTANT	22.260 TPY

Summary from this Permit 13-3269A

Air Programs	Applicable Regulations
MACT	
NSPS	
TITLE V	
Title V/Major	

Fee Program	Fee	Application Type
8D	$2,000.00	MODIFICATION

Notes from Database
Permit Note: Application resubmitted as a full modification after discovered proposed increases were beyond 6/10 thresholds.

Permit Note: Updating the facility wide fugitive emission calculations, station volume venting, and pigging emissions calculations.

Activity Dates

APPLICATION RECIEVED	07/05/2016
ASSIGNED DATE	07/06/2016
APPLICANT PUBLISHED LEGAL AD	07/08/2016
APPLICATION FEE PAID	07/11/2016 300 via cc
APPLICATION DEEMED COMPLETE	07/20/2016
APPLICANT PUBLISHED LEGAL AD	10/14/2016
APPLICATION RESUBMITTAL	10/17/2016
APPLICATION FEE PAID	11/02/2016 1700 via cc
APPLICATION DEEMED COMPLETE	11/07/2016
OAQ PUBLISHED LEGAL AD	12/16/2016

NOTICE

NON-CONFIDENTIAL

Please note, this information sheet is not a substitute for file research and is limited to data entered into the AIRTRAX database.

Company ID: 017-00158
Company: EQT Gathering, LLC
Printed: 12/19/2016
Engineer: Kessler, Joe

IPR FILE INDEX

Applicant : EQT Gathering, LLC **Plant ID No.:** 017-00158
Facility : Janus Compressor Station **R13-**3269A

Chronological Order - Add Index Pages As Necessary

Date	To	From	Subject	# of pages
7/06/16	EQT	Sandie Adkins	48-Hour Letter	
7/20/16	Joe Kessler	EQT	Affidavit of Publication (for Class II A/U)	
9/24/15	EQT	Joe Kessler	Completeness Determination (for Class II A/U)	
10/17/16	Joe Kessler	EQT	Unforeseen Events Plant	
10/17/16	Joe Kessler	EQT	Revised Full Modification Application (in App File)	
10/27/16	Joe Kessler	EQT	Affidavit of Publication (for Full Modification)	
9/24/15	EQT	Joe Kessler	Completeness Determination (for Full Modification)	
11/30/16	Joe Kessler	EQT	Remove request to cease flaring of storage tank vapors.	
12/19/16	File	Joe Kessler	DAQ/EQT E-mails	
12/19/16	File	Joe Kessler	Draft Permit R13-3269, Evaluation, Tracking Manifest	
12/19/16	File	Joe Kessler	Public Notice Documents	

JRK
12/19/2016

AIR QUALITY PERMIT NOTICE

Notice of Intent to Approve

On October 17, 2016, EQT Gathering, LLC applied to the WV Department of Environmental Protection, Division of Air Quality (DAQ) for a permit to modify the Janus Compressor Station located approximately 3.1 miles south-southwest of West Union, east of County Route (CR) 11 (Arnold's Creek Road), in Doddridge County, WV at latitude 39.25777 and longitude -80.80566. A preliminary evaluation has determined that all State and Federal air quality requirements will be met by the modified facility. The DAQ is providing notice to the public of its preliminary determination to issue the permit as R13-3269A.

The following changes in potential emissions will be authorized by this permit action: Volatile Organic Compounds, 18.79 tons per year (TPY); Hazardous Air Pollutants, -1.70 TPY.

Written comments or requests for a public meeting must be received by the DAQ before 5:00 p.m. on XXXXX. A public meeting may be held if the Director of the DAQ determines that significant public interest has been expressed, in writing, or when the Director deems it appropriate.

The purpose of the DAQ's permitting process is to make a preliminary determination if the proposed modification will meet all State and Federal air quality requirements. The purpose of the public review process is to accept public comments on air quality issues relevant to this determination. Only written comments received at the address noted below within the specified time frame, or comments presented orally at a scheduled public meeting, will be considered prior to final action on the permit. All such comments will become part of the public record.

Joe Kessler, PE
WV Department of Environmental Protection
Division of Air Quality
601 57th Street, SE
Charleston, WV 25304
Telephone: 304/926-0499, ext. 1219
FAX: 304/926-0478

Additional information, including copies of the draft permit, application and all other supporting materials relevant to the permit decision may be obtained by contacting the engineer listed above. The draft permit and engineering evaluation can be downloaded at:

www.dep.wv.gov/daq/Pages/NSRPermitsforReview.aspx

Kessler, Joseph R

From: Adkins, Sandra K
Sent: Wednesday, December 14, 2016 3:26 PM
To: Glance, Jacob P; Gillenwater, Kelley J
Cc: Kessler, Joseph R
Subject: DAQ Public Notice

Please see below the Public Notice for Draft Permit R13-3269A for EQT Gathering, LLC's Janus Compressor Station located in Doddridge County.
The notice will be published in *The Doddridge Independent* on Friday, December 16, 2016. The thirty day comment period will end on Tuesday, January 17, 2017.

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Kessler, Joseph R

From: Adkins, Sandra K
Sent: Wednesday, December 14, 2016 3:26 PM
To: 'wentworth.paul@epa.gov'; 'bradley.megan@epa.gov'; 'abosiljevac@eqt.com'
Cc: Durham, William F; McKeone, Beverly D; McCumbers, Carrie; Hammonds, Stephanie E; Kessler, Joseph R; Taylor, Danielle R; Hammell, Douglas N; Keatley, Robert L
Subject: WV Draft Permit R13-3269A for EQT Gathering, LLC; Janus Compressor Station
Attachments: 3269A.PDF; Eval3269A.PDF; AttachmentA.PDF; notice.pdf

Please find attached the Draft Permit R13-3269A, Engineering Evaluation, Attachment A, and Public Notice for EQT Gathering, LLC's Janus Compressor Station located in Doddridge County.

The notice will be published in *The Doddridge Independent* on Friday, December 16, 2016, and the thirty day comment period will end on Tuesday, January 17, 2017.

Should you have any questions or comments, please contact the permit writer, Joe Kessler, at 304 926-0499 x1219.

Kessler, Joseph R

From: Adkins, Sandra K
Sent: Wednesday, December 14, 2016 3:25 PM
To: Michael Zorn
Cc: Kessler, Joseph R
Subject: RE: Publication of Class I Legal Ad for the WV Division of Air Quality

Thank you!

From: Michael Zorn [mailto:mike@thedoddridgeindependent.com]
Sent: Wednesday, December 14, 2016 3:20 PM
To: Adkins, Sandra K <Sandra.K.Adkins@wv.gov>
Subject: Re: Publication of Class I Legal Ad for the WV Division of Air Quality

Received…

mike

Michael Zorn / Editor

The Doddridge Independent

187 East Main Street • West Union, WV 26456

Main: 304-666-1030
Cell: 304-844-8040
Fax: 304-666-1080

mike@thedoddridgeindependent.com

On Dec 13, 2016, at 1:39 PM, Adkins, Sandra K <Sandra.K.Adkins@wv.gov> wrote:

Please publish the information below as a Class I legal advertisement (one time only) in the Friday, December 16, 2016, issue of*The Doddridge Independent*. Please let me know that this has been received and will be published as requested. Thank you.

Send the invoice for payment and affidavit of publication to:

Sandra Adkins

WV Department of Environmental Protection
DIVISION OF AIR QUALITY

601- 57th Street

Charleston, WV 25304

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West Virginia Department of Environmental Protection
Division of Air Quality

Earl Ray Tomblin
Governor

Randy C. Huffman
Cabinet Secretary

Permit to Modify

Entire Document
NON-CONFIDENTIAL

R13-3269A

This permit is issued in accordance with the West Virginia Air Pollution Control Act (West Virginia Code §§ 22-5-1 et seq.) and 45 C.S.R. 13 — Permits for Construction, Modification, Relocation and Operation of Stationary Sources of Air Pollutants, Notification Requirements, Temporary Permits, General Permits and Procedures for Evaluation. The permittee identified at the facility listed below is authorized to construct the stationary sources of air pollutants identified herein in accordance with all terms and conditions of this permit.

Issued to:

EQT Gathering, LLC
Janus Compressor Station
017-00158

DRAFT

William F. Durham
Director

Issued: DRAFT

This permit supercedes and replaces Permit Number R13-3269 issued on February 12, 2016.

Facility Location:	Near West Union, Doddridge County, West Virginia
Mailing Address:	625 Liberty Avenue, Suite 1700, Pittsburgh, PA 15222
Facility Description:	Compressor Station
SIC/NAICS Code:	1311/211111
UTM Coordinates:	516.767 km Easting • 4,345.400 km Northing • Zone 17
Latitude/Longitude:	39.25777/-80.80566
Permit Type:	Modification
Desc. of Change:	Updating the facility wide fugitive emission calculations, station volume venting, and pigging emissions calculations.

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

The source is subject to 45CSR30. Changes authorized by this permit must also be incorporated into the facility's Title V operating permit. Commencement date of any operation authorized by this permit shall be determined by the appropriate timing limitations associated with Title V permit revisions per 45CSR30.

Table of Contents

1.0 Emission Units

Emission Unit ID	Emission Point ID	Emission Unit Description	Year Installed	Design Capacity	Control Device[1]
ENG-001	ENG-001	Caterpillar G3616 4-Stroke Lean Burn (4SLB) Compressor Engine	2016	5,350 hp	OxCat (C1)
ENG-002	ENG-002	Caterpillar G3616 4SLB Compressor Engine	2016	5,350 hp	OxCat (C2)
ENG-003	ENG-003	Caterpillar G3616 4SLB Compressor Engine	2016	5,350 hp	OxCat (C3)
ENG-004	ENG-004	Caterpillar G3616 4SLB Compressor Engine	2016	5,350 hp	OxCat (C4)
EG-001	EG-001	Capstone C200 Microturbine	2016	200kWe	None
EG-002	EG-002	Capstone C200 Microturbine	2016	200kWe	None
EG-003	EG-003	Capstone C200 Microturbine	2016	200kWe	None
EG-004	EG-004	Capstone C200 Microturbine	2016	200kWe	None
EG-005	EG-005	Capstone C200 Microturbine	2016	200kWe	None
DEHY-001	n/a	Glycol Dehydration Unit Flash Tank[2]	2016	125 mmscf/day	Flare (FLARE-001)
	FLARE-001	Glycol Dehydration Unit Still Column			
RB-001	RB-001	Glycol Dehydration Unit Reboiler	2016	2.31 mmBtu/hr	None
DEHY-002	n/a	Glycol Dehydration Unit Flash Tank[2]	2016	125 mmscf/day	Flare (FLARE-002)
	FLARE-002	Glycol Dehydration Unit Still Column			
RB-002	RB-002	Glycol Dehydration Unit Reboiler	2016	2.31 mmBtu/hr	None
HTR-1	HTR-1	Fuel Gas Heater	2016	1.15 mmBtu/hr	None
HTR-2	HTR-2	Fuel Gas Heater	2016	0.77 mmBtu/hr	None
T-001	FLARE-003	Produced Liquids Storage Tank	2016	8,820 gallons	Flare (FLARE-003)
T-002	FLARE-003	Produced Liquids Storage Tank	2016	8,820 gallons	Flare (FLARE-003)
T-003	T-003	Engine Lube Oil Storage Tank	2016	2,000 gallons	None
T-004	T-004	Compressor Oil Storage Tank	2016	2,000 gallons	None
T-005	T-005	New MEG Storage Tank	2016	2,000 gallons	None
T-006	T-006	Used MEG Storage Tank	2016	2,000 gallons	None

1.0 Emission Units

Emission Unit ID	Emission Point ID	Emission Unit Description	Year Installed	Design Capacity	Control Device[1]
T-007	T-007	Used Oil Storage Tank	2016	4,200 gallons	None
T-008	T-008	Ice-Chek Storage Tank	2016	4,000 gallons	None
T-009	T-009	Engine Oil Storage Tank	2016	300 gallons	None
T-010	T-010	Engine Oil Storage Tank	2016	300 gallons	None
T-011	T-011	Engine Oil Storage Tank	2016	300 gallons	None
T-012	T-012	Engine Oil Storage Tank	2016	300 gallons	None
T-013	T-013	Compressor Oil Storage Tank	2016	300 gallons	None
T-014	T-014	Compressor Oil Storage Tank	2016	300 gallons	None
T-015	T-015	Compressor Oil Storage Tank	2016	300 gallons	None
T-016	T-016	Compressor Oil Storage Tank	2016	300 gallons	None
T-017	T-017	Ice-Chek Oil Storage Tank	2016	550 gallons	None
T-018	T-018	Ice-Chek Oil Storage Tank	2016	550 gallons	None
T-019	T-019	Ice-Chek Oil Storage Tank	2016	550 gallons	None
T-020	T-020	Ice-Chek Oil Storage Tank	2016	550 gallons	None
T-021	T-021	Ice-Chek Oil Storage Tank	2016	550 gallons	None
T-022	T-022	Ice-Chek Oil Storage Tank	2016	550 gallons	None
T-023	T-023	New TEG Storage Tank	2016	2,000 gallons	None
T-024	T-024	Used TEG Storage Tank	2016	2,000 gallons	None
FLARE-001	FLARE-001	Glycol Dehydration Unit #1 Enclosed Flare	2016	7.0 mmBtu/hr	n/a
FLARE-002	FLARE-002	Glycol Dehydration Unit #2 Enclosed Flare	2016	7.0 mmBtu/hr	n/a
FLARE-003[3]	FLARE-003	Storage Tank Enclosed Flare	2016	41.0 mmBtu/hr	n/a
L1	L1	Liquids Loading	2016	210,000 gal/yr	None

(1) OxCat = Oxidation Catalyst

(2) The Glycol Dehydration Unit flash tanks are not specifically identified in the application as Emission Units but are here for consistency with other fully controlled units.

2.0. General Conditions

2.1. Definitions

2.1.1. All references to the "West Virginia Air Pollution Control Act" or the "Air Pollution Control Act" mean those provisions contained in W.Va. Code §§ 22-5-1 to 22-5-18.

2.1.2. The "Clean Air Act" means those provisions contained in 42 U.S.C. §§ 7401 to 7671q, and regulations promulgated thereunder.

2.1.3. "Secretary" means the Secretary of the Department of Environmental Protection or such other person to whom the Secretary has delegated authority or duties pursuant to W.Va. Code §§ 22-1-6 or 22-1-8 (45 CSR § 30-2.12.). The Director of the Division of Air Quality is the Secretary's designated representative for the purposes of this permit.

2.2. Acronyms

CAAA	Clean Air Act Amendments	**NO_x**	Nitrogen Oxides
CBI	Confidential Business Information	**NSPS**	New Source Performance Standards
CEM	Continuous Emission Monitor	**PM**	Particulate Matter
CES	Certified Emission Statement	**$PM_{2.5}$**	Particulate Matter less than 2.5μm in diameter
C.F.R. *or* CFR	Code of Federal Regulations	**PM_{10}**	Particulate Matter less than 10μm in diameter
CO	Carbon Monoxide	**Ppb**	Pounds per Batch
C.S.R. *or* CSR	Codes of State Rules	**pph**	Pounds per Hour
DAQ	Division of Air Quality	**ppm**	Parts per Million
DEP	Department of Environmental Protection	**Ppmv or ppmv**	Parts per million by volume
dscm	Dry Standard Cubic Meter	**PSD**	Prevention of Significant Deterioration
FOIA	Freedom of Information Act	**psi**	Pounds per Square Inch
HAP	Hazardous Air Pollutant	**SIC**	Standard Industrial Classification
HON	Hazardous Organic NESHAP	**SIP**	State Implementation Plan
HP	Horsepower	**SO_2**	Sulfur Dioxide
lbs/hr	Pounds per Hour	**TAP**	Toxic Air Pollutant
LDAR	Leak Detection and Repair	**TPY**	Tons per Year
M	Thousand	**TRS**	Total Reduced Sulfur
MACT	Maximum Achievable Control Technology	**TSP**	Total Suspended Particulate
MDHI	Maximum Design Heat Input	**USEPA**	United States Environmental Protection Agency
MM	Million	**UTM**	Universal Transverse Mercator
MMBtu/hr *or* mmbtu/hr	Million British Thermal Units per Hour	**VEE**	Visual Emissions Evaluation
MMCF/hr *or* mmcf/hr	Million Cubic Feet per Hour	**VOC**	Volatile Organic Compounds
NA	Not Applicable	**VOL**	Volatile Organic Liquids
NAAQS	National Ambient Air Quality Standards		
NESHAPS	National Emissions Standards for Hazardous Air Pollutants		

2.3. Authority

This permit is issued in accordance with West Virginia Air Pollution Control Law W.Va. Code §§22-5-1 et seq. and the following Legislative Rules promulgated thereunder:

2.3.1. 45CSR13 – *Permits for Construction, Modification, Relocation and Operation of Stationary Sources of Air Pollutants, Notification Requirements, Temporary Permits, General Permits and Procedures for Evaluation.*

2.4. Term and Renewal

2.4.1. This permit shall remain valid, continuous and in effect unless it is revised, suspended, revoked or otherwise changed under an applicable provision of 45CSR13 or any applicable legislative rule.

2.5. Duty to Comply

2.5.1. The permitted facility shall be constructed and operated in accordance with the plans and specifications filed in Permit Application R13-3269A and any modifications, administrative updates, or amendments thereto. The Secretary may suspend or revoke a permit if the plans and specifications upon which the approval was based are not adhered to;
[45CSR§§13-5.11 and 13-10.3]

2.5.2. This permit supercedes and replaces Permit Number R13-3269. The permittee must comply with all conditions of this permit. Any permit noncompliance constitutes a violation of the West Virginia Code and the Clean Air Act and is grounds for enforcement action by the Secretary or USEPA;

2.5.3. Violations of any of the conditions contained in this permit, or incorporated herein by reference, may subject the permittee to civil and/or criminal penalties for each violation and further action or remedies as provided by West Virginia Code 22-5-6 and 22-5-7;

2.5.4. Approval of this permit does not relieve the permittee herein of the responsibility to apply for and obtain all other permits, licenses and/or approvals from other agencies; i.e., local, state and federal, which may have jurisdiction over the construction and/or operation of the source(s) and/or facility herein permitted.

2.6. Duty to Provide Information

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

2.7. Duty to Supplement and Correct Information

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

2.8. Administrative Update

The permittee may request an administrative update to this permit as defined in and according to the procedures specified in 45CSR13.
[45CSR§13-4]

2.9. Permit Modification

The permittee may request a minor modification to this permit as defined in and according to the procedures specified in 45CSR13.
[45CSR§13-5.4.]

2.10. Major Permit Modification

The permittee may request a major modification as defined in and according to the procedures specified in 45CSR14 or 45CSR19, as appropriate.
[45CSR§13-5.1]

2.11. Inspection and Entry

The permittee shall allow any authorized representative of the Secretary, upon the presentation of credentials and other documents as may be required by law, to perform the following:

a. At all reasonable times (including all times in which the facility is in operation) enter upon the permittee's premises where a source is located or emissions related activity is conducted, or where records must be kept under the conditions of this permit;

b. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;

c. Inspect at reasonable times (including all times in which the facility is in operation) any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under the permit;

d. Sample or monitor at reasonable times substances or parameters to determine compliance with the permit or applicable requirements or ascertain the amounts and types of air pollutants discharged.

2.12. Emergency

2.12.1. An "emergency" means any situation arising from sudden and reasonable unforeseeable events beyond the control of the source, including acts of God, which situation requires immediate corrective action to restore normal operation, and that causes the source to exceed a technology-based emission

limitation under the permit, due to unavoidable increases in emissions attributable to the emergency. An emergency shall not include noncompliance to the extent caused by improperly designed equipment, lack of preventative maintenance, careless or improper operation, or operator error.

2.12.2. Effect of any emergency. An emergency constitutes an affirmative defense to an action brought for noncompliance with such technology-based emission limitations if the conditions of Section 2.12.3 are not met.

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

a. An emergency occurred and that the permittee can identify the cause(s) of the emergency;

b. The permitted facility was at the time being properly operated;

c. During the period of the emergency the permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards, or other requirements in the permit; and,

d. The permittee submitted notice of the emergency to the Secretary within one (1) working day of the time when emission limitations were exceeded due to the emergency and made a request for variance, and as applicable rules provide. This notice must contain a detailed description of the emergency, any steps taken to mitigate emission, and corrective actions taken.

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

2.12.5. The provisions of this section are in addition to any emergency or upset provision contained in any applicable requirement.

2.13. Need to Halt or Reduce Activity Not a Defense

It shall not be a defense for a permittee in an enforcement action that it should have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit. However, nothing in this paragraph shall be construed as precluding consideration of a need to halt or reduce activity as a mitigating factor in determining penalties for noncompliance if the health, safety, or environmental impacts of halting or reducing operations would be more serious than the impacts of continued operations.

2.14. Suspension of Activities

In the event the permittee should deem it necessary to suspend, for a period in excess of sixty (60) consecutive calendar days, the operations authorized by this permit, the permittee shall notify the Secretary, in writing, within two (2) calendar weeks of the passing of the sixtieth (60) day of the suspension period.

2.15. Property Rights

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

2.16. Severability

The provisions of this permit are severable and should any provision(s) be declared by a court of competent jurisdiction to be invalid or unenforceable, all other provisions shall remain in full force and effect.

2.17. Transferability

This permit is transferable in accordance with the requirements outlined in Section 10.1 of 45CSR13. **[45CSR§13-10.1]**

2.18. Notification Requirements

The permittee shall notify the Secretary, in writing, no later than thirty (30) calendar days after the actual startup of the operations authorized under this permit.

2.19. Credible Evidence

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

3.0. Facility-Wide Requirements

3.1. Limitations and Standards

3.1.1. **Open burning.** The open burning of refuse by any person, firm, corporation, association or public agency is prohibited except as noted in 45CSR§6-3.1.
[45CSR§6-3.1.]

3.1.2. **Open burning exemptions.** The exemptions listed in 45CSR§6-3.1 are subject to the following stipulation: Upon notification by the Secretary, no person shall cause, suffer, allow or permit any form of open burning during existing or predicted periods of atmospheric stagnation. Notification shall be made by such means as the Secretary may deem necessary and feasible.
[45CSR§6-3.2.]

3.1.3. **Asbestos.** The permittee is responsible for thoroughly inspecting the facility, or part of the facility, prior to commencement of demolition or renovation for the presence of asbestos and complying with 40 C.F.R. § 61.145, 40 C.F.R. § 61.148, and 40 C.F.R. § 61.150. The permittee, owner, or operator must notify the Secretary at least ten (10) working days prior to the commencement of any asbestos removal on the forms prescribed by the Secretary if the permittee is subject to the notification requirements of 40 C.F.R. § 61.145(b)(3)(i). The USEPA, the Division of Waste Management and the Bureau for Public Health - Environmental Health require a copy of this notice to be sent to them.
[40CFR§61.145(b) and 45CSR§34]

3.1.4. **Odor.** No person shall cause, suffer, allow or permit the discharge of air pollutants which cause or contribute to an objectionable odor at any location occupied by the public.
[45CSR§4-3.1 State-Enforceable only.]

3.1.5. **Permanent shutdown.** A source which has not operated at least 500 hours in one 12-month period within the previous five (5) year time period may be considered permanently shutdown, unless such source can provide to the Secretary, with reasonable specificity, information to the contrary. All permits may be modified or revoked and/or reapplication or application for new permits may be required for any source determined to be permanently shutdown.
[45CSR§13-10.5.]

3.1.6. **Standby plan for reducing emissions.** When requested by the Secretary, the permittee shall prepare standby plans for reducing the emissions of air pollutants in accordance with the objectives set forth in Tables I, II, and III of 45 C.S.R. 11.
[45CSR§11-5.2.]

3.2. Monitoring Requirements

3.2.1. **Emission Limit Averaging Time.** Unless otherwise specified, compliance with all annual limits shall be based on a rolling twelve month total. A rolling twelve month total shall be the sum of the measured parameter of the previous twelve calendar months. Compliance with all hourly emission limits shall be based on the applicable NAAQS averaging times or, where applicable, as given in any approved performance test method.

3.3. Testing Requirements

3.3.1. **Stack testing.** As per provisions set forth in this permit or as otherwise required by the Secretary, in accordance with the West Virginia Code, underlying regulations, permits and orders, the permittee shall conduct test(s) to determine compliance with the emission limitations set forth in this permit and/or established or set forth in underlying documents. The Secretary, or his duly authorized representative, may at his option witness or conduct such test(s). Should the Secretary exercise his option to conduct such test(s), the operator shall provide all necessary sampling connections and sampling ports to be located in such manner as the Secretary may require, power for test equipment and the required safety equipment, such as scaffolding, railings and ladders, to comply with generally accepted good safety practices. Such tests shall be conducted in accordance with the methods and procedures set forth in this permit or as otherwise approved or specified by the Secretary in accordance with the following:

a. The Secretary may on a source-specific basis approve or specify additional testing or alternative testing to the test methods specified in the permit for demonstrating compliance with 40 C.F.R. Parts 60, 61, and 63 in accordance with the Secretary's delegated authority and any established equivalency determination methods which are applicable. If a testing method is specified or approved which effectively replaces a test method specified in the permit, the permit may be revised in accordance with 45CSR§13-4 or 45CSR§13-5.4 as applicable.

b. The Secretary may on a source-specific basis approve or specify additional testing or alternative testing to the test methods specified in the permit for demonstrating compliance with applicable requirements which do not involve federal delegation. In specifying or approving such alternative testing to the test methods, the Secretary, to the extent possible, shall utilize the same equivalency criteria as would be used in approving such changes under Section 3.3.1.a. of this permit. If a testing method is specified or approved which effectively replaces a test method specified in the permit, the permit may be revised in accordance with 45CSR§13-4 or 45CSR§13-5.4 as applicable.

c. All periodic tests to determine mass emission limits from or air pollutant concentrations in discharge stacks and such other tests as specified in this permit shall be conducted in accordance with an approved test protocol. Unless previously approved, such protocols shall be submitted to the Secretary in writing at least thirty (30) days prior to any testing and shall contain the information set forth by the Secretary. In addition, the permittee shall notify the Secretary at least fifteen (15) days prior to any testing so the Secretary may have the opportunity to observe such tests. This notification shall include the actual date and time during which the test will be conducted and, if appropriate, verification that the tests will fully conform to a referenced protocol previously approved by the Secretary.

d. The permittee shall submit a report of the results of the stack test within sixty (60) days of completion of the test. The test report shall provide the information necessary to document the objectives of the test and to determine whether proper procedures were used to accomplish these objectives. The report shall include the following: the certification described in paragraph 3.5.1.; a statement of compliance status, also signed by a responsible official; and, a summary of conditions which form the basis for the compliance status evaluation. The summary of conditions shall include the following:

1. The permit or rule evaluated, with the citation number and language;
2. The result of the test for each permit or rule condition; and,
3. A statement of compliance or noncompliance with each permit or rule condition.

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

3.4. Recordkeeping Requirements

3.4.1. **Retention of records.** The permittee shall maintain records of all information (including monitoring data, support information, reports and notifications) required by this permit recorded in a form suitable and readily available for expeditious inspection and review. Support information includes all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation. The files shall be maintained for at least five (5) years following the date of each occurrence, measurement, maintenance, corrective action, report, or record. At a minimum, the most recent two (2) years of data shall be maintained on site. The remaining three (3) years of data may be maintained off site, but must remain accessible within a reasonable time. Where appropriate, the permittee may maintain records electronically (on a computer, on computer floppy disks, CDs, DVDs, or magnetic tape disks), on microfilm, or on microfiche.

3.4.2. **Odors.** For the purposes of 45CSR4, the permittee shall maintain a record of all odor complaints received, any investigation performed in response to such a complaint, and any responsive action(s) taken.
[45CSR§4. *State-Enforceable only.*]

3.5. Reporting Requirements

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

3.5.2. **Confidential information.** A permittee may request confidential treatment for the submission of reporting required by this permit pursuant to the limitations and procedures of W.Va. Code § 22-5-10 and 45CSR31.

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

If to the DAQ:

Director
WVDEP
Division of Air Quality
601 57th Street, SE
Charleston, WV 25304-2345

If to the USEPA:

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

3.5.4. **Operating Fee.**
In accordance with 45CSR30 – Operating Permit Program, the permittee shall submit a Certified Emissions Statement (CES) and pay fees on an annual basis in accordance with the submittal requirements of the Division of Air Quality. A receipt for the appropriate fee shall be maintained on the premises for which the receipt has been issued, and shall be made immediately available for inspection by the Secretary or his/her duly authorized representative.

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

4.0. Source-Specific Requirements

4.1. Limitations and Standards

4.1.1. Only those emission units/sources as identified in Table 1.0, with the exception of any *de minimis* sources as identified under Table 45-13B of 45CSR13, are authorized at the permitted facility by this permit. In accordance with the information filed in Permit Application R13-3269A, the emission units/sources identified under Table 1.0 of this permit shall be installed, maintained, and operated so as to minimize any fugitive escape of pollutants, shall not exceed the listed maximum design capacities, shall use the specified control devices, and comply with any other information provided under Table 1.0.

4.1.2. <u>Compressor Engines</u>
The compressor engines, identified as ENG-001 through ENG-004, shall meet the following requirements:

a. Each unit shall be a Caterpillar, G3616 4SLB 5,350 hp compressor engine and shall only be fired by pipeline-quality natural gas;

b. At all times each engine is in operation, an EMIT Technologies, Inc. Model EBX-9000-3036F-8C4E-48C oxidation catalyst shall be used for emissions control;

c. The maximum emissions from each engine, as controlled by the oxidation catalyst specified under 4.1.2(b), shall not exceed the limits given in the following table:

Table 4.1.2(c): Per-Compressor Engine Emission Limits

Pollutant	PPH(1)	TPY
CO	2.04	8.93
NO_x	5.90	25.83
$PM_{2.5}/PM_{10}/PM$(2)	0.39	1.73
VOC	3.93	17.23
Formaldehyde	0.24	1.03

(1) PPH emissions based on specific model of engine, engine size, and control technology.
(2) Includes condensables.

d. As the annual emissions are based on 8,760 hours of operation, there is no annual limit on hours of operation or natural gas combusted on an annual basis;

e. The emission limitations specified in Table 4.1.2(c) shall apply at all times except during periods of start-up and shut-down provided that the duration of these periods does not exceed 30 minutes per occurrence. The permittee shall operate the engine in a manner consistent with good air pollution control practices for minimizing emissions at all times, including periods of start-up and shut-down. The emissions from start-up and shut-down shall be included in the twelve (12) month rolling total of emissions. The permittee shall comply with all applicable start-up and shut-down requirements in accordance with 40 CFR Part 60, Subparts JJJJ and 40 CFR Part 63, Subpart ZZZZ.

f. **40 CFR 60, Subpart JJJJ**
Owners and operators of stationary SI ICE with a maximum engine power greater than or equal to 75 KW (100 HP) (except gasoline and rich burn engines that use LPG) must comply with the emission standards in Table 1 to this subpart for their stationary SI ICE.
[40 CFR §60.4233(e)]

g. **40 CFR 60, Subpart OOOOa**
You must reduce GHG (in the form of a limitation on emissions of methane) and VOC emissions by complying with the standards in paragraphs (a) through (d) of this section for each reciprocating compressor affected facility.

(1) You must replace the reciprocating compressor rod packing according to either paragraph (a)(1) or (2) of this section, or you must comply with paragraph (a)(3) of this section.

(i) On or before the compressor has operated for 26,000 hours. The number of hours of operation must be continuously monitored beginning upon initial startup of your reciprocating compressor affected facility, or the date of the most recent reciprocating compressor rod packing replacement, whichever is later.
[40 CFR §60.5385a(a)(1)]

(ii) Prior to 36 months from the date of the most recent rod packing replacement, or 36 months from the date of startup for a new reciprocating compressor for which the rod packing has not yet been replaced.
[40 CFR §60.5385a(a)(2)]

(iii) Collect the methane and VOC emissions from the rod packing using a rod packing emissions collection system that operates under negative pressure and route the rod packing emissions to a process through a closed vent system that meets the requirements of §60.5411a(a) and (d).
[40 CFR §60.5385a(a)(3)]

h. **40 CFR 63, Subpart ZZZZ**
An affected source that meets any of the criteria in paragraphs (c)(1) through (7) of this section must meet the requirements of this part by meeting the requirements of 40 CFR part 60 subpart IIII, for compression ignition engines or 40 CFR part 60 subpart JJJJ, for spark ignition engines. No further requirements apply for such engines under this part.
[40 CFR §63.6590(c)]

(1) A new or reconstructed stationary RICE located at an area source;
[40 CFR §63.6590(c)(1)]

4.1.3. <u>Oxidation Catalysts</u>
Use of oxidation catalysts shall be in accordance with the following:

a. Lean-burn natural gas compressor engine(s) equipped with oxidation catalyst air pollution control devices shall be fitted with a closed-loop automatic air/fuel ratio feedback controller to ensure emissions of regulated pollutants do not exceed the emission limits listed under Table 4.1.2(c) for any engine/oxidation catalyst combination under varying load. The closed-loop, automatic air/fuel ratio controller shall control a fuel metering valve to ensure a lean-rich mixture;

b. For natural gas compressor engine(s), the permittee shall monitor the temperature to the inlet of the catalyst and in accordance with manufacturer's specifications; a high temperature alarm shall shut off the engine before thermal deactivation of the catalyst occurs. If the engine shuts off due to high temperature, the permittee shall also check for thermal deactivation of the catalyst before normal operations are resumed; and

c. The permittee shall follow a written operation and maintenance plan that provides the periodic and annual maintenance requirements of the oxidation catalyst (this plan may be based on manufacturer's recommendations on operation and maintenance).

4.1.4. **Microturbines**

The Microturbines, identified as EG-001 through EG-005, shall meet the following requirements:

a. Each individual unit shall be a Capstone C200 NG 200kWe (output) Microturbine, shall not exceed a rated MDHI of 2.28 mmBtu/hr (based on a HHV of 1,226 Btu/scf), and shall only be fired by natural gas;

b. The maximum emissions from each individual Microturbine shall not exceed the limits given in the following table:

Table 4.1.3(b): Per-Microturbine Emission Limits

Pollutant	PPH(1)	TPY
CO	0.22	0.96
NO_x	0.08	0.35

(1) PPH emissions based on specific model of Microturbine.

c. As the annual emissions are based on 8,760 hours of operation, there are no annual limits on hours of operation or natural gas combusted on an annual basis.

4.1.5. **Glycol Dehydration Units**

The Glycol Dehydration Units, identified as DEHY-001 and DEHY-002, shall meet the following requirements:

a. The maximum dry natural gas throughput to each Glycol Dehydration Unit identified as DEHY-001 and DEHY-002 shall not exceed 125 mmscf/day or 45,625 mmscf/year.

b. The maximum glycol recirculation rate in each unit shall not exceed 18.8 gallons per minute;

c. The maximum aggregate emissions from each unit (both Glycol Dehydrator Regeneration Still Vent and Flash Tank), as emitted after combustion at the associated flare (FLARE-001 or FLARE-002), shall not exceed the limits given in the following table:

Table 4.1.5(c): Per-Glycol Dehydrator Regeneration Still Vent/Flash Tank Controlled Emission Limits(1)

Pollutant	PPH	TPY
VOC	1.55	6.80
n-Hexane	*0.04*	*0.18*

Pollutant	PPH	TPY
Benzene	*0.08*	*0.36*
Toluene	*0.22*	*0.97*
Ethylbenzene	*0.04*	*0.17*
Xylene	*0.27*	*1.17*
2,2,4-Trimethylpentane	*0.03*	*0.11*
Total HAPs	0.68	2.96

(1) Emissions based on GLYCalc Version 4.0 using wet gas throughputs as limited under 4.1.5(a) and glycol recirculation rate as limited under 4.1.5(b).

d. Vapors from each Glycol Dehydrator Flash Tank shall be captured and sent either sent to the flame zone of the reboiler as fuel or to the associated enclosed flare for destruction using a closed vent system. The closed vent system shall meet the requirements given under 4.1.11; and

e. **40 CFR 63, Subpart HH: Applicability and Designation of Affected Source**
Any source that has actual emissions of 5 tons per year or more of a single HAP, or 12.5 tons per year or more of a combination of HAP (i.e., 50 percent of the major source thresholds), shall update its major source determination within 1 year of the prior determination or October 15, 2012, whichever is later, and each year thereafter, using gas composition data measured during the preceding 12 months.
[40CFR§63.760(c)]

f. **40 CFR 63, Subpart HH**
Exemptions. The owner or operator of an area source is exempt from the requirements of paragraph (d) of this section if the criteria listed in paragraph (e)(1)(i) or (ii) of this section are met, except that the records of the determination of these criteria must be maintained as required in § 63.774(d)(1).
[40 CFR §63.764(e)(1)]

(1) The actual average emissions of benzene from the glycol dehydration unit process vent to the atmosphere are less than 0.90 megagram per year, as determined by the procedures specified in § 63.772(b)(2) of this subpart.
[40 CFR §63.764(e)(1)(ii)]

g. For the purposes of determining actual average benzene emissions, the methods specified in § 63.772(b) of 40 CFR 63, Subpart HH shall be used if the permittee is exempt from § 63.764(d).

4.1.6. <u>Glycol Dehydration Reboilers</u>
The Glycol Dehydration Unit Reboilers, identified as RB-001 and RB-002, shall meet the following requirements:

a. The MDHI of each unit shall not exceed 2.31 mmBtu/hr and the units shall only be fired by natural gas or captured flash gas;

b. The maximum emissions from each Reboiler's combustion exhaust shall not exceed the limits given in the following table;

Table 4.1.6(b): Reboiler Emission Limits

Pollutant	PPH(1)	TPY
CO	0.16	0.69
NO_x	0.19	0.82

(1) PPH emissions based on MDHI of Reboilers and emission factors from AP-42, Section 1.4.

c. As the annual emissions are based on 8,760 hours of operation, there is no annual limit on hours of operation or natural gas/flash gas combusted on an annual basis for either Reboiler; and

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d. **45CSR2**
No person shall cause, suffer, allow or permit emission of smoke and/or particulate matter into the open air from any fuel burning unit which is greater than ten (10) percent opacity based on a six minute block average. **[40CSR§2-3.1]**

4.1.7. **Fuel Gas Heaters**
The Fuel Gas Heater, identified as HTR-1 and HTR-2, shall meet the following requirements:

a. The MDHI of the HTR-1 and HTR-2 shall not exceed 1.15 mmBtu/hr and 0.77 mmBtu/hr, respectively and the units shall only be fired by natural gas;

b. The maximum emissions from the Fuel Gas Heaters combustion exhaust shall not exceed the limits given in the following table;

Table 4.1.7(b): Fuel Gas Heaters Emission Limits

HTR-1		
Pollutant	**PPH**	**TPY**
CO	0.08	0.35
NO_x	0.09	0.41
HTR-2		
Pollutant	**PPH**	**TPY**
CO	0.05	0.23
NO_x	0.06	0.28

c. As the annual emissions are based on 8,760 hours of operation, there is no annual limit on hours of operation or natural gas combusted on an annual basis for either Fuel Gas Heater.

4.1.8. **Storage Tanks**
Use of the produced liquids storage tanks, identified as T-001 and T-002, shall be in accordance with the following:

a. Tank size and material stored shall be limited as specified under Table 1.0 of this permit.

b. The aggregate storage tank throughput shall not exceed a limit of 210,000 gallons/year of produced liquids. The permittee shall not exceed the limit without first obtaining a modification to this permit to determine Subpart OOOOa applicability;

c. The permittee shall route all VOC and HAP emissions (working/breathing/flashing) from the storage tanks to an enclosed flare (FLARE-003). The vapors shall be routed to the control device using a closed vent system according to the requirements of 4.1.11; and

d. **Cover Requirements**
The permittee shall comply with the following storage tank cover requirements:

(1) The cover and all openings on the cover (e.g., access hatches, sampling ports, pressure relief valves and gauge wells) shall form a continuous impermeable barrier over the entire surface area of the liquid in the storage vessel.

(2) Each cover opening shall be secured in a closed, sealed position (e.g., covered by a gasketed lid or cap) whenever material is in the unit on which the cover is installed except during those times when it is necessary to use an opening as follows:

(i) To add material to, or remove material from the unit (this includes openings necessary to equalize or balance the internal pressure of the unit following changes in the level of the material in the unit);

(ii) To inspect or sample the material in the unit;

(iii) To inspect, maintain, repair, or replace equipment located inside the unit; or

(iv) To vent liquids, gases, or fumes from the unit through a closed-vent system designed and operated in accordance with the requirements of this permit to a control device or to a process.

(3) Each storage vessel thief hatch shall be weighted and properly seated. The permittee shall select gasket material for the hatch based on composition of the fluid in the storage vessel and weather conditions.

4.1.9. **Truck Loadout**
The Truck Loading operations, identified as L1, shall be in accordance with the following requirements:

a. *[Reserved]*

b. The maximum loadout of condensate from the storage tanks shall not exceed 15,330 gallons per year.

4.1.10. **Enclosed Flares**
The Enclosed Flares, identified as FLARE-001 and FLARE-002, shall operate according to the following requirements:

a. Each enclosed flare shall be non-assisted and the maximum capacity of the flare shall not exceed heat input as given under Emissions Table 1.0;

b. The maximum combustion exhaust emissions from the enclosed flares shall not exceed the limits given in the following table;

Table 4.1.10(b): Enclosed Flares Combustion Exhaust Emission Limits

FLARE-001/FLARE-002 (Per-Unit)		
Pollutant	**PPH**	**TPY**
CO	0.49	2.13
NO_x	0.58	2.53
FLARE-003		
Pollutant	**PPH**	**TPY**
CO	2.82	12.34
NO_x	3.35	14.69

c. Enclosed flares FLARE-001 and FLARE-002 shall be designed, operated, and maintained according to good engineering practices or manufacturing recommendations so as to achieve, at a minimum, a hydrocarbon combustion rate of 98.0%;

d. Each enclosed flare shall be operated with a flame present at all times, as determined by the methods specified in 4.2.6(a);

e. Each enclosed flare shall be designed for and operated with no visible emissions as determined by the methods specified in 4.3.4(a) except for either (1) or (2):

(1) periods not to exceed a total of one minute during any 15 minute period, determined on a monthly basis; or

(2) periods not to exceed a total of two (2) minutes during any hour, determined on a quarterly basis if the enclosed combustion device installed was a model tested under §60.5413(d) which meets the criteria in §60.5413(d)(11).

f. Each enclosed flare shall be operated at all times when emissions are vented to them;

g. To ensure compliance with 4.1.10(e) above, the permittee shall monitor in accordance with 4.2.6(d).

h. The permittee shall operate and maintain the enclosed combustion device according to the manufacturer's specifications for operating and maintenance requirements to maintain the guaranteed control efficiency listed under 4.1.10(b).

i. **45CSR6**
All Enclosed flares are subject to 45CSR6. The requirements of 45CSR6 include but are not limited to the following:

(1) The permittee shall not cause, suffer, allow or permit particulate matter to be discharged from the flares into the open air in excess of the quantity determined by use of the following formula:

Emissions (lb/hr) = F x Incinerator Capacity (tons/hr)

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

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

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

[45CSR§6-4.1]

(2) No person shall cause, suffer, allow or permit emission of smoke into the atmosphere from any incinerator which is twenty (20%) percent opacity or greater.
[45CSR6 §4.3]

(3) The provisions of paragraph (i) shall not apply to smoke which is less than forty (40%) percent opacity, for a period or periods aggregating no more than eight (8) minutes per start-up.
[45CSR6 §4.4]

(4) No person shall cause or allow the emission of particles of unburned or partially burned refuse or ash from any incinerator which are large enough to be individually distinguished in the open air.
[45CSR6 §4.5]

(5) Incinerators, including all associated equipment and grounds, shall be designed, operated and maintained so as to prevent the emission of objectionable odors.
[45CSR6 §4.6]

(6) Due to unavoidable malfunction of equipment, emissions exceeding those provided for in this rule may be permitted by the Director for periods not to exceed five (5) days upon specific application to the Director. Such application shall be made within twenty-four (24) hours of the malfunction. In cases of major equipment failure, additional time periods may be granted by the Director provided a corrective program has been submitted by the owner or operator and approved by the Director.
[45CSR6 §8.2]

4.1.11. **Closed Vent Requirements**

The permittee shall meet the following requirements for closed vent systems:

a. The permittee shall design the closed vent system to route all gases, vapors, and fumes captured by the vapor recovery unit system;

b. The permittee shall design and operate the closed vent system with no detectable emissions, as determined following the procedures under 40 CFR 60, Subpart OOOOa for ongoing compliance;

c. The permittee shall meet the requirements specified in (1) and (2) of this section if the closed vent system contains one or more bypass devices that could be used to divert all or a portion of the gases, vapors, or fumes from entering the control device or to a process;

(1) Except as provided in paragraph (2) of this section, you must comply with either paragraph (i) or (ii) of this section for each bypass device.

(i) You must properly install, calibrate, maintain, and operate a flow indicator at the inlet to the bypass device that could divert the stream away from the control device or process to the atmosphere that sounds an alarm, or initiates notification via remote alarm to the nearest field office, when the bypass device is open such that the stream is being, or could be, diverted away from the control device or process to the atmosphere; or

(ii) You must secure the bypass device valve installed at the inlet to the bypass device in the non-diverting position using a car-seal or a lock-and-key type configuration.

(2) Low leg drains, high point bleeds, analyzer vents, open-ended valves or lines, and safety devices are not subject to the requirements of paragraph (i) of this section. Pressure relief valves used to protect the fluid tanks from overpressure are not subject to this section.

4.1.12. **Fugitive Emissions**
The permittee shall mitigate the release of fugitive emissions according to the following requirements:

a. *[Reserved]*

b. The permittee shall install, maintain, and operate all above-ground piping, valves, pumps, etc. that service lines in the transport of potential sources of regulated air pollutants to prevent any substantive fugitive escape of regulated air pollutants. Any above-ground piping, valves, pumps, etc. that shows signs of excess wear and that have a reasonable potential for substantive fugitive emissions of regulated air pollutants shall be replaced;

c. The number of compressor blowdowns, station shutdown vents, filter maintenance releases, and pigging events at the facility shall not exceed 36, 5, 15, and 250, respectively. Compliance with this annual limitation shall be determined using a twelve (12) month rolling total. A twelve (12) month rolling total shall mean the sum of the events from the previous twelve (12) consecutive calendar months. However, in lieu of the event limits given in this section, if the permittee can accurately determine the quantity of gas released during each event, the permittee may show compliance with 4.1.12(c) by limiting total annual gas released to less than 2,651 mscf;

d. The permittee shall develop a plan to limit the duration of any unforeseen release of natural gas by responding to the event in a reasonable time frame. This plan will include the placement of visible contact information at the facility for public reporting such an event. This plan shall be submitted to the DAQ prior to startup of the facility; and

e. The permittee shall meet all applicable requirements given under 40 CFR 60, Subpart OOOOa for mitigation of the emissions of fugitive emissions.

4.1.13. The permittee shall meet all applicable requirements, including those not specified above, as given under 45CSR2, 45CSR6, 40 CFR 60, Subpart JJJJ, and Subpart OOOOa, and 40 CFR 63, Subpart HH and Subpart ZZZZ. Any final revisions made to the above rules will, where applicable, supercede those specifically cited in this section.

4.1.14. **Operation and Maintenance of Air Pollution Control Equipment.** The permittee shall, to the extent practicable, install, maintain, and operate all pollution control equipment listed in Section 1.0 and associated monitoring equipment in a manner consistent with safety and good air pollution control practices for minimizing emissions, or comply with any more stringent limits set forth in this permit or as set forth by any State rule, Federal regulation, or alternative control plan approved by the Secretary.
[45CSR§13-5.11.]

4.2. Monitoring, Compliance Demonstration, Recording and Reporting Requirements

4.2.1. Oxidation Catalysts

The permittee shall meet the following Monitoring, Compliance Demonstration, Recording and Reporting Requirements for the oxidation catalysts:

a. The permittee shall regularly inspect, properly maintain and/or replace catalytic reduction devices and auxiliary air pollution control devices to ensure functional and effective operation of each compressor engine's physical and operational design. The permittee shall ensure proper operation, maintenance and performance of catalytic reduction devices and auxiliary air pollution control devices by:

(1) Maintaining proper operation of the automatic air/fuel ratio controller or automatic feedback controller.

(2) Following the catalyst manufacturer emissions related operating and maintenance recommendations, or develop, implement, or follow a site-specific maintenance plan.

b. To demonstrate compliance with section 4.1.3, the permittee shall maintain records of the maintenance performed on each RICE and/or generator; and

c. To demonstrate compliance with section 4.1.3(c), the permittee shall maintain a copy of the site specific maintenance plan or manufacturer maintenance plan.

4.2.2. Glycol Dehydration Units

The permittee shall meet the following Monitoring, Compliance Demonstration, Recording and Reporting Requirements for the glycol dehydration units:

a. For the purposes of demonstrating compliance with the maximum dry gas throughput limit set forth in 4.1.5(a), the permittee shall monitor and maintain monthly and rolling twelve month records of the dry gas throughput of the Glycol Dehydration Unit;

b. Representative gas sample collection and emissions analysis frequency for the dehydration units shall be upon request by the Secretary. If requested, the permittee shall submit the wet gas analysis report required by section this section within 60 days of conducting the sampling of the wet gas stream as required. This report shall include a potential to emit (PTE) estimate using GRI-GlyCalc Version 3.0 or higher, incorporating the specific parameters measured, as well as a copy of the laboratory analysis. If the results of the compliance determination conducted as required in this section predict the emissions to be at or above 95% of HAPs major source levels or 0.95 tons per year of benzene, the permittee shall submit such determination and all supporting documentation to the Secretary within 15 days after making such determination.

c. Compliance with the Maximum Glycol Recirculation Limitation set forth in 4.1.5(b) shall be determined using an average of a minimum of quarterly readings of the actual glycol pump(s) rate. If more than one pump is operating simultaneously then the rate of each operating pump shall be recorded and totaled for compliance purposes.

d. To demonstrate compliance with the benzene exemption in 4.1.5(f), the following parameters shall be measured at a minimum frequency of once per quarter, with the exception of natural gas flowrate annual daily average, natural gas flowrate maximum design capacity and wet gas

composition, in order to define annual average values or, if monitoring is not practical, some parameters may be assigned default values as listed below.

- Natural Gas Flowrate
  - Operating hours per quarter
  - Quarterly throughput (MMscf/quarter)
  - Annual daily average (MMscf/day), and
  - Maximum design capacity (MMscf/day)
- Absorber temperature and pressure
- Lean glycol circulation rate
- Glycol pump type and maximum design capacity (gpm)
- Flash tank temperature and pressure, if applicable
- Stripping Gas flow rate, if applicable
- Wet gas composition (upstream of the absorber – dehydration column) sampled in accordance with GPA method 2166 and analyzed consistent with GPA extended method 2286 as well as the procedures presented in the GRI-GLYCalc™ Technical Reference User Manual and Handbook V4
- Wet gas water content (lbs H_2O/MMscf)

- Dry gas water content (lbs H_2O/MMscf) at a point directly after exiting the dehydration column and before any additional separation points

  The following operating parameter(s) may be assigned default values when using GRI-GLYCalc:

- Dry gas water content can be assumed to be equivalent to pipeline quality at 7 lb H_2O / MMscf
- Wet gas water content can be assumed to be saturated
- Lean glycol water content if not directly measured may use the default value of 1.5 % water as established by GRI
- Lean glycol circulation rate may be estimated using the TEG recirculation ratio of 3 gal TEG / lb H_2O removed.

  Note: If you are measuring and using actual wet or dry gas water content, then you should also measure the glycol circulation rate rather than using the default TEG recirculation ratio.

e. The permittee shall maintain records of the quarterly dry natural gas throughput through the glycol dehydration unit(s), all monitoring data, wet gas sampling, and GRI-GLYCalcTM emission estimates.

4.2.3. **Glycol Dehydration Reboilers**

Upon request by the Secretary, compliance with the visible emission requirements of 4.1.6(d) shall be determined in accordance with 40 CFR Part 60, Appendix A, Method 9 or by using measurements from continuous opacity monitoring systems approved by the Secretary. The Secretary may require the installation, calibration, maintenance and operation of continuous opacity monitoring systems and may establish policies for the evaluation of continuous opacity monitoring results and the determination of compliance with the visible emission requirements of 4.1.6(d). Continuous opacity monitors shall not be required on fuel burning units which employ wet scrubbing systems for emission control.

[40CSR§2-3.2]

4.2.4 **Storage Tanks**

For the purposes of demonstrating compliance with the storage tank throughput limits set forth in 4.1.8(b), the permittee shall monitor and maintain monthly and rolling twelve month records of the condensate throughput of each the storage tanks. Alternatively, recording the monthly and rolling twelve (12) month total of condensate loaded into tanker trucks from each storage tank according to 4.2.5. can be used to demonstrate compliance.

4.2.5. **Truck Loadout**

For the purposes of demonstrating compliance with the truck loadout limits set forth in 4.1.8, the permittee shall monitor and maintain monthly and rolling twelve month records of the amount of produced liquids loaded into tanker trucks.

4.2.6. **Enclosed Flares**

The permittee shall meet the following Monitoring, Compliance Demonstration, Recording and Reporting Requirements for the enclosed flares:

a. To demonstrate compliance with the pilot flame requirements of 4.1.10(d), the presence of a pilot flame shall be continuously monitored using a thermocouple or any other equivalent device to detect the presence of a flame when emissions are vented to it. The pilot shall be equipped such that it sounds an alarm, or initiates notification via remote alarm to the nearest field office, when the pilot light is out;

b. For any absence of pilot flame, or other indication of smoking or improper equipment operation, you must ensure the equipment is returned to proper operation as soon as practicable after the event occurs. At a minimum, you must: (1) Check the air vent for obstruction. If an obstruction is observed, you must clear the obstruction as soon as practicable. (2) Check for liquid reaching the combustor;

c. The permittee is exempt from the pilot flame requirements of permit condition 4.2.6(b) of this section if the permittee installed an enclosed combustion device model that was tested under § 60.5413(d) which meets the criteria in § 60.5413(d)(11);

d. For the purpose of demonstrating compliance with the continuous pilot flame requirements in 4.1.10(c), the permittee shall maintain records of the times and duration of all periods when the pilot flame was not present and vapors were vented to the device:

   (1) If the permittee is demonstrating compliance to 4.2.6(b) with visual inspections, the permittee shall maintain records of the inspections; and

   (2) If the permittee is demonstrating compliance to 4.2.6(c) with an enclosed combustion device model that was tested under the conditions of § 60.5413(d), a record shall be maintained of the performance test results.

e. To demonstrate compliance with 4.1.10(e), the permittee shall maintain records of the manufacturer's specifications for operating and maintenance requirements to maintain the control efficiency;

f. Any bypass event of an enclosed flare must be reported in writing to the Director of the DAQ as soon as practicable, but within ten (10) calendar days, of the occurrence and shall include, at a minimum, the following information: the date of the bypass, the estimate of VOC emissions released to the atmosphere as a result of the bypass, the cause or suspected cause of the bypass, and any corrective measures taken or planned; and

g. Any time the enclosed flare is not operating when emissions are vented to it, shall be reported in writing to the Director of the DAQ as soon as practicable, but within ten (10) calendar days of the discovery.

4.2.7. **Closed Vent Requirements**

To demonstrate compliance with the closed vent system requirements of 4.1.11, the permittee shall:

a. **Initial requirements.** The permittee shall follow the procedures in 40 CFR 60, Subpart OOOOa. The initial inspection shall include the bypass inspection, conducted according to paragraph (c) of this section.

b. *[Reserved]*

c. **Bypass inspection.** Visually inspect the bypass valve during the initial inspection for the presence of the car seal or lock-and-key type configuration to verify that the valve is maintained in the non-diverting position to ensure that the vent stream is not diverted through the bypass device. If an alternative method is used, conduct the inspection of the bypass as described in the operating procedures.

d. **Unsafe to inspect requirements**. You may designate any parts of the closed vent system as unsafe to inspect if the requirements in paragraphs (1) and (2) of this section are met. Unsafe to inspect parts are exempt from the inspection requirements of paragraphs (a) and (b) of this section.

(1) You determine that the equipment is unsafe to inspect because inspecting personnel would be exposed to an imminent or potential danger as a consequence of complying with the requirements.

(2) You have a written plan that requires inspection of the equipment as frequently aspracticable during safe-to-inspect times.

e. To demonstrate compliance with the closed vent monitoring requirements given under paragraphs (a) through (d) above, the following records shall be maintained:

(1) The initial compliance requirements;

(2) *[Reserved]*

(3) If you are subject to the bypass requirements, the following records shall also be maintained:

(i) Each inspection or each time the key is checked out or a record each time the alarm is sounded;

(ii) Each occurrence that the control device was bypassed. If the device was bypassed, the records shall include the date, time, and duration of the event and shall provide the reason that the event occurred. The record shall also include the estimate of emissions that were released to the environment as a result of the bypass.

(4) Any part of the system that has been designated as "unsafe to inspect" in accordance with 4.2.7(d).

4.2.8. **40 CFR 60, Subpart JJJJ**

The permittee shall comply with all applicable monitoring, compliance demonstration and record-keeping requirements as given under 40 CFR 60, Subpart JJJJ including the following:

If you are an owner or operator of a stationary SI internal combustion engine and must comply with the emission standards specified in §60.4233(d) or (e), you must demonstrate compliance according to one of the methods specified in paragraphs (b)(1) and (2) of this section.
[40 CFR §60.4243(b)]

a. Purchasing a non-certified engine and demonstrating compliance with the emission standards specified in §60.4233(d) or (e) and according to the requirements specified in §60.4244, as applicable, and according to paragraphs (b)(2)(i) and (ii) of this section.
[40 CFR §60.4243(b)(2)]

(1) If you are an owner or operator of a stationary SI internal combustion engine greater than 500 HP, you must keep a maintenance plan and records of conducted maintenance and must, to the extent practicable, maintain and operate the engine in a manner consistent with good air pollution control practice for minimizing emissions. In addition, you must conduct an initial performance test and conduct subsequent performance testing every 8,760 hours or 3 years, whichever comes first, thereafter to demonstrate compliance.
[40 CFR §60.4243(b)(2)(ii)]

4.2.9 **Fugitive Emissions**

The permittee shall meet the following Monitoring, Compliance Demonstration, Recording and Reporting Requirements for the fugitive emissions:

a. For the purposes of determining compliance with 4.1.12(c), the permittee shall monitor and record the monthly and rolling twelve month records of the number of compressor blowdowns, station shutdown vents, filter maintenance releases, and pigging events at the facility. The information will further include the duration, estimated volume of gas vented, and reason for event; and

b. The permittee shall monitor and record other events (not listed under 4.1.12(c)) where a substantive amount of gas is released (i.e., pressure relief trips). The information will further include the duration, estimated volume of gas vented, reason for event, and corrective actions taken.

c. The permittee shall report all events recorded under 4.2.9(b) to the DAQ in writing as soon as practicable but no later than fifteen (15) days after the event.

4.2.10. **40 CFR 63, Subpart HH**

The permittee shall comply with all applicable monitoring, compliance demonstration and record-keeping requirements as given under 40 CFR 63, Subpart HH including the following:

Determination of glycol dehydration unit flowrate, benzene emissions, or BTEX emissions. The procedures of this paragraph shall be used by an owner or operator to determine glycol dehydration unit natural gas flowrate, benzene emissions, or BTEX emissions.
[40 CFR §63.772(b)]

a. The determination of actual average benzene or BTEX emissions from a glycol dehydration unit shall be made using the procedures of either paragraph (b)(2)(i) or (ii) of this section.

Emissions shall be determined either uncontrolled, or with federally enforceable controls in place. **[40 CFR §63.772(b)(2)]**

(1) The owner or operator shall determine actual average benzene or BTEX emissions using the model GRI-GLYCalcTM , Version 3.0 or higher, and the procedures presented in the associated GRI-GLYCalcTM Technical Reference Manual. Inputs to the model shall be representative of actual operating conditions of the glycol dehydration unit and may be determined using the procedures documented in the Gas Research Institute (GRI) report entitled "Atmospheric Rich/Lean Method for Determining Glycol Dehydrator Emissions" (GRI-95/0368.1); or
[40 CFR §63.772(b)(2)(i)]

(2) The owner or operator shall determine an average mass rate of benzene or BTEX emissions in kilograms per hour through direct measurement using the methods in § 63.772(a)(1)(i) or (ii), or an alternative method according to § 63.7(f). Annual emissions in kilograms per year shall be determined by multiplying the mass rate by the number of hours the unit is operated per year. This result shall be converted to megagrams per year.
[40 CFR §63.772(b)(2)(ii)]

4.2.11. The permittee shall meet all applicable Monitoring, Compliance Demonstration and Source-Specific Recordkeeping and Reporting Requirements as given under 45CSR2, 45CSR6, 40 CFR 60, Subpart JJJJ, and Subpart OOOOa, and 40 CFR 63, Subpart HH and Subpart ZZZZ. Any final revisions made to 40 CFR Subpart JJJJ and 40 CFR 63, Subpart HH will, where applicable, supercede those specifically cited in this section.

4.3. Performance Testing Requirements

4.3.1. At such reasonable time(s) as the Secretary may designate, in accordance with the provisions of 3.3 of this permit, the permittee shall conduct or have conducted test(s) to determine compliance with the emission limitations established in this permit and/or applicable regulations.

4.3.2. **Compressor Engines**
The permittee shall, pursuant to the timing and other requirements of 40 CFR 60, Subpart JJJJ, conduct, or have conducted, performance testing on the compressor engines to determine the emission rates of CO, NO_x, and VOCs. The testing shall, in addition to meeting all applicable requirements under 40 CFR 60, Subpart JJJJ, be in accordance with 3.3.1. Results of the this performance testing shall, unless granted in writing a waiver by the Director, be used to determine compliance with the CO, NO_x, and VOC emission limits given under 4.1.2(c).

4.3.3. **Glycol Dehydration Units**
If requested under 4.2.2(b), the permittee shall sample wet natural gas in accordance with the Gas Processor Association (GPA) Method 2166 and analyze the samples in accordance with GPA Method 2286. The permittee may utilize other equivalent methods provided they are approved in advance by DAQ as part of a testing protocol. If alternative methods are proposed, a test protocol shall be submitted for approval no later than 60 days before the scheduled test date.

Note: The DAQ defines a representative wet gas sample to be one that is characteristic of the average gas composition dehydrated throughout a calendar year. If an isolated sample is not indicative of the annual average composition, then a company may opt to produce a weighted average based on throughput between multiple sampling events, which can be used to define a more representative average annual gas composition profile.

4.3.4. **Enclosed Flares**

The permittee shall meet the following Performance Testing Requirements for the enclosed flares:

a. To demonstrate compliance with the visible emissions requirements of 4.1.10(e), the permittee shall conduct visible emission checks and/or opacity monitoring and recordkeeping for each enclosed flare.

(1) The visible emission check shall determine the presence or absence of visible emissions. The observations shall be conducted according to Section 11 of EPA Method 22. At a minimum, the observer must be trained and knowledgeable regarding the effects of background contrast, ambient lighting, observer position relative to lighting, wind, and the presence of uncombined water (condensing water vapor) on the visibility of emissions. This training may be obtained from written materials found in the References 1 and 2 from 40CFR Part 60, Appendix A, Method 22 or from the lecture portion of the 40CFR Part 60, Appendix A, Method 9 certification course. The observation period shall be:

(i) *[Reserved]*;
(ii) a minimum of 15 minutes if demonstrating compliance with 4.1.10(e)(1); or
(iii) a minimum of 1 hour if demonstrating compliance with 4.1.10(e)(2).

(2) The visible emission check shall be conducted initially within 180 days of start-up to demonstrate compliance while vapors are being sent to the control device.

b. At such reasonable times as the Secretary may designate, the operator of any incinerator shall be required to conduct or have conducted stack tests to determine the particulate matter loading, by using 40 CFR Part 60, Appendix A, Method 5, and volatile organic compound loading, by using Methods 18 and 25A of 40 CFR Part 60, Appendix A, Method 320 of 40 CFR Part 63, Appendix A, or ASTM D 6348-03 or other equivalent U.S. EPA approved method approved by the Secretary, in exhaust gases. Such tests shall be conducted in such manner as the Secretary may specify and be filed on forms and in a manner acceptable to the Secretary. The Secretary may, at the Secretary's option, witness or conduct such stack tests. Should the Secretary exercise his or her option to conduct such tests, the operator will provide all the necessary sampling connections and sampling ports to be located in such manner as the Secretary may require, power for test equipment and the required safety equipment such as scaffolding, railings and ladders to comply with generally accepted good safety practices. The Secretary may conduct such other tests as the Secretary may deem necessary to evaluate air pollution emissions other than those noted above. **[45CSR§6-7.1 and 7.2]**

4.3.5. The permittee shall meet all applicable Performance Testing Requirements as given under 45CSR2, 45CSR6, 40 CFR 60, Subpart JJJJ, and Subpart OOOOa, and 40 CFR 63, Subpart HH and Subpart ZZZZ.

4.4. Additional Recordkeeping Requirements

4.4.1. **Record of Monitoring.** The permittee shall keep records of monitoring information that include the following:

a. The date, place as defined in this permit and time of sampling or measurements;

b. The date(s) analyses were performed;

c. The company or entity that performed the analyses;

d. The analytical techniques or methods used;

e. The results of the analyses; and

f. The operating conditions existing at the time of sampling or measurement.

4.4.2. **Record of Maintenance of Air Pollution Control Equipment.** For all pollution control equipment listed in Section 1.0, the permittee shall maintain accurate records of all required pollution control equipment inspection and/or preventative maintenance procedures.

4.4.3. **Record of Malfunctions of Air Pollution Control Equipment.** For all air pollution control equipment listed in Section 1.0, the permittee shall maintain records of the occurrence and duration of any malfunction or operational shutdown of the air pollution control equipment during which excess emissions occur. For each such case, the following information shall be recorded:

a. The equipment involved.

b. Steps taken to minimize emissions during the event.

c. The duration of the event.

d. The estimated increase in emissions during the event.

For each such case associated with an equipment malfunction, the additional information shall also be recorded:

e. The cause of the malfunction.

f. Steps taken to correct the malfunction.

g. Any changes or modifications to equipment or procedures that would help prevent future recurrences of the malfunction.

4.4.4. For the purpose of demonstrating compliance with the visible emissions and opacity requirements, the permittee shall maintain records of the visible emission opacity tests and checks. The permittee shall maintain records of all monitoring data required by 4.3.4(a) documenting the date and time of each visible emission check, the emission point or equipment/ source identification number, the name or means of identification of the observer, the results of the check(s), whether the visible emissions are normal for the process, and, if applicable, all corrective measures taken or planned. The permittee shall also record the general weather conditions (i.e. sunny, approximately 80°F, 6-10 mph NE wind) during the visual emission check(s). Should a visible emission observation be required to be performed per the requirements specified in Method 9, the data records of each observation shall be maintained per the requirements of Method 9. For an emission unit out of service during the evaluation, the record of observation may note "out of service" (O/S) or equivalent.

4.5. Additional Reporting Requirements

4.5.1. Any deviation of the allowable visible emission requirement for any emission source discovered during observation using 40CFR Part 60, Appendix A, Method 9 per 4.3.4(a)(3) must be reported in writing to the Director of the DAQ as soon as practicable, but within ten (10) calendar days, of the occurrence and shall include, at a minimum, the following information: the results of the visible determination of opacity of emissions, the cause or suspected cause of the violation(s), and any corrective measures taken or planned.

CERTIFICATION OF DATA ACCURACY

I, the undersigned, hereby certify that, based on information and belief formed after reasonable inquiry, all information contained in the attached _____, representing the period beginning _____ and ending _____, and any supporting documents appended hereto, is true, accurate, and complete.

Signature[1] _____ _____
(please use blue ink) Responsible Official or Authorized Representative Date

Name and Title _____ _____
(please print or type) Name Title

Telephone No. _____ Fax No. _____

---

[1] This form shall be signed by a "Responsible Official." "Responsible Official" means one of the following:

a. For a corporation: The president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy or decision-making functions for the corporation, or a duly authorized representative of such person if the representative is responsible for the overall operation of one or more manufacturing, production, or operating facilities applying for or subject to a permit and either:

(I) the facilities employ more than 250 persons or have a gross annual sales or expenditures exceeding $25 million (in second quarter 1980 dollars), or

(ii) the delegation of authority to such representative is approved in advance by the Director;

b. For a partnership or sole proprietorship: a general partner or the proprietor, respectively;

c. For a municipality, State, Federal, or other public entity: either a principal executive officer or ranking elected official. For the purposes of this part, a principal executive officer of a Federal agency includes the chief executive officer having responsibility for the overall operations of a principal geographic unit of the agency (e.g., a Regional Administrator of USEPA); or

d. The designated representative delegated with such authority and approved in advance by the Director.

west virginia department of environmental protection

Division of Air Quality
601 57th Street, SE
Charleston, WV 25304
Phone: (304) 926-0475 • Fax: (304) 926-0479

Earl Ray Tomblin, Governor
Randy C. Huffman, Cabinet Secretary
www.dep.wv.gov

ENGINEERING EVALUATION / FACT SHEET

BACKGROUND INFORMATION

Application No.:	R13-3269A
Plant ID No.:	017-00158
Applicant:	EQT Gathering, LLC
Facility Name:	Janus Compressor Station
Location:	Near West Union, Doddridge County
SIC/NAICS Code:	1311/211111
Application Type:	Modification
Received Date:	July 5, 2016 (Class II Administrative Update) October 17, 2016 (Revised Full Modification)
Engineer Assigned:	Joe Kessler
Fee Amount:	$2,000
Date Received:	July 11, 2016 ($300) November 2, 2016 ($1,700)
Complete Date:	November 7, 2016
Due Date:	February 5, 2016
Applicant's Ad Date:	October 14, 2016
Newspaper:	*The Doddridge Independent*
UTM's:	516.767 km Easting • 4,345.400 km Northing • Zone 17
Latitude/Longitude:	39.25777/-80.80566
Description:	Updating the facility wide fugitive emission calculations, station volume venting, and pigging emissions calculations.

On July 5, 2016 EQT Gathering, LLC (EQT) submitted a Class II Administrative Update (A/U) to Permit Number R13-3269. After being deemed complete, and during the subsequent technical review, it was discovered that the increase in emissions associated with the proposed changes was in excess of the thresholds that would require the proposed changes to be reviewed as a full modification. It was also discovered that the original legal advertisement did not include the contribution from fugitive emission increases. Therefore, EQT was required to submit a revised full modification permit application with an additional fee and place a new legal advertisement. Thereafter, EQT withdrew the request to cease flaring of the storage tank vapors which may have made the permitting action eligible to be reviewed again as an A/U. However, due to the possible increase of VOCs over 144 lbs/day, it remained as a full modification.

DESCRIPTION OF PROCESS/MODIFICATIONS

Existing Facility

On February 12, 2016, EQT was issued Permit Number R13-3269 to construct a natural gas compressor station located approximately 3.1 miles south-southwest of West Union, WV east of County Route (CR) 11 (Arnold's Creek Road). The Janus Compressor Station consists of four (4) Caterpillar G3616 4-Stroke Lean Burn (4SLB) 5,350 horsepower (hp) compressor engines, five (5) Capstone C200 NG 200kWe Microturbines, two (2) Exterran 125 mmscf/day triethylene glycol (TEG) dehydration units (GDUs), two (2) fuel gas heaters (1.15 and 0.77 mmBtu/hr), and two (2) 8,820 gallon produced liquid storage tanks.

Natural gas produced in area wells enter into the facility and is compressed by the engines (ENG-001 through ENG-004). The compressed gas is sent and through the GDUs (DEHY-001 and DEHY-002) where it is dehydrated to the desired level. The compressor engines are each controlled (CO, VOCs, and formaldehyde) by an EMIT Technologies EBX-9000-3036F-8C4E-48C oxidation catalyst (C1 through C4).

Glycol dehydration is a liquid desiccant system used for the removal of water from natural gas. In each GDU, lean, water-free glycol is fed to the top of an absorber (known as a "contactor") where it is contacted with the wet natural gas stream. The glycol removes water from the natural gas by physical absorption and is carried out the bottom of the column. The dry natural gas leaves the top of the absorption column and is fed into a pipeline for transportation. The dehydrator still vent gases are each sent an associated enclosed flare (FLARE-001 and FLARE-002) for destruction. Additionally, each GDU contains several TEG storage tanks. However, the storage tanks are defined as *de minimis* sources under Table 45-13B of 45CSR13 as they are each less than 10,000 gallons and TEG has an extremely low vapor pressure (<0.01 mm Hg).

After leaving the absorber, each glycol stream - now referred to as "rich" glycol - is fed to a flash vessel where flashed hydrocarbon vapors are either sent to the reboiler as fuel or, if the reboiler is not in operation, sent to the associated enclosed flare. Any liquid hydrocarbons removed in the flash tank are sent to one of the 8,820 gallon produced liquid storage tanks (T-001 and T-002). Currently, vapors from the produced liquids storage tanks (working/breathing/flashing) are sent to an associated enclosed flare (FLARE-003) for control.

After leaving the flash vessel, in each unit, the rich glycol is fed to a Glycol Regenerator Column. Each Regenerator Column consists of a column, an overhead condenser, and the reboiler. The glycol is thermally regenerated to remove excess water and regain high purity. The heat for the regeneration is provided by two (2) 2.31 mmBtu/hr natural gas-fired reboilers (RB-001 and RB-002). The hot, lean glycol is cooled by a heat-exchanger and is then fed to a pump where it is sent to the glycol absorber for reuse. Liquids produced in the regeneration process are sent to one of the facility storage tanks.

A portion of the gas is withdrawn after dehydration but before the station outlet metering and sent to the fuel gas system. The fuel gas is directed through a fuel gas scrubber and metering before being directed to the compressor engines and other gas-powered equipment. Two (2) fuel gas heaters (HTR-1 and HTR-2) are used in the fuel gas system to prevent the formation of hydrates and to minimize condensate dropout from the pressure reduction.

There are many other small storage tanks at the facility (T-003 through T-024) that are used for bulk storage (lube oil storage, compressor oil storage, TEG storage, etc.). Any emissions from the miscellaneous tanks are, based on the vapor pressures of the materials stored, considered insignificant. Additionally, the facility utilizes an uncontrolled truck loadout (L1) to remove condensate and produced water from the site (estimated to be a maximum of 210,000 gallons/year). Five (5) 200 kWe uncontrolled Microturbines (EG-001 through EG-005) are used to produce primary power for the facility.

Proposed Modifications

EQT is now proposing to modify the existing facility by updating the facility-wide fugitive emission calculations, station volume venting, and pigging emissions calculations based on as-built component counts and updated maintenance scenarios.

SITE INSPECTION

On November 18, 2015, the writer conducted an inspection of the proposed location of the Janus Compressor Station. The Janus site is located in a rural area of Doddridge County approximately 3.1 miles south-southwest of West Union, WV east of County Route (CR) 11 (Arnold's Creek Road). The writer was accompanied on the inspection by Mr. Alex Bosiljevac, Environmental Coordinator with EQT.

Due to the nature of the source and the proposed changes, the writer deemed an additional site inspection as not necessary. The facility was last "Part Of Site" inspected by DAQ Compliance/ Enforcement (C/E) Inspector Mr. Douglas Hammel on April 27, 2016. Based on that inspection, the facility was determined to be "Status 30 - In Compliance."

AIR EMISSIONS AND CALCULATION METHODOLOGIES

EQT included in Attachment N of the permit application air emissions calculations for the equipment and processes at the Janus Compressor Station. The following will only summarize the air emissions and calculation methodologies of the emission sources being modified as part of this permitting action.

Equipment Leaks

EQT based their revised VOC fugitive equipment leak calculations on emission factors taken from the document EPA-453/R-95-017 - "Protocol for Equipment Leak Emission Estimates" Table 2-4 (VOCs) with a 20% safety factor added on. No control efficiencies, as based on a Leak Detection and Repair (LDAR) protocol, were applied. Component counts were given and were based on updated field counts. VOC by-weight percentages (15%) of the natural gas was also used in the calculations and is based on a site-specific gas analysis taken on October 10, 2012.

Maintenance and Emergency Events

EQT also included in their fugitive emission estimate a certain number of scenarios (revised based on as-built data) where natural gas is released for emergency or maintenance purposes. Those included were filter maintenance (15 events/year), compressor blowdown/startup events (36 events/year), station emergency shutdowns (5 event/year), and "pigging" events (250 events/year). Emissions were calculated in accordance with Equations W-35 and W-36 in Subpart W of 40 CFR 98. VOC by-weight percentages (15%) of the natural gas was also used in the calculations and is based on a site-specific gas analysis taken on October 10, 2012.

Emissions Summary

Based on the above estimation methodology as submitted in Attachment N of the permit application, the post-modification facility-wide PTE of the revised Janus Compressor Station is given in Attachment A. The change in annual facility-wide PTE as a result of the modifications evaluated herein is given in the following table:

Table 1: Change in Facility-Wide Annual PTE (in tons/year)

Pollutant	R13-3269[(1)]	R13-3269A	Change
CO	59.03	59.03	0.00
NO_X	127.10	127.10	0.00
$PM_{2.5}/PM_{10}/PM$	8.94	8.94	0.00
SO_2	0.68	0.68	0.00
VOCs	95.71	114.50	18.79
Total HAPs	23.96	22.26	(1.70)

(1) Emissions taken from R13-3269 Fact Sheet Attachment A.

REGULATORY APPLICABILITY

This section will address the potential regulatory applicability/non-applicability of substantive state and federal air quality rules relevant to the emission units/sources modified at the Janus Compressor Station.

45CSR13: Permits for Construction, Modification, Relocation and Operation of Stationary Sources of Air Pollutants, Notification Requirements, Administrative Updates, Temporary Permits, General Permits, and Procedures for Evaluation

The proposed changes of the Janus Compressor Station evaluated herein has a potential to increase emissions in excess of 144 pounds per calendar day of a regulated pollutant and, therefore, pursuant to §45-13-2.17, the changes are defined as a "modification" under 45CSR13. Pursuant to §45-13-5.1, "[n]o person shall cause, suffer, allow or permit the construction, modification,

relocation and operation of any stationary source to be commenced without . . . obtaining a permit to construct." Therefore, EQT is required to obtain a permit under 45CSR13 for the modification of the facility.

As required under §45-13-8.3 ("Notice Level A"), EQT placed a Class I legal advertisement in a "newspaper of *general circulation* in the area where the source is . . . located." The ad ran on October 14, 2016 in *The Doddridge Independent* and the affidavit of publication for this legal advertisement was submitted on October 27, 2016.

45CSR14: Permits for Construction and Major Modification of Major Stationary Sources of Air Pollution for the Prevention of Significant Deterioration - (NON APPLICABILITY)

The Janus Compressor Station is located in Doddridge County, WV. Doddridge County is classified as "in attainment" with all National Ambient Air Quality Standards. Therefore, as the facility is not a "listed source" under §45-14-2.43, the individual major source applicability threshold for all pollutants is 250 TPY. As given in Attachment A, the facility-wide PTE of the modified Janus Compressor Station is less than 250 TPY for all criteria pollutants. Therefore, the facility is not defined as a "major stationary source" under either 45CSR14 and the rule does not apply.

45CSR30: Requirements for Operating Permits

45CSR30 provides for the establishment of a comprehensive air quality permitting system consistent with the requirements of Title V of the Clean Air Act. The Janus Compressor Station meets the definition of a "major source under §112 of the Clean Air Act" as outlined under §45-30-2.26 and clarified (fugitive policy) under 45CSR30b. The facility-wide PTE (see Attachment A) of a regulated pollutant does exceed 100 TPY. Therefore, the source is a major source subject to 45CSR30. The Title V (45CSR30) application, or revisions to that application as based on the proposed changes discussed herein, is due within twelve (12) months after the commencement date of any operation authorized by this permit.

40CFR60 Subpart OOOOa: Standards of Performance for Crude Oil and Natural Gas Production, Transmission and Distribution for which Construction, Modification or Reconstruction Commenced after September 18, 2015

40CFR60 Subpart OOOOa establishes emission standards and compliance schedules for the control of the pollutant greenhouse gases (GHG) and VOCs. The greenhouse gas standard in this subpart is in the form of a limitation on emissions of methane from affected facilities in the crude oil and natural gas source category that commence construction, modification or reconstruction after September 18, 2015. This subpart also establishes emission standards and compliance schedules for the control of volatile organic compounds (VOC) and sulfur dioxide (SO_2) emissions from affected facilities that commence construction, modification or reconstruction after September 18, 2015 (40 CFR 60, Subpart OOOO is applicable to those sources constructed prior to this date but after August 23, 2011). As the Janus Compressor Station was constructed after September 18, 2015, the facility is subject to the applicable provisions of Subpart OOOOa.

Compressor Engines

Pursuant to §60.5365a(c), "[e]ach reciprocating compressor affected facility, which is a single reciprocating compressor [not located at a well site]" that is constructed after September 18, 2015 is subject to the applicable provisions of Subpart OOOOa. As the Janus Compressor Station is located before the point of custody transfer, the compressor engines are applicable to Subpart OOOOa. The substantive requirements for the engines are given under §60.5385a(a): the engines' "rod packing" must replaced according to the given schedule and the engine must meet applicable MRR given under §60.5410a(c), §60.5415a(c), and §60.5420a(b).

Storage Tanks - (NON APPLICABILITY)

Pursuant to §60.5365a(e), for "[e]ach storage vessel affected facility, which is a single storage vessel with the potential for VOC emissions equal to or greater than 6 tpy as determined according to this section" that is constructed after September 18, 2015 must meet the control requirements under §60.5395a. The substantive requirement is to "VOC emissions by 95.0 percent within 60 days after startup." The controlled PTE of each storage tank at the existing Janus Compressor Station is less than 6 TPY. Therefore, the storage tanks are not subject to the requirements of Subpart OOOOa.

Fugitive Emissions Components

Pursuant to §60.5365a(j), "[t]he collection of fugitive emissions components at a compressor station, as defined in §60.5430a, is an affected facility." The Leak Detection and Repair (LDAR) requirements for a compressor station are given under §60.5497a.

TOXICITY OF NON-CRITERIA REGULATED POLLUTANTS

This section provides an analysis for those regulated pollutants that may be emitted from the modified Janus Compressor Station and that are not classified as "criteria pollutants." Criteria pollutants are defined as Carbon Monoxide (CO), Lead (Pb), Oxides of Nitrogen (NO_x), Ozone, Particulate Matter (PM_{10} and $PM_{2.5}$), and Sulfur Dioxide (SO_2). These pollutants have National Ambient Air Quality Standards (NAAQS) set for each that are designed to protect the public health and welfare. Other pollutants of concern, although designated as non-criteria and without national concentration standards, are regulated through various federal and programs designed to limit their emissions and public exposure. These programs include federal source-specific Hazardous Air Pollutants (HAPs) limits promulgated under 40 CFR 61 (NESHAPS) and 40 CFR 63 (MACT). Any potential applicability to these programs were discussed above under REGULATORY APPLICABILITY.

The majority of non-criteria regulated pollutants fall under the definition of HAPs which, with some revision since, were 188 compounds identified under Section 112(b) of the Clean Air Act (CAA) as pollutants or groups of pollutants that EPA knows or suspects may cause cancer or other serious human health effects. The following table lists each HAP with a revised facility-wide PTE above 0.05 TPY and the associated carcinogenic risk (as based on analysis provided in the Integrated Risk Information System (IRIS)):

Table 2: Potential HAPs - Carcinogenic Risk

HAPs	Type	Known/Suspected Carcinogen	Classification
Acetaldehyde	VOC	Yes	B2 - Probable Human Carcinogen
Acrolein	VOC	No	Inadequate Data
Formaldehyde	VOC	Yes	B1 - Probable Human Carcinogen
Methanol	VOC	No	No Assessment Available
Biphenyl	VOC	Yes	Suggestive Evidence of Carcinogenic Potential
1,3-Butadiene	VOC	Yes	B2 - Probable Human Carcinogen
Naphthalene	VOC	Yes	C - Possible Human Carcinogen
n-Hexane	VOC	No	Inadequate Data
Benzene	VOC	Yes	Category A - Known Human Carcinogen
Toluene	VOC	No	Inadequate Data
Ethylbenzene	VOC	No	Category D - Not Classifiable
Xylenes	VOC	No	Inadequate Data
2,2,4-Trimethylpentane	VOC	No	Inadequate Data

All HAPs have other non-carcinogenic chronic and acute effects. These adverse health affects may be associated with a wide range of ambient concentrations and exposure times and are influenced by source-specific characteristics such as emission rates and local meteorological conditions. Health impacts are also dependent on multiple factors that affect variability in humans such as genetics, age, health status (e.g., the presence of pre-existing disease) and lifestyle. As stated previously, *there are no federal or state ambient air quality standards for these specific chemicals.* For a complete discussion of the known health effects of each compound refer to the IRIS database located at *www.epa.gov/iris*.

AIR QUALITY IMPACT ANALYSIS

The estimated maximum emissions of the modified facility are less than applicability thresholds that would define the proposed facility as "major" under 45CSR14 and, therefore, no air quality impacts modeling analysis was required. Additionally, based on the nature and location of the proposed source, an air quality impacts modeling analysis was not required under §45-13-7.

MONITORING, COMPLIANCE DEMONSTRATIONS, REPORTING, AND RECORDING OF OPERATIONS

There was no substantive change to the monitoring, compliance demonstration, and record-keeping requirements (MRR) in the permit.

PERFORMANCE TESTING OF OPERATIONS

There was no substantive change to the performance testing requirements in the permit.

CHANGES TO R13-3269

The following substantive changes were made to Permit Number R13-3269:

- The requirement to recalculate the fugitive emissions produced from component leaks under 4.1.12(a) was removed from the permit as the changes evaluated herein satisfy that requirement;
- The limited events under 4.1.12(c) were revised based on the new numbers provided by EQT;
- Requirement 4.1.12(e) was added to the permit requiring EQT to meet the applicable requirement of 40 CFR 60, Subpart OOOOa for mitigation of fugitive emissions; and
- 40 CFR 60, Subpart OOOO language was replaced with new Subpart OOOOa language wherever applicable in the permit.

RECOMMENDATION TO DIRECTOR

The information provided in the permit application indicates that compliance with all applicable state and federal air quality regulations will be achieved. Therefore, I recommend to the Director the issuance of a Permit Number R13-3269A to EQT Gathering, LLC for the modification of the Janus Compressor Station located near West Union, Doddridge County, WV.

Joe Kessler, PE
Engineer

11/14/16
Date

Attachment A: Facility-Wide PTE

EQT Gathering, LLC: Janus Compressor Station
Permit Number R13-3269A: Facility ID 017-00158

Emission Unit	EP ID	CO		NO_x		PM[1]		SO_x		VOC		Acetaldehyde		HAPs	
		lb/hr	TPY	lb/hr	TPY	lb/hr	TPY	lb/hr	TPY	lb/hr	TPY	lb/hr	TPY	lb/hr	TPY
Compressor Engine	ENG-001	2.04	8.93	5.90	25.83	0.39	1.71	0.02	0.10	3.93	17.23	0.33	1.44	0.84	3.66
Compressor Engine	ENG-002	2.04	8.93	5.90	25.83	0.39	1.71	0.02	0.10	3.93	17.23	0.33	1.44	0.84	3.66
Compressor Engine	ENG-003	2.04	8.93	5.90	25.83	0.39	1.71	0.02	0.10	3.93	17.23	0.33	1.44	0.84	3.66
Compressor Engine	ENG-004	2.04	8.93	5.90	25.83	0.39	1.71	0.02	0.10	3.93	17.23	0.33	1.44	0.84	3.66
Microturbines	EG-001	0.22	0.96	0.08	0.35	0.02	0.07	0.01	0.03	0.02	0.11	~0.00	~0.00	~0.00	~0.00
Microturbines	EG-002	0.22	0.96	0.08	0.35	0.02	0.07	0.01	0.03	0.02	0.11	~0.00	~0.00	~0.00	~0.00
Microturbines	EG-003	0.22	0.96	0.08	0.35	0.02	0.07	0.01	0.03	0.02	0.11	~0.00	~0.00	~0.00	~0.00
Microturbines	EG-004	0.22	0.96	0.08	0.35	0.02	0.07	0.01	0.03	0.02	0.11	~0.00	~0.00	~0.00	~0.00
Microturbines	EG-005	0.22	0.96	0.08	0.35	0.02	0.07	0.01	0.03	0.02	0.11	~0.00	~0.00	~0.00	~0.00
Dehy #1 Vent/Flash Tank[2]	DEHY-001	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.55	6.80	0.00	0.00	0.68	2.96
Dehy #1 Reboiler[3]	RB-001	0.16	0.69	0.19	0.83	0.01	0.06	~0.00	~0.00	0.01	0.05	~0.00	~0.00	~0.00	~0.00
Dehy #2 Vent/Flash Tank[2]	DEHY-002	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.55	6.80	0.00	0.00	0.68	2.96
Dehy #2 Reboiler[3]	RB-002	0.16	0.69	0.19	0.83	0.01	0.06	~0.00	~0.00	0.01	0.05	~0.00	~0.00	~0.00	~0.00
Fuel Gas Heater #1	HTR-1	0.08	0.35	0.09	0.41	0.01	0.03	~0.00	~0.00	0.01	0.02	~0.00	~0.00	~0.00	~0.00
Fuel Gas Heater #2	HTR-2	0.05	0.23	0.06	0.28	~0.00	~0.00	~0.00	~0.00	0.01	0.02	~0.00	~0.00	~0.00	~0.00
Dehy Enclosed Flares Combustion[3]	FLARE-001, FLARE-002	0.96	4.20	1.14	5.00	0.08	0.48	0.01	0.04	0.00	0.00	0.00	0.00	0.00	0.00
Tank Enclosed Flare Combustion[3]	FLARE-003	2.82	12.34	3.35	14.69	0.25	1.11	0.02	0.09	0.00	0.00	0.00	0.00	0.00	0.00
Storage Tanks[2]	T-01, T-02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.10	0.42	0.00	0.00	<0.01	<0.01
Truck Loadout	L1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.80	0.09	0.00	0.00	0.00	0.00
Fugitive Emissions	n/a	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.03	30.80	~0.00	~0.00	0.39	1.69
Facility-Wide Total[4] →		***13.49***	***59.03***	***29.02***	***127.10***	***2.03***	***8.94***	***0.16***	***0.68***	***26.90***	***114.50***	***1.32***	***5.76***	***5.11***	***22.26***

(1) All particular matter emissions are assumed to be 2.5 microns or less.
(2) As emitted at the associated enclosed flare after 2% pass-through (5% for storage tank enclosed flare).
(3) Combustion exhaust only. Aggregate of both dehy flares.
(4) No individual HAP has a PTE over 10 TPY. As the PTE of all individual HAPs are less than 10 TPY (acetaldehyde is the highest emitted individual HAP) and the PTE of total HAPs is less than 25 TPY, the Janus Compressor Station is defined as a minor (area) source of HAPs for purposes of 40 CFR 61, 40CFR63, and Title V.

INTERNAL PERMITTING DOCUMENT TRACKING MANIFEST

Company Name EQT GATHERING, LLC

Permitting Action Number R13-3269A Total Days 21 DAQ Days ϕ

Permitting Action:

- ❍ Permit Determination
- ❍ General Permit
- ❍ Administrative Update
- ❍ Temporary
- ❍ Relocation
- ❍ Construction
- ☒ Modification
- ❍ PSD (Rule 14)
- ❍ NNSR (Rule 19)

Documents Attached:

- ☒ Engineering Evaluation/Memo
- ☒ Draft Permit
- ☒ Notice
- ❍ Denial
- ❍ Final Permit/General Permit Registration
- ☒ Completed Database Sheet
- ❍ Withdrawal
- ❍ Letter
- ❍ Other *(specify)*

Date	From	To	Action Requested
11/07/16	Joe Kessler	Bev McKeone	NOTICE APPROVAL
11/14	Bev	Joe	Go to Notice

NOTE: Retain a copy of this manifest for your records when transmitting your document(s).

N N

DAQ – 5/02

625 Liberty Ave, Suite 1700
Pittsburgh PA 15222
www.eqt.com

TEL: (412) 395-3699
FAX: (412) 395-2156

Alex Bosiljevac
Environmental Coordinator

EQT

November 17, 2016

CERTIFIED MAIL # 7015 1660 0000 9399 6369

Mr. Joe Kessler
WVDEP – Division of Air Quality
601 57th Street, SE
Charleston, WV 25304

Re: Produced Liquid Tanks (T001 & T002)
EQT Gathering, LLC - Janus Compressor Station
Permit No. R13-3269
Plant ID No. 017-00158

Dear Mr. Kessler:

Based on conversations over the last two weeks, EQT Gathering, LLC (EQT) is requesting that the flare and produced liquid tank revisions proposed in the application be removed, and that the original permit conditions for these emission units be restored. If you have any questions concerning this permit application, please contact Alex Bosiljevac at (412) 395-3699 or by email at abosiljevac@eqt.com.

Sincerely,

Diana M. Charletta

Diana Charletta
Senior Vice President

Enclosures

Kessler, Joseph R

From: Kessler, Joseph R
Sent: Thursday, July 21, 2016 2:20 PM
To: Bosiljevac, Alex
Subject: RE: WV DAQ Permit Application Status for EQT Gathering, LLC; Janus Station

That sounds sweet, I've been up that way. Great time of year to escape the heat. I'm heading to OBX.. two kids, mid 90's, R&R unlikely.

From: Bosiljevac, Alex [mailto:ABosiljevac@eqt.com]
Sent: Thursday, July 21, 2016 2:18 PM
To: Kessler, Joseph R <Joseph.R.Kessler@wv.gov>
Subject: RE: WV DAQ Permit Application Status for EQT Gathering, LLC; Janus Station

Thanks Joe – Have a good vacation. I'm heading up to Bar Harbor Maine/Acadia NP the first week of August. Hope you get some rest and relaxation on your vacation.

I.D. No. 017-00158 Reg. 3269A
Company EQT GATHERING
Facility JANUS Region
Initials

Alex Bosiljevac
T: 412-395-3699
C: 412-439-3131

From: Kessler, Joseph R [mailto:Joseph.R.Kessler@wv.gov]
Sent: Thursday, July 21, 2016 1:59 PM
To: Bosiljevac, Alex
Subject: RE: WV DAQ Permit Application Status for EQT Gathering, LLC; Janus Station

Alex, I got the affidavit. I will do the 30-day completeness review before EOB on 8/4 and get back to you if I need anything else. I'm good, heading on vacation next week. Hope all is good in your world as well.

Thanks

Joe Kessler

Entire Document
NON-CONFIDENTIAL

From: Bosiljevac, Alex [mailto:ABosiljevac@eqt.com]
Sent: Friday, July 15, 2016 1:47 PM
To: Kessler, Joseph R <Joseph.R.Kessler@wv.gov>
Subject: RE: WV DAQ Permit Application Status for EQT Gathering, LLC; Janus Station

Hi Joe,

Hope all is well. We got the legal affidavit for this site already (see attached). Please let me know if you have any questions.

Thanks,

Alex Bosiljevac
T: 412-395-3699
C: 412-439-3131

From: Ward, Beth A [mailto:Beth.A.Ward@wv.gov]
Sent: Monday, July 11, 2016 12:38 PM
To: Adkins, Sandra K; Charletta, Diana; Bosiljevac, Alex
Cc: McKeone, Beverly D; Kessler, Joseph R
Subject: RE: WV DAQ Permit Application Status for EQT Gathering, LLC; Janus Station

Please see the attached receipt.

Thank You!

OASIS CR 1700003016

From: Adkins, Sandra K
Sent: Wednesday, July 06, 2016 11:09 AM
To: dcharletta@eqt.com; 'abosiljevac@eqt.com' <abosiljevac@eqt.com>
Cc: McKeone, Beverly D <Beverly.D.Mckeone@wv.gov>; Kessler, Joseph R <Joseph.R.Kessler@wv.gov>; Ward, Beth A <Beth.A.Ward@wv.gov>
Subject: WV DAQ Permit Application Status for EQT Gathering, LLC; Janus Station

RE: Application Status
EQT Gathering, LLC
Janus Station
Facility ID No. 017-00158
Application No. R13-3269A

Ms. Charletta,

Your application for a Class II Administrative Update permit for the Janus Compressor Station was received by this Division on July 5, 2016, and was assigned to Joe Kessler. The following items were not included in the initial application submittal:

Original affidavit for Class I legal advertisement not submitted.

Application fee AND/OR additional application fees:
**$300 Class II Administrative Update*
(You may contact the Accounts Receivable section at 304 926-0499 ext. 4888 or Beth Ward at ext. 1846 to pay via credit card. DEP accepts Visa and MasterCard only.)

These items are necessary for the assigned permit writer to continue the 30-day completeness review.

Within 30 days, you should receive a letter from Joe stating the status of the permit application and, if complete, given an estimated time frame for the agency's final action on the permit.

Any determination of completeness shall not relieve the permit applicant of the requirement to subsequently submit, in a timely manner, any additional or corrected information deemed necessary for a final permit decision.

Should you have any questions, please contact the assigned engineer, Joe Kessler, at 304-926-0499, extension 1219.

Kessler, Joseph R

From: Bosiljevac, Alex <ABosiljevac@eqt.com>
Sent: Tuesday, September 13, 2016 3:04 PM
To: Kessler, Joseph R
Subject: Re: Draft Permit R13-3269A

Thanks Joe I'll look this over and get any comments back to you as soon as possible.

Sent from my iPhone

On Sep 13, 2016, at 3:02 PM, Kessler, Joseph R <Joseph.R.Kessler@wv.gov<mailto:Joseph.R.Kessler@wv.gov>> wrote:

Alex, attached is the draft permit for Janus. The substantive changes/additions are highlighted. Please note that this draft permit has not yet been reviewed by my supervisor and is therefore subject to change. Please review the changes and let me know if you have any questions or comments.

Thanks

Joe Kessler, PE
Engineer
West Virginia Division of Air Quality
601-57th St., SE
Charleston, WV 25304
Phone: (304) 926-0499 x1219
Fax: (304) 926-0478
Joseph.r.kessler@wv.gov<mailto:Joseph.r.kessler@wv.gov>

<3269A_dpm.pdf>

Kessler, Joseph R

From: Bosiljevac, Alex <ABosiljevac@eqt.com>
Sent: Thursday, September 15, 2016 2:04 PM
To: Kessler, Joseph R
Subject: RE: Message

Thanks Joe – I'm going to move forward with the modification path and get this cleared up.

Thanks again,

Alex Bosiljevac
T: 412-395-3699
C: 412-439-3131

From: Kessler, Joseph R [mailto:Joseph.R.Kessler@wv.gov]
Sent: Thursday, September 15, 2016 1:59 PM
To: Bosiljevac, Alex <ABosiljevac@eqt.com>
Subject: RE: Message

Alex, in talking with Bev she said we would not have to do a formal withdraw to switch to a full modification. You would just run a new ad with mod language, submit an additional $1,700, and a letter explaining it all signed by the responsible official. Then we would change the permit status in our system as resubmitted (which would restart the clock) and review as a full mod.

Thanks

Joe

From: Bosiljevac, Alex [mailto:ABosiljevac@eqt.com]
Sent: Thursday, September 15, 2016 9:27 AM
To: Kessler, Joseph R <Joseph.R.Kessler@wv.gov>
Subject: RE: Message

Sorry Joe I was out sick yesterday (feeling better now). Yeah we list it in the table the page before since it has a vendor guarantee. Let me know if you have any other questions on the calculations.

Thanks,

Alex Bosiljevac
T: 412-395-3699
C: 412-439-3131

From: Kessler, Joseph R [mailto:Joseph.R.Kessler@wv.gov]
Sent: Wednesday, September 14, 2016 1:51 PM
To: Bosiljevac, Alex <ABosiljevac@eqt.com>
Subject: Message

Alex, please ignore the message I just left on your cell. Although the HCHO is not listed in the compressor engine HAP table, the number does seem to be reflected in the total.

Thanks

Joe Kessler, PE
Engineer
West Virginia Division of Air Quality
601-57th St., SE
Charleston, WV 25304
Phone: (304) 926-0499 x1219
Fax: (304) 926-0478
Joseph.r.kessler@wv.gov

Kessler, Joseph R

From: Kessler, Joseph R
Sent: Friday, October 28, 2016 11:16 AM
To: 'Bosiljevac, Alex'
Subject: RE: Janus Station

OK, thanks.

-----Original Message-----
From: Bosiljevac, Alex [mailto:ABosiljevac@eqt.com]
Sent: Friday, October 28, 2016 11:14 AM
To: Kessler, Joseph R <Joseph.R.Kessler@wv.gov>
Subject: Re: Janus Station

I don't think we used a new gas analysis, but we now have plans in the next year to add a second line into the station with very similar gas. We wanted to account for the additional pigging operations through that line.

Sent from my iPhone

> On Oct 28, 2016, at 11:08 AM, Kessler, Joseph R <Joseph.R.Kessler@wv.gov> wrote:
>
> That's fine, no hurry. One other thing, I thought your guys based the new fugitive emissions based on an updated site-specific gas analysis, but I didn't see one in the application. Is this right, or did you use the old 10/2012 analysis again for these calculations?
>
> Joe
>
> -----Original Message-----
> From: Bosiljevac, Alex [mailto:ABosiljevac@eqt.com]
> Sent: Friday, October 28, 2016 11:03 AM
> To: Kessler, Joseph R <Joseph.R.Kessler@wv.gov>
> Subject: Re: Janus Station
>
> Let me check with operations and double check on my assumption. Most of our folks are off today so it'll probably Monday before I get a response.
>
> Thanks,
> Alex
>
> Sent from my iPhone
>
>> On Oct 28, 2016, at 11:00 AM, Kessler, Joseph R <Joseph.R.Kessler@wv.gov> wrote:
>>
>> OK, could you guys track condensate throughput separate from total liquids? Do you pull it off the top and load it out separately?
>>
>> Joe
>>
>> -----Original Message-----

>> From: Bosiljevac, Alex [mailto:ABosiljevac@eqt.com]
>> Sent: Friday, October 28, 2016 10:51 AM
>> To: Kessler, Joseph R <Joseph.R.Kessler@wv.gov>
>> Subject: Re: Janus Station
>>
>> Thanks Joe let me take a look at it. I assume that 15,330 gal/yr is the worst-case amount of condensate, and that 210,000 is the total liquid throughput which would include water. I'll get back to you.
>>
>> Sent from my iPhone
>>
>> On Oct 28, 2016, at 10:44 AM, Kessler, Joseph R <Joseph.R.Kessler@wv.gov<mailto:Joseph.R.Kessler@wv.gov>> wrote:
>>
>> Alex it looks like E&P Tanks was run at only 1 bbl/day, or about 15,330 gal/yr per tank. This throughput will have to be limited per-tank to protect the non-applicability (6 TPY) of Subpart OOOOa. Looks like the loadout emissions were based on 210,000 gal/yr in the original permit application. I think I missed the lower E&P run in the original permit (as I had an aggregate tank throughput limit of 210,000 gal/yr), but it didn't really matter as the flare was handling the tank emissions. But now it is important, so wanted to make sure you are aware of the discrepancy and the lower per-tank throughput limit.
>>
>> Thanks
>>
>> Joe
>>
>> From: Kessler, Joseph R
>> Sent: Tuesday, October 25, 2016 8:54 AM
>> To: 'Bosiljevac, Alex' <ABosiljevac@eqt.com<mailto:ABosiljevac@eqt.com>>
>> Subject: RE: Janus Station
>>
>> Thanks for the update Alex. I'll be looking for it.
>>
>> Joe Kessler
>>
>> From: Bosiljevac, Alex [mailto:ABosiljevac@eqt.com]
>> Sent: Monday, October 24, 2016 1:32 PM
>> To: Kessler, Joseph R <Joseph.R.Kessler@wv.gov<mailto:Joseph.R.Kessler@wv.gov>>
>> Subject: RE: Janus Station
>>
>> Hi Joe,
>>
>> The legal ad ran October 14th in the Doddridge Independent. The original legal affidavit is on its way. I'll pay the additional fee of $1,700 this week (I tried to call today but it seems like your phones are down).
>>
>> Thanks,
>>
>> Alex Bosiljevac
>> T: 412-395-3699
>> C: 412-439-3131
>>
>> From: Kessler, Joseph R [mailto:Joseph.R.Kessler@wv.gov]
>> Sent: Wednesday, October 19, 2016 10:35 AM
>> To: Bosiljevac, Alex <ABosiljevac@eqt.com<mailto:ABosiljevac@eqt.com>>

>> Subject: RE: Janus Station
>>
>> Alex, I received the revised application package. Just like an ordinary application submission, I will do a completeness check within 30 days. As this is now a full mod, I will have to go to public notice when I have completed my evaluation and draft permit. This should all go pretty fast, as I did most of the work thinking it was going to be issued as a Class II A/U. Your new 30 days ad and my 30 day ad can overlap if I can get to notice that fast on it. I will be looking out for the fee and the affidavit and will let you know if I need anything else.
>>
>> Thanks
>>
>> Joe
>>
>> From: Bosiljevac, Alex [mailto:ABosiljevac@eqt.com]
>> Sent: Monday, October 3, 2016 12:01 PM
>> To: Kessler, Joseph R <Joseph.R.Kessler@wv.gov<mailto:Joseph.R.Kessler@wv.gov>>
>> Subject: RE: Janus Station
>>
>> Great. I'll get someone to get it updated, printed and sent to you. Thanks Joe.
>>
>> Alex Bosiljevac
>> T: 412-395-3699
>> C: 412-439-3131
>>
>> From: Kessler, Joseph R [mailto:Joseph.R.Kessler@wv.gov]
>> Sent: Monday, October 03, 2016 10:29 AM
>> To: Bosiljevac, Alex <ABosiljevac@eqt.com<mailto:ABosiljevac@eqt.com>>
>> Subject: RE: Janus Station
>>
>> Yes, I don't see any reason why you could not add the additional pigging events. As we talked about before, just run a new ad with mod language and revised emission changes (including fugitives), submit an additional $1,700, and a letter explaining it all signed by the responsible official. Then we will change the permit status in our system as resubmitted (which would restart the clock) and review as a full mod.
>>
>> Thanks
>>
>> Joe
>>
>> From: Bosiljevac, Alex [mailto:ABosiljevac@eqt.com]
>> Sent: Thursday, September 29, 2016 3:50 PM
>> To: Kessler, Joseph R <Joseph.R.Kessler@wv.gov<mailto:Joseph.R.Kessler@wv.gov>>
>> Subject: Janus Station
>>
>> Good Afternoon Joe,
>>
>> I have the updated application and letter ready to go, but a question came up at the end of last week. In 2017, there is a new pipeline that will be coming into the station that will require an additional pigging receiver. The new pipeline will not affect the rest of the station. It is a line that will require daily pigging in the winter due the wet gas the line is transferring. This would essentially double the number of pigging events, so we would need to increase the count from 250 to 500 pigging events per year. This is a worst-case number that we do not expect to exceed and is based on cold winter temperatures.
>>

>> My question is: Can we include an additional 250 (500 total) pigging events in the current application? This shouldn't change the status of the facility (area source). Let me know either way, and I'll make the changes and get the final out to you. I'm out of office most of the next month, so email (or cell when I have reception) might be the best way to get ahold of me.
>>
>> Thank you in advance,
>>
>> Alex Bosiljevac
>> EQT Plaza
>> 625 Liberty Avenue
>> Pittsburgh, PA 15222
>> T: 412-395-3699
>> C: 412-439-3131
>>

Kessler, Joseph R

From: Bosiljevac, Alex <ABosiljevac@eqt.com>
Sent: Wednesday, November 16, 2016 10:44 AM
To: Kessler, Joseph R
Subject: Re: Janus Station Liquids Unloading

Thanks Joe. I'll get this asap.

Sent from my iPhone

On Nov 16, 2016, at 9:21 AM, Kessler, Joseph R <Joseph.R.Kessler@wv.gov<mailto:Joseph.R.Kessler@wv.gov>> wrote:

Wow, this one has had its twists and turns. I will have to put the closed vent language back in as well. Just to keep it simple and get this out, please just send in a letter signed by the responsible official requesting the change back to flaring. That will put the request formally in the file and I will adjust the PTE back down in the Fat Sheet.

Joe

From: Bosiljevac, Alex [mailto:ABosiljevac@eqt.com]
Sent: Tuesday, November 15, 2016 2:59 PM
To: Kessler, Joseph R <Joseph.R.Kessler@wv.gov<mailto:Joseph.R.Kessler@wv.gov>>
Subject: RE: Janus Station Liquids Unloading

Hi Joe,

I talked to the NWV operations manager. We prefer running the flare, and revisiting this issue after we are comfortable with facility. Sorry for the hassle especially if you've already written up some language.

Let me know what you need from me (form updates). We would prefer that it reflect the previous language that you wrote in the original application. I'll be in meetings tomorrow, but I can be reached by cellphone after 1.

Thanks,

Alex Bosiljevac
T: 412-395-3699
C: 412-439-3131

From: Bosiljevac, Alex
Sent: Monday, November 14, 2016 8:46 AM
To: 'Kessler, Joseph R' <Joseph.R.Kessler@wv.gov<mailto:Joseph.R.Kessler@wv.gov>>
Subject: RE: Janus Station Liquids Unloading

Good Morning Joe,

I talked to the northern WV operations manager regarding tracking the liquids separately. He doesn't think that we could track the liquids separately as we track the separation of the liquids by waste manifest and separation of the liquids at the disposal facilities. He doesn't like the idea of trusting this to a third party, and there will be a delay until we get the information back from the third party.

Do you have time to discuss this week?

Thanks,

Alex Bosiljevac
T: 412-395-3699
C: 412-439-3131

From: Kessler, Joseph R [mailto:Joseph.R.Kessler@wv.gov]
Sent: Monday, November 07, 2016 11:39 AM
To: Bosiljevac, Alex <ABosiljevac@eqt.com<mailto:ABosiljevac@eqt.com>>
Subject: RE: Janus Station Liquids Unloading

That's fine, thanks for keeping on it. I should be able to deem the revised application complete today.

Joe

From: Bosiljevac, Alex [mailto:ABosiljevac@eqt.com]
Sent: Monday, November 7, 2016 11:35 AM
To: Kessler, Joseph R <Joseph.R.Kessler@wv.gov<mailto:Joseph.R.Kessler@wv.gov>>
Subject: Janus Station Liquids Unloading

Hi Joe,

We're discussing how we can track the condensate from the produced liquids tanks. We currently use a third party to track how much of the liquid unloaded from the tanks condensate (and therefore saleable), but we are verifying that we are comfortable with the process. I'm going to talk to Janus Station operators tomorrow to check in on this issue. Sorry it's taking longer than I thought it would.

Thanks,

Alex Bosiljevac
EQT Plaza
625 Liberty Avenue
Pittsburgh, PA 15222
T: 412-395-3699
C: 412-439-3131

Kessler, Joseph R

From: Kessler, Joseph R
Sent: Monday, November 7, 2016 11:52 AM
To: 'abosiljevac@eqt.com'
Cc: Kessler, Joseph R
Subject: R13-3269A Revised Permit Application Status

RE: Application Status: Complete
EQT Gathering, LLC
Janus Station
Permit Application: R13-3269A
Plant ID No.: 017-00158

Mr. Bosiljevak,

Your application for a Class II Administrative Update was received by the Division of Air Quality (DAQ) on July 5, 2016 and assigned to the writer for review. Upon an initial review, the application was deemed to be complete as of July 20, 2016. However, the subsequent technical review determined that the proposed emissions increase was in excess of the threshold that would have allowed for the application to be reviewed as a Class II Administrative Update. Therefore, EQT was informed that a revised permit application with a new legal advertisement (and an additional $1,700 fee) were required to process the permit application as a full modification. The revised application was submitted on October 17, 2016 and, after a review of the permit application and the submission of the additional fee and proof of advertisement, the revised application has now been deemed complete as of the date of this e-mail. Therefore, the ninety (90) day review period began on that date.

This determination of completeness shall not relieve the permit applicant of the requirement to subsequently submit, in a timely manner, any additional or corrected information deemed necessary for a final permit determination.

Should you have any questions, please contact me at (304) 926-0499 ext. 1219 or reply to this email.

Thank You,

Joe Kessler, PE
Engineer
West Virginia Division of Air Quality
601-57th St., SE
Charleston, WV 25304
Phone: (304) 926-0499 x1219
Fax: (304) 926-0478
Joseph.r.kessler@wv.gov

Kessler, Joseph R

From: Ward, Beth A
Sent: Wednesday, November 2, 2016 11:43 AM
To: Bosiljevac, Alex; dcharletta@eqt.com; Adkins, Sandra K; McKeone, Beverly D; Kessler, Joseph R
Subject: RE: WV DAQ Permit Application Status for EQT Gathering, LLC; Janus Station
Attachments: 2016_11_02_11_39_07.pdf

Please see the attached receipt.

Thank You!

OASIS CR 1700048931

From: Bosiljevac, Alex [mailto:ABosiljevac@eqt.com]
Sent: Wednesday, November 02, 2016 8:52 AM
To: Ward, Beth A <Beth.A.Ward@wv.gov>
Subject: RE: WV DAQ Permit Application Status for EQT Gathering, LLC; Janus Station

Good Morning Beth,

It's going to be an additional $1,700 as the permit was reclassified. When you get the chance please shoot me a call and we can get this squared up with my CC.

Thanks in advance!

Alex Bosiljevac
T: 412-395-3699
C: 412-439-3131

From: Ward, Beth A [mailto:Beth.A.Ward@wv.gov]
Sent: Monday, July 11, 2016 12:38 PM
To: Adkins, Sandra K <Sandra.K.Adkins@wv.gov>; Charletta, Diana < >; Bosiljevac, Alex <ABosiljevac@eqt.com>
Cc: McKeone, Beverly D <Beverly.D.Mckeone@wv.gov>; Kessler, Joseph R <Joseph.R.Kessler@wv.gov>
Subject: RE: WV DAQ Permit Application Status for EQT Gathering, LLC; Janus Station

Please see the attached receipt.

Thank You!

OASIS CR 1700003016

From: Adkins, Sandra K
Sent: Wednesday, July 06, 2016 11:09 AM
To: dcharletta@eqt.com; 'abosiljevac@eqt.com' <abosiljevac@eqt.com>
Cc: McKeone, Beverly D <Beverly.D.Mckeone@wv.gov>; Kessler, Joseph R <Joseph.R.Kessler@wv.gov>; Ward, Beth A <Beth.A.Ward@wv.gov>
Subject: WV DAQ Permit Application Status for EQT Gathering, LLC; Janus Station

RE: Application Status
EQT Gathering, LLC
Janus Station
Facility ID No. 017-00158
Application No. R13-3269A

Ms. Charletta,

Your application for a Class II Administrative Update permit for the Janus Compressor Station was received by this Division on July 5, 2016, and was assigned to Joe Kessler. The following items were not included in the initial application submittal:

Original affidavit for Class I legal advertisement not submitted.

Application fee AND/OR additional application fees:
**$300 Class II Administrative Update*
(You may contact the Accounts Receivable section at 304 926-0499 ext. 4888 or Beth Ward at ext. 1846 to pay via credit card. DEP accepts Visa and MasterCard only.)

These items are necessary for the assigned permit writer to continue the 30-day completeness review.

Within 30 days, you should receive a letter from Joe stating the status of the permit application and, if complete, given an estimated time frame for the agency's final action on the permit.

Any determination of completeness shall not relieve the permit applicant of the requirement to subsequently submit, in a timely manner, any additional or corrected information deemed necessary for a final permit decision.

Should you have any questions, please contact the assigned engineer, Joe Kessler, at 304-926-0499, extension 1219.

The Doddridge Independent

The Doddridge Independent

PUBLISHER'S CERTIFICATE

I, Michael D. Zorn, Publisher of The Doddridge Independent, A newspaper of general circulation published in the town of West Union, Doddridge County, West Virginia, do hereby certify that:

Notice of Application

Notice is given that EQT Gathering, LLC has applied to the West Virginia Department of Environmental Protection, Division of Air Quality, for an R13 modification to permit number R13-3269 for an existing natural gas compressor station (the Janus Station) located off Left Fork Run Road in Doddridge County, West Virginia. The site latitude and longitude coordinates are: 39.25777 N, -80.80566 W

was published in The Doddridge Independent 1 time commencing on Friday, October 14, 2016 and Ending on Friday, October 14, 2016 at the request of:

EQT Gathering LLC
Dianna Charlette, Sr. VP Midstream Oper.

Given under my hand this Friday, October 14, 2016

The publisher's fee for said publication is:

$ 32.49 1st Run/$ 0 Subsequent Runs
This Legal Ad Total: $ 32.49

Michael D. Zorn
Publisher of The Doddridge Independent

Subscribed to and sworn to before me on this date Oct. / 21 / 16

Notary Public in and for Doddridge County

My Commission expires on The 26 day of August 20 21

RECEIVED
OCT 27 2016
WV DEP / DIV OF AIR QUALITY

AIR QUALITY PERMIT NOTICE

Notice of Application

Notice is given that EQT Gathering, LLC has applied to the West Virginia Department of Environmental Protection, Division of Air Quality, for an R13 modification to permit number R13-3269 for an existing natural gas compressor station (the Janus Station) located off Left Fork Run Road in Doddridge County, West Virginia. The site latitude and longitude coordinates are: 39.25777 N, -80.80566 W.

The applicant estimates the potential increase in the following Regulated Air Pollutants associated with the project will be:

Pollutant	Emissions (tons per year)
Particulate Matter (PM) =	<0.01 tpy
Sulfur Dioxide (SO2) =	<0.01 tpy
Volatile Organic Compounds (VOC) =	28.68 tpy
Carbon Monoxide (CO) =	<0.01 tpy
Nitrogen Oxides (NOx) =	<0.01 tpy
Hazardous Air Pollutants (HAPs) =	<0.01 tpy
Carbon Dioxide Equivalents (CO2e) =	1,202.3 tpy

Written comments will be received by the West Virginia Department of Environmental Protection, Division of Air Quality, 601 57th Street, SE, Charleston, WV 25304, for at least 30 calendar days from the date of publication of this notice.

Any questions regarding this permit application should be directed to the DAQ at (304) 926-0499, extension 1250, during normal business hours.

Dated on October XX, 2016.

By: EQT Gathering, LLC
Diana Charletta, Senior Vice President – Midstream Operations
625 Liberty Ave Suite 1700
Pittsburgh, PA 15222

1x 10/21

I.D. No. 017-00158 Reg. 3269A
Company EQT
Facility JANUS Region
Initials

Entire Document
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VICTORIA A. GAINS
NOTARY PUBLIC
STATE OF WEST VIRGINIA
Doddridge County Public Library
117 Court Street
West Union, WV 26456
My Commission Expires Aug 26, 2021

625 Liberty Ave Suite 1700
Pittsburgh PA 15222
www.eqt.com

TEL: (412) 395-3699
FAX. (412) 395-2156

Alex Bosiljevac
Environmental Coordinator

October 10, 2016

CERTIFIED MAIL # 7015 1520 0002 1412 3806

Mr. William Durham
WVDEP – Division of Air Quality
601 57th Street, SE
Charleston, WV 25304

Re: Unforeseen Events Plan
EQT Gathering LLC – Janus Compressor Station
Permit No. R13-3269
Plant ID No. 017-00158
Doddridge County, WV

Dear Mr. Durham:

Enclosed are two electronic copies and one original hard copy of an unforeseen events plan for the Janus Station. The unforeseen events plan documents the procedures EQT Gathering LLC (EQT) will take under emergencies and gives the public a contact number to call during emergency events. This number will be on display outside of the facility upon startup. The unforeseen events plan requirement is in the permit under the 4.1.12(d) of the R13-3269 air permit.

If you have any questions concerning this plan, please contact me at (412) 395-3699 or by email at abosiljevac@eqt.com.

Sincerely,

R. Alex Bosiljevac
EQT Corporation

Enclosures

EQT Where energy meets innovation.

EQT MIDSTREAM

EMERGENCY ACTION PLAN

Janus Compressor Station
1138 Punkin Run Rd.
West Union, WV, 26456

Doddridge County

Coordinates: 39.25767, -80.80584
Access Rd. Coordinates 39.26031, -80.79344

October 2016

INDEX

EMERGENCY ACTION PLAN

Janus Compressor Station
1138 Punkin Run Rd.
West Union, WV 26456

Access Rd. Coordinate = Lat. 39.26031 Lon. -80.79344 Built in 2016

Purpose/Scope

This EAP encompasses all personnel working on the site employed and/or hired by EQT Corporation. The EAP Plan shall be reviewed or discussed with all employees on the work site prior to beginning their work. The review of this plan can either take place during formal training or be discussed in a tailgate safety meeting or a pre-job briefing. If additional information for this plan is needed, please contact your Supervisor or Safety Coordinator. This plan also serves as an unforeseen events plan as required by permit the WVDEP air permit R13-3269.

Facility Type:

☒ Compressor Station ☐ Dehydration Station ☐ Other: _____

Directions to the site:

Heading west from West Union, WV at the intersection of US-50 and WV-18, go 2.6 miles and then turn left on to Arnolds Creek Road (C.R. 1/1), go 0.7 miles and bear left on to Left Fork Run Road (Punkin Run Rd, C.R. 11/4), and go 0.7 miles to the site access road on the right

Plan Availability:

A copy of this Plan will be available in the following locations during all normal operating hours:

- Designated office area of site
- Electronically
- Submitted to WVDEP October 2016

Accountability and Assembly Areas:

All persons on site will be accounted for using a completed Tailgate Safety Meeting Form if more than (2) individuals are onsite. Personnel should not leave the site without first informing their immediate supervisor, Director of Operations, and/or Sr. Safety Coordinator. Refer to the documentation listed below in order to account for all personnel on site.

The Tailgate Safety Meeting Form/Sign-In Roster is located at: **Office Area of Site**
Primary Assembly Area: **Main Entrance to Site**
Secondary Assembly Area: **West Entrance to Site**

Evacuation Procedures

At the onset of any emergency, all workers will evacuate the affected area following the shortest evacuation route to the pre-designated assembly point. Refer to the attached site map (Attachment #1) to ensure that all personnel are aware and understand where the closest assembly point is located. In the event of a fire or total evacuation, all operations will immediately cease.

EMERGENCY ACTION PLAN

Janus Compressor Station
1138 Punkin Run Rd.
West Union, WV 26456

Access Rd. Coordinate = Lat. 39.26031 Lon. -80.79344

Built in 2016

Emergency Contact:

EQT Call Center 1-800-926-1759

NOTE: Notifications must be made verbally, continue making notifications in order until you speak to someone in person.

Emergency Response Agencies:

Hospital: United Hospital Center 681-342-1000
Fire: Doddridge County Emergency Squad 911
EMS: Doddridge County EMS 911

Site Hazards:

- Natural gas pressurized in pipes and valves

Tanks	
Material	**Quantity**
Pipeline Condensate	8800 gallons
Waste Oil	4200 gallons
New TEG	2000 gallons
Used TEG	2000 gallons
Oil Day Tanks	300 gallons
Methanol Tanks	2000 gallons

Site Description:

Emergency Shut Down (ESD) Stations:

- See Attachment #1

First Aid and Eye Wash Locations:

- See Attachment #1

Fire Extinguisher Locations:

- See Attachment #1

Protection Zone Plans

In the event of an emergency at a Midstream facility, the Emergency Coordinator, or his designee, shall determine protective zones to limit the risk of exposure to workers, local responders, and residents surrounding the work area. Life safety, impacts to the environment, and property conservation are priorities. The Emergency Coordinator shall determine these zones based on the following information at the site:

- Magnitude of the incident
- Wind Direction
- MSDS of applicable materials
- Current and forecasted weather conditions
- Topography and land conditions
- Other influences specific to the incident
- Once established, these zones will be maintained until a determination is made by the Emergency Coordinator to alter or discontinue them.

EMERGENCY ACTION PLAN

Janus Compressor Station
1138 Punkin Run Rd.
West Union, WV 26456

Access Rd. Coordinate = Lat. 39.26031 Lon. -80.79344 Built in 2016

FIRE EMERGENCY PROCEDURE

1. Shut all labeled emergency valves. Permanent **Gas Detectors can trigger an ESD Shutdown. There is an "Emergency Stop" shutdown button on each engine panel.**

2. In the event of an emergency contact **EMERGENCY SERVICES (911)** so that residents can be notified.

3. Employees will assemble at the primary location. If the primary location is not accessible, employees will assemble at the alternate location. All employees on duty shall be accounted for by the Asst. Superintendent or a designated employee. EQT employees are not adequately trained to provide any rescue operations and therefore should not try to perform these types of activities. EQT will rely on the 3rd party emergency agencies (Fire/EMS) to perform these activities.

   Primary Assembly Area: **Main Entrance to Site**
   Secondary Assembly Area: **West Entrance to Site**

4. If gas is evident inside any building and there is no fire, vent the building to prevent a gas build up. **DO NOT OPEN OR CLOSE ANY ELECTRICAL CIRCUITS OR SWITCHES.**

5. If a fire occurs, ascertain if it is appropriate to use firefighting equipment or call for support. In addition, determine if the ESD should be activated. Activating the ESD and venting gas to the atmosphere could pose a greater risk if fire is present. Remember that Operations personnel are only trained to contain fires in the incipient stage.

6. Notify Asst. Superintendent, Gas Control, Director of Operations, Safety Coordinator, and the Environmental Coordinator, as soon as possible. The Asst. Superintendent or next highest-ranking employee on site is designated to make himself available for necessary information needed by the Fire Department, Police, or Emergency Squad. All personnel on location are to cooperate with those in authority.

HOSTILE SITUATION PROCEDURE

1. Lock all gates and man doors

2. Contact the local emergency response agency (if external threat) and wait for help or backup

3. Notify Asst. Superintendent as quickly as possible

NATURAL DISASTER PROCEDURE (e.g. Earthquake, Hurricane, Tornado)

All employees will immediately gather in an internally walled room until the emergency has subsided. It is important to note that all employees should keep clear of moveable objects to decrease the chance of injury. If access to an interior walled room is not possible, locate under a doorway or desk and wait for further instruction.

BOMB THREAT PROCEDURE

All bomb threats by either phone, mail, E-mail, fax, etc. require immediate attention on the part of the recipient. The following procedure has been developed to handle a bomb threat situation.

Bomb Threat Relating to EQT Midstream Premises:

1. If the threat is received via phone, the recipient needs to gather as much information as possible.

   - The individual receiving the call should ask for the location of the bomb, time of detonation, type of explosive (pipe, plastic, etc.), and organization or person responsible for placing bomb.

   - Although the caller may not be willing to divulge the above information, it is important to attempt to gather all pertinent information.

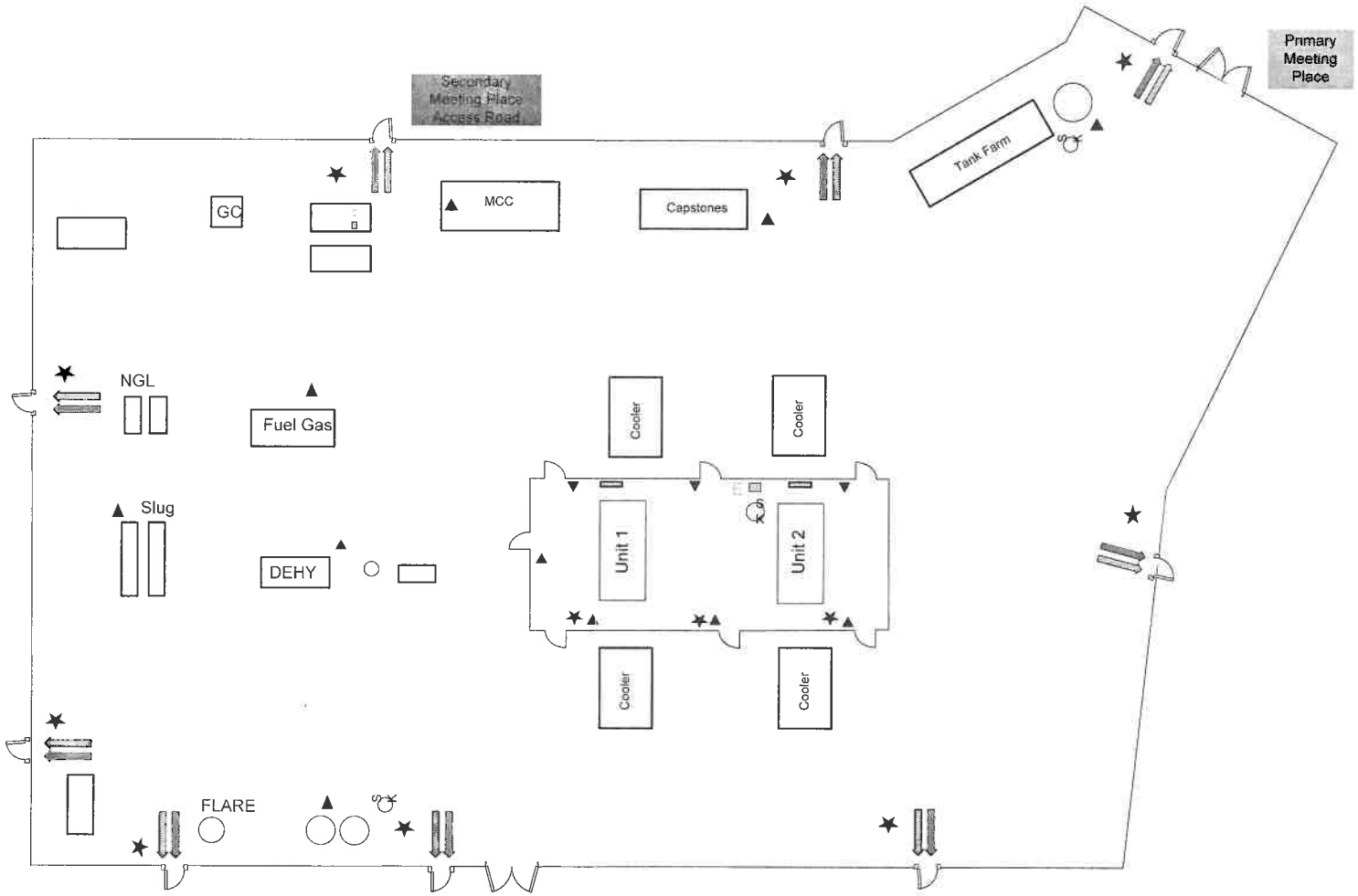
   - If a bomb is located, do not attempt to touch, remove or otherwise disturb.

2. Notify all affected personnel and evacuate immediately.

3. After evacuation, contact the Asst. Superintendent (if Asst. Superintendent is unavailable, contact the Director of Operations.)

   No employees are to return to the Station following a bomb threat until the Emergency Response Agency has approved re-entry.

Attachment #1
Site Map



EQT
Where energy meets innovation.

KEY

- Primary Route
- Secondary Route
- ESD Location
- Fire Extinguisher
- First Aid
- Eye Wash
- Man Gate
- Spill Kit
- Day Tanks

EQT CORPORATION

SURVEY DATE
1/2016

DRAWN BY
Russ Grooms

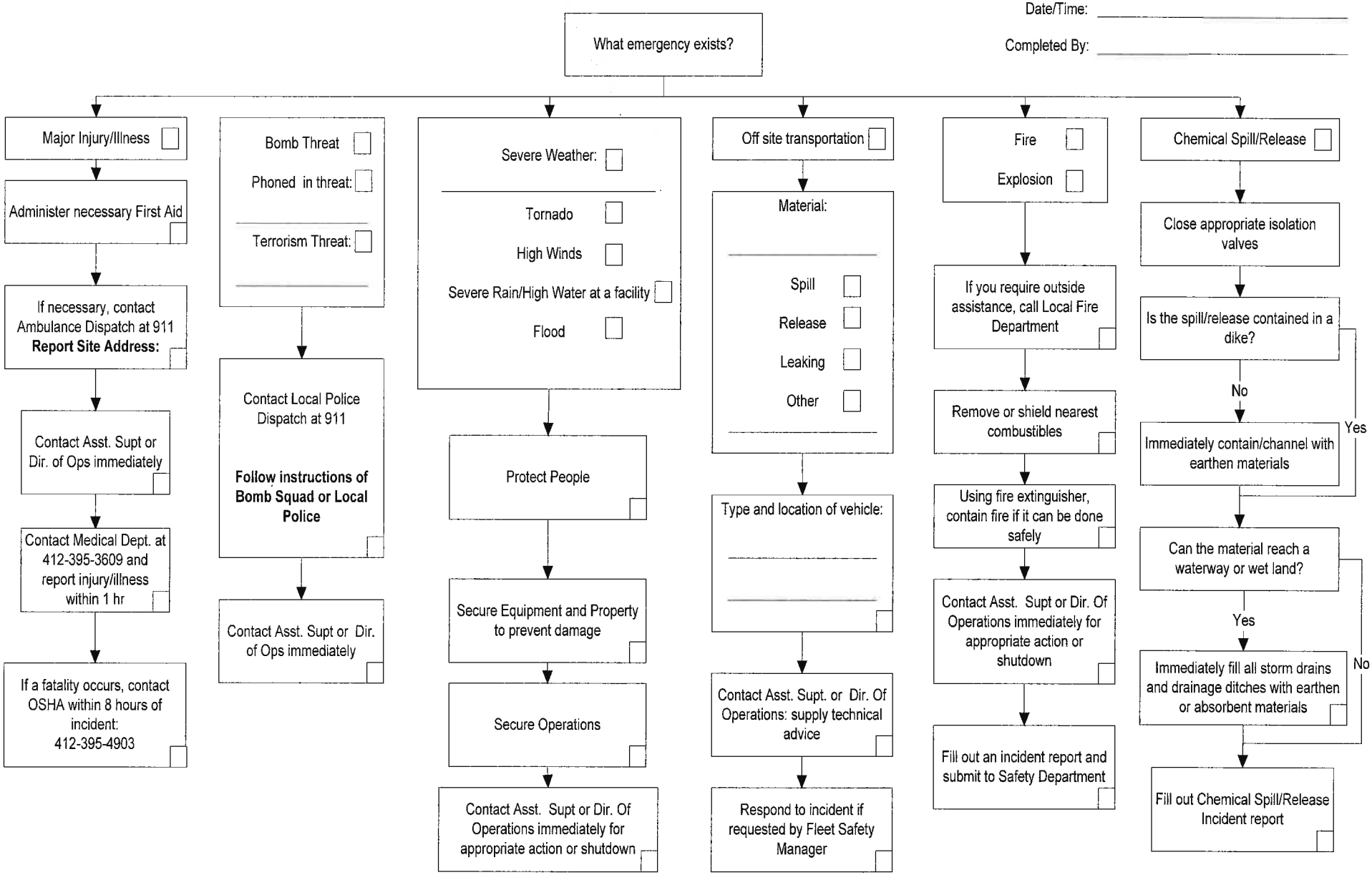
JANUS
COMPRESSOR
STATION
EMERGENCY
EVACUATION PLAN

Attachment #2
Initial Emergency Response Checklist

When a step is completed or a decision is made, check off the box in the decision tree.

Date/Time: _____

Completed By: _____



Kessler, Joseph R

From: Kessler, Joseph R
Sent: Friday, August 05, 2016 9:00 AM
To: 'abosiljevac@eqt.com'
Cc: Kessler, Joseph R
Subject: R13-3269A Permit Application Status

RE: Application Status: Complete
EQT Gathering, LLC
Janus Station
Permit Application: R13-3269A
Plant ID No.: 017-00158

Mr. Bosiljevak,

Your application for a Class II Administrative Update was received by the Division of Air Quality (DAQ) on July 5, 2016 and assigned to the writer for review. Upon an initial review, the application has been deemed complete. The sixty (60) day statutory time frame began the day the last information (affidavit of publication) was received required to deem the application complete: July 20, 2016.

This determination of completeness shall not relieve the permit applicant of the requirement to subsequently submit, in a timely manner, any additional or corrected information deemed necessary for a final permit determination.

Should you have any questions, please contact me at (304) 926-0499 ext. 1219 or reply to this email.

Thank You,

Joe Kessler, PE
Engineer
West Virginia Division of Air Quality
601-57th St., SE
Charleston, WV 25304
Phone: (304) 926-0499 x1219
Fax: (304) 926-0478
Joseph.r.kessler@wv.gov

UC Defaulted Accounts Search Results

Sorry, no records matching your criteria were found.

FEIN:
Business name: EQT GATHERING, LLC
Doing business as/Trading as:

Please use your browsers back button to try again.

WorkforceWV	Unemployment Compensation	Offices of the Insurance Commissioner

UC Defaulted Accounts Search Results

Sorry, no records matching your criteria were found.

FEIN: 202752042
Business name:
Doing business as/Trading as:

Please use your browsers back button to try again.

WorkforceWV	Unemployment Compensation	Offices of the Insurance Commissioner

Kessler, Joseph R

From: Ward, Beth A
Sent: Monday, July 11, 2016 12:38 PM
To: Adkins, Sandra K; dcharletta@eqt.com; 'abosiljevac@eqt.com'
Cc: McKeone, Beverly D; Kessler, Joseph R
Subject: RE: WV DAQ Permit Application Status for EQT Gathering, LLC; Janus Station
Attachments: 2016_07_11_12_36_07.pdf

Please see the attached receipt.

Thank You!

OASIS CR 1700003016

From: Adkins, Sandra K
Sent: Wednesday, July 06, 2016 11:09 AM
To: dcharletta@eqt.com; 'abosiljevac@eqt.com' <abosiljevac@eqt.com>
Cc: McKeone, Beverly D <Beverly.D.Mckeone@wv.gov>; Kessler, Joseph R <Joseph.R.Kessler@wv.gov>; Ward, Beth A <Beth.A.Ward@wv.gov>
Subject: WV DAQ Permit Application Status for EQT Gathering, LLC; Janus Station

RE: Application Status
EQT Gathering, LLC
Janus Station
Facility ID No. 017-00158
Application No. R13-3269A

Ms. Charletta,

Your application for a Class II Administrative Update permit for the Janus Compressor Station was received by this Division on July 5, 2016, and was assigned to Joe Kessler. The following items were not included in the initial application submittal:

Original affidavit for Class I legal advertisement not submitted.

Application fee AND/OR additional application fees:
**$300 Class II Administrative Update*
(You may contact the Accounts Receivable section at 304 926-0499 ext. 4888 or Beth Ward at ext. 1846 to pay via credit card. DEP accepts Visa and MasterCard only.)

These items are necessary for the assigned permit writer to continue the 30-day completeness review.

Within 30 days, you should receive a letter from Joe stating the status of the permit application and, if complete, given an estimated time frame for the agency's final action on the permit.

Any determination of completeness shall not relieve the permit applicant of the requirement to subsequently submit, in a timely manner, any additional or corrected information deemed necessary for a final permit decision.

Should you have any questions, please contact the assigned engineer, Joe Kessler, at 304-926-0499, extension 1219.

WV DEP
601 57TH ST SE
CHARLESTON, WV 25304

SALE

MID: 5990 Store: 5430 Term: 7501
REF#: 00000003
Batch #: 123 RRN: 619316404147
07/11/16 12:30:38
AVS: ZIP MATCH CVE: M
Cust CODE: 0
Invoice #: 133269
Trans ID: 586193594384773
APPR CODE: 063149
VISA Manual CNP
**********9803 **/**

AMOUNT $300.00

APPROVED

I AGREE TO PAY ABOVE TOTAL AMOUNT
IN ACCORDANCE WITH CARD ISSUER'S
AGREEMENT
(MERCHANT AGREEMENT IF CREDIT VOUCHER)
RETAIN THIS COPY FOR STATEMENT
VERIFICATION

MERCHANT COPY

625 Liberty Ave, Suite 1700
Pittsburgh PA 15222
www.eqt.com

TEL: (412) 395-3699
FAX: (412) 395-2156

Alex Bosiljevac
Environmental Coordinator

RECEIVED
JUL 20 2016
WV DEP / DIV OF AIR QUALITY

July 15, 2016

CERTIFIED MAIL # 7015 1660 0000 9399 6345

Mr. Joe Kessler, Engineer
West Virginia Department of Environmental Protection
Division of Air Quality
601 57th Street, SE
Charleston, West Virginia, 25304

RE: R13 Permit Modification – Original Legal Affidavit
EQT Production Company
Janus Compressor Station R13-3269

Entire Document
NON-CONFIDENTIAL

Dear Mr. Kees,

Please see the enclosed for the original legal affidavit for the Janus Compressor Station. If you have any questions concerning this permit application, please contact me at (412) 395-3699 or by email at abosiljevac@eqt.com.

Sincerely,

RAB

Alex Bosiljevac
EQT Corporation

I.D. No. 017-00158 Reg. 3269A
Company EQT GATHERING
Facility JANUS Region
Initials

Enclosures

Adkins, Sandra K

From: Adkins, Sandra K
Sent: Wednesday, July 06, 2016 11:09 AM
To: 'dcharletta@eqt.com'; 'abosiljevac@eqt.com'
Cc: McKeone, Beverly D; Kessler, Joseph R; Ward, Beth A
Subject: WV DAQ Permit Application Status for EQT Gathering, LLC; Janus Station

RE: Application Status
EQT Gathering, LLC
Janus Station
Facility ID No. 017-00158
Application No. R13-3269A

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Should you have any questions, please contact the assigned engineer, Joe Kessler, at 304-926-0499, extension 1219.