

MARKWEST

MarkWest Energy Appalachia, L.L.C.
P.O. Box 575
South Shore, KY 41175
(606) 932-8216

January 23, 2015

David Keatley
NSR Air Pollution Permit Engineer
West Virginia Department of Environmental Protection
Division of Air Quality
601 57th Street SE
Office: 1121
Charleston, WV 25304



RE: *Corrections for Permit – R13-1814D that was issued on 12.16.14*
MarkWest Energy Appalachia, LLC – Kenova Facility

Dear Mr. Keatley:

Please find the signed Permit Application requesting a Class I Administrative Update along with the corrections that need to be updated in the R13-1814D permit that was issued.

If you have any questions or comments in regards to this permit action, please do not hesitate to contact me at (606) 932-8216 or email Jennifer.osborne@markwest.com.

Sincerely,

MARKWEST ENERGY APPALACHIA, LLC

Jennifer Osborne
Environmental Coordinator

cc: Trinity Consultants
MarkWest File



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

January 14, 2015

Jennifer Osborne
P.O. Box 575
South Shore, KY 41175

RE: Application Status
MarkWest Energy Appalachia, LLC
Kenova Facility
Plant ID No. 099-00053

Dear Ms. Osborne:

Your letter regarding Permit R13-1814D for the Kenova facility was received by this Division on January 9, 2015. It is being returned to you due to the fact that a permit application requesting a Class I Administrative Update must be submitted in order to process the corrections for permit R13-1814D. Please note that the permit application must be signed by the company designated Responsible Official.

Should you have any questions, please contact me at 304-926-0499, extension 1260.

Sincerely,

Beverly D. McKeone, P.E.
NSR Program Manager

BDM/jlr

Attachment



WEST VIRGINIA DEPARTMENT OF ENVIRONMENTAL PROTECTION
DIVISION OF AIR QUALITY

601 57th Street, SE
 Charleston, WV 25304
 (304) 926-0475
www.dep.wv.gov/daq

**APPLICATION FOR NSR PERMIT
 AND
 TITLE V PERMIT REVISION
 (OPTIONAL)**

PLEASE CHECK ALL THAT APPLY TO NSR (45CSR13) (IF KNOWN):

- CONSTRUCTION MODIFICATION RELOCATION
 CLASS I ADMINISTRATIVE UPDATE TEMPORARY
 CLASS II ADMINISTRATIVE UPDATE AFTER-THE-FACT

PLEASE CHECK TYPE OF 45CSR30 (TITLE V) REVISION (IF ANY):

- ADMINISTRATIVE AMENDMENT MINOR MODIFICATION
 SIGNIFICANT MODIFICATION

IF ANY BOX ABOVE IS CHECKED, INCLUDE TITLE V REVISION INFORMATION AS ATTACHMENT S TO THIS APPLICATION

FOR TITLE V FACILITIES ONLY: Please refer to "Title V Revision Guidance" in order to determine your Title V Revision options (Appendix A, "Title V Permit Revision Flowchart") and ability to operate with the changes requested in this Permit Application.

Section I. General

1. Name of applicant (as registered with the WV Secretary of State's Office): MarkWest Energy Appalachia, LLC.		2. Federal Employer ID No. (FEIN): 841352233	
3. Name of facility (if different from above): Kenova Natural Gas Liquids Extraction Facility		4. The applicant is the: <input type="checkbox"/> OWNER <input type="checkbox"/> OPERATOR <input checked="" type="checkbox"/> BOTH	
5A. Applicant's mailing address: 1515 Arapahoe St. Tower 2, Suite 700 Denver, CO 80202		5B. Facility's present physical address: 50 Big Sandy Road Kenova, WV 25311	
6. West Virginia Business Registration. Is the applicant a resident of the State of West Virginia? <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO – If YES, provide a copy of the Certificate of Incorporation/Organization/Limited Partnership (one page) including any name change amendments or other Business Registration Certificate as Attachment A . – If NO, provide a copy of the Certificate of Authority/Authority of L.L.C./Registration (one page) including any name change amendments or other Business Certificate as Attachment A .			
7. If applicant is a subsidiary corporation, please provide the name of parent corporation: MarkWest Energy Partners, LP			
8. Does the applicant own, lease, have an option to buy or otherwise have control of the proposed site? <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO – If YES, please explain: MarkWest owns the property and the facility. – If NO, you are not eligible for a permit for this source.			
9. Type of plant or facility (stationary source) to be constructed, modified, relocated, administratively updated or temporarily permitted (e.g., coal preparation plant, primary crusher, etc.): Natural Gas Liquids Extraction Facility		10. North American Industry Classification System (NAICS) code for the facility: 211112	
11A. DAQ Plant ID No. (for existing facilities only): 099 – 00053		11B. List all current 45CSR13 and 45CSR30 (Title V) permit numbers associated with this process (for existing facilities only): R13-1814D	

All of the required forms and additional information can be found under the Permitting Section of DAQ's website, or requested by phone.

12A.

- For **Modifications, Administrative Updates** or **Temporary permits** at an existing facility, please provide directions to the *present location* of the facility from the nearest state road;
- For **Construction** or **Relocation permits**, please provide directions to the *proposed new site location* from the nearest state road. Include a **MAP** as **Attachment B**.

Travel west from Kenova on US-60, turn south on 21st street, turn west on Chester street, turn south on 23rd street/Big Sandy road

12.B. New site address (if applicable): N/A	12C. Nearest city or town: Kenova	12D. County: Wayne
12.E. UTM Northing (KM): 4248.2	12F. UTM Easting (KM): 380.6	12G. UTM Zone: 17
13. Briefly describe the proposed change(s) at the facility: No additional changes; only administrative changes.		
14A. Provide the date of anticipated installation or change: If this is an After-The-Fact permit application, provide the date upon which the proposed change did happen: / /		14B. Date of anticipated Start-Up if a permit is granted:
14C. Provide a Schedule of the planned Installation of/Change to and Start-Up of each of the units proposed in this permit application as Attachment C (if more than one unit is involved).		
15. Provide maximum projected Operating Schedule of activity/activities outlined in this application: Hours Per Day 24 Days Per Week 7 Weeks Per Year 52		
16. Is demolition or physical renovation at an existing facility involved? <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO		
17. Risk Management Plans. If this facility is subject to 112(r) of the 1990 CAAA, or will become subject due to proposed changes (for applicability help see www.epa.gov/ceppo), submit your Risk Management Plan (RMP) to U. S. EPA Region III.		
18. Regulatory Discussion. List all Federal and State air pollution control regulations that you believe are applicable to the proposed process (<i>if known</i>). A list of possible applicable requirements is also included in Attachment S of this application (Title V Permit Revision Information). Discuss applicability and proposed demonstration(s) of compliance (<i>if known</i>). Provide this information as Attachment D .		
Section II. Additional attachments and supporting documents.		
19. Include a check payable to WVDEP – Division of Air Quality with the appropriate application fee (per 45CSR22 and 45CSR13).		
20. Include a Table of Contents as the first page of your application package.		
21. Provide a Plot Plan , e.g. scaled map(s) and/or sketch(es) showing the location of the property on which the stationary source(s) is or is to be located as Attachment E (Refer to Plot Plan Guidance) . - Indicate the location of the nearest occupied structure (e.g. church, school, business, residence).		
22. Provide a Detailed Process Flow Diagram(s) showing each proposed or modified emissions unit, emission point and control device as Attachment F .		
23. Provide a Process Description as Attachment G . - Also describe and quantify to the extent possible all changes made to the facility since the last permit review (if applicable).		
All of the required forms and additional information can be found under the Permitting Section of DAQ's website, or requested by phone.		

24. Provide **Material Safety Data Sheets (MSDS)** for all materials processed, used or produced as **Attachment H**.
 – For chemical processes, provide a MSDS for each compound emitted to the air.

25. Fill out the **Emission Units Table** and provide it as **Attachment I**.

26. Fill out the **Emission Points Data Summary Sheet (Table 1 and Table 2)** and provide it as **Attachment J**.

27. Fill out the **Fugitive Emissions Data Summary Sheet** and provide it as **Attachment K**.

28. Check all applicable **Emissions Unit Data Sheets** listed below:

<input type="checkbox"/> Bulk Liquid Transfer Operations	<input type="checkbox"/> Haul Road Emissions	<input type="checkbox"/> Quarry
<input type="checkbox"/> Chemical Processes	<input type="checkbox"/> Hot Mix Asphalt Plant	<input type="checkbox"/> Solid Materials Sizing, Handling and Storage Facilities
<input type="checkbox"/> Concrete Batch Plant	<input type="checkbox"/> Incinerator	<input type="checkbox"/> Storage Tanks
<input type="checkbox"/> Grey Iron and Steel Foundry	<input type="checkbox"/> Indirect Heat Exchanger	
<input checked="" type="checkbox"/> General Emission Unit, specify Engine		

Fill out and provide the **Emissions Unit Data Sheet(s)** as **Attachment L**.

29. Check all applicable **Air Pollution Control Device Sheets** listed below:

<input type="checkbox"/> Absorption Systems	<input type="checkbox"/> Baghouse	<input type="checkbox"/> Flare
<input type="checkbox"/> Adsorption Systems	<input type="checkbox"/> Condenser	<input type="checkbox"/> Mechanical Collector
<input type="checkbox"/> Afterburner	<input type="checkbox"/> Electrostatic Precipitator	<input type="checkbox"/> Wet Collecting System
<input checked="" type="checkbox"/> Other Collectors, specify Oxidation Catalyst		

Fill out and provide the **Air Pollution Control Device Sheet(s)** as **Attachment M**.

30. Provide all **Supporting Emissions Calculations** as **Attachment N**, or attach the calculations directly to the forms listed in Items 28 through 31.

31. **Monitoring, Recordkeeping, Reporting and Testing Plans.** Attach proposed monitoring, recordkeeping, reporting and testing plans in order to demonstrate compliance with the proposed emissions limits and operating parameters in this permit application. Provide this information as **Attachment O**.

➤ Please be aware that all permits must be practically enforceable whether or not the applicant chooses to propose such measures. Additionally, the DAQ may not be able to accept all measures proposed by the applicant. If none of these plans are proposed by the applicant, DAQ will develop such plans and include them in the permit.

32. **Public Notice.** At the time that the application is submitted, place a **Class I Legal Advertisement** in a newspaper of general circulation in the area where the source is or will be located (See 45CSR§13-8.3 through 45CSR§13-8.5 and *Example Legal Advertisement* for details). Please submit the **Affidavit of Publication** as **Attachment P** immediately upon receipt.

33. **Business Confidentiality Claims.** Does this application include confidential information (per 45CSR31)?

YES NO

➤ If **YES**, identify each segment of information on each page that is submitted as confidential and provide justification for each segment claimed confidential, including the criteria under 45CSR§31-4.1, and in accordance with the DAQ's "*Precautionary Notice – Claims of Confidentiality*" guidance found in the *General Instructions* as **Attachment Q**.

Section III. Certification of Information

34. **Authority/Delegation of Authority.** Only required when someone other than the responsible official signs the application. Check applicable **Authority Form** below:

<input type="checkbox"/> Authority of Corporation or Other Business Entity	<input type="checkbox"/> Authority of Partnership
<input type="checkbox"/> Authority of Governmental Agency	<input type="checkbox"/> Authority of Limited Partnership

Submit completed and signed **Authority Form** as **Attachment R**.

All of the required forms and additional information can be found under the Permitting Section of DAQ's website, or requested by phone.

35A. **Certification of Information.** To certify this permit application, a Responsible Official (per 45CSR§13-2.22 and 45CSR§30-2.28) or Authorized Representative shall check the appropriate box and sign below.

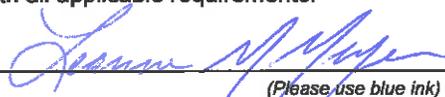
Certification of Truth, Accuracy, and Completeness

I, the undersigned **Responsible Official** / **Authorized Representative**, hereby certify that all information contained in this application and any supporting documents appended hereto, is true, accurate, and complete based on information and belief after reasonable inquiry I further agree to assume responsibility for the construction, modification and/or relocation and operation of the stationary source described herein in accordance with this application and any amendments thereto, as well as the Department of Environmental Protection, Division of Air Quality permit issued in accordance with this application, along with all applicable rules and regulations of the West Virginia Division of Air Quality and W.Va. Code § 22-5-1 et seq. (State Air Pollution Control Act). If the business or agency changes its Responsible Official or Authorized Representative, the Director of the Division of Air Quality will be notified in writing within 30 days of the official change.

Compliance Certification

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

SIGNATURE _____


(Please use blue ink)

DATE: _____

1-22-15
(Please use blue ink)

35B. Printed name of signee: Leanne Meyer

35C. Title: VP Environmental Safety and Compliance

35D. E-mail:

35E. Phone:

35F. FAX:

36A. Printed name of contact person (if different from above): Jennifer Osborne

36B. Title: Environmental Coordinator

36C. E-mail:

Jennifer.Osborne@markwest.com

36D. Phone: (606) 422-7756

36E. FAX:

PLEASE CHECK ALL APPLICABLE ATTACHMENTS INCLUDED WITH THIS PERMIT APPLICATION:

- | | |
|---------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|
| <input type="checkbox"/> Attachment A: Business Certificate | <input type="checkbox"/> Attachment K: Fugitive Emissions Data Summary Sheet |
| <input type="checkbox"/> Attachment B: Map(s) | <input type="checkbox"/> Attachment L: Emissions Unit Data Sheet(s) |
| <input type="checkbox"/> Attachment C: Installation and Start Up Schedule | <input type="checkbox"/> Attachment M: Air Pollution Control Device Sheet(s) |
| <input type="checkbox"/> Attachment D: Regulatory Discussion | <input type="checkbox"/> Attachment N: Supporting Emissions Calculations |
| <input type="checkbox"/> Attachment E: Plot Plan | <input type="checkbox"/> Attachment O: Monitoring/Recordkeeping/Reporting/Testing Plans |
| <input type="checkbox"/> Attachment F: Detailed Process Flow Diagram(s) | <input type="checkbox"/> Attachment P: Public Notice |
| <input type="checkbox"/> Attachment G: Process Description | <input type="checkbox"/> Attachment Q: Business Confidential Claims |
| <input type="checkbox"/> Attachment H: Material Safety Data Sheets (MSDS) | <input type="checkbox"/> Attachment R: Authority Forms |
| <input type="checkbox"/> Attachment I: Emission Units Table | <input type="checkbox"/> Attachment S: Title V Permit Revision Information |
| <input type="checkbox"/> Attachment J: Emission Points Data Summary Sheet | <input type="checkbox"/> Application Fee |

Please mail an original and three (3) copies of the complete permit application with the signature(s) to the DAQ, Permitting Section, at the address listed on the first page of this application. Please DO NOT fax permit applications.

FOR AGENCY USE ONLY – IF THIS IS A TITLE V SOURCE:

- Forward 1 copy of the application to the Title V Permitting Group and:
- For Title V Administrative Amendments:
 - NSR permit writer should notify Title V permit writer of draft permit,
- For Title V Minor Modifications:
 - Title V permit writer should send appropriate notification to EPA and affected states within 5 days of receipt,
 - NSR permit writer should notify Title V permit writer of draft permit.
- For Title V Significant Modifications processed in parallel with NSR Permit revision:
 - NSR permit writer should notify a Title V permit writer of draft permit,
 - Public notice should reference both 45CSR13 and Title V permits,
 - EPA has 45 day review period of a draft permit.

All of the required forms and additional information can be found under the Permitting Section of DAQ's website, or requested by phone.

MarkWest Energy Appalachia, L.L.C.
P.O. Box 575
South Shore, KY 41175
(606) 932-8216



January 7, 2015

David Keatley
NSR Air Pollution Permit Engineer
West Virginia Department of Environmental Protection
Division of Air Quality
601 57th Street SE
Office: 1121
Charleston, WV 25304

*RE: Corrections for Permit – R13-1814D that was issued on 12.16.14
MarkWest Energy Appalachia, LLC – Kenova Facility*

Dear Mr. Keatley:

MarkWest Energy Appalachia, LLC (MarkWest) received the issued Permit to Modify Permit for the Kenova Facility. MarkWest's had submitted these comments regarding the draft permit and Engineering Evaluation/Fact Sheet during the comment period on December 10, 2014. However, corrections did not get carried over to the issued permit.

DRAFT PERMIT

- ✓1) Please update the UTM Coordinates, they should be 360.966 km Easting 4,248.386 km Northing Zone 17
- ✓2) Page 2 of 23 regarding the Description of Change, the existing 3,500 bhp compressor engine will be replaced with a newly rebuilt 3,550 bhp compressor engine.
- ✓3) Page 4 of 23 Section 1, the (S-6) Emission Unit ID description should be Caterpillar G3612 LE Natural Gas Compressor Engine, year installed 2014 (rebuilt 2014), and the Design Capacity should be 3,550 bhp not 3350 bhp.
- ✓4) Page 17 of 23 Section 5.1.2, the 23, 487 cubic feet per hour should be 23,497 cubic feet per hour.
- ✓5) Page 17 of 23 Section 5.1.5 referencing C6 and EGC-1 units, the statement was not referenced in the original G60 permit pertaining to EGC-1. Please remove the requirements pertaining to EGC-1. This was not listed as a requirement in the G60- permit; this is an emergency unit and does not run on a routine basis.
- ✓6) Page 17 of 23 Section 5.2.1, the permittee shall inspect catalyst quarterly, was not specified quarterly regarding the EGC-1 in the G-60 permit. Please remove this requirement pertaining to the EGC-1.

ENGINEERING EVALUATION/FACT SHEET

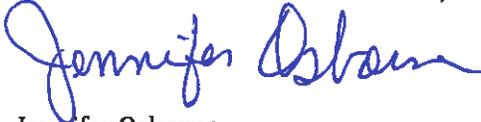
- ? 7) The location in the Background information needs to be listed as Wayne County instead of Cabell County
- ✓ 8) Regarding the Description of the Background information, an existing 3,500 bhp compressor is being replaced with a newly rebuilt 3,550 bhp compressor
- ? 9) Page 1 of 5, Description of Process, please remove the LE from the Caterpillar G3612. S-2 is a Caterpillar G3612

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If you have any questions or comments in regards to this permit action, please do not hesitate to contact me at (606) 932-8216 or email [Jennifer.osborne@markwest.com](mailto:Jennifer.osborne@markwest.com).

Sincerely,

MARKWEST ENERGY APPALACHIA, LLC



Jennifer Osborne  
Environmental Coordinator

cc: Trinity Consultants  
MarkWest File



*MarkWest Energy Appalachia, L.L.C.*  
P.O. Box 575  
South Shore, KY 41175  
(606) 932-8216

December 10, 2014

David Keatley  
NSR Air Pollution Permit Engineer  
West Virginia Department of Environmental Protection  
Division of Air Quality  
601 57<sup>th</sup> Street SE  
Office: 1121  
Charleston, WV 25304

**RE:** *Comments on Draft Modification Revision Permit – R13-1814D  
MarkWest Energy Appalachia, LLC – Kenova Facility*

Dear Mr. Keatley:

MarkWest Energy Appalachia, LLC (MarkWest) submitted a Modification Permit Revision application for the current conditional major permit (R13-1814C and G60-C053) on July 29, 2014. MarkWest's comments regarding the draft permit and Engineering Evaluation/Fact Sheet are provided below for WVDEP's consideration.

### **DRAFT PERMIT**

- 1) Please update the UTM Coordinates, they should be 360.966 km Easting 4,248.386 km Northing Zone 17
- 2) Page 2 of 23 regarding the Description of Change, the existing 3,500 bhp compressor engine will be replaced with a newly rebuilt 3,550 bhp compressor engine.
- 3) Page 4 of 23 Section 1, the (S-6) Emission Unit ID description should be Caterpillar G3612 LE Natural Gas Compressor Engine, year installed pending (rebuilt 2014), and the Design Capacity should be 3,550 bhp.
- 4) Page 17 of 23 Section 5.1.2, the 23, 487 cubic feet per hour should be 23,497 cubic feet per hour.
- 5) Page 17 of 23 Section 5.1.5 referencing C6 and EGC-1 units, the statement was not referenced in the original G60 permit pertaining to EGC-1. Please remove the requirements pertaining to EGC-1. This was not listed as a requirement in the G60- permit; this is an emergency unit and does not run on a routine basis.

- 6) Page 17 of 23 Section 5.2.1, the permittee shall inspect catalyst quarterly, was not specified quarterly regarding the EGC-1 in the G-60 permit. Please remove this requirement pertaining to the EGC-1.

### ENGINEERING EVALUATION/FACT SHEET

- 7) The location in the Background information needs to be listed as Wayne County instead of Cabell County
- 8) Regarding the Description of the Background information, an existing 3,500 bhp compressor is being replaced with a newly rebuilt 3,550 bhp compressor
- 9) Page 1 of 5, Description of Process, please remove the LE from the Caterpillar G3612. S-2 is a Caterpillar G3612

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If you have any questions or comments in regards to this permit action, please do not hesitate to contact me at (606) 932-8216 or email Jennifer.osborne@markwest.com.

Sincerely,

MARKWEST ENERGY APPALACHIA, LLC



Jennifer Osborne
Environmental Coordinator

cc: Trinity Consultants
MarkWest File