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Response to Public Comment

Class II General Permit G35-C

For the Prevention and Control of Air Pollution in regard to the Construction, Modification, Relocation, Administrative Update and Operation of Natural Gas Compressor and/or Dehydration Facilities

Date: December 18, 2015

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BACKGROUND INFORMATION

During the week of August 10, 2015, pursuant to §45-13-8, the West Virginia Division of Air Quality (DAQ) provided notice to the public of a preliminary determination to issue General Permit G35-C for the Prevention and Control of Air Pollution in regard to the Construction, Modification, Relocation, Administrative Update and Operation of Natural Gas Compressor and/or Dehydration Facilities. At that time, the draft permit and Engineering Evaluation/Fact Sheet were made available to the public for review.

The public notice was followed by a public comment period (required to be a minimum of 30 days under §45-13-8) scheduled to end at 5:00 P.M. on September 14, 2015. During the public comment period, the DAQ accepted comments on our preliminary determination to issue General Permit G35-C and on all documents related thereto. To provide information on the permitting action and to facilitate the submission of comments, the DAQ held, on September 1, 2015, pursuant to §45-13-9, a public meeting concerning General Permit G35-C at the WVDEP Headquarters located in Charleston, WV.

OVERVIEW OF COMMENTS RECEIVED

The DAQ received written comments during the public comment period. Comments were received by and/or on behalf of the following individuals, groups, and organizations: (1) John Bird; (2) Tina Del Prete; (3) Lyn Bordo; (4) George Monk and Molly Schaffnit; (5) WV Surface Owners' Rights Organization (WV-SORO); (6) West Virginia Oil and Natural Gas Association (WVONGA); (7) Williams Companies; (8) Antero Resources; (9) Thomas Bates; (10) Beth Crowder.

Pursuant to §45-13-8.8, all submitted comments received during the public comment period have been reviewed and are appropriately addressed in this document.

ORGANIZATION OF COMMENT RESPONSE

The DAQ's response to the submitted comments includes both a general and specific response section. The general response defines issues over which the DAQ has authority and by contrast, identify those issues that are beyond the purview of the DAQ. The general response also describes the statutory basis for the issuance/denial of a permit, discusses the role of the pre-construction permitting process in the larger divisional goal of maintaining air quality in WV.

The specific response summarizes each relevant non-general comment that falls within the purview of the DAQ and provides a response to it. This document does not reproduce all the comments here (they are available for review in the G35-C file). Instead, each comment is summarized and key points are listed. The DAQ makes no claim that the summaries are complete; they are provided only to place the responses in a proper context. For a complete understanding of submitted comments, please see the original documents in the file. The DAQ responses, however, are directed to the entire comments and not just to what is summarized. Comments that are not directly identified and responded to in the specific response section of this document are assumed to be answered under the general response section.

GENERAL RESPONSE TO COMMENTS

Statutory Authority of the DAQ

The statutory authority of the DAQ is given under the Air Pollution Control Act (APCA) - West Virginia Code §22-5-1, *et. seq.* - which states, under §22-5-1 ("Declaration of policy and purpose"), that:

> It is hereby declared the public policy of this state and the purpose of this article to achieve and maintain such levels of air quality as will protect human health and safety, and to the greatest degree practicable, prevent injury to plant and animal life and property, foster the comfort and convenience of the people, promote the economic and social development of this state and facilitate the enjoyment of the natural attractions of this state.

DAQ Permitting Process in Context

It is important to note that the DAQ permitting process is but one part of a system that works to meet the intent of the APCA in WV. The DAQ maintains a Compliance/Enforcement (C/E) Section, an Air Monitoring Section, a Planning Section, *etc.* to effect this. Most pertinent to the permitting process, the C/E Section regularly inspects permitted sources to determine the compliance status of the facility including compliance with all testing, monitoring, record-keeping, and reporting requirements.

General Response Conclusion

In conclusion, in response to all commenters who referenced substantive non-air quality issues, the APCA and 45CSR13 does not grant the DAQ the authority to take into consideration such issues in determining to issue or deny the permit. Further, the requirements of 45CSR13 require the DAQ to, when denying a permit, explicitly state the reason pursuant to §45-13-5.7. Additionally, the permit is but the beginning of the involvement of the DAQ with a source. After issuance, the facility will receive regular inspections to determine compliance with the requirements as outlined in the applicable permit.

SPECIFIC RESPONSES TO COMMENTS

GENERAL COMMENTS

Comment #1 (Oral Comment at 9/1/2015 Public Meeting)

- Concerned about noise, light and traffic.
  The Canton North Compressor Station has disrupted his life (disturbs sleep).
  What sound level is reasonable?
  Measured noise levels by phone that measure 75 dB.
  Companies should be required to install active noise reduction such as berms, walls, and sound lessening materials.
- Better public notices are needed.

Received by: Thomas Bates

DAQ Response

- Permit condition 3.2.8 addresses noise and light issues at registered natural gas compressor stations. It states:

  The registrant shall not create a nuisance to the surrounding community by way of unreasonable noise and light during operation.

  The registration under any general permit is a voluntary process and is not required. Permit condition 3.2.8 is a reasonable condition under 45CSR13 Section 5.11. Furthermore, this permit condition meets the intent and purpose of West Virginia Code §22-5-1. Therefore, no changes will be made to this permit condition.

- 45CSR13 Section 8 establishes the public notice procedures for Class II general permit applications. Public notice of any proposed new or revised general permit must be conducted by the agency in accordance with the provisions of 45CSR13 subsection 8.4. The Secretary shall, prior to issuance or revision of any general permit, prepare a rationale document supporting his or her stated intent to issue or revise such general permit and shall transmit to U. S. EPA and any other interested party which so requests, a nonconfidential copy of the rationale document and a draft copy of the general permit which is proposed for issuance or revision. The Secretary shall review and appropriately address any comments received from the public and U. S. EPA prior to the issuance or revision of any general permit.

  Additionally, at the time that an application for Class II general permit registration is filed, the applicant shall also place a Class I legal advertisement in a newspaper of general circulation in the area where the source is or will be located. No such permit or general permit registration shall be issued to any applicant until at least thirty (30) days notice has been provided to the public. The advertisement shall contain at a minimum, the name of the applicant, the type and location of the source, the type and amount of air pollutants that will be discharged, the nature of the permit being sought, the proposed start-up date for the source and a contact telephone number for more information.

- 45CSR13 is a legislative rule and any change to the public notice procedures must be done through the legislative process.

DAQ Action
- None.
- None.

Comment #2 (Oral Comment at 9/1/2015 Public Meeting)
- Nearby Pandora Compressor Station is very loud.
  Heartbroken dealing with this industry.
  What sound level is reasonable?

Received by: Beth Crowder

DAQ Response
Permit condition 3.2.8 addresses noise and light issues at registered natural gas compressor stations. It states:

The registrant shall not create a nuisance to the surrounding community by way of unreasonable noise and light during operation.

The registration under any general permit is a voluntary process and is not required. Permit condition 3.2.8 is a reasonable condition under 45CSR13 Section 5.11. Furthermore, this permit condition meets the intent and purpose of West Virginia Code §22-5-1. Therefore, no changes will be made to this permit condition.

DAQ Action
None.

Comment #3
Why are people who are near drilling and gas pipe lines not protected from noise, failing wells, bad roads, etc. The general permit should include noise abatement. If gas wells are in the public interest, why should not the ones near be protected from bad water, noise, and other problems?
Received by: John Bird

DAQ Response
Permit condition 3.2.8 addresses noise and light issues at registered natural gas compressor stations. It states:

The registrant shall not create a nuisance to the surrounding community by way of unreasonable noise and light during operation.

The registration under any general permit is a voluntary process and is not required. Permit condition 3.2.8 is a reasonable condition under 45CSR13 Section 5.11. Furthermore, this permit condition meets the intent and purpose of West Virginia Code §22-5-1. Therefore, no changes will be made to this permit condition.

DAQ Action
None.

Comment #4
I am writing in reference to the new rules your office is planning on instituting for compressor stations. I would like to start by thanking you and your office for realizing that more needs to be done to limit noise, light and emission pollution from these stations. "3.2.8 states-The registrant shall not create a nuisance to the surrounding community by way of unreasonable noise and light during operations."

I appreciate that noise and light are considered a nuisance, because they really are to folks living around them. In Doddridge County, where I live, there are so many compressor stations already built that are constantly emitting way to much noise and light, not to mention the polluting emissions spewing from these stations. The one thing I regret about these new rules is that they would only cover new stations. Something really needs to be done about the ones that already exist.

The noise from these stations are unbearable to folks living close to them and can travel to homes rather far away. Especially in fall and winter when the leaves are off the trees So I feel that a decimal limit must be imposed as it would be more predictable and clear. I can hear the Victoria Station that is about 3 or 4 miles, as the crow flies, from my house in fall and winter. I also have the Canton North Compressor station about 11/4 miles from my house that I expect to be able to hear when the leaves come off the trees. And behind me about a mile, the Pandora (doesn't that name give you warm and fuzzy feelings? NOT) being built. So I am surrounded by these stations and I do not like it one bit. I do not have the ways and means to move so I am stuck here, as are a lot of folks and it is way past time that someone started caring about us and our environment.

I am hoping that new rules and regulations will be imposed on the emissions from these stations also. I've asked this before and was not given an answer so here it is again. When will enough be enough for my community? When will there be enough well pads, compressor stations, metering stations, gathering lines and pipelines be enough for your agency to say enough? It's already way to much for the folks living in Doddridge.

Sorry to vent to you all my frustrations but I am at the end of my rope. I guess I can be thankful that my days are numbered and won't have to watch the total destruction and toxic wasteland that Doddridge will soon become.

Please let me know you got my comments and keep me informed as to what ends up happening with these new rules and whether they will be implemented or if the industry gets to win again by you not implementing these new rules.
Received by: Tina Del Prete

DAQ Response
Permit condition 3.2.8 addresses noise and light issues at registered natural gas compressor stations. It states:

The registrant shall not create a nuisance to the surrounding community by way of unreasonable noise and light during operation.

The registration under any general permit is a voluntary process and is not required. Permit condition 3.2.8 is a reasonable condition under 45CSR13 Section 5.11. Furthermore, this permit condition meets the intent and purpose of West Virginia Code §22-5-1. Therefore, no changes will be made to this permit condition.

DAQ Action
None.

Comment #5
As a citizen of WV and resident living right on the Doddridge-Ritchie county line, I am contacting you with my concerns surrounding the drilling activity in our area, specifically compressor stations and even more specifically, the noise from the compressor station closest to our home. Most days, especially mornings, that I feel like I am living on an airport runway.

During my 30+ year working career my husband and I poured all of our resources into educating our children and developing our home & land.

I retired just last fall. Now I find I cannot even sit outside and enjoy the fruits of our labors. The compressor is unbearably loud. Set aside all the other aspects of drilling in our area- this whole fiasco as it were- I find my life and lifestyle being destroyed. And, no, that is not hyperbole. The noise is that bad!

I implore you to please advocate for stricter noise and light standards for these facilities, both future and existing.

I appreciate your considerations and action!!
Received by: Lyn Bordo

DAQ Response
Permit condition 3.2.8 addresses noise and light issues at registered natural gas compressor stations. It states:

The registrant shall not create a nuisance to the surrounding community by way of unreasonable noise and light during operation.

The registration under any general permit is a voluntary process and is not required. Permit condition 3.2.8 is a reasonable condition under 45CSR13 Section 5.11. Furthermore, this permit condition meets the intent and purpose of West Virginia Code §22-5-1. Therefore, no changes will be made to this permit condition.

DAQ Action
None.

Comment #6
We would like to support the DAQ in their language for noise restriction in the G35-C general permit. We believe that the loud noise that is generated at compressor stations could be lessened dramatically, but is not.

Our experience is based on 039-00530, the Cranberry Pipeline station near us. For our neighbors who live closest the constant noise is a nuisance. For us who live further away the din is annoying.

We believe the language in the general permit at 3.2.8 should be retained without change.
Received by: George Monk and Molly Schaffnit

DAQ Response
None.

DAQ Action
None.

Comment #7
Having reviewed the draft G35-C, which replaces portions of the previously proposed G80-A general permit, we remain concerned that the permit fails to satisfy several requirements of the Clean Air Act and federal and state regulations implementing the Act. Because the G35-C incorporates many provisions of the proposed G80-A, which had several shortcomings including a lack of uniform terms and conditions; failure to provide specific technically accurate limits on potential to emit, etc., we respectfully ask that you reconsider our prior comments on the proposed G80-A where relevant. A copy of the comments on the draft G80-A previously submitted by the Group Against Smog & Pollution, WV-SORO, et. al. are attached.
Received by: WV-SORO

DAQ Response
Each comment has been provided a response in this document.

DAQ Action
Those comments have been incorporated into this document.

Comment #8
WVDAQ must either alter G80-A to provide uniform terms and conditions, or provide a 30-day public comment period prior to authorizing construction or modification of individual sources under G80-A.

Typically, public participation is not required prior to issuing a general permit registration to an individual source based on the presumption that all facilities authorized under the same general permit will be subject to uniform terms and conditions.

While EPA requires state and local air permitting authorities to provide a 30-day opportunity for public comment prior to issuing a standard permit, EPA does not require a similar public comment period prior to issuing a general permit registration to an individual source. EPA's logic is that (1) the public has an opportunity to comment on the general permit when the air permitting authority initially developed the general permit, and (2) no additional public comment period is necessary because general permits are standardized documents that will not be tailored on a case-by-case basis to individual sources:

In cases where standardized permits have been adopted, EPA and the public need not be involved in their application to individual sources as long as the standard permits themselves have been subject to notice and opportunity to comment. . . . A general permit is a single permit that establishes terms and conditions that must be complied with by all sources subject to that permit. The establishment of a general permit provides for conditions limiting potential to emit in a one-time permitting process, and thus avoids the need to issue separate permits for each source within the covered source type or category.
Received by: WV-SORO

DAQ Response
DAQ does provide a 30 day comment period prior to authorizing construction or modification of individual sources under all Class II general permits, including General Permit G35-C.

45CSR13 Section 8 establishes the public notice procedures for Class II general permit applications. Public notice of any proposed new or revised general permit must be conducted by the agency in accordance with the provisions of 45CSR13 subsection 8.4 and 8.9. The Secretary shall, prior to issuance or revision of any general permit, prepare a rationale document supporting his or her stated intent to issue or revise such general permit and shall transmit to U. S. EPA and any other interested party which so requests, a nonconfidential copy of the rationale document and a draft copy of the general permit which is proposed for issuance or revision. The Secretary shall review and appropriately address any comments received from the public and U. S. EPA prior to the issuance or revision of any general permit.

Additionally, at the time that an application for Class II general permit registration is filed, the applicant shall also place a Class I legal advertisement in a newspaper of general circulation in the area where the source is or will be located. No such permit or general permit registration shall be issued to any applicant until at least thirty (30) days notice has been provided to the public and the public notice requirements of 45CSR13 section 8.3. The advertisement shall contain at a minimum, the name of the applicant, the type and location of the source, the type and amount of air pollutants that will be discharged, the nature of the permit being sought, the proposed start-up date for the source and a contact telephone number for more information.

DAQ Action
None.

Comment #9

By incorporating facility-specific emission limits and operating parameter requirements by reference, G80-A defies the presumption that all facilities authorized under the same general permit will be subject to uniform terms and conditions.

G80-A contains virtually no specific numeric limits on emissions from G80-A-eligible emission units, nor does it specify pollution control device efficiencies, limits on equipment capacities, operational or production limitations, or operating parameters necessary to ensure sources achieve and maintain any required control efficiencies or emission limits. Instead, G80-A would incorporate by reference emission limits and other operating parameters contained in facility-specific G80-A registration forms. It appears that the information in the registration forms would copied directly from applicants' G80-A registration applications.

Thus, while G80-A nominally provides uniform, standardized permit terms and conditions, the G80-A terms and conditions themselves contain very few substantive requirements; instead, the G80-A language largely incorporates by reference whatever facility specific numeric emission limits and operating parameters the applicant provided in its initial G80-A registration application. As a result, the actual applicable numeric emission limits and operating parameters may vary as wildly from one G80-A facility to the next as they would between G80-A-eligible sources permitted under the standard individualized minor NSR permitting process. Yet, unlike individual minor NSR permits, neither individual G80-A authorizations, nor the facility-specific G80-A registration forms are subject to public comment prior to issuance.

As proposed, G80-A would afford applicants virtually the same freedom to customize their proposed facilities the standard minor NSR permitting process would provide while eliminating the opportunity for public participation afforded under the standard minor NSR permitting process. As discussed above, the rationale for not requiring a 30-day public comment period prior to issuing a general permit registration to an individual source is premised on the assumption that applicable terms and conditions will not vary from one general permit facility to the next. In its present form, G80-A defies that assumption. Thus WVDAQ must either alter G80-A to provide uniform terms and conditions, or provide a 30-day public comment period prior to issuing a general permit registration to an individual source.
Received by: WV-SORO

DAQ Response

General Permit G35-C section 1.1.2 states that in accordance with the information filed in the G35-C General Permit Registration Application, the equipment/processes identified in the Emissions Unit Table of the G35-C General Permit Registration 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 shall not exceed the emission limits listed in the General Permit Registration. Each *individual* G35-C General Permit Registration contains specific emission limits, maximum design capacities, control devices required, etc. This information is reviewed to ensure that all applicable regulations are met. General Permit G35-C contains all applicable regulatory requirements for the emission sources covered.

DAQ does provide a 30 day comment period prior to registering construction or modification of individual sources under all Class II general permits, including General Permit G35-C.

45CSR13 Section 8 establishes the public notice procedures for Class II general permit applications. Public notice of any proposed new or revised general permit must be conducted by the agency in accordance with the provisions of 45CSR13 subsection 8.4 and 8.9. The Secretary shall, prior to issuance or revision of any general permit, prepare a rationale document supporting his or her stated intent to issue or revise such general permit and shall transmit to U. S. EPA and any other interested party which so requests, a nonconfidential copy of the rationale document and a draft copy of the general permit which is proposed for issuance or revision. The Secretary shall review and appropriately address any comments received from the public and U. S. EPA prior to the issuance or revision of any general permit.

Additionally, at the time that an application for Class II general permit registration is filed, the applicant shall also place a Class I legal advertisement in a newspaper of general circulation in the area where the source is or will be located as required by 45CSR13 Section 8.3. No such permit or general permit registration shall be issued to any applicant until at least thirty (30) days notice has been provided to the public. The advertisement shall contain at a minimum, the name of the applicant, the type and location of the source, the type and amount of air pollutants that will be discharged, the nature of the permit being sought, the proposed start-up date for the source and a contact telephone number for more information.

DAQ Action
None.

Comment #10
G80-A fails to provide specific, technically accurate limits on potential to emit and fails to establish specific operating parameters to ensure those limits are achieved and maintained in practice.

As discussed in the previous section, G80-A itself contains virtually no specific limits on emissions or operating parameter requirements to ensure sources achieve and maintain limits on potential to emit. In a memo titled "Guidance on Enforceability Requirements for Limiting Potential to Emit" USEPA states:

[A permit-by-]rule or general permit . . . must specify technically accurate limits on the potential to emit. . . must clearly specify the limits that apply, and include the specific associated compliance monitoring. . . . The standards or limits must be technically specific and accurate to limit potential to emit, identifying any allowed deviations. . . . Further, for potential to emit limitations, the standards set must be technically sufficient to provide assurance to EPA and the public that they actually represent a limitation on the potential to emit for the category of sources identified. Any presumption for control efficiency must be technically accurate and the rule must provide the specific parameters as enforceable limits to assure that the control efficiency will be met. For example, rules setting presumptive efficiencies for incineration controls applied to a specific or broad category must state the operating temperature limits or range, the air flow, or any other parameters that may affect the efficiency on which the presumptive efficiency is based.

EPA goes on to directly address problems with proposals, like G80-A, which would allow general permit applicants to establish source-specific operating parameters and emission limits:

A rule that allows sources to submit the specific parameters and associated limits to be monitored may not be enforceable because the rule itself does not set specific technical limits. The submission of these voluntarily accepted limits on parameters or monitoring requirements would need to be federally enforceable. Absent a source-specific permit and appropriate review and public participation of the limits, such a rule is not consistent with the EPA's enforceability principles.

Received by: WV-SORO

DAQ Response

General Permit G35-C section 1.1.2 states that in accordance with the information filed in the G35-C General Permit Registration Application, the equipment/processes identified in the Emissions Unit Table of the G35-C General Permit Registration 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 shall not exceed the emission limits listed in the General Permit Registration. Each *individual* G35-C General Permit Registration contains specific emission limits, maximum design capacities, control devices required, etc. This information is reviewed to ensure that all applicable regulations are met. General Permit G35-C contains all applicable regulatory requirements for the emission sources covered.

General Permit G35-C is issued under 45CSR13 which has been approved by USEPA, therefore, the standards contained in General Permit G35-C and associated registrations are federally enforceable.

DAQ Action

None.

Comment #11

G80-A fails to establish federally enforceable limits on potential to emit because underlying emission limits and operating parameter requirements are not subject to public participation requirements.

Major sources are not eligible for G80-A. Major source status is based on a facility's "potential to emit" applicable pollutants. Limitations must be "enforceable by the [WVDEP] Secretary and U. S. EPA" in order to constitute limits on potential to emit. In order to be federally enforceable, limits must be subject to an opportunity for public review. As stated in the sections above, individual facility authorizations under G80-A are not subject to public review, and the standard terms and conditions of G80-A fail to provide specific limits on emissions or establish operating parameter requirements to ensure sources achieve and maintain limits on potential to emit.

The public notice required at the time of G80-A application submission is not sufficient to satisfy the public participation requirement. The application itself would not provide any indication to the public of which limits and operating parameters listed in the application WVDAQ would ultimately include in the G80-A registration form and incorporate by reference as facility-specific G80-A emission unit level terms and conditions. Further, if the initial G80-A application was later revised to include new or modified limits on emissions or operating parameter requirements, a new 45 CSR 13-8.3 notice, and new 30-day comment window would be necessary to satisfy the public participation requirements of 40 CFR 51.161.

Received by: WV-SORO

DAQ Response
DAQ does provide a 30 day comment period prior to authorizing construction or modification of individual sources under all Class II general permits, including General Permit G35-C.

45CSR13 Section 8 establishes the public notice procedures for Class II general permit applications. Public notice of any proposed new or revised general permit must be conducted by the agency in accordance with the provisions of 45CSR13 subsection 8.4 and 8.9. The Secretary shall, prior to issuance or revision of any general permit, prepare a rationale document supporting his or her stated intent to issue or revise such general permit and shall transmit to U. S. EPA and any other interested party which so requests, a nonconfidential copy of the rationale document and a draft copy of the general permit which is proposed for issuance or revision. The Secretary shall review and appropriately address any comments received from the public and U. S. EPA prior to the issuance or revision of any general permit.

Additionally, at the time that an application for Class II general permit registration is filed, the applicant shall also place a Class I legal advertisement in a newspaper of general circulation in the area where the source is or will be located. No such permit or general permit registration shall be issued to any applicant until at least thirty (30) days notice has been provided to the public and the public notice requirements of 45CSR13 section 8.3. The advertisement shall contain at a minimum, the name of the applicant, the type and location of the source, the type and amount of air pollutants that will be discharged, the nature of the permit being sought, the proposed start-up date for the source and a contact telephone number for more information.

DAQ Action
None.

Comment #12
45 CSR 13-5.11 prohibits incorporation of emission limits and operating parameters by reference.

45 CSR 13-5.11 states that, "any portions of the permit application, other than plans and specifications, that are to be made permit conditions must be specifically identified in the permit itself." WVDAQ's proposal to incorporate emission limits and operating parameter requirements by reference, rather than stating them directly in G80-A itself is clearly and expressly prohibited by 45 CSR 13-5.11.
Received by: WV-SORO

DAQ Response
General Permit G35-C section 1.1.2 states that in accordance with the information filed in the G35-C General Permit Registration Application, the equipment/processes identified in the Emissions Unit Table of the G35-C General Permit Registration 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 shall not exceed the emission limits listed in the General Permit Registration. Each *individual* G35-C General Permit Registration contains specific emission limits, maximum design capacities, control devices required, etc. This information is reviewed to ensure that all applicable regulations are met.

General Permit G35-C contains all applicable regulatory requirements for the emission sources covered.

General Permit G35-C is issued under 45CSR13 which has been approved by USEPA, therefore, the standards contained in General Permit G35-C and associated registrations are federally enforceable.

DAQ Action
None.

Comment #13
G80-A should be revised to include specific emission limits and operating parameter requirements in the general permit itself, rather than incorporating such requirements by reference from facility-specific registration forms.

The problems described in sections 1-4 above are due in large part to the fact that proposed General Permit G80-A incorporates emission limits and operating parameter requirements by reference to facility-specific information and could be addressed by instead providing specific, uniform emission limits and operating parameter requirements directly in the G80-A terms and conditions themselves. For example, Pennsylvania Air Quality General Permit 5 for natural gas compression and/or processing facilities includes specific numeric emission limits for stationary engines and turbines, a numeric control efficiency for the dehydrator still vent, and provides specific parametric requirements to ensure dehydrator control device efficiency.
Received by: WV-SORO

DAQ Response
General Permit G35-C section 1.1.2 states that in accordance with the information filed in the G35-C General Permit Registration Application, the equipment/processes identified in the Emissions Unit Table of the G35-C General Permit Registration 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 shall not exceed the emission limits listed in the General Permit Registration. Each *individual* G35-C General Permit Registration contains specific emission limits, maximum design capacities, control devices required, etc. This information is reviewed to ensure that all applicable regulations are met. General Permit G35-C contains all applicable regulatory requirements for the emission sources covered.

General Permit G35-C is issued under 45CSR13 which has been approved by USEPA, therefore, the standards contained in General Permit G35-C and associated registrations are federally enforceable.

DAQ Action
None.

Comment #14
G80-A should be revised to include conditions establishing reciprocating engine control device efficiencies and engine emission limits.

Reciprocating engine emissions are generally among the largest permanent sources of NO_x, CO, VOC, and formaldehyde emissions from natural gas facilities. Consistent with the policy and purpose of W. Va. Code Chapter 22, Article 5, and pursuant to its authority under W. Va. Code §22-5-4(a)(1) and 45 CSR 13-5.11, DAQ should include specific numeric limits on emissions from reciprocating engines in G80-A.
Received by: WV-SORO

DAQ Response
General Permit G35-C section 1.1.2 states that in accordance with the information filed in the G35-C General Permit Registration Application, the equipment/processes identified in the Emissions Unit Table of the G35-C General Permit Registration 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 shall not exceed the emission limits listed in the General Permit Registration. Each *individual* G35-C General Permit Registration contains specific emission limits, maximum design capacities, and control devices required, etc. This information is reviewed to ensure that all applicable regulations are met. General Permit G35-C contains all applicable regulatory requirements for the emission sources covered.

General Permit G35-C is issued under 45CSR13 which has been approved by USEPA, therefore, the standards contained in General Permit G35-C and associated registrations are federally enforceable.

DAQ Action
None.

Comment #15
Absent a permit condition requiring trucks to meet a specific collection efficiency, PTE from truck loadout must be based on maximum uncontrolled emissions from truck loadout.

The G80-A fact sheet directs applicants to estimate facility potential to emit and goes on to provide presumptive control efficiencies and emission limits for various G80-A emission sources. For truck loadout emissions, DAQ lists 3 separate presumptive capture efficiencies, ranging from 70% to 99.2% depending on the leak certification status of individual trucks and states that "compliance with this requirement shall be demonstrated by keeping records of the applicable MACT or NSPS Annual Leak Test certification for every truck loaded/unloaded."

However, DAQ does not indicate how applicants should estimate potential to emit from truck loadout.

Potential to emit is defined as:
the maximum capacity of a stationary source to emit a pollutant under its physical and operational design. Any physical or operational limitation on the capacity of the source to emit a pollutant, including air pollution control equipment and restrictions on hours of operation or on

the type or amount of fuel combusted, stored or processed, shall be treated as part of its design if the limitation or the effect it would have on emissions is federally enforceable.

Numerical limits on potential to emit are not enforceable per se. In order to be federally enforceable, a PTE limit must either: reflect maximum emissions of the source operating at full capacity, or be based on production limits or operational limits (e.g., hours of operation, fuel restrictions, pollution control requirements) sufficient to ensure the source will not exceed the numerical emission limit.

Thus, absent a permit condition requiring trucks to meet a specific collection efficiency, PTE from truck loadout must be based on maximum uncontrolled emissions from truck loadout.
Received by: WV-SORO

DAQ Response
General Permit G35-C section 1.1.2 states that in accordance with the information filed in the G35-C General Permit Registration Application, the equipment/processes identified in the Emissions Unit Table of the G35-C General Permit Registration 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 shall not exceed the emission limits listed in the General Permit Registration. Each *individual* G35-C General Permit Registration contains specific emission limits, maximum design capacities, and control devices required, etc.

The issued General Permit G35-C registration establishes the maximum annual throughput limit and the required closed system collection efficiency. This information is sufficient to establish the potential to emit from this source of emissions.

General Permit G35-C is issued under 45CSR13 which has been approved by USEPA, therefore, the standards contained in General Permit G35-C and associated registrations are federally enforceable.

DAQ Action
None.

Comment #16
Several G80-A terms and conditions are not enforceable as a practical matter and must be revised.

Several G80-A terms and conditions including the qualifying language "as soon as practicable." In some instances, the "as soon as practicable" language is rendered enforceable because it is followed by language establishing a specific deadline (e.g., "but within ten (10) calendar days"). However, several conditions using the "as soon as practicable" language are not accompanied by language setting an absolute deadline. In the latter cases, an absolute deadline should be added or the permit condition should otherwise be altered to render it enforceable.
Received by: WV-SORO

DAQ Response
No specific instances are provided where current permit language would be unenforceable.

DAQ Action
None.

Comment #17
DEP should implement the additional measures recommended by Dr. McCawley of the WVU School of Public Health.

DEP has statutory authority to undertake additional rulemaking with regard to Marcellus Shale and other horizontal oil and gas well drilling, pursuant to the Horizontal Well Act, particular with regard to air quality. W.Va. Code §22-6A-22. "Air quality study and rule making" provides that,

The secretary shall, by July 1, 2013, report to the Legislature on the need, if any, for further regulation of air pollution occurring from well sites, including the possible health impacts, the need for air quality inspections during drilling, the need for inspections of compressors, pits and impoundments, and any other potential air quality impacts that could be generated from this type of drilling activity that could harm human health or the environment. If he or she finds that specialized permit conditions are necessary, the secretary shall promulgate legislative rules establishing these new requirements.

That report was done. The West Virginia Surface Owner's Rights Organization appeared at the public hearing on this general permit and spoke in more detail on this matter and submitted a copy of the report by Dr. McCawley of the WVU School of Public Health. His recommendation to the Legislature was that monitoring of parameters should be required at the boundary of natural gas operations or at a nearby residence chosen based on distance, topography and prevailing wind. If monitoring results exceeded acceptable levels, additional actions by the driller should be required. More particularly: The operator shall set up continuous real-time monitoring of air (and noise), and dust and particulates at the residence or other point of impact that is closest or most likely to be impacted by the well work, including traffic associated with the site. The operator shall continuously monitor those parameters in real time. If there is a 5% chance or greater that the monitored levels could exceed any of the required parameters as determined by continuous process control analysis during any running twenty four hour averaging period, the operator shall implement the best available control technology available to limit the levels. The monitored levels need to be continuously available by wireless or other transmission to those persons or entities within fifteen hundred feet of the limit of disturbance who request it. When levels exceed parameters, alerts shall be sent to those persons or entities. The data shall be available to the public for study. Unless altered by legislative rule, the parameters shall be:

(1) for noise during site construction, 70 dBA average an hour.
(2) for noise at all other times, 55 dBA at any time.
(3) for dust, the national ambient air quality standard level for a twenty-four hour period and no visible dust on residences or crops.
(4) for air, the Minimal Risk Levels for chronic (365 days or more) exposure to organic compounds set by the Agency for Toxic Substances and Disease Registry of the Centers for

Disease Control and Prevention of the United States Department of Health and Human Services. If, after completion of well work, production or production facilities cause a violation of the standards set out in subsection (b) at a residence, then the operator shall implement the best available control technology available to limit the levels that violate the standards. The DEP, either as part of this general permit or as rule making, should carry out those recommendations.
Received by: WV-SORO

DAQ Response
While noise and light have not historically been regulated by WVDEP, in recognition that these parameters can create a nuisance, additional language has been added to the General Permit G35-C. Compliance with all state and federal air pollution regulations, including particulate matter and volatile organic compounds, is required by all permittees, including those in the oil and gas industry. Additionally, WVDEP regularly engages in dialog with operators and citizens in the context of specific complaint situations that may arise after a permit has been issued.

In 2012 WVDEP undertook a study of noise, light, dust (particulate matter), and volatile organic compounds air emissions related to horizontal hydraulically fractured wells as part of a legislative mandate. WVDEP contracted with West Virginia University, including work done by Dr. McCawley, to obtain multi-media monitoring and a literature review of other similar studies and emission reduction practices. Sampling included air quality monitoring during all stages of well pad development: site clearing and preparation; vertical drilling; horizontal drilling; hydraulic fracturing; and flowback and completion. The study characterized these activities, emissions and exposures which by their nature are transient and not present continuously over a long period of time. There were no indications of a public health emergency or threat based on data obtained from this study. Subsequent WVDEP outreach at workshops for the regulated community had included relaying some of WVU's recommendations on useful work practices to minimize noise.

Along with supporting information, the three legislative reports have been posted to WVDEP's Office of Oil and Gas website under the "horizontal drilling" tab in the "legislative studies" section.

WVDEP's final May 28, 2013 report to the legislature included a summary of noise, light and radiation findings based on WVU's data are below:

> **Noise, Light, and Radiation**
>
> WVU obtained one-minute and one-hour noise measurements at the WAMS locations around well pads. The results of WVU's noise assessment indicated average levels were below the United States Environmental Protection Agency's (EPA) guideline of 70 decibels (dB). The EPA 70 dB threshold over a 24-hour period is a guideline over which hearing loss may occur if exposure at this level occurred for a lifetime.
>
> EPA also has noise guidelines regarding annual average daily exposure levels over forty years of 55 dB to prevent outdoor activity from interfering with the ability to hear and causing annoyance, and 45 dB to prevent indoor activity interference and annoyance. In some instances, one-hour noise levels near well pads, based on approximately six days of averaged data, were above these guidelines, indicating the potential for interference if experienced for forty years. Sound barriers were not used at

the sites monitored during this study. As recognized by EPA, sound levels inside stores, offices, and residences with normal conversation or television listening normally fall within the 40-65 dB range also. Due to the transient nature and/or frequency of sound, the agency recognizes that noises may be perceived as a nuisance, even though measurements indicate no harm.

Some of WVU's recommendations to minimize noise are useful practices that OOG shared in a workshop with the regulated community. OOG already works with individual operators and companies on a case-by-case basis to facilitate discussion and resolve citizen complaints. Inspectors will continue to work with operators to deploy sound mitigation measures, such as sound barriers, based on site specific circumstances.

WVU's assessment of the light data from the WAMS and DOE equipment indicate there was no impact on nighttime illumination from well pad activities. The noise and light results were consistent across various distances from the well pad. Ionizing radiation levels measured from filtered airborne dust were near zero. WVU states on page 24, "Radiation levels for alpha and beta sources were well below established background levels in air."

DEP's final report also included a summary of dust and volatile organic compounds:

Dust and Volatile Organic Compounds

EPA established National Ambient Air Quality Standards (NAAQS) for certain pollutants, including particulate matter and ozone (of which volatile organic compounds and oxides of nitrogen are precursors) in order to protect human health and welfare from the cumulative impact from all sources of air pollution in a given geographic area. Although there is no one-hour $PM_{2.5}$ (particulate matter less than 2.5 microns in diameter) NAAQS, WVU found that some one-hour $PM_{2.5}$ dust results were above the annual NAAQS, but that all results were below the 24-hour $PM_{2.5}$ NAAQS. This would not be uncommon since, by definition, long-term averages incorporate short-term values that are higher.

There were three methods used to sample volatile organic compounds at each drilling location. The portable WAMS sampler provided a total hydrocarbon value, and the other methods provided clearly defined compound data. At some pads, elevated benzene levels, above the benchmark Agency for Toxic Substances and Disease Registry (ATSDR) Minimum Risk Level used by WVU, were observed, although not consistently. ATSDR is a federal public health agency for the United States Department of Health and Human Services. WVU recognizes on page 20, "Lifetime exposures cannot be estimated from a small number of short-term measurements." It should be emphasized that this study characterized the nature of activities, emissions, and exposures that will not be present continuously over a long period of time.

Even in remote locations across the country, as well as in West Virginia, background ambient air is not free of pollutants, including dust and volatile organic compounds. That is, the mere presence and detection of air pollutants in ambient air is not precluded by federal and state rules. Based on WVU's study data, vehicle traffic and engine exhaust are the likely sources of the intermittently high dust and benzene

observations. While there are no indications of immediate danger to public health based on data obtained from this study, vehicle traffic associated with well pad development activities may pose a nuisance. The occupied dwelling structure setback of 625 feet from well pad center does not address the inconveniences associated with increased vehicle traffic such as congestion, vehicle idling emissions, and potential road dust and noise.

WVU recommended on page 21 that "Better use [of] roadway wetting agents would reduce many of the peak dust exposures seen from roadside samples that were taken over the course of the survey." Such common sense measures as use of DEP-approved dust suppressants and lower vehicle travel speeds have already been used at various sites to mitigate dust and will continue to be used on an as-needed basis. WVU also recommended on page 21, "Greater spacing of diesel-container trucks, while waiting in line for HF [hydraulic fracturing], could reduce the local concentration of diesel exhaust and may reduce noise as well." As a more practical alternative to spacing requirements, the Diesel-Powered Motor Vehicle Idling Act (W. Va. Code §17C-13A) applies on both private and public property, including staging areas. This statute limits regulated entities to no more than 15 minutes of idling per one-hour period; however, a number of exceptions, including for public safety and manufacturing processes, are contained in the statute. The Diesel-Powered Motor Vehicle Idling Act is enforceable by a law enforcement officer such as local police, county sheriffs, and state police, but does not include DEP inspectors.

For ambient air pollution levels to meet the NAAQS, a broad spectrum of sources of air pollution is regulated by state and federal standards and rules, including the oil and gas sector. The existing federal and state regulatory structure implemented by the DAQ includes rules and policy, as well as permitting and enforcement authority, to prevent and minimize air pollution from a wide range of stationary sources, including oil and gas production and transmission activities. While DEP continues to review its regulatory approach and the authorities of its oil and gas and air quality programs for further improvement, implementation of current standards and practices remain in effect.

There are a number of ambient air studies underway by federal and state agencies that, when completed, will provide additional data on emissions from the oil and gas sector. Further, a new federal regulation affecting air emissions from wellhead operations went into effect in October 2012. While focusing on production activities, the rule requires that well completion operations at hydraulically-fractured wells drilled on or after January 1, 2015 safely maximize resource recovery and minimize releases to the atmosphere during flowback and subsequent recovery.

DAQ Action

None.

COMMENT #18
Potential to Commence Construction (45 C.S.R. 16)
WVONGA requests that WVDAQ modify the Draft General Permit to incorporate the requirements of 45 C.S.R. 13 ("Permission to Commence Construction in Advance of Permit Issuance") for existing facilities. This approach would allow companies the option to include elements of the "Permission to Commence Construction" application in the application for the Draft General Permit.
Received by: WVONGA

DAQ Response
Permission to Commence Construction is a separate application with specific requirements for the application, public notice, fees, etc. set forth under 45CSR13 section 16 and cannot be incorporated into the General Permit Registration application process. General permit application requirements are set forth under 45CSR13 section 5.

DAQ Action
None.

GENERAL PERMIT G35-C COMMENTS

COMMENT #19
Williams respectfully requests that WVDEP consider incorporating, into the General Permit, the express authorization of like-kind replacements for all equipment and control devices permitted under the G35-C, and require companies to keep records of such replacements that demonstrate that emissions are less than or equal to those claimed for the original equipment. This proposal is already authorized under 45 C.S.R. 13-5.13 and -5.14, and could be incorporated into Section 3.0 or 4.0 of the General Permit.
Received by: Williams Companies

DAQ Response
45CSR13 Section 2.17.f.2 specifically states that routine maintenance, repair, and replacement (excluding such activities that are subject to new source performance standards under 45CSR16) shall not constitute a modification of a stationary source. Otherwise, the procedures for these types of changes are covered under 45CSR13 sections 5.13 and 5.14 and these rule requirements must be followed.

DAQ Action
None.

COMMENT #20
Like-Kind Replacement
WVONGA requests that WVDAQ consider incorporating into the Draft General Permit the express authorization of like-kind replacements for all equipment and control devices permitted under the G35-C, and require companies to keep records of such replacements that demonstrate that the emissions are less than or equal to those claimed for the original equipment. This is

authorized under 45 C.S.R. 13-5.13 and -5.14, and could be incorporated into Section 3.0 or 4.0 of the Draft General Permit.
Received by: WVONGA

DAQ Response
45CSR13 Section 2.17.f.2 specifically states that routine maintenance, repair, and replacement (excluding such activities that are subject to new source performance standards under 45CSR16) shall not constitute a modification of a stationary source. Otherwise, the procedures for these types of changes are covered under 45CSR13 sections 5.13 and 5.14 and these rule requirements must be followed.

DAQ Action
None.

COMMENT #21
Section 1.1.1.
WVONGA requests the explicit inclusion of sources that are less than the modification levels as defined in 45 C.S.R. 13 and are not subject to an applicable substantive standard or regulation. This would allow flexibility in the Draft General Permit for minor changes that do not meet the definition of "modification" and are consistent with 45 C.S.R. 13.
Received by: WVONGA

DAQ Response
The procedures for these types of changes are covered under 45CSR13 sections 4 (administrative updates), 5.13 and 5.14 and these rule requirements must be followed.

DAQ Action
None.

COMMENT #22
Section 1.1.1.
Williams respectfully suggests the language allow for flexibility in the permit for minor changes that do not meet the definition of modification and are consistent with 45CSR13. The suggested amendatory language would state that "[o]nly those emission units/sources as identified in the G35-C General Permit Registration, with the exception of any de minimis sources as identified under Table 45-13B of 45CSR13 and sources that are less than modification levels as defined in 45CSR13 and are not subject to an substantive applicable standard or rule, are authorized at the registered facility."
Received by: Williams Companies

DAQ Response
The procedures for these types of changes are covered under 45CSR13 sections 4 (administrative updates), 5.13 and 5.14 and these rule requirements must be followed.

DAQ Action
None.

COMMENT #23
Section 1.1.5.
WVONGA requests that calculation methods used in the permit application be listed as an additional approved calculation method, without requiring WVDAQ approval. Calculation methods that were sufficient for purposes of permitting should be sufficient for purposes of recordkeeping, and allowing use of the same methods would result in consistency in calculating emissions and easy comparison of permitted to actual emissions. We suggest the section be amended by adding the following phrase: ". . .sample and/or test data, calculation methods used in preparation of the permit application, or other methods approved by the DAQ. . ."
Received by: WVONGA

DAQ Response
DAQ agrees and the requested change will be made.

DAQ Action
Permit condition 1.1.5 now states:

Minor Source Compliance. The registrant shall maintain records of annual HAP and all other regulated air pollutant emissions using AP-42 emission factors, GRI-GLYCalc model inputs and outputs, flashing simulation model inputs and outputs, manufacturer guaranteed values, sample and/or test data, calculation methods used in preparation of the registration application or other methods approved by DAQ demonstrating that facility-wide emissions are less than those specified in Sections 1.1.3 and 1.1.4.

COMMENT #24
Section 1.1.5.
Williams respectfully requests that this subsection be removed since most emission sources currently show compliance through monitoring operational parameters and run times. It is vital that the language within the General Permit does not create a conflict between how emissions are calculated in terms of permitting versus compliance standards. If the General Permit requires one calculation method for permitting, yet another standard is used for compliance, then it not only creates inconsistency but also a massive burden on the industry to ensure proper regulatory compliance is maintained. For example, if a company permits using a manufacturer numbers engine and uses AP-42 numbers to show compliance, the engine will always be out of compliance unless the engine rarely operated. This is because the AP-42 factors show more emissions for the same engine.

Additionally, removal is warranted because it does not reference or allows companies to reach compliance through other commonly used methods such as material balance and API fugitive factors. Williams recommends that calculation methods used for said General Permit be allowed for consistency, thus being a more beneficial permitting option.

In lieu of deleting said subsection, Williams recommends that the language be substituted for the following language: *"The registrant shall maintain records of annual HAP and all other regulated air pollutant emissions using methods of calculation used in the permit application or other methods approved by DAQ demonstrating that facility-wide emissions are less than those specified in Sections 1.1.3 and 1.1.4."*
Received by: Williams Companies

DAQ Response
The language in the permit condition allows for use of manufacturer's data or AP-42, so the example given in the comments is unclear. However, the permit condition will be changed to allow for calculation methods used in the preparation of the registration application.

DAQ Action
Permit condition 1.1.5 now states:

Minor Source Compliance. The registrant shall maintain records of annual HAP and all other regulated air pollutant emissions using AP-42 emission factors, GRI-GLYCalc model inputs and outputs, flashing simulation model inputs and outputs, manufacturer guaranteed values, sample and/or test data, calculation methods used in preparation of the registration application or other methods approved by DAQ demonstrating that facility-wide emissions are less than those specified in Sections 1.1.3 and 1.1.4.

COMMENT #25
Section 2.3.1.g.
WVONGA notes that some operators are increasing the use of turbines in their operations, but that turbines subject to NSPS, Subpart KKKK are not permittable under the Draft General Permit. Accordingly, WVONGA requests that WVDAQ eliminate the prohibition in Section 2.3.1.g and incorporate the requirements of NSPS 40 C.F.R. 60 Subpart GG and 40 C.F.R. 60 Subpart KKKK, in order to make these turbines eligible for permit coverage.
Received by: WVONGA

DAQ Response
Turbines require specific additional operating permit requirements to ensure that applicable regulatory requirements will be met. General Permits are written specific to a certain industry group with the goal of providing permit coverage to the largest equipment types. Therefore, turbines are not covered under General Permit G35-C. If a turbine will be utilized at one of these sites, it will need to be permitted under a 45CSR13 construction/modification permit.

DAQ Action
None.

COMMENT #26
Section 2.3.1.h.
This section excludes from coverage under the Draft General Permit "[a]ny natural gas production, compressor, and/or dehydration facility which will require an individual air quality permit review process and/or individual permit provisions to address the emission of a regulated pollutant or to incorporate regulatory requirement(s) other than those established by General Permit G35-C. This would include "synthetic minor" permitting actions, as they are required to undergo Notice Level C under 45 CSR 13 Section 8.5." While WVONGA understands that the intent of this section is to exclude from coverage those facilities requiring or otherwise seeking site-specific conditions or review not otherwise accounted for in the Draft General Permit, some of the language of this section is confusing. First, WVONGA requests clarification as to what constitutes an "individual air quality permit review process"—presumably this is intended to include only the individual permitting process under 45 C.S.R. 13 and not a permit determination

or aggregation analysis. Further, the express prohibition of "synthetic minor" permitting through the Draft General Permit may raise some logical inconsistencies with some of the limitations that are authorized in the Permit (e.g., having a backup pump on a glycol dehydrator, but only running one pump at a time).
Received by: WVONGA

DAQ Response
An individual air quality review process would be a 45CSR13 construction, modification permit or administrative update application review, due to ineligibility of General Permit G35-C. Additionally, this includes "synthetic minor" permitting actions which would include limitations on physical or operational capacity to remain below major stationary source thresholds (including 45CSR14, 45CSR19, 45CSR30 and 45CSR34). Possessing a backup pump on a glycol dehydrator that was approved under a general permit registration would not constitute a synthetic minor.

DAQ Action
None.

COMMENT #27
Section 2.9.1.
WVONGA requests the inclusion of an explicit authorization in this section to construct and/or operate changes that do not meet the definition of modification as defined in 45 C.S.R. 13. Further, WVONGA requests that this language be expanded to include other operating scenarios authorized under the Draft General Permit to maximize the flexibility and utility of the permit.
Received by: WVONGA

DAQ Response
The procedures for these types of changes are covered under 45CSR13 sections 4 (administrative updates), 5.13 and 5.14 and these rule requirements must be followed. The registration is clear as to all applicable sections of General Permit G35-C at the time of registration issuance.

DAQ Action
None.

COMMENT #28
Section 2.9.1.
Williams respectfully requests that the subsection be modified to allow for changes that do not meet the definition of modification as defined in 45CSR13. Historically, by not allowing such changes, it has forced companies to constantly modify current permits. If not changed, it will create the same issue with the G35-C permit. The suggested amendatory language would state: "[t]he registered facility shall be constructed and operated in accordance with the information filed in the General Permit Registration Application and any amendments thereto or changes that do not meet the definition of modification as defined in 45CSR13."
Received by: Williams Companies

DAQ Response
The procedures for these types of changes are covered under 45CSR13 sections 4 (administrative updates), 5.13 and 5.14 and these rule requirements must be followed. The registration is clear as to all applicable sections of General Permit G35-C at the time of registration issuance.

DAQ Action
None.

COMMENT #29
Section 2.10.1.c.
For safety reasons, WVONGA requests that this section be revised to include language requiring any authorized representative of the Director wishing to access the permitted facility to contact company personnel prior to entering the facility to ensure that all necessary safety precautions are taken.
Received by: WVONGA

DAQ Response
West Virginia Code §22-5-4(9) states the Director is authorized to enter and inspect any property, premise or place on or at which a source of air pollutants is located or is being constructed, installed or established at any reasonable time for the purpose of ascertaining the state of compliance with this article and rules promulgated under the provisions of this article. No person shall refuse entry or access to any authorized representative of the director who requests entry for purposes of inspection, and who presents appropriate credentials; nor shall any person obstruct, hamper or interfere with any such inspection: Provided, that nothing contained in this article eliminates any obligation to follow any process that may be required by law.

DAQ Action
None.

COMMENT #30
Section 2.10.1.c.
Safety is the highest priority at Williams and to keep all parties safe, we believe that the inspector should contact company personnel to confirm that it is safe to enter the premises before conducting an inspection. The suggested amendatory language would add that: "[i]f entering the facility, the inspector must give notice to company personnel and take into account safety conditions before entering;"
Received by: Williams Companies

DAQ Response
West Virginia Code §22-5-4(9) states the Director is authorized to enter and inspect any property, premise or place on or at which a source of air pollutants is located or is being constructed, installed or established at any reasonable time for the purpose of ascertaining the state of compliance with this article and rules promulgated under the provisions of this article. No person shall refuse entry or access to any authorized representative of the director who requests entry for purposes of inspection, and who presents appropriate credentials; nor shall any person obstruct, hamper or interfere with any such inspection: Provided, that nothing contained in this article eliminates any obligation to follow any process that may be required by law.

DAQ Action
None.

COMMENT #31
Section 3.2.8.
The WVDAQ has no authority to regulate noise and light, and it cannot impose limitations in the Draft Permit that purport to regulate noise and light. Even if it could, the prohibition of a "nuisance" and "unreasonable light and noise" is too vague to enforce, as it gives the permittee no guidance as to what constitutes permitted behavior. This section should be eliminated from the Draft General Permit.
Received by: WVONGA

DAQ Response
The registration under any general permit is a voluntary process and is not required. Permit condition 3.2.8 is a reasonable condition under 45CSR13 Section 5.11. Furthermore, this permit condition meets the intent and purpose of West Virginia Code §22-5-1. Therefore, no changes will be made to this permit condition.

DAQ Action
None.

COMMENT #32
Section 3.2.8.
Williams respectfully requests that this subsection be removed because the subsection is: (1) too broad; (2) does not define what is considered "unreasonable" noise and light; and (3) fails to provide operation standards for compliance. Based on the current draft language as written, companies will be unable to determine if they meet the requirements per said rule because there are no compliance standards to follow.
Received by: Williams Companies

DAQ Response
The registration under any general permit is a voluntary process and is not required. Permit condition 3.2.8 is a reasonable condition under 45CSR13 Section 5.11. Furthermore, this permit condition meets the intent and purpose of West Virginia Code §22-5-1. Therefore, no changes will be made to this permit condition.

DAQ Action
None.

Comment #33
WV-SORO supports the inclusion the provision in section 3.2.8. to limit community impacts and the use of a nuisance standard to limit unreasonable noise and light during operation.

The most frequent complaint that WV-SORO gets with regard to compressor stations is noise. The number of stations is growing and the noise is more and more a problem. Individual surface owners may have dodged the bullet and did not have a well pad on or near them, but their lives

can still be affected by the noise a compressor station makes from great distances. Noise can reduce a citizen's to the point that the citizen wants to leave, but often the noise reduces the value of the home to the extent that they cannot sell the home and land for what they owe, let alone for their investment in the payments already made.

The value of the gas going through these compressor stations is beyond the experience of most West Virginians living near them, and it is even beyond the experience of those working in the industry prior to horizontal shale drilling. The cost of a sound insulating building (not just any building, but a sound insulating building), and the cost of other noise reduction technologies and measures (such as turning the cooling fans upward and the use of electric motors is not significant when compared to the total cost of constructing the facility and certainly nothing compared not to the value of the gas passing through it to the private enterprise to whom the compressor station will belong.

So the industry should put the most and the best noise reduction technologies in place, and it is not an unreasonable imposition to require them to do so. Having done that, it is unlikely that there will be a nuisance noise level at any residence or other sensitive facility. It is therefore not unreasonable to put the nuisance standard that is proposed in this general permit. The industry will do its own noise management plan/study of a particular site and either put in the most and the best noise reduction available from the start, or risk that in putting in something less that results in a citizen complaining about the noise, and the State insisting on improvements to reduce it.

Further argument for the nuisance standard for noise is the difficulty of developing a standard based on enumerated decibel levels. One frequently used limit is 55 dB(A). (See 18 C.F.R. 380.12(k) carrying out the National Environmental Policy Act.) This level is recognized by the EPA and the World Health Organization of causing health concerns. (See footnote 12 at page 128 of the May 28, 2013, study that was ordered by the Horizontal Well Act and commissioned to Dr. Michael McCawley of the WVU School of Public Health by the DEP.) There are several problems with such a standard. First it is often used as an average, and intermittent sounds can occur that are much louder, loud enough to disturb sleep or even awaken a person (clangs, bangs, horns, etc.), but are well above the average. And there can be different sensitivities. Young children, the chronically ill and the elderly are more susceptible to adverse health affects for example. There is also the general enjoyment and quality of life of one's property. A nearby store that is playing music to its customers has a different sensitivity than a residence that can have the sounds of approaching strangers obscured. Rural residences are of often chosen for the peace and quiet, and as noted above, their value will be diminished without it.

Any such enumeration setting decibel limits on noise would have difficulty taking into account all of the factors that might affect the noise level at a particular site, such as the elevation or height of the facility relative to homes and other sensitive facilities and dwellings, whether the noise is unusual or incongruous, the frequency of the noise, and the level and frequency the ambient noise, prevailing winds, etc.

Some other nuisance standards start with the ambient noise level at the impacted residence and limit additions (see the attached Noise Control Ordinance for the Town of Windsor, NY). But if it is already noisy, that can get above even something like 55 dBA. Some governmental limits on highway noise levels address peaks, but even with that, who should be made to live next to a highway -- a highway out of which they get no use.

Also, many of these standards are measured at existing facilities, such as residences, and do not take into account that future home sites between the existing home and the compressor station may be compromised.

Therefore, WV-SORO supports the general permit with regard to noise as written because it knows of no more objective standard that is or can be made workable for all citizens affected. The inclusion of such a standard in the general permit is need to require operators to limit noise from compressor stations and give DEP DAQ some basic authority to regulate noise, suspend operations if they are too loud and order operators to deploy noise reducing measures and technologies to reduce it.

The downside of the noise provisions included in this general permit will be there limited applicability. While WV-SORO supports their inclusion, what is really needed are comprehensive rules regulating and monitoring air, noise and light emissions from all permitted oil and gas facilities including oil and gas production facilities and well sites, to reduce potential exposures, prevent negative health impacts, protect property values and preserve the quality of life of residents living near these operations. For air compressor stations in particular such rules should include resident notification of blowdowns and maintenance, shutdown and startup (MSS), which can release large volumes of emissions in a short time; and a prohibition on the use of diesel engines and open flares that emit high levels of VOCs. Additionally, regular and ongoing monitoring at and near compressor stations should be conducted to allow the DAQ to assess the cumulative impacts to air quality as more facilities come online.
Received by: WV-SORO

DAQ Response
The registration under any general permit is a voluntary process and is not required. Permit condition 3.2.8 is a reasonable condition under 45CSR13 Section 5.11. Furthermore, this permit condition meets the intent and purpose of West Virginia Code §22-5-1. Therefore, no changes will be made to this permit condition.

DAQ Action
None.

COMMENT #34
Condition 3.2.8 – Noise and Light Nuisance
The draft permit appears to attempt to regulate noise and light; specifically, section 3.2.8 provides, "The registrant shall not create a nuisance to the surrounding community by way of unreasonable noise and light during operation." The authority of the WVDEP under the Air Pollution Control Act does not extend to the regulation of noise and light and upon this basis alone is a proper basis for the removal of this term and condition of the permit. See, W. Va. Code § 22-5-1 et seq. WVDEP does not have the statutory authority to regulate noise or light through its air permits under W.Va. Code 22-5-1 et seq. WVDEP may regulate statutory air pollution. See, W. Va. Code § 22-5-3. However, the words "statutory air pollution" mean and are limited to "the discharge into the air by the act of man of substances (liquid, solid, organic or inorganic) in a locality, manner and amount as to be injurious to human health or welfare, animal or plant life, or property, or which would interfere with the enjoyment of life or property." W.Va. Code § 22-5-2(6).

The plain language of the statute would indicate that neither noise nor light are a "substance" included in this definition. "A statutory provision which is clear and unambiguous and plainly expresses the legislative intent will not be interpreted by the courts but will be given full force and effect." Syllabus Point 2, State v. Epperly, 135 W. Va. 877, 65 S.E.2d 488 (1951).

Further, the definition expressly provides a list of substances (liquid, solid, gaseous, organic or inorganic) used to create the pollution. "In the interpretation of statutory provisions the familiar maxim expressio unius est exclusio alterius, the express mention of one thing implies the exclusion of another, applies." Syllabus Point 3, Manchin v. Dunfee, 174 W. Va. 532, 327 S.E.2d 710 (1984).

The statute expressly lists substances that, if discharged into the air in certain manners and amounts, can cause pollution. Noise is not listed as one of these substances. Light is not listed as one of these substances. There is no West Virginia case law that gives guidance on this issue, however, an examination of the statute using canons of statutory construction indicates that noise and light are not considered under W.Va. Code § 22-5-1 et seq.

Further, the singular sentence contained in the permit provides no standard for what constitutes a nuisance. Absent a standard, the permittee and the agency have no tangible means of measuring compliance. This uncertainty is unacceptable. The WVDEP does not have existing authority to be the arbiter of what constitutes a nuisance, which is clearly the sole province of the courts and has failed to request authority to regulate noise and light through an amendment to the current law and further failed to set forth a coherent and enforceable standard for noise and light. Therefore, the noise and light provision in Section 3.2.8 should be removed from the proposed draft permit.
Received by: Antero Resources

DAQ Response
The registration under any general permit is a voluntary process and is not required. Permit condition 3.2.8 is a reasonable condition under 45CSR13 Section 5.11. Furthermore, this permit condition meets the intent and purpose of West Virginia Code §22-5-1. Therefore, no changes will be made to this permit condition.

DAQ Action
None.

COMMENT #35
Section 4.1.1.
To reduce ambiguity regarding applicable requirements, WVONGA requests that the phrase “or as set forth by any State rule, Federal regulation, or alternative control plan approved by the Secretary” be eliminated. Otherwise, this language introduces uncertainty as to when an alternative rule would apply in lieu of the Draft General Permit requirements.
Received by: WVONGA

DAQ Response
General Permits are written specific to a certain industry group with the goal of providing permit coverage to the largest equipment types. Therefore, this language is intended to provide

coverage for the air pollution control device equipment and emission reduction devices listed in the registration as well as provide regulatory coverage for any limit set forth in a state rule, federal regulation or alternative control plan approved by the Secretary. Without this language, an individual air quality permit may/would be necessary.

DAQ Action
None.

COMMENT #36
Sections 4.1.3 and 4.1.4.
The Draft General Permit would impose significant requirements relating to fugitive emissions and leak detection compliance requirements. WVDAQ has derived its authority for these requirements from 45 C.S.R. 13-5.11, which allows the DAQ to impose "reasonable conditions" in a permit. However, these leak detection requirements are not specified elsewhere in 45 CSR 13 or in another rule adopted by the DAQ, and we are not aware of any federal rule that imposes this type of leak detection on units covered by the Draft General Permit. The West Virginia Air Pollution Control Act expressly provides that "[n]o legislative rule or program of the director hereafter adopted shall be any more stringent than any federal rule or program except to the limited extent that the director first makes a specific written finding for any such departure that there exists scientifically supportable evidence for such rule or program reflecting factors unique to West Virginia or some area thereof." W. Va. Code § 22-5-4(a)(4). Absent some applicable federal requirement or an express finding that conditions unique to oil and gas development in West Virginia merit imposing these additional, more stringent requirements on sources to be governed by the Draft General Permit, these new and far-reaching leak detection requirements are inappropriate and should be deleted. Indeed, these requirements are more stringent than many other more complex permitted facilities in the state.

Another reason to leave out the LDAR requirements for existing facilities and equipment is EPA's proposed leak detection and repair requirements in 40 CFR 60 Subpart OOOOa. Whatever the final details of that rule, it will become the de facto standard for LDAR. Rather than having two standards, one that applies pre-August 18, 2015 and post-August 18, 2015, it would make more sense to leave off the permit's proposed LDAR obligations, and wait for a final federal rule. (As more fully explained in Section A.3 of these comments, if LDAR requirements remain in the permit, we suggest that the WVDAQ allow permittees to use the LDAR requirements of 40 CFR 60, Subpart OOOOa for facilities and equipment that are installed after August 18, 2015, in lieu of any other LDAR requirements.)

In the event these requirements are not eliminated, Section 4.1.4 requires the maintenance of quarterly records of fugitive emissions for "each facility component that was inspected for fugitive escape of regulated air pollutants." WVONGA requests that this section be revised to authorize the documentation of leaks by equipment type rather than by component, given the very high number of individual components likely to be present at any given permitted facility.

WVONGA also suggests that the Draft Permit authorize a reduction in the frequency of LDAR monitoring based on the number of leaks detected. For example, Ohio's protocol is as follows: (1) An initial monitoring shall be completed within 90 days of startup and quarterly thereafter for a period of four consecutive quarters (1 year); (2) If, following the initial four consecutive quarters, less than or equal to 2.0% of the facility components are determined to be leaking

during the most recent quarterly monitoring event, then the frequency of monitoring can be reduced to semiannual; (3) If, following two consecutive semi-annual periods, less than 2.0% of the ancillary equipment are determined to be leaking during the most recent semi-annual monitoring event, then the frequency of the monitoring can be reduced to annual; (4) If more than or equal to 2.0% of the ancillary equipment are determined to be leaking during any one of the semi-annual or annual monitoring events, then the frequency of monitoring shall be returned to quarterly. WVONGA suggests adopting a similar protocol in the Draft General Permit.

Finally, WVONGA requests a change to the last paragraph of Section 4.1.4 to include any facility component satisfying the outlined conditions for delay of repair. This could be done by amending the sentence in the following manner: "Delay of repair of a ~~closed vent system~~ <u>any facility component</u> for which leaks or defects have been detected is allowed if the repair is technically infeasible without a shutdown. . ."
Received by: WVONGA

<u>DAQ Response</u>
These are reasonable conditions under 45CSR13 section 5.11. Fugitive leaks account for a large source of emissions from these facilities. Therefore, this requirement is necessary to minimize fugitive VOC emissions from these sources. The reduction in frequency that is referenced in your comment is based on using certified equipment to check for leaks. This is not required in permit condition 4.1.4. The LDAR language that was proposed will remain with no changes. At the time 40CFR60 Subpart OOOOa is promulgated, any necessary changes will be made to General Permit G35-C.

Additionally permit condition 4.1.3 has been changed to allow for repair instead of replacement only.

<u>DAQ Action</u>
Permit condition 4.1.3 now states:

The registrant 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 minimize any fugitive escape of regulated air pollutants (leak). Any above-ground piping, valves, pumps, etc. that shows signs of excess wear and that have a reasonable potential for fugitive emissions of regulated air pollutants shall be <u>repaired or</u> replaced <u>as needed</u>.

<u>COMMENT #37</u>
Section 4.1.3.
Williams respectfully requests that this subsection be removed because the requirement to prevent "any" fugitive escape is exceedingly stringent pursuant to W. Va. Code § 22-5-4(a)(4) and unreasonable. The terms "excess wear" and "reasonable potential" are too vague and open to interpretation as written. Additionally, the section should be removed to avoid any conflict with NSPS OOOOa.
Received by: Williams Companies

DAQ Response
These are reasonable conditions under 45CSR13 section 5.11. Fugitive leaks account for a large source of emissions from these facilities. Therefore, this requirement is necessary to minimize fugitive VOC emissions from these sources. The reduction in frequency that is referenced in your comment is based on using certified equipment to check for leaks. This is not required in permit condition 4.1.4. The LDAR language that was proposed will remain with no changes. At the time 40CFR60 Subpart OOOOa is promulgated, any necessary changes will be made to General Permit G35-C.

Additionally permit condition 4.1.3 has been changed to allow for repair instead of replacement only.

DAQ Action
Permit condition 4.1.3 now states:

The registrant 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 minimize any fugitive escape of regulated air pollutants (leak). Any above-ground piping, valves, pumps, etc. that shows signs of excess wear and that have a reasonable potential for fugitive emissions of regulated air pollutants shall be repaired or replaced as needed.

COMMENT #38
Section 4.1.4. - Incorporation of 40 CFR 60, Subpart OOOOa
WVONGA proposes doing away with all LDAR requirements in this permit. However, to the extent they remain in the permit, WVONGA suggests that permittees be allowed to implement the LDAR requirements of 40 CFR 60, Subpart OOOOa, which was proposed August 18, 2015. the DAQ should consider allowing permittees the option of applying the proposed LDAR program for facilities that are constructed and equipment installed after that date, in lieu of the LDAR and closed vent requirements of this proposed permit. The LDAR requirements in final Subpart OOOOa will likely change little, and many permittees may decide that it makes sense to prepare now for changes that are likely to be effective in the future. Any changes in the final federal rule can be implemented through an amendment to the permit at some later time. For those facilities and equipment that are not subject to Subpart OOOOa, we urge the DAQ to remove all references to LDAR or closed vents, as there is no support for regulating fugitives in the manner the DAQ has proposed.
Received by: WVONGA

DAQ Response
This is a reasonable condition under 45CSR13 section 5.11. Fugitive leaks account for a large source of emissions from these facilities. Therefore, this requirement is necessary to minimize fugitive VOC emissions from these sources. The reduction in frequency that is referenced in your comment is based on using certified equipment to check for leaks. This is not required in permit condition 4.1.4. The LDAR language that was proposed will remain with no changes. At the time 40CFR60 Subpart OOOOa is promulgated, any necessary changes will be made to General Permit G35-C.

DAQ Action
None.

COMMENT #39

Condition 4.1.4 – LDAR Monitoring

Antero proposes that Leak Detection and Repair (LDAR) monitoring requirements contained in the draft permit be amended to include provisions for an allowance for a reduction in the monitoring frequency based on the site leak detection performance. The concept of reduced monitoring frequency based on performance is featured in many Federal MACT and NSPS standards (40 CFR 63 Subpart H and 40 CFR 60 Subpart KKK) and in the state Regulation to Prevent and Control Air Pollution from the Emission of Volatile Organic Compounds (45 CSR 21). Antero offers the following comments:

a. Initial monitoring shall be completed with 90 days of startup and quarterly thereafter for a period of four consecutive quarters (1 year).
b. If following the initial four consecutive quarters, less than or equal to 2.0% of the ancillary equipment are determined to be leaking during the most recent quarterly monitoring event, then the frequency of monitoiing can be reduced to semiannual.
c. If following two consecutive semi-annual periods, less than 2.0% of the ancillary equipment is determined to be leaking during the most recent semi-annual monitoring event, and then the frequency of the monitoring can be reduced to annual.
d. If more than or equal to 2.0% of the ancillary equipment are determined to be leaking during any one of the semi-annual or annual monitoring events, then the frequency of monitoring shall be returned to quarterly. After any quarterly monitoring period, where less than or equal to 2.0% of the ancillary equipment is determined to be leaking, then the frequency of the monitoring can be reduced to semi-annual. After any semi-annual period, where less than 2.0% of the ancillary equipment is determined to be leaking, then the frequency of the monitoring can be reduced to annual.
e. The program shall require that the leaking component is repaired within 30 calendar days after the leak is detected.

These general recommendations are supported by similar requirements authorized by the Ohio General Air Permit 12.1 - Oil and Gas Well-site Production Operation GP with a Small Flare - Section C.5.c)(2) and General Air Permit 12.2 - Oil and Gas Well-site Production Operation GP with a Large Flare - Section C.5.c)(2).

Received by: Antero Resources

DAQ Response

This is a reasonable condition under 45CSR13 section 5.11. Fugitive leaks account for a large source of emissions from these facilities. Therefore, this requirement is necessary to minimize fugitive VOC emissions from these sources. The reduction in frequency that is referenced in your comment is based on using certified equipment to check for leaks. This is not required in permit condition 4.1.4. The LDAR language that was proposed will remain with no changes. At the time 40CFR60 Subpart OOOOa is promulgated, any necessary changes will be made to General Permit G35-C.

DAQ Action

None.

COMMENT #40

Williams suggests that all language within the General Permit that refers to NSPS "OOOO"be amended to refer to NSPS OOOO or NSPS OOOOa. With the pending proposal of NSPS OOOOa, NSPS OOOO is no longer applicable to new or modified sources. Williams asks that WVDEP review NSPS OOOOa as proposed and remove any potential conflicts that may result in conflicting permit requirements between this General Permit and NSPS OOOOa. This would force companies to maintain two different "books" and also create double monitoring; thus, making this General Permit an unfavorable option for the industry. This conflict currently exists in the storage vessels, fugitive components and closed vent sections but have the potential to also affect further sections once NSPS OOOOa is final. Since NSPS OOOOa has not been finalized, Williams asks that NSPS OOOOa be referenced only to avoid conflicts if the final rule is different than proposed.

Received by: Williams Companies

DAQ Response

This is a reasonable condition under 45CSR13 section 5.11. Fugitive leaks account for a large source of emissions from these facilities. Therefore, this requirement is necessary to minimize fugitive VOC emissions from these sources. The reduction in frequency that is referenced in your comment is based on using certified equipment to check for leaks. This is not required in permit condition 4.1.4. The LDAR language that was proposed will remain with no changes. At the time 40CFR60 Subpart OOOOa is promulgated, any necessary changes will be made to General Permit G35-C.

DAQ Action

None.

COMMENT #41

Section 4.1.4.

Due to the likelihood of contradicting NSPS OOOOa once finalized, this subsection should simply require that sources subject to NSPS OOOOa, shall follow NSPS OOOOa requirements. By not removing this subsection, it risks making the General Permit unusable by the industry. Many requirements within this subsection directly contradict the proposed NSPS OOOOa language. Merely referencing NSPS OOOOa would be the most beneficial towards a usable General Permit since NSPS OOOOa is still in the drafting stage and additional edits are possible.

Received by: Williams Companies

DAQ Response

This is a reasonable condition under 45CSR13 section 5.11. Fugitive leaks account for a large source of emissions from these facilities. Therefore, this requirement is necessary to minimize fugitive VOC emissions from these sources. The reduction in frequency that is referenced in your comment is based on using certified equipment to check for leaks. This is not required in permit condition 4.1.4. The LDAR language that was proposed will remain with no changes. At the time 40CFR60 Subpart OOOOa is promulgated, any necessary changes will be made to General Permit G35-C.

DAQ Action

None.

COMMENT #42
Storage Vessels Containing Condensate and/or Produced Water (Section 5.0)
This section should be modified to exclude produced water tanks with greater that 90% produced water, as these tanks have minimal emissions. That could be done by changing the title to ("Storage Vessels Containing Less Than 90% Produced Water")"
Received by: WVONGA

DAQ Response
The DAQ reserves the right to set emission limits, throughput limits, turnovers, vapor pressure, etc. on any storage vessel containing produced water. Such situations would include when the facility is close to major source thresholds.

DAQ Action
None.

COMMENT #43
Section 5.0.
Tanks with little to no emissions, such as tanks with greater than 90% produced water, should not be subject to this subsection because emissions will be limited.
Received by: Williams Companies

DAQ Response
The DAQ reserves the right to set emission limits, throughput limits, turnovers, vapor pressure, etc. on any storage vessel containing produced water. Such situations would include when the facility is close to major source thresholds.

DAQ Action
None.

COMMENT #44
Section 5.1.2.
WVONGA requests revision of this section to authorize changes that do not exceed the definition of "modification" as allowed by 45 CSR 13.
Received by: WVONGA

DAQ Response
The registrant is not allowed to exceed the maximum storage vessel throughput limitation in the issued General Permit registration without first obtaining the proper amended registration. This may be in the form of a modification or administrative update depending on the emissions increase.

DAQ Action
None.

COMMENT #45
Section 5.1.3.
Most produced water tanks do not have an emission limit, consistent with the WVDAQ's own guidance. WVONGA requests confirmation that a tank that is not otherwise required to have a limit is not required by this section to obtain one.
Received by: WVONGA

DAQ Response
The DAQ reserves the right to set emission limits on any storage vessel containing produced water. Such situations would include when the facility is close to major source thresholds.

DAQ Action
None.

COMMENT #46
Section 5.1.5.1.
Williams recommends removing the option of being subject to the closed vent system requirements of section 6.0 or section 7.0 of this general permit because the final version of NSPS OOOOa will likely address a similar requirement and may create a conflict with NSPS if not removed.
Received by: Williams Companies

DAQ Response
These are reasonable conditions under 45CSR13 section 5.11. Fugitive leaks account for a large source of emissions from these facilities. Therefore, this requirement is necessary to minimize fugitive VOC emissions from these sources. The LDAR language that was proposed will remain with no changes. At the time 40CFR60 Subpart OOOOa is promulgated, any necessary changes will be made to General Permit G35-C.

DAQ Action
None.

COMMENT #47
Section 5.1.5.2.
This section specifies the applicable General Permit sections for control devices that are subject to control device requirements of NSPS Subpart OOOO. The condition states the registrant shall be subject to the control device and closed vent system requirements of section 7.0 of this general permit. However, this is a relic from the proposed General Permit G80-A. Control devices subject to the requirements of NSPS Subpart OOOO should be subject to section 6.0 of the draft General Permit G35-C.
Received by: WVONGA

DAQ Response
DAQ agrees and the requested change will be made.

DAQ Action
Permit condition 5.1.5.2 now references section 6.0.

COMMENT #48
Section 5.1.6.
Williams seeks confirmation from WVDEP that a gas analysis would be allowed in lieu of liquid sampling, since the liquid sampling method used for most condensate tanks does not work due to a lack of produced condensate needed to run the test. Please remove this requirement for produced water tanks above 90% water.
Received by: Williams Companies

DAQ Response
General Permit G35-C requirement 5.1.6.2.ii allows for usage of a gas analysis.

DAQ Action
None.

COMMENT #49
Section 5.1.6.2.i.
Flowback is a wellsite-specific event that would be more appropriate in a producer permit. WVONGA requests a more logical requirement such as "within thirty (30) days of startup" or allowing samples to be taken in the same time frames as gas samples for dehydrators.
Received by: WVONGA

DAQ Response
DAQ agrees and the requested change will be made.

DAQ Action
Permit condition 5.1.6.2.i now states:

The site specific sample shall be taken within thirty (30) days of ~~flowback~~ startup.

COMMENT #50
Section 5.1.6.2.i.
Williams recommends that this subsection be removed from the General Permit because the term "flowback" is a wellsite specific event and is more appropriate language for a producer focused permit. It would be more fitting to require samples be taken at the same timeframe as dehydrators since this is a midstream focused General Permit. This modification would also create consistency in multiple monitoring requirements.
Received by: Williams Companies

DAQ Response
DAQ agrees and the permit condition will be changed.

DAQ Action
Permit condition 5.1.6.2.i now states:

The site specific sample shall be taken within thirty (30) days of ~~flowback~~ startup.

COMMENT #51
Condition 5.1.6.2.ii - Site specific sample. (Only for storage vessels with no air pollution control devices or VRUs)

Condition 5.1.6.2.ii states that "the sample location shall be equipped with appropriate sampling access and temperature and pressure instrumentation." Many of Antero's operations rely on third-party contractors to perform these measurements with their own instrumentation. While it is appropriate to require that sampling locations be provided, requiring operators to install and maintain temperature and pressure instrumentation is not appropriate or consistent with operations. Antero urges WVDEP to delete the phrase "and temperature and pressure instrumentation as this instrumentation is typically provided by the third party contractors performing the sampling.
Received by: Antero Resources

DAQ Response
The DAQ agrees and will remove the requirement for temperature and pressure instrumentation.

DAQ Action
Permit condition 5.1.6.2.ii now states:

The type and location of the sample shall be appropriate for the calculation methodology or model (e.g. ProMax, E&P Tanks, HYSYS) being used to calculate the emissions. The sample location shall be equipped with appropriate sampling access ~~and temperature and pressure instrumentation~~.

COMMENT #52
Condition 5.1.6.2.iii - Site specific sample. (Only for storage vessels with no air pollution control devices or VRUs)
Condition 5.1.6.2.iii requires the notification of WVDEP if the VOC potential emissions are higher than the emission limits in the registration in accordance with Condition 5.5.3. Condition 5.5.3 does not exist in the permit. The correct reference should be Condition 5.4.1. Antero urges WVDEP to correct this clerical error.
Received by: Antero Resources

DAQ Response
The DAQ recognizes this typographical error.

DAQ Action
The requested change was made.

COMMENT #53
Section 5.2.2.1.
This section requires the registrant, for uncontrolled production storage vessels that are fed by a gas to liquid separator, to inspect and maintain records of the separator liquid level that opens the dump valve for uncontrolled production storage vessels on an as-needed basis and annually (at a minimum). Liquid level inspection in separators is not practical, and this requirement should be deleted.
Received by: WVONGA

DAQ Response
Separators are equipped with sight gages that visually indicate the liquid level in the separator. If liquid level is too low, natural gas will be transferred through the liquid line to the liquid storage tank and vented to the atmosphere. The DAQ has received complaints on this issue. Monitoring the liquid level in the separator is critical. The registrant does not want to lose their product. A dump valve that is stuck open will allow the vapors to vent directly to the atmosphere.

DAQ Action
None.

COMMENT #54
Condition 5.2.2.1- Uncontrolled production storage vessels
Condition 5.2.2.1 requires that permittees who maintain uncontrolled production storage vessels that are fed by a gas to liquid separator that they shall inspect the separator liquid level that opens the dump valve on an as needed basis but a minimum of once per year. The inspection is not practical and Antero requests that it be removed from the permit.
Received by: Antero Resources

DAQ Response
Separators are equipped with sight gages that visually indicate the liquid level in the separator. If liquid level is too low, natural gas will be transferred through the liquid line to the liquid storage tank and vented to the atmosphere. The DAQ has received complaints on this issue. Monitoring the liquid level in the separator is critical. The registrant does not want to lose their product. A dump valve that is stuck open will allow the vapors to vent directly to the atmosphere.

DAQ Action
None.

COMMENT #55
Section 5.3.2.
This section requires the registrant to maintain records of the determination of the VOC emission rate per storage vessel, including identification of the model or calculation methodology used to calculate the VOC emission rate. WVONGA notes that not all companies calculate tank emissions on a per-tank basis, but rather as a aggregate emissions point, and we urge the WVDAQ to allow aggregate emission reporting.
Received by: WVONGA

DAQ Response
The emissions determination as required by the rule is per storage vessel. Therefore, this is required.

DAQ Action
None.

COMMENT #56
Section 5.3.2.
This subsection possibly creates duplicative requirements that are already within the permit application since emission rates and PTEs are both part of the application process. The above sampling is a check and does not reflect the on-going emissions of the tank. Additionally, our tanks are normally permitted as a group since they are historically tracked as a group. Please make changes accordingly to minimize any duplicative requirements. This section may also create conflict with NSPS OOOO and NSPS OOOOa standards since some tank maybe required to determine emissions as a group and other as a single tank.
Received by: Williams Companies

DAQ Response
The emissions determination as required by the rule is per storage vessel. Therefore, this is required. The language that was proposed will remain with no changes. At the time 40CFR60 Subpart OOOO or OOOOa promulgates amended language, any necessary changes will be made to General Permit G35-C.

DAQ Action
None.

COMMENT #57
Sections 7 & 14
WVDEP should define a bypass to not include safety pressure release devices as stated in NESHAP HH and the Applicability Determination Index (ADI) so not to cause conflict between this general permit and NESHAP HH. Please refer to 40 CFR 60.771(c).
Received by: Williams Companies

DAQ Response
The DAQ agrees that a safety pressure release device is not a bypass.

DAQ Action
None.

COMMENT #58

Section 7.1.

WVONGA requests confirmation that this section is limited in scope to non-engine control devices. To the extent that this is the case, WVONGA recommends adding an express statement to this effect in the introductory "scope" narrative under Section 7.1. Further, all references "Emission Reduction Devices" should be changed to "Process Modifications," as this is more accurate terminology for the equipment being addressed here.

Additionally, the Scope narrative explains that if a control device is subject to NSPS Subpart OOOO requirements, then it is subject to Section 7.0 of the General Permit G35-C. However, this is a relic of the proposed General Permit G80-A. The required applicable section should now be Section 6.0 for control devices subject to NSPS Subpart OOOO. This comment also applies to Section 7.1.2.1, which again refers to Section 7.0 for control devices subject to NSPS Subpart OOOO, when it should refer to Section 6.0.

Received by: WVONGA

DAQ Response

The term 'modification' is defined in 45CSR13, therefore, ERDs as described in this section are not modifications. Section 7.1 outlines possible control and emission reduction devices meeting the scope of this section.

Possible control and emission reduction devices meeting the scope of this section include: (1) control devices used to control VOC and HAP emissions from the tanker truck loading operations; (2) control devices used to control VOC and HAP emissions from the storage vessel(s) below the NSPS, Subpart OOOO threshold of 6 tpy VOC. Control devices that are permitted under a legally and practically enforceable state permit achieve a "federally enforceable PTE" for VOC emissions at the storage vessels; and (3) control devices used to control VOC and HAP emissions from dehydration units.

DAQ agrees that the applicable section should be 6.0 and the requested change will be made.

DAQ Action

Permit conditions 7.1 and 7.1.2.1 now reference section 6.0.

COMMENT #59

Section 7.1.

Williams respectfully requests that WVDEP confirm that Section 7.0 is the correct section to be referenced in said title. Referencing Section 7.0 appears to create a contradiction since the section is subject to devices not subject the NSPS OOOO or NESHAP HH.

Williams respectfully requests that the language should be modified to state: "Possible control and emission reduction devices meeting the scope of this section include *but are not limited to*…" Said modification would allow for unforeseen sources and situations, at the time of permitting, to still be eligible for this permit if they can meet the requirements of this section. If the permit writer determines said sources are beyond the scope of this general permit, they can request a company to apply for R13. For example, a flare controlling blowdowns, pigging, SSM emissions or etc. These examples are not included but should be able to be handled in this permit.

Received by: Williams Companies

DAQ Response
General Permits are written specific to a certain industry group with the goal of providing permit coverage to the largest equipment types. Therefore, is a control device or emission reduction device is needed that is not covered under General Permit G35-C, it will be necessary to apply for a 45CSR13 construction/modification permit.

DAQ Action
None.

COMMENT #60
Section 7.1.2.
Williams respectfully requests that WVDEP add a section specifically for thermal oxidizer coverage. While some may consider thermal oxidizers as an enclosed combustor, this is not clear in the general permit and needs clarified by WVDEP.
Received by: Williams Companies

DAQ Response
Thermal oxidizers are covered under General Permit G35-C. On page 29 of the G35-C registration application, the option exists to register a thermal oxidizer. The requirements for thermal oxidizers are covered under enclosed combustion devices in section 7.1.2.3 of the General Permit.

DAQ Action
None.

COMMENT #61
Section 7.1.2.2.i.
Please allow flexibility for a site to permit a minimum down time of the flare for such things as manufacturer required flare maintenance. The language also needs to be modified because it does not allow for a flare to be used as a back-up control device. Williams respectfully requests the following modification to the language: "[v]apors that are being controlled by the flare shall be routed to the flare at all times *unless application reflects a minimum amount of downtime or use as a back-up control device*."
Received by: Williams Companies

DAQ Response
General Permits are written specific to a certain industry group with the goal of providing permit coverage to the largest equipment types. If the applicant chooses to permit back-ups of specified downtime, this must be done through a 45CSR13 construction/modification permit.

DAQ Action
None.

COMMENT #62

Section 7.1.2.2.

- Section 7.1.2.2.ii. This language does not account for pilotless flares.
- Section 7.1.2.2.iii. This language appears to assume that all flares will be subject to 40 C.F.R. § 60.18, which is not the case (e.g., pressure-assisted flares). If a flare is not otherwise subject to a NSPS, the Draft General Permit should not require compliance with this provision.
- Sections 7.1.2.2.ii and iv. These sections appear to conflict with one another. Does the flare have to operate with a flame present at all times (per ii) or only when emissions are vented to it (per iv)?

Received by: WVONGA

DAQ Response

7.1.2.2.ii.

The DAQ has not encountered pilotless flares at these facilities located. General Permits are written specific to a certain industry group with the goal of providing permit coverage to the largest equipment types. Pilotless flares are not covered under General Permit G35-C. If a pilotless flare will be utilized at one of these sites, it will need to be permitted under a 45CSR13 construction/modification permit.

7.1.2.iii.

Historically, the DAQ has encountered numerous non-compliance issues with pressure assisted flares. Additionally, the DAQ has not encountered pressure assisted flares at these facilities. General Permits are written specific to a certain industry group with the goal of providing permit coverage to the largest equipment types. Pressure assisted flares are not covered under General Permit G35-C. If a pressure assisted flare will be utilized at one of these sites, it will need to be permitted under a 45CSR13 construction/modification permit.

7.1.2.2.ii and iv.

The flare must operate with a flame present at all times.

DAQ Action

None.

COMMENT #63

Section 7.1.2.2.ii.

Williams recommends the following language to be added to the subsection: "[f]lares shall be operated with a flame present at all times *when flow to the flare is present*, as determined by the methods specified in section 7.2.1 of this general permit *or is equipped with automatic ignitor*;" This modification allows for flare emissions to be reduced during times when said flare is not needed during practices such as site maintenance shutdowns or controlled equipment shutdowns.

Williams requests the language be modified to state: "[t]he enclosed combustion device shall be operated with a flame present at all times *when flow to the flare is present*,, as determined by the methods specified in sections 7.2.1 and 7.2.3 of this general permit *or is equipped with automatic ignitor*." This modification allows for device emissions to be reduced when not needed during certain events that include site maintenance shutdowns or controlled equipment shutdowns. This

modification also prohibits a flare to be used as a back-up control device which results in reductions in emissions from the pilot gas.
Received by: Williams Companies

DAQ Response
The DAQ has not encountered pilotless flares at natural gas production facilities located at the well site. General Permits are written specific to a certain industry group with the goal of providing permit coverage to the largest equipment types. Pilotless flares are not covered under General Permit G35-C. If a pilotless flare will be utilized at one of these sites, it will need to be permitted under a 45CSR13 construction/modification permit.

DAQ Action
None.

COMMENT #64
Section 7.1.2.2.iii.
Williams respectfully requests said language be removed from the General Permit because flares are not subject to a NSPS or NESHAP. As a result, there is no requirement for a flare to be subject to 60.18. This change would allow for use pressure assisted flares.
Received by: Williams Companies

DAQ Response
The only way for the DAQ to grant 98% destruction efficiency is to meet permit condition 7.1.2.3.iii. Historically, the DAQ has encountered numerous non-compliance issues with pressure assisted flares. Additionally, the DAQ has not encountered pressure assisted flares at these facilities. General Permits are written specific to a certain industry group with the goal of providing permit coverage to the largest equipment types. Pressure assisted flares are not covered under General Permit G35-C. If a pressure assisted flare will be utilized at one of these sites, it will need to be permitted under a 45CSR13 construction/modification permit.

DAQ Action
None.

COMMENT #65
Section 7.1.2.2.iv.
Williams respectfully requests said language be removed from the General Permit since the change to § 7.1.2.2.ii. now makes this subsection duplicative.
Received by: Williams Companies

DAQ Response
The flare must operate with a flame present at all times.

DAQ Action
None.

COMMENT #66

Section 7.1.2.3.

- Section 7.1.2.3.ii. WVONGA requests the inclusion of language authorizing autoignite enclosed flares.
- Section 7.1.2.3.iii. This section requires enclosed combustion devices to be designed for and operated with "no visible emissions." This requirement directly conflicts with the 20 percent opacity limitation contained in 45 C.S.R. 6-4.3. As currently drafted, it appears that any visible emissions would automatically constitute a violation of the Draft General Permit, which is unreasonable. At a minimum, the Draft General Permit should be revised to be consistent with 45 C.S.R. 6. Further, the references in Section 7.1.2.3.iii.b to NSPS Subpart OOOO subsections are inappropriate because this section of the Draft General Permit expressly applies to those control devices not subject to NSPS Subpart OOOO.
- Section 7.1.2.3.iv. WVONGA requests the removal of the closed vent system requirement set forth here. This is another requirement that will likely conflict with the final OOOOa fugitive control provisions.
- Sections 7.1.2.3.ii and iv. These sections appear to conflict with one another. Does the enclosed combustion device have to operate with a flame present at all times (per ii) or only when emissions are vented to it (per iv)?

Received by: WVONGA

DAQ Response

7.1.2.3.ii.

The DAQ has not encountered pilotless flares at natural gas production facilities at these facilities. General Permits are written specific to a certain industry group with the goal of providing permit coverage to the largest equipment types. Pilotless flares are not covered under General Permit G35-C. If a pilotless flare will be utilized at one of these sites, it will need to be permitted under a 45CSR13 construction/modification permit.

7.1.2.3.iii.

The comment misinterprets the actual permit condition. The provision meets 60.18 and 45CSR6. The only way for the DAQ to grant 98% destruction efficiency is to meet permit condition 7.1.2.3.iii. Meeting 20% opacity in 45CSR6 will not achieve a 98% destruction efficiency.

7.1.2.3.iv.

These are reasonable conditions under 45CSR13 section 5.11. At the time 40CFR60 Subpart OOOOa promulgates LDAR language, any necessary changes will be made to General Permit G35-C.

7.1.2.3.ii and iv.

The flare must operate with a flame present at all times.

DAQ Action

None.

COMMENT #67

Section 7.1.2.3.i.

Williams respectfully requests that WVDEP allow flexibility for a site to permit a minimum down time of flaring activities for specific practices such as manufacturer required device maintenance. Williams requests the language be modified to state, "[v]apors that are being controlled by the enclosed combustion device shall be routed to the enclosed combustion device at all times *unless application reflects a minimum amount of downtime or use as a back-up device*."

Received by: Williams Companies

DAQ Response

General Permits are written specific to a certain industry group with the goal of providing permit coverage to the largest equipment types. If the applicant chooses to permit specified downtime, this must be done through a 45CSR13 construction/modification permit.

DAQ Action

None.

COMMENT #68

Section 7.1.3.

- Section 7.1.3. This section should refer to Section 5.1.4, not 5.1.2, regarding emissions determination from storage vessels.
- Section 7.1.3.2.iv. WVONGA requests the removal of the closed vent system requirement set forth here.

Received by: WVONGA

DAQ Response

- DAQ agrees that the section should be 5.1.4 and the requested change will be made.
- These are reasonable conditions under 45CSR13 section 5.11. At the time 40CFR60 Subpart OOOOa promulgates LDAR language, any necessary changes will be made to General Permit G35-C.

DAQ Action

- Permit condition 7.1.3 now reference section 5.1.4.
- None.

COMMENT #69

Section 7.1.3.2.iv.

Most liquids are loaded out of the tanks and into tank trucks which are often not a closed vent system nor are proposed to be in the permit application. This subsection may also create a potential conflict with the proposed NSPS OOOOa. Williams respectfully requests that the subsection's language be modified to state: [t]o vent gases, or fumes from the unit through a designed and operated in accordance with the requirements of this general permit to a control device."

Received by: Williams Companies

DAQ Response
The cover requirements are reasonable conditions under 45CSR13 section 5.11. Fugitive leaks account for a large source of emissions from these facilities. Therefore, this requirement is necessary to minimize fugitive VOC emissions from these sources. The cover requirements that were proposed will remain with no changes. At the time 40CFR60 Subpart OOOOa promulgates alternative language, any necessary changes will be made to General Permit G35-C.

DAQ Action
None.

COMMENT #70
Section 7.1.4. For the reasons discussed above in relation to Sections 4.1.3 and 4.1.4 of the Draft General Permit, WVONGA objects to the imposition of new LDAR requirements in this section. See Sections 7.1.4.1. and 7.1.4.2. Additionally, this section should refer to Section 5.1.4, not 6.1.4, regarding emissions determinations from storage vessels.
Received by: WVONGA

DAQ Response
- DAQ agrees that the section should be 5.1.4 and the requested change will be made.
- The LDAR requirements are reasonable conditions under 45CSR13 section 5.11. Fugitive leaks account for a large source of emissions from these facilities. Therefore, this requirement is necessary to minimize fugitive VOC emissions from these sources. The reduction in frequency that is referenced in your comment is based on using certified equipment to check for leaks. This is not required in permit condition 4.1.4. The LDAR language that was proposed will remain with no changes. At the time 40CFR60 Subpart OOOOa promulgates LDAR language, any necessary changes will be made to General Permit G35-C.

DAQ Action
- Permit condition 7.1.4 now reference section 5.1.4.
- None.

COMMENT #71
Section 7.1.4.
Williams respectfully requests that said subsection be deleted due to a likely conflict with NSPS OOOOa.

Williams respectfully requests that this entire section be removed from the General Permit as it will likely conflict with the proposed OOOOa.
Received by: Williams Companies

DAQ Response
These are reasonable conditions under 45CSR13 section 5.11. Fugitive leaks account for a large source of emissions from these facilities. Therefore, this requirement is necessary to minimize fugitive VOC emissions from these sources. The LDAR language that was proposed will remain with no changes. At the time 40CFR60 Subpart OOOOa promulgates LDAR language, any necessary changes will be made to General Permit G35-C.

DAQ Action
None.

COMMENT #72
Condition 7.1.4.1- Closed Vent Systems (applies to all non-40 CFR 60 Subpart OOOO controls). Condition 7.1.4.1 reads as follows: *You must design the closed vent system to route all gases, vapors, and fumes emitted from the material in the storage vessel to a control device that meets the requirements of 6.1.5 of this general permit or to a process. The registrant shall perform an initial LOAR evaluation within thirty (30) days of start-up and follow the procedures in section 4.1.4 for ongoing compliance.*

a. Condition 7.1.4.1 requires the closed vent system to route all gases, vapors, and fumes emitted from the material in the storage vessel to a control device that meets the requirements of 6.1.5. Condition 6.1.5 does not exist in the permit. The correct reference should be Condition 5.1.5, which Antero urges WVDEP to correct this clerical error.

b. Condition 7.1.4.1 requires the registrant to follow the procedures in Section 4.1.4 for ongoing compliance with LDAR monitoring. Antero requests reduced LDAR monitoring frequency consistent with Comment #6.

Received by: Antero Resources

DAQ Response
a. The DAQ recognizes this typographical error.
b. This is a reasonable condition under 45CSR13 section 5.11. Fugitive leaks account for a large source of emissions from these facilities. Therefore, this requirement is necessary to minimize fugitive VOC emissions from these sources. The reduction in frequency that is referenced in your comment is based on using certified equipment to check for leaks. This is not required in permit condition 4.1.4. The LDAR language that was proposed will remain with no changes. At the time 40CFR60 Subpart OOOOa promulgates LDAR language, any necessary changes will be made to General Permit G35-C.

DAQ Action
a. The requested change was made.
b. None.

COMMENT #73
Section 7.1.5.vi.
The Draft General Permit requires the registrant to keep on-site fresh replacement for all carbon used in a carbon adsorption system. The regulatory authority for this requirement is unclear, as the Draft General Permit does not include a citation for this provision. This is expected to create logistical problems, particularly at unmanned facilities where the materials may be subject to theft. Accordingly, WVONGA requests the deletion of this requirement.
Received by: WVONGA

DAQ Response
If fresh replacements are not kept on site and the carbon canister saturation indicator indicates saturation, then this control device cannot be operated appropriately, and noncompliance would occur.

DAQ Action
None.

COMMENT #74
Section 7.1.5.vi.
Williams respectfully requests that this requirement be removed due to a lack of on-site storage within facility locations.
Received by: Williams Companies

DAQ Response
If fresh replacements are not kept on site and the carbon canister saturation indicator indicates saturation, then this control device cannot be operated appropriately, and noncompliance would occur.

DAQ Action
None.

COMMENT #75
Section 7.1.6.i.
Williams respectfully requests that this subsection be removed as the closed vent portion will likely conflict with the proposed NSPS OOOOa. Additionally, the low control percentage reflects that WVDEP does not expect the vapors to be controlled by the condenser at all time and thus companies should not be held to that standard.
Received by: Williams Companies

DAQ Response
The closed vent system requirements are reasonable conditions under 45CSR13 section 5.11. Fugitive leaks account for a large source of emissions from these facilities. Therefore, this requirement is necessary to minimize fugitive VOC emissions from these sources. The closed vent system requirements that were proposed will remain with no changes. At the time 40CFR60 Subpart OOOOa promulgates alternative language, any necessary changes will be made to General Permit G35-C.

Permit condition 7.1.6 allows the registrant the opportunity to be approved on manufacturer's specifications with a capture and control efficiency greater than 50%, therefore, registrants have alternatives.

DAQ Action
None.

COMMENT #76
Section 7.1.6.ii.
This section requires the condenser/BTEX Eliminator to be designed, operated and maintained according to good engineering practices and manufacturer's specifications so as to achieve, at a minimum, a capture and control efficiency of 50%." WVONGA is unclear on the basis for this limitation in the absence of an NSPS requirement. Is WVDAQ's intent to allow the registrant to claim a maximum capture and control efficiency of 50% unless it can provide documentation of greater reductions? Additionally, does this section conflict with Section 7.1.6.i, which requires routing vapors through a closed vent system to the condenser/BTEX Eliminator "at all times"? WVONGA believes that Section 7.1.6.ii and 7.1.6.ii.a are overly prescriptive and suggests that they be deleted.
Received by: WVONGA

DAQ Response
This is a reasonable condition under 45CSR13 section 5.11. Permit condition 7.1.6 allows the registrant the opportunity to be approved on manufacturer's specifications with a capture and control efficiency greater than 50%, therefore, this requirement is not overly prescriptive.

DAQ Action
None.

COMMENT #77
Condition 7.1.6.ii - Condenser/BTEX eliminator design and operation
Condition 7.1.6.ii states that the condenser/BTEX eliminator be designed, operated and maintained according to good engineering practices and manufacturer's specifications. Antero requests that the phrase "good engineering practices and manufacturer's specifications" be changed to "good engineering practices and/or manufacturer's specifications." Manufacturer's specifications may not be available and limits the flexibility, which is the purpose of the permit term.
Received by: Antero Resources

DAQ Response
Good engineering practices and manufacturer's specifications must be followed at all times.

DAQ Action
None.

COMMENT #78
Section 7.1.7.
Section 7.1.7.i requires the registrant to comply with the closed vent system requirements of Section 7.1.4 of the Draft General Permit. It is not appropriate to impose closed vent requirements on a non-NSPS Subpart OOOO source regulated under this section. This is also not applicable to sources not subject to an NSPS or NESHAP controls.
Received by: WVONGA

DAQ Response
Closed vent systems are a vital part of any capture system such as VRUs or combustors used to reduce emissions to non-NSPS levels. Additionally, EPA has identified closed vent systems as sources of emissions that should be controlled. This is a reasonable condition under 45CSR13 section 5.11. To ensure that the overall capture and control efficiency is achieved this permit condition is required.

DAQ Action
None.

COMMENT #79
Section 7.1.7.i.
Williams respectfully requests that this subsection be removed from the General Permit as it will likely conflict with the proposed NSPS OOOOa.
Received by: Williams Companies

DAQ Response
Closed vent systems are a vital part of any capture system such as VRUs or combustors used to reduce emissions to non-NSPS levels. Additionally, EPA has identified closed vent systems as sources of emissions that should be controlled. This is a reasonable condition under 45CSR13 section 5.11. To ensure that the overall capture and control efficiency is achieved this permit condition is required. Fugitive leaks account for a large source of emissions from these facilities. Therefore, this requirement is necessary to minimize fugitive VOC emissions from these sources. The closed vent requirements that were proposed will remain with no changes. At the time 40CFR60 Subpart OOOOa promulgates alternative language, any necessary changes will be made to General Permit G35-C.

DAQ Action
None.

COMMENT #80
Section 7.1.8.
This section appears to mix two possible systems for the control or recycling of possible emissions from a dehydrator—a condenser and a flash tank. WVONGA believes that this section is unusable as currently drafted because it is possible to have one or both of these systems on a dehy. Section 7.1.8.a is redundant for a condenser, as this is addressed in Section 7.1.6.i. Section 7.1.8.b is problematic because if a dehydrator does not have a condenser it is impossible to burn vapors in the reboiler from the still column as the water content is too great. Additionally, if a dehydrator has only a condenser, it is possible for natural gas to be the primary fuel for the reboiler. With regard to Section 7.1.8.c, again, if a dehydrator does not have a condenser then it is impossible to burn vapors from the still column as the water content is too great. Often, a dehydrator equipped with a condenser does not use the non-condensables as a primary fuel because this has the chance of putting out the reboiler flame. It is introduced to the flame zone in addition to the primary burner fuel and has a back-up system that will control the vapors if the reboiler turns off. There is a great variety of ways that this is done, including but not limited to glow plugs, extra burners, and some burn management systems. Additionally, Section 7.1.8.c would not apply to a dehydrator that has a flash tank only.

Section 7.1.8 goes on to limit the control and capture efficiency to 50% unless a company is approved based on manufacturer's specifications. This again appears to mix a condenser and a flash tank. First, a condenser and flash tank will have two different percentage rates by which they will limit emissions that are unrelated to each other. This can even be seen in the emission calculations for a dehydrator. The calculations treat these systems as separate limiting factors. The condenser will be more likely to be based on manufacturer's design. A flash tank will be more related to the BTU/scf of the gas, glycol pump type, and the size of the reboiler that is attached to the dehydrator. For that reason, it is highly unlikely that a company will be able to provide manufacturer's specifications for a flash tank. Additionally, in dry gas areas 85% has been a standard capture efficiency for a flash tank and has in the past and currently been accepted by many states.

Due to this conflation of the condenser and flash tank systems, WVONGA believes that this section will be unusable for dehydrators that have a condenser only, flash tank only or both, and require companies with such dehydrators to obtain an individual permit under 45 C.S.R. 13. Because dehydrators are one of the most common pieces of equipment in oil and gas operations and flash tanks are common, this would mean that a sizable number of sites would not be able to use this general permit.

Accordingly, in order to avoid redundancy with Section 7.1.6, WVONGA suggests that this section be rewritten for requirements for a flash tank only, as follows:

> 7.1.8. *Glycol Dehydration Units Equipped with a Flash Tank.* If the registrant reduces waste gas by recycling it as fuel via process design, such as the use of a dehydration flash tank back to the flame zone of the reboiler, it may be designed and operated in accordance with the following:
>
> a. The reboiler shall only be fired with vapors from a flash tank or noncondensables from a condenser, and natural gas may be used as a supplemental fuel.

Please note that WVONGA has the same concerns about the control efficiency of 50% referenced in the last paragraph that we noted with regard to Section 7.1.6. However, if an efficiency requirement is to be retained, WVONGA suggests rewording the last paragraph of Section 7.1.8. to the following:

> The registrant may claim a recycling factor of 50% for wet gas and 85% for dry gas systems for those units meeting the requirement of 7.1.8.a. The registrant may claim a recycling factor greater than 50% or 85% if the General Permit Registration was approved based on manufacturer's specifications or calculations based on gas analysis, glycol pump type and burner size. An additional capture and control efficiency can be applied to flash tanks that are routed to another type of control listed in section 7 as either a secondary or primary control of the vapor.

Received by: WVONGA

DAQ Response
The intent of permit condition 7.1.8 was not to require a condenser and flash tank to claim a capture and control efficiency of 50%. Therefore, this permit condition will be modified to state that the use of a condenser or flash tank will allow the registrant to claim a capture and control efficiency of 50%. This permit condition allows the registrant to claim a capture and control efficiency greater than 50% if the General Permit Registration was approved based on manufacturer's specifications and the unit was operated as such.

DAQ Action
Permit condition 7.1.8 now states:

The registrant may claim a capture and control efficiency of 50% for those units meeting the requirements of ~~a through c~~ either a or b. The registrant may claim a capture and control efficiency greater than 50% if the General Permit Registration was approved based on manufacturer's specifications and the unit was operated as such.

COMMENT #81
Section 7.1.8.
Williams requests that this be clarified that this is for flash tanks.
Received by: Williams Companies

DAQ Response
Flash tanks are covered under this permit condition.

DAQ Action
None.

COMMENT #82
Section 7.1.8.a.
Williams respectfully requests that this entire section be removed from the General Permit because still column emissions are unable to be directly recycled back due to high water content. Removal is warranted because still column emissions going through a condenser is already covered under 7.1.6. Additionally, the low control efficiency reflects that these vapors may not be able to be routed to the reboiler at all times.
Received by: Williams Companies

DAQ Response
If the unit is not operating in this manner, then this section does not apply.

DAQ Action
None.

COMMENT #83
Section 7.1.8.b.
Williams respectfully requests that the subsection be modified to state: "[t]he reboiler shall only be fired with the *non-condensables from a condenser,and/or* vapors from the flash tank, and natural gas may be used as a supplemental fuel. Williams requests said change because still column vapors are unable to be directly routed to the reboiler.
Received by: Williams Companies

DAQ Response
If the unit is not operating in this manner, then this section does not apply. The intent of permit condition 7.1.8 was not to require a condenser and flash tank to claim a capture and control efficiency of 50%. Therefore, this permit condition will be modified to state that the use of a condenser or flash tank will allow the registrant to claim a capture and control efficiency of 50%. This permit condition allows the registrant to claim a capture and control efficiency greater than 50% if the General Permit Registration was approved based on manufacturer's specifications and the unit was operated as such.

DAQ Action
Permit condition 7.1.8 now states:

The registrant may claim a capture and control efficiency of 50% for those units meeting the requirements of ~~a through c~~ either a or b. The registrant may claim a capture and control efficiency greater than 50% if the General Permit Registration was approved based on manufacturer's specifications and the unit was operated as such.

COMMENT #84
Section 7.1.8.c.
Williams respectfully requests that the subsection's language be modified to state: "[t]he vapors/overheads from the *flash tank* shall be introduced into the flame zone of the reboiler *or with the primary fuel before the combustion chamber*." We recommend the change because the vapors/overheads cannot be the primary fuel if it is introduced in said flame zone and the flash tank should be focus of this section since condensers (still column vapors) are handled in a previous section.
Received by: Williams Companies

DAQ Response
If the unit is not operating in this manner, then this section does not apply. The intent of permit condition 7.1.8 was not to require a condenser and flash tank to claim a capture and control efficiency of 50%. Therefore, this permit condition will be modified to state that the use of a condenser or flash tank will allow the registrant to claim a capture and control efficiency of 50%. This permit condition allows the registrant to claim a capture and control efficiency greater than 50% if the General Permit Registration was approved based on manufacturer's specifications and the unit was operated as such.

DAQ Action
Permit condition 7.1.8 now states:

The registrant may claim a capture and control efficiency of 50% for those units meeting the requirements of ~~a through c~~ either a or b. The registrant may claim a capture and control efficiency greater than 50% if the General Permit Registration was approved based on manufacturer's specifications and the unit was operated as such.

COMMENT #85
Section 7.1.8.
The capture and control efficiency should be based on stream heat content modeled using a gas analysis. The manufacturer never provides a reduction percentage because of changes from site to site gas analysis. Williams recommends the language be changed to state: "[t]he registrant may claim a capture and control efficiency greater than 50% if the General Permit Registration was approved based on gas analysis and boiler rating or back-up burner/control system and the unit was operated as such."
Received by: Williams Companies

DAQ Response
The intent of permit condition 7.1.8 was not to require a condenser and flash tank to claim a capture and control efficiency of 50%. Therefore, this permit condition will be modified to state that the use of a condenser or flash tank will allow the registrant to claim a capture and control efficiency of 50%. This permit condition allows the registrant to claim a capture and control efficiency greater than 50% if the General Permit Registration was approved based on manufacturer's specifications and the unit was operated as such.

DAQ Action
Permit condition 7.1.8 now states:

The registrant may claim a capture and control efficiency of 50% for those units meeting the requirements of ~~a through c~~ either a or b. The registrant may claim a capture and control efficiency greater than 50% if the General Permit Registration was approved based on manufacturer's specifications and the unit was operated as such.

COMMENT #86
Section 7.2.1.
The Draft General Permit requires the pilot flame for flares and enclosed combustion devices to 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." Again, the regulatory basis for this requirement is unclear. Many remote locations may not be equipped with such an alarm. Further, this does not account for multiple pilots (if one pilot goes down but others remain lit, would an alarm have to be sent?), and this section should not apply if the unit is equipped with an automatic re-igniter.
Received by: WVONGA

DAQ Response
If there is no alarm to notify the registrant that the flare is not operating appropriately, then the control device is non-functioning, and noncompliance would occur.

DAQ Action
None.

COMMENT #87
Section 7.2.1.
Williams believes an alarm requirement is unnecessary since most flares are equipped with multiple pilots making the possibility of all pilots out to be unlikely. Also, if a site is in a remote location, having alarms to the nearest field office is often unreliable or impossible since electricity is sometimes not available in remote areas. In areas that do have electric power access, alarms will still not properly function if the site experiences a power outage. This is the reason that multiple pilots are normally the standard for the industry. Williams recommends that the following language be changed to read: "To demonstrate compliance with the pilot flame requirements of sections 7.1.2.2 and 7.1.2.3 of this general permit, 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 unless an *automatic ignitor is installed*. The pilot shall be equipped such that it sounds an alarm, or initiates notification via remote alarm to the nearest field office, when the *all pilot lights are out unless equipped with multiple pilots*."
Received by: Williams Companies

DAQ Response
If there is no alarm to notify the registrant that the flare is not operating appropriately, then the control device is non-functioning, and noncompliance would occur.

DAQ Action
None.

COMMENT #88
Section 7.2.2.
The requirements of this section relating to the initial leak inspection and subsequent leak monitoring requirements are overbroad and unduly burdensome. These are not appropriate for controls not subject to NSPS Subpart OOOO.
Received by: WVONGA

DAQ Response
This is a reasonable condition under 45CSR13 section 5.11. Fugitive leaks account for a large source of emissions from these facilities. Therefore, this requirement is necessary to minimize fugitive VOC emissions from these sources.

DAQ Action
45CSR§13-5.11 citation was added.

COMMENT #89
Section 7.2.2.
Williams respectfully requests that this entire subsection be removed from the General Permit as it will likely conflict with the proposed NSPS OOOOa.
Received by: Williams Companies

DAQ Response
Closed vent systems are a vital part of any capture system such as VRUs or combustors used to reduce emissions to non-NSPS levels. Additionally, EPA has identified closed vent systems as sources of emissions that should be controlled. This is a reasonable condition under 45CSR13 section 5.11. To ensure that the overall capture and control efficiency is achieved this permit condition is required. Fugitive leaks account for a large source of emissions from these facilities. Therefore, this requirement is necessary to minimize fugitive VOC emissions from these sources. The closed vent requirements that were proposed will remain with no changes. At the time 40CFR60 Subpart OOOOa promulgates alternative language, any necessary changes will be made to General Permit G35-C.

DAQ Action
None.

COMMENT #90
Condition 7.2.2 - Monitoring Requirements
Condition 7.2.2. is confusing because it requires both quarterly monitoring consistent with 40 CFR, Part 60, method 21 or optical gas imaging, and annual inspections of the closed vent system. Antero urges WVDEP to revise the permit language to indicate clearly what must be inspected on an annual basis and how that requirement differs from the quarterly monitoring requirements.
Received by: Antero Resources

DAQ Response
The annual inspection language will be removed. These inspections are required quarterly, therefore, additional annual inspections are unnecessary and will be removed.

DAQ Action
Permit conditions 7.2.2.b.i and ii were removed.

COMMENT #91
Section 7.2.3.
Please see the comment to Section 7.2.1, above, regarding the requirement to equip a pilot flame with an alarm.
Received by: WVONGA

DAQ Response
If there is no alarm to notify the registrant that the flare is not operating appropriately, then the control device is non-functioning, and noncompliance would occur.

DAQ Action
None.

COMMENT #92
Section 7.2.3.i.
Williams respectfully requests that this entire subsection be removed from the General Permit as it is duplicative of § 7.2.1. Please also see Comment 34 on § 7.2.1.
Received by: Williams Companies

DAQ Response
DAQ agrees that permit condition 7.2.3.i and 7.2.1 are duplicative and permit condition 7.2.3.i will be removed. However, in response to the alarm comment of permit condition 7.2.1, if there is no alarm to notify the registrant that the flare is not operating appropriately, then the control device is non-functioning, and noncompliance would occur.

DAQ Action
Permit condition 7.2.3.i was removed.

COMMENT #93
Condition 7.2.3.iii- pilot flare requirements
Condition 7.2.3.iii states the registrant is exempt from the pilot flame requirements of i. and ii. if the registrant installed an enclosed combustion device model that was tested under 60.5413(d), which meets the criteria in 60.5413(d)(11). Antero requests that these sections be clarified that (i) and (ii) reference 7.2.3.i. and 7.2.3.ii.
Received by: Antero Resources

DAQ Response
The reference to paragraphs (i) and (ii) in 7.2.3.iii will be changed to 7.2.3.i.

DAQ Action
Permit condition 7.2.3.ii now states:

The registrant is exempt from the pilot flame requirements of permit condition ~~paragraphs (i)7~~.2.3.i of this section if the registrant installed an enclosed combustion device model that was tested under § 60.5413(d) which meets the criteria in § 60.5413(d)(11).

COMMENT #94
Section 7.3.1.
This section prescribes testing requirements relating to the visible emissions requirements in Sections 7.1.2.2, 7.1.2.3 and 7.1.2.6 of the Draft General Permit. As stated above, WVONGA objects to these requirements on the ground that they would render any visible emissions an automatic violation of the Draft General Permit, and contradict the 20 percent opacity limitation contained in 45 C.S.R. 6. Furthermore, the testing protocols required in this section are much more stringent than other sources currently permitted in West Virginia, and without any regulatory basis. WVONGA suggests that the opacity limitations from 45 C.S.R. 6 be incorporated into the Draft General Permit as the governing standard—which may already be the

case, pursuant to Section 7.1.2.6, although it is unclear how this provision relates to other sections relating to visible emissions—and then, if visible emissions are detected using Section 11 of EPA Method 22, the registrant should be given a certain timeframe in which to correct the issue. If a followup test using Method 22 indicates that the leak persists, then a Method 9 test may be appropriate within 10 days thereafter (due to difficulties in getting someone who is certified to perform Method 9 tests out to the individual sites immediately).
Received by: WVONGA

DAQ Response
This is a reasonable condition under 45CSR13 section 5.11. To ensure that the flare achieves a 98% control efficiency, these minimum visible emission requirements are necessary. Complying only with 20% opacity in 45CSR6 will not achieve 98% destruction efficiency.

DAQ Action
None.

COMMENT #95
Section 7.3.2.
This does not allow for pressure assisted flares which often can be more reliable than candle stick flares and there are no performance test listed in the general permit. So this requirement has no affect. Additionally, since said flares are not subject to a NSPS or NEHAP, the flares in this section are not subject to 60.18. Williams respectfully requests that this section be removed from the General Permit.
Received by: Williams Companies

DAQ Response
Historically, the DAQ has encountered numerous non-compliance issues with pressure assisted flares. Additionally, the DAQ has not encountered pressure assisted flares at these facilities. General Permits are written specific to a certain industry group with the goal of providing permit coverage to the largest equipment types. Pressure assisted flares are not covered under General Permit G35-C. If a pressure assisted flare will be utilized at one of these sites, it will need to be permitted under a 45CSR13 construction/modification permit. The only way for the DAQ to grant 98% destruction efficiency is to meet permit condition 7.1.2.3.iii.

DAQ Action
None.

COMMENT #96
Section 7.3.3.
WVONGA notes that several of the methods referenced in this section are not included in 45 C.S.R. 6-7.1 and may not be appropriate for use here. Specifically, Method 5 is unnecessary and would prove very difficult, if not impossible, to perform with any accuracy due to the high temperatures and the lack of sampling access on flare exhaust stacks. Special equipment such as glass filter frits and quartz probe liners would be needed just to handle the heat. The preferred nozzle (glass) would not be possible since the union used to connect glass probe nozzles to probe liners must be made of Teflon (max sampling temperature of Teflon is 500°F) to prevent nozzle damage. Furthermore, filter and probe temperatures are almost impossible to maintain at the

required 248 +/- 25°F due to the extremely high temperature gas samples being drawn into the sampling system. Since the flare is used to burn natural gas that has a very low particulate loading, a full blown Method 5 particulate test will most likely not tell you anything you could not surmise from a visual observation of the exhaust. When you consider the applicable Method 22 opacity testing requirement this seems, at the very least, duplicative. Method 18, for many of the same reasons stated above, will not be possible on these types of sources. The Tedlar bags used in this method can only handle about 225°F and any Teflon components in the sample train will start to deform above 500°F. Again, when a flare is operating it is controlling emissions sufficiently and performing a stack test is duplicative in nature and simply not necessary.
Received by: WVONGA

DAQ Response
This is a requirement in 45CSR6. However, permit condition 3.4.1 allows alternative testing at the Director's discretion.

DAQ Action
None.

COMMENT #97
Section 7.3.3.
Williams respectfully requests that this entire subsection be removed from the General Permit because many of these test methods would either be impossible or do not result in the desired data for flares thus making it impossible for companies to comply.
Received by: Williams Companies

DAQ Response
This is a requirement in 45CSR6. However, permit condition 3.4.1 allows alternative testing at the Director's discretion.

DAQ Action
None.

COMMENT #98
Section 7.4.1.
It appears that this section presumes that a flare-specific on-site design evaluation will be done in accordance with 40 C.F.R. § 60.18. Again, WVONGA notes that some flares are not subject to 40 C.F.R. § 60.18, and therefore requests confirmation that such flares would not have to comply with this requirement. If that is the case, WVONGA suggests adding express language to this section limiting its applicability to any flares subject to 40 C.F.R. § 60.18.
Received by: WVONGA

DAQ Response
Historically, the DAQ has encountered numerous non-compliance issues with pressure assisted flares. Additionally, the DAQ has not encountered pressure assisted flares at these facilities. General Permits are written specific to a certain industry group with the goal of providing permit coverage to the largest equipment types. Pressure assisted flares are not covered under General Permit G35-C. If a pressure assisted flare will be utilized at one of these sites, it will need to be

permitted under a 45CSR13 construction/modification permit. The only way for the DAQ to grant 98% destruction efficiency is to meet permit condition 7.1.2.3.iii.

DAQ Action
None.

COMMENT #99
Section 7.4.5.
For the reasons discussed above in conjunction with Section 7.2.2, the closed vent monitoring requirements should not be applicable to non-NSPS Subpart OOOO sources and therefore should be deleted from the Draft General Permit.
Received by: WVONGA

DAQ Response
This is a reasonable condition under 45CSR13 section 5.11. Fugitive leaks account for a large source of emissions from these facilities. Therefore, this requirement is necessary to minimize fugitive VOC emissions from these sources.

DAQ Action
45CSR§13-5.11 citation was added.

COMMENT #100
Section 7.4.5.
Williams respectfully requests that this entire subsection be removed from the General Permit because it will likely conflict with NSPS OOOOa.
Received by: Williams Companies

DAQ Response
Closed vent systems are a vital part of any capture system such as VRUs or combustors used to reduce emissions to non-NSPS levels. Additionally, EPA has identified closed vent systems as sources of emissions that should be controlled. This is a reasonable condition under 45CSR13 section 5.11. To ensure that the overall capture and control efficiency is achieved this permit condition is required. Fugitive leaks account for a large source of emissions from these facilities. Therefore, this requirement is necessary to minimize fugitive VOC emissions from these sources. The closed vent requirements that were proposed will remain with no changes. At the time 40CFR60 Subpart OOOOa promulgates alternative language, any necessary changes will be made to General Permit G35-C.

DAQ Action
None.

COMMENT #101
Section 7.4.8.
This section requires that any records submitted to the agency pursuant to a requirement of the permit or upon request by the Director be certified by a responsible official. WVONGA suggests adding "upon request by WVDAQ" to the end of this sentence, as records that are provided to agency officials during inspections and otherwise frequently are not individually certified.
Received by: WVONGA

DAQ Response
The permit condition states that any records submitted to the agency pursuant to a requirement of this permit or upon request by the Secretary shall be certified by a responsible official. If an official request is made by the Secretary, these records shall be certified by a responsible official.

DAQ Action
None.

COMMENT #102
Section 7.4.8.
Williams respectfully requests that the "certification" language be removed from this subsection because most inspectors would prefer the data during the inspection. The current language would create a conflict with the "readily available" requirement because it requires certification by a responsible party, thus causing a delay in the submittal of information.
Received by: Williams Companies

DAQ Response
The permit condition states that any records submitted to the agency pursuant to a requirement of this permit or upon request by the Secretary shall be certified by a responsible official. If an official request is made by the Secretary, these records shall be certified by a responsible official.

DAQ Action
None.

COMMENT #103
Section 7.4.9.
This section would require the registrant to record the volume of gas flared and the heating value of the gas flare on a monthly basis to demonstrate compliance with the maximum heat design input for a flare or enclosed combustion device. This requirement is unnecessary and overly burdensome for ensuring compliance with the maximum heat design input, and not all operators have a means of readily collecting this information.
Received by: WVONGA

DAQ Response
DAQ agrees and has removed the requirement to record the heating value of the gas flared.

DAQ Action
Permit condition 7.4.9 now states:

To demonstrate compliance with section 7.1.2.5 of this general permit, the registrant shall record the volume of gas flared ~~and the heating value of the gas flared~~ on a monthly basis.

COMMENT #104
Section 7.4.10.
For the glycol dehydrators that have condenser overheads that are routed to a combustion device or to the reboiler to be combusted, WVONGA believes this requirement is unnecessary, and accordingly, WVONGA requests the deletion of this requirement. Additionally, for the glycol dehydrators that have the condenser overheads vented to the atmosphere rather than combusted, WVONGA suggests that monitoring be quarterly, as in Section 14.2.3.
Received by: WVONGA

DAQ Response
DAQ agrees and has removed the requirement.

DAQ Action
Permit condition 7.4.10 was removed in its entirety.

COMMENT #105
Section 7.4.10.
Williams respectfully requests the subsection be removed because this requirement does not clearly determine if a condenser is in compliance. If the requirement is to be kept, Williams requests that the language is modified to state that: "[t]o demonstrate compliance with section 7.1.6 of this general permit, the registrant shall record the outlet temperature of the condenser on a *quarterly* basis." Said modification matches the dehydrator requirement for record keeping and will provide consistency in monitoring requirements.

Received by: Williams Companies

DAQ Response
Based on WVONGA's comment, this permit condition was removed.

DAQ Action
Permit condition 7.4.10 was removed in its entirety.

COMMENT #106
Section 7.5.
WVONGA submits that this entire section is without a regulatory basis (and the Draft General Permit cites to no authority for any of the requirements in this section), and as such constitutes an unreasonable overreach by the agency in the context of the relatively minor sources to be permitted subject to the Draft General Permit. Further, with regard to Section 7.5.3 specifically, WVONGA questions why any reporting is necessary in the absence of any exceedance of emissions, regardless of the operational status of the air pollution control device.

Received by: WVONGA

DAQ Response
This is a reasonable condition under 45CSR13 section 5.11. Additionally, this ensures that the capture and control efficiency allowed under the permit are being met.

DAQ Action
None.

COMMENT #107
Section 7.5.2.
Williams respectfully requests that the subsection's language be modified to state that: "[a]ny bypass event *that results in emissions above the permit limit* of the registered control device 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." This recommended modification allows for back-up devices and planned bypasses that were included in the application, such as manufacturer required maintenance.
Received by: Williams Companies

DAQ Response
This is a reasonable condition under 45CSR13 section 5.11. Additionally, this ensures that the capture and control efficiency allowed under the permit are being met.

DAQ Action
None.

COMMENT #108
Section 7.5.3.
Williams requests the following modification: "[a]ny time the air pollution control device is not operating when emissions are vented to it *that results in emissions above permit limit*, shall be reported in writing to the Director of the DAQ as soon as practicable, but within ten (10) calendar days of the discovery." Said modification is recommended because it will allow for back-up devices and planned bypasses that were included in the application. An example this would be applicable is during manufacturer required maintenance.
Received by: Williams Companies

DAQ Response
This is a reasonable condition under 45CSR13 section 5.11. Additionally, this ensures that the capture and control efficiency allowed under the permit are being met.

DAQ Action
None.

COMMENT #109
Section 12.1.3.a.
Williams respectfully requests that this subsection be removed due to being duplicative of NSPS IIII, NSPS JJJJ and NEHAP ZZZZ requirements.
Received by: Williams Companies

DAQ Response
These requirements are necessary to ensure units are being operated appropriately. Additionally, not all engines are subject to the requirements listed in the comment.

DAQ Action
None.

COMMENT #110
Section 12.1.3.d.
WVONGA requests confirmation that the requirement to "monitor" the temperature to the inlet of the catalyst does not require that this information be recorded, as this is typically not the case—rather, it is monitored and the unit will alarm and shut down in the event of high temperature. WVONGA also questions whether thermal deactivation is such a common issue that it needs to be addressed in such a specific, prescriptive manner in this section of the permit, rather than as a part of the registrant's normal operation and maintenance procedures.
Received by: WVONGA

DAQ Response
This permit requirement does not require that this information is recorded, only monitored. This issue is a concern to DAQ, therefore it will remain a requirement.

DAQ Action
None.

COMMENT #111
Section 12.1.3.e
WVONGA requests that this requirement be removed since this is addressed in NESHAP ZZZZ and NSPS JJJJ and can have different requirements.
Received by: WVONGA

DAQ Response
These requirements are necessary to ensure units are being operated appropriately. Additionally, not all engines are subject to the requirements listed in the comment.

DAQ Action
None.

COMMENT #112
Section 12.1.5.
This section would require emissions from startup and shutdown to be included in calculating the 12-month rolling emissions total. WVONGA requests clarification regarding from the agency regarding what emissions, are considered to be "startup and shutdown" emissions.
Received by: WVONGA

DAQ Response
EPA issued a final action to ensure states have plans in place that are fully consistent with the Clean Air Act and recent court decisions concerning startup, shutdown and malfunction (SSM) operations. The final action can be found:

http://www3.epa.gov/airquality/urbanair/sipstatus/emissions.html

DAQ Action
None.

COMMENT #113
Section 12.1.5.
The subsection's language is ambiguous in regards to what 12-month rolling total emissions and which type of start-up or shutdown emissions WVDEP is referring too. Williams permits pipeline blowdowns separate from engines since they are a different type of emissions. The only other emission that WVDEP may be referring to are emissions caused by engine cold starts. Please keep in mind that engines take seconds to warm up and there are no manufacturer emissions factors for this period. As a result, Williams respectfully recommends that the following sentence be deleted from the subsection: "[t]he emissions from start-up and shut-down shall be included in the twelve (12) month rolling total of emissions." Additionally, 13.1.1 appear to be a typo. Williams believes that the reference should be 12.1.1.
Received by: Williams Companies

DAQ Response
EPA issued a final action to ensure states have plans in place that are fully consistent with the Clean Air Act and recent court decisions concerning startup, shutdown and malfunction (SSM) operations. The final action can be found:

http://www3.epa.gov/airquality/urbanair/sipstatus/emissions.html

DAQ recognizes typographical error of 13.1.1.

DAQ Action
Reference was changed to 12.1.1.

COMMENT #114
Section 12.1.6.
Williams requests that WVDEP please confirm that this definition does not create a direct conflict with NEHAP ZZZZ and NSPS JJJJ language.
Received by: Williams Companies

DAQ Response
The permit condition clearly states that this definition is for the purposes of General Permit G35-C.

DAQ Action
None.

COMMENT #115
Routine, Repair, and Replacement of Like-kind Engines
Antero believes there should be a provision in the permit to allow for the like-kind replacement of engines. This is consistent with the routine, repair, and replacement equipment concept found in 45 CSR 13 § 2.17.f.2. Facilities should have the ability to replace an engine with the same make and model number without modifying an existing permit. For instance, Colorado allows for the replacement of existing engines with like-kind replacements under General Air Permit GP02 - Oil and Gas Source Natural Gas Fired Reciprocating Internal Combustion Engines (RICE). In the permit (Section VII), an applicant can apply for Alternative Operating Scenarios (AOS) which allows for the replacement with a like-kind engine (same make and model number). The engine must be tested with portable equipment to indicate that existing emission limitations are met.

Antero proposes to include the following new permit provision:

12.1.7. Provided that the emission limits set forth in the application are still met, the permittee may replace an existing engine registered under the general permit with a different or like-kind engine without modifying the general permit registration.

12.1.7.1.A like-kind replacement is defined as replacing a piece of equipment with the same make, model and design capacity as the original piece of equipment.
Received by: Antero Resources

DAQ Response
45CSR13 Section 2.17.f.2 specifically states that routine maintenance, repair, and replacement (excluding such activities that are subject to new source performance standards under 45CSR16) shall not constitute a modification of a stationary source. Otherwise, the procedures for these types of changes are covered under 45CSR13 sections 5.13 and 5.14 and these rule requirements must be followed. Furthermore, replacement of engines most likely would result in different regulatory requirements.

DAQ Action
None.

COMMENT #116
Section 13.1.2.
WVONGA requests revision of this section to authorize changes that do not exceed the definition of "modification" as allowed by 45 C.S.R. 13.
Received by: WVONGA

DAQ Response
The registrant is not allowed to exceed the maximum truck loading throughput limitation in the issued General Permit registration without first obtaining the proper amended registration. This may be in the form of a modification or administrative update depending on the emissions increase.

DAQ Action
None.

COMMENT #117
Section 13.1.4.
Not all registrants will use capture efficiencies in their emissions calculations. We suggest the first sentence of this section be amended to read "To the extent a registrant intends to claim a capture efficiency in calculating emissions, the following applicable capture efficiencies are required:"

In addition, Section 13.1.4 requires submission of certification with the G35-C Annual Certification. We do not see any requirement for an annual certification in the Draft Permit.
Received by: WVONGA

DAQ Response
- This requirement only applies to those registrants that are claiming a capture efficiency.
- The reference to an Annual Certification was a typographical error.

DAQ Action
- None.
- The reference to the Annual Certification was removed.

COMMENT #118
Section 13.1.4.
Please note that not all companies claim loading controls. The subsection's language suggests a requirement for all loading. Williams suggests the language be modified to state: "The following applicable capture efficiencies are *allowed if represented in the application*: a. For tanker trucks not passing one of the annual leak tests in 13.1.4(b) or (c) and has vapor return – 70% b. For tanker trucks passing the NSPS level annual leak test – 98.7%. c. For tanker trucks passing the MACT level annual leak test – 99.2%..."

This permit does not require an annual certification. This requirement appears to be written in error and is a requirement of the G70 general permit and not the G-35C General Permit.

Williams requests the following language be deleted from the subsection: "[t]his certification must be submitted with the G35-C Annual Certification."
Received by: Williams Companies

DAQ Response
This requirement only applies to those registrants that are claiming a capture efficiency.

DAQ Action
None.

COMMENT #119
Conditions 13.1.4 and 13.2.2 - railcar certification
Conditions 13.1.4 and 13.2.2 require MACT and/or NSPS Annual Leak Tests to demonstrate compliance with the capture efficiencies. These conditions indicate that the requirement can be satisfied if the trucking company provides certification that all tanker trucks servicing the location are compliant. Antero requests the conditions should include a statement to clarify that the certification requirement for rail cars can also be met if the rail company provides certifications that all rail cars servicing the location are compliant MACT and/or NSPS Annual Leak Tests.
Received by: Antero Resources

DAQ Response
DAQ agrees and will add rail car language to these permit conditions.

DAQ Action
Permit condition 13.1.4 now states:

The following applicable capture efficiencies are required:

a. For tanker trucks and/or rail cars not passing one of the annual leak tests in 13.1.4(b) or (c) and has vapor return – 70%
b. For tanker trucks and/or rail cars passing the NSPS level annual leak test – 98.7%.
c. For tanker trucks and/or rail cars passing the MACT level annual leak test – 99.2%

Compliance with this requirement shall be demonstrated by keeping records of the applicable MACT or NSPS Annual Leak Test certification for every truck and railcar loaded/unloaded. This requirement can be satisfied if the trucking/railcar company provided certification that all tanker trucks/rail cars servicing the location are compliant. This certification must be submitted to the DAQ.

Permit condition 13.2.2 now states:

For the purpose of demonstrating compliance with section 13.1.2, the registrant shall maintain records of the MACT and/or NSPS Annual Leak Tests of all tanker trucks/rail cars loaded at the facility. This requirement can be satisfied if the trucking/rail car company provided certification that all tanker trucks/rail cars servicing the location are compliant. This certification must be submitted in writing to the Director of the DAQ.

COMMENT #120
Section 13.2.2.
Certification of truck fleet compliance with Section 13.1.2 is to be submitted to the Director in writing, but there is no deadline for this certification. This could be addressed in a reporting section.
Received by: WVONGA

DAQ Response
This certification would need to be submitted in writing with the registration application.

DAQ Action
None.

COMMENT #121
Section 13.2.2.
The G-35C permit does not require an annual certification or report as does the G-70B permit. Williams recommends the following language be deleted from the subsection: "[t]his certification must be submitted in writing to the director of the DAQ."
Received by: Williams Companies

DAQ Response
This certification would need to be submitted in writing with the registration application.

DAQ Action
None.

COMMENT #122
Section 14.1.2.
For purposes of consistency with the monitoring frequency required in Section 14.2.3 of the Draft General Permit, WVONGA requests that the 12-month rolling total be based on the sum of the **quarterly** throughput (versus monthly throughput).
Received by: WVONGA

DAQ Response
The DAQ agrees with monitoring frequency change.

DAQ Action
Permit condition 14.1.2 now states:

Maximum Throughput Limitation. The maximum dry natural gas throughput to the glycol dehydration units/ still columns shall not exceed the throughput limit listed in the registrant's G35-C General Permit Registration. Compliance with the Maximum Throughput Limitation shall be determined using a twelve (12) month rolling total. A twelve (12) month rolling total shall mean the sum of the quarterly throughput at any given time during the previous twelve (12) consecutive calendar months.

COMMENT #123
Section 14.1.6.
WVONGA requests that language be added to this section to clarify that backup pumps do not have to be considered as operating for purposes of calculating potential to emit here.
Received by: WVONGA

DAQ Response
The backup pumps must be considered in accordance with 40CFR63 Subpart HH. The potential to emit must be calculated using the throughput of both pumps.

DAQ Action
None.

COMMENT #124
Section 14.2.1.
For purposes of clarity and consistency with what we believe is the agency's intent, WVONGA recommends that this section be revised as follows: "To demonstrate compliance with Section 14.1.2 of this general permit, the registrant shall monitor the throughput of dry natural gas ~~fed to~~ from the dehydration system on a ~~monthly~~ quarterly basis . . . ." The proposed change to quarterly monitoring is consistent with Section 14.2.3.
Received by: WVONGA

DAQ Response
DAQ agrees with suggested change.

DAQ Action
The requested change was made.

COMMENT #125
Section 14.2.3.
For purposes of assigning a "default value" for maximum design capacity as contemplated in Section 14.2.3.a.iv, WVONGA notes that this is a documented value that is a part of the registrant's application.
Received by: WVONGA

DAQ Response
Permit condition states that the natural gas flowrate maximum design capacity does not need to monitored quarterly. The permit condition does not state that the natural gas flowrate maximum design capacity has a default value.

DAQ Action
None.

COMMENT #126
Section 14.3.1.
WVONGA requests confirmation that advance notification of the sampling to be conducted pursuant to this section is not required.
Received by: WVONGA

DAQ Response
Advance notification of the sampling is not required, unless the registrant chooses to use alternative methods that must be approved by the DAQ.

DAQ Action
None.

COMMENT #127
Section 14.4.1.
Consistent with its previous comments, WVONGA requests that the reference to monthly dry natural gas throughput records be changed to quarterly.
Received by: WVONGA

DAQ Response
DAQ agrees with suggested change.

DAQ Action
The requested change was made.

COMMENT #128
Section 14.5.1.
Williams respectfully recommends that this entire subsection be deleted from the General Permit because it potentially requires over-reporting. § 14.5.1 should merely be a matter of recordkeeping as required by § 14.4.1 and not reporting. The main reporting focus is already included within § 14.5.2.
Received by: Williams Companies

DAQ Response
The results of the wet gas analysis are required to be reported per permit condition 14.5.1.

DAQ Action
None.

COMMENT #129
Section 14.5.2.
WVONGA submits that this should not be required if the source was permitted as such and has not exceeded any permitted limits.
Received by: WVONGA

DAQ Response
The purpose of this requirement is to ensure that sources that are close to major source status do not exceed major source levels. Therefore, this notification is necessary in order for DAQ to review the data and make the determination that major source levels were not exceeded.

DAQ Action
None.

GENERAL PERMIT G35-C APPLICATION COMMENTS

COMMENT #130
Application Forms
WVONGA appreciates the significant improvements made to the application forms following the close of the comment period on the Draft General Permit G80-A. However, WVONGA notes that in certain places the forms continue to prompt the entry of data multiple times and in multiple places, which increases the likelihood of errors that may result in permit delays. Accordingly, WVONGA urges WVDAQ to review the proposed forms once more in an effort to eliminate all duplicative data entry requirements.
Received by: WVONGA

DAQ Response
The standardized forms developed by the DAQ expedite internal permit application review.

DAQ Action
None.

COMMENT #131
General Permit Registration Application pp. 1-2.
For purposes of clarity and ease in completing the application forms, WVONGA suggests that the individual check boxes for construction, modification and relocation at the top of page 1 of the application be replaced with a single box for "New Registration" (as modifications and relocations are not expected to be applicable here). Corresponding changes (from "Construction, Modification and Relocation" to "New Registration," deleting unnecessary references to "modifications" and "relocations," etc.) should be implemented throughout the forms. The Class I and Class II Administrative Update boxes should remain as-is in the Draft General Permit.

In the last row on page 2, the application requires the registrant to provide "One (1) paper copy and two (2) copies of CD or DVD of pdf copy of Application and Excel Spreadsheets (plot plans, all attachments and supporting documents)." WVONGA notes that plot plans are not easily convertible to PDF and as such requests that one paper copy of these plans is sufficient to provide with the application (particularly as any PDF of a plot plan is likely to be too small to read anyway).

Finally, WVONGA believes that this form needs to be clearer regarding what documentation and forms are required for the different types of applications. For example, is a plot plan required when filing for an administrative update?

Received by: WVONGA

DAQ Response
Modifications and administrative updates are both an option under General Permit G35-C.

All attempts to include a plot plan with the pdf copy should be made. However, if inclusion is impossible, one (1) paper copy shall be sufficient. Additional paper copies may be requested.

Attachment F clearly states that a plot plan is required for an administrative update. Each attachment is clear on its necessity to be included with the application submittal.

DAQ Action
None.

COMMENT #132
Application Attachment A - Single Source Determination Form.
It appears that the current proposed version of this form—as revised from the version included with the draft General Permit G80-A earlier this year—would require all applicants to provide a narrative source aggregation analysis, those facilities located within one mile of another facility owned by or associated with the natural gas industry would also have to complete the extensive "Single Source Determination Form" checklist. While WVONGA appreciates the agency's limitation of the requirement to fill out the detailed checklist, WVONGA continues to believe that this checklist will create far more confusion for both the regulated community and the agency than the current narrative-only approach. Despite this attempt to systematize and simplify the aggregation analysis, the fact remains that whether aggregation is appropriate is a highly site-specific inquiry that is best evaluated on the basis of a narrative justification. Furthermore, it is unclear from the checklist what additional "explanations" regarding the specific questions would be required beyond what the applicant presumably already would have included in its narrative discussion on page 3. Finally, WVONGA notes that the current checklist ultimately may end up conflicting with any revisions to the aggregation analysis ultimately finalized by the United States Environmental Protection Agency. Accordingly, WVONGA suggests that WVDAQ delete the proposed checklist in favor of requiring a narrative aggregation analysis/justification only, consistent with current practice.
Received by: WVONGA

DAQ Response
If the proposed facility is located within one (1) mile of another facility in the natural gas industry, the checklist must be completed. This checklist was developed to assist DAQ personnel in making source determinations. The DAQ does not believe it creates confusion for the regulated community. These questions are routinely asked of applicants when facilities are located this close to one another. This checklist will help expedite single source determinations.

If USEPA clarifies air permitting rules in regards to single source determinations for the oil and natural gas industry, DAQ will reassess this form and modify appropriately.

DAQ Action
None.

COMMENT #133
Source Aggregation Evaluation
The West Virginia Department of Environmental Protection (WVDEP), Division of Air Quality requires as part of its air permit application review process an air aggregation source determination analysis be performed and such review requires an analysis of sources beyond ¼ mile from the proposed source. Antero urges WVDEP to review the application to be sure it is consistent with the federal Clean Air Act (CAA) regulations and current case law and further that it adopt a general standard that sources which are beyond ¼ mile in distance from the proposed source are by definition not "contiguous" and "adjacent" to the proposed source for purposes of performing its source aggregation evaluation, this approach is consistent USEPA's proposed clarification of air permitting rules for the oil and gas industry issued on August 18, 2015. See Proposed Rule, Oil and Natural Sector: Emissions for New and Modified Sources available at http://www.epa.gov/airquality/oilandgas/pdfs/og_nsps_pr_081815.pdf.

The federal Clean Air Act regulations for Title V permitting programs define a major source as follows:

> *Major source* means any stationary source (or any group of stationary sources that are located on one or more contiguous or adjacent properties, and are under common control of the same person (or persons under common control} belonging to a single major industrial grouping and that are described in paragraph (1), (2), or (3) of this definition. For the purposes of defining "major source," a stationary source or group of stationary sources shall be considered part of a single industrial grouping if all of the pollutant emitting activities at such source or group of sources on contiguous or adjacent properties belong to the same Major Group (i.e., all have the same two-digit code) as described in the Standard Industrial Classification Manual, 1987.

40 Code of Federal Rules ("CFR"), Part 70.2. Therefore, while WVDEP has a duty, as set forth in the draft permit to perform a source aggregation analysis, the aggregation of the emissions activities of two or more stationary sources is only appropriate if the sources meet all of the following criteria as found in the CAA regulations:

1. The sources are located on one or more contiguous or adjacent properties;
2. The sources are under the common control of the same person (or persons under common control); and
3. The sources belong to a single major industrial grouping.

40 CFR, Part 52.

In addition to the above factors and in order to provide further guidance, in the 1980 preamble to the U.S. Environmental Protection Agency's (U.S. EPA) New Source Review regulations the agency set the following boundaries on the definition for PSD purposes of the component terms of "source":

1. It must carry out reasonably the purposes of PSD;

2. It must approximate a common sense notion of "plant"; and
3. It must avoid aggregating pollutant-emitting activities that as a group would not fit within the ordinary meaning of "building," "structure," "facility," or "installation."

45 FR 52676, at 52695 (Aug. 7, 1980).

An analysis of source aggregation begins with the CAA and its three-prong test, and then if necessary, asks for further analysis with regard to whether aggregation of the sources would be in the best interests of the regulatory program even if the three-prong test contained in the CAA were satisfied. Because source determinations are made on a case-by-case basis, considering the specific facts of the situation, prior agency statements and source determinations related to oil and gas activities may be constructive, but are not determinative.

Furthermore, Emissions activities must be located on contiguous or adjacent property to be considered a single source. Functional interdependence of two activities cannot be considered in assessing this criterion. While the terms "contiguous" and "adjacent" are not defined by the U.S.EPA, the dictionary definition of "contiguous" means to be in actual contact and "adjacent" means to be nearby and having a common endpoint or border.

The U.S. Court of Appeals for the 6th Circuit has held that the terms "adjacent" and "contiguous" are not ambiguous as used in EPA's regulations and that the literal dictionary definitions of the terms shall be used in analyzing whether emission sources should be aggregated for purposes of determining permit status. See, *Summit Petroleum Co. v. EPA, et* al., 690 F.3d 733 (6th Cir. 2012). EPA's previous policy of reviewing the interrelated functions of the sources may no longer be considered in determining whether sources are "adjacent" or "contiguous" when making source determination decisions in its Title V and New Source Review (NSR) programs. The only question is whether the distance between the sources meets the dictionary definition of adjacent or contiguous.

Although the regulations do not provide an exact distance between sources that would cause two activities to be contiguous and require an aggregation determination, many states have in fact developed bright line distance limitations in reviewing whether sources are in fact contiguous and adjacent. Generally, these states have adopted what is commonly referred to as the Quarter Mile rule, which basically sets forth that sources located further than a quarter of a mile from each other fail to meet the ordinary definition of contiguous and adjacent and shall not be subject to source aggregation, and that any review of those sources shall be limited to the literal definition of the terms ambiguous and adjacent. Sources less than a quarter of a mile in distance from each other shall be reviewed on a case-by-case basis to determine whether source aggregation is proper pursuant to the Court's analysis provided above.

In the August 18, 2015 proposal for USEPA's air permitting rules as they apply to the oil and gas industry, USEPA, consistent with the decision in Summit, proposes to adopt the Quarter Mile Rule as a general benchmark when performing its source aggregation evaluation.

Antero supports the use of this general rule and that sources located greater than a quarter mile away in distance do not meet the common sense notion of contiguous or adjacent. Sources closer than 1/4 mile in distance would be subject to a case-by-case review to determine whether source aggregation is proper. Antero urges WVDEP to reduce the radius for its review of neighboring sources to those sources within 1/4 mile of the proposed facility.

Antero also urges the agency to consider the following comments:

a. The application requires the applicant to identify whether there is a facility owned by or "associated with the natural gas industry" within one mile from the proposed facility. Antero urges WVDEP to limit this distance to ¼ mile from the proposed facility as further described above. Furthermore, the phrase "associated with the natural gas industry" is vague and undefined. Presumably, this question seeks to identify whether the sources belong to a single major industrial grouping. This question should be refined to ask whether there are any facilities within a prescribed distance "that belong to the same single major industrial grouping as the proposed facility." The Single Source Determination Form should contain check boxes for the response "unknown" because; it may not be possible for authorized official to certify "yes" or "no" to each of the questions.

b. Antero urges WVDEP to develop a tool for applicants to identify facilities belonging to the same single major industrial grouping based on site coordinates as this would expedite the application and review process.

Received by: Antero Resources

DAQ Response

The DAQ requires the registrant to provide a source aggregation analysis for the proposed facility. Furthermore, the checklist only needs to be completed if the proposed facility is located within one (1) mile of another facility in the natural gas industry, the checklist must be completed. This checklist was developed to assist DAQ personnel in making source determinations. The DAQ does not believe it creates confusion for the regulated community. These questions are routinely asked of applicants when facilities are located this close to one another. This checklist will help expedite single source determinations.

If USEPA clarifies air permitting rules in regards to single source determinations for the oil and natural gas industry, DAQ will reassess this form and modify appropriately.

DAQ Action

None.

COMMENT #134

Application Attachment F - Plot Plan.
WVONGA notes that a plot plan should not be required for an administrative update that does not affect the location of an emission point or the location of the facility.
Received by: WVONGA

DAQ Response

It is common for as built changes to have occurred since the original registration issuance.

DAQ Action

None.

COMMENT #135

Application Attachment G - Area Map.
Like the plot plan discussed above, an area map should not be required for an administrative update that does not affect the location of an emission point or the location of the facility.
Received by: WVONGA

DAQ Response

It is common for changes (new dwellings or roads) to have occurred since the original registration issuance.

DAQ Action

None.

COMMENT #136

Application Attachment I – Emission Units/ERD Table.

- The reference in the header of the Table to "Emission Reduction Devices" should be changed to "Process Modifications." WVONGA notes further that control devices and ERDs are not interchangeable like Section 8.0 of the Draft General Permit treats them—many of the "emissions reductions devices" are treated separately by the Draft General Permit as quasi-controls, despite being legitimate process configurations. These terms are not defined in the permit to provide the needed clarity.
- The introductory language at the top of the table should clarify that this attachment does not apply to sources of fugitive emissions.
- WVONGA approves of the agency's deletion of language requiring the applicant to list all storage vessels associated with the permitted facility's operation, including those that have "negligible emissions," in this table. WVONGA seeks confirmation that these *de minimis* tanks are no longer required to be included in Attachment I (i.e., and they are to be entered into Attachment L only).
- The fourth column on the chart would require the registrant to provide the "Year Installed/Modified." WVONGA requests that the agency delete the reference to modification as confusing and potentially duplicative, as any change will be captured in the seventh column ("Type and Date of Change").

Received by: WVONGA

DAQ Response

- The term ‘modification’ is defined in 45CSR13, therefore, ERDs as described in this section are not modifications. Section 8.1 outlines possible control and emission reduction devices meeting the scope of this section.

  Possible control and emission reduction devices meeting the scope of this section include: (1) control devices used to control VOC and HAP emissions from the tanker truck loading operations; (2) control devices used to control VOC and HAP emissions from the storage vessel(s) below the NSPS, Subpart OOOO threshold of 6 tpy VOC. Control devices that are permitted under a legally and practically enforceable state permit achieve a “federally enforceable PTE” for VOC emissions at the storage vessels; and (3) control devices used to control VOC and HAP emissions from dehydration units.

- Clarification will be provided.
- Clarification will be provided.
- Clarification will be provided.

DAQ Action

- None.
- A sentence was added that states, "Do not include fugitive emission sources in this table".
- A sentence was added that states, "Deminimis storage tanks shall be listed in the Attachment K table".
- The fourth column's heading will be changed to "Year Installed". Modifications would be covered under the Type and Date of Change column.

COMMENT #137

Application Attachment J – Fugitive Emissions.

- WVONGA incorporates its comments relating to the monitoring frequency for fugitive emissions in the Draft General Permit, above, and requests the deletion of the "Monitor Frequency" column in the table on page 12.
- WVONGA notes that the form on page 12 could cause confusion by requiring the applicant to denote "Closed Vent System" and "Stream Type" for each type and count of component. It becomes unclear how to complete this form if there are valves in both gas and liquid service, for example. Additionally, these two fields provide no benefit to WVDAQ, as they will not provide any additional information for regulatory applicability or for inspections.
- At the bottom of the table on page 12, WVDAQ requests the applicant to provide an explanation of the sources of fugitive emissions, including pneumatic controllers. Historically, WVDAQ has not required any information on pneumatic controllers to be included in the permit application. The reference to pneumatic controllers in this question should be removed.
- The question at the bottom of the table on page 12 relating to closed vent bypasses is unnecessary. Such systems are either not regulated or are regulated by NSPS Subpart OOOO. If they are subject to NSPS Subpart OOOO, the general references to the regulation in the Draft General Permit itself would cover all regulatory requirements. This question provides no additional value to the forms.

Received by: WVONGA

DAQ Response

- This is required in the permit to be monitored quarterly. Therefore, this column will be removed.
- The DAQ agrees it is unclear to represent component types in both gas and liquid service.
- The G35-C registration application specifically requests information concerning pneumatic controllers in Attachment P.
- This question requires all equipment used in the closed vent system to assist in making the determination whether or not the closed vent system meets the regulatory requirements of the permit.

DAQ Action

- The "Monitor Frequency" column was removed.

- The stream type column will be modified to include check boxes for each stream type or both stream types.
- None.
- None.

COMMENT #138

Application Attachment K – Storage Vessel Data Sheet.
The Storage Tank Data Table on page 18 of the application prompts the applicant to identify all *de minimis* storage tanks. WVONGA requests clarification as to how companies should address the installation or removal of *de minimis* tanks, as emissions from these tanks do not have to be quantified and the tanks are not subject to emissions limits. Will a notification to WVDEP be required of any change in the number of *de minimis* tanks on site?
Received by: WVONGA

DAQ Response

This issue would be covered under 45CSR13 Sections 5.13 or 5.14 as it relates to the permit determination process

DAQ Action

None.

COMMENT #139

Application Attachment M – Internal Combustion Engine Data Sheet.

- In the seventh row of the table on page 20, WVONGA requests clarification regarding what the agency means by "NESHAP ZZZZ/NSPS JJJJ Window."
- WVONGA requests clarification of whether, by checking "yes" in response to the question of whether the Air Pollution Control Device Manufacturer's Data Sheet is included on the "Engine Air Pollution Control Device" form on page 22, the remainder of the form can be left blank.
- The "Engine Air Pollution Control Device" form on page 22 requires the registrant to specify the "Service life of the catalyst." This is unnecessary and will vary. The "Pressure drop against the catalyst bed" also changes.
- WVONGA objects to the requirement in the "Engine Air Pollution Control Device" form on page 22 to specify the recommended frequency of replacement of the catalyst as unnecessary and irrelevant. The purpose of this requirement is unclear.
- As a global comment on the "Engine Air Pollution Control Device" form on page 22, WVONGA notes that much of this information should not be necessary to provide if the manufacturer's data sheet is included with the application. The agency should take all efforts to minimize unnecessary duplication.

Received by: WVONGA

DAQ Response

- NESHAP ZZZZ/NSPS JJJJ Window refers to engines that fall into a ‘window’ where there are no requirements under either 40CFR63 Subpart ZZZZ or 40CFR60 Subpart JJJJ. Therefore, those engines that are ‘new’ under 40CFR63 Subpart ZZZZ (i.e. construction or reconstruction commenced on or after June 12, 2006) located at an area

source of HAP emissions, and ordered or manufactured before the applicable dates in 40CFR60 Subpart JJJJ, do not have to meet the requirements of either rule.

- No. The APCD manufacturer's data sheet must be included and the form must be completed.
- This requirement ensures that the air pollution control device is being operated per manufacturer's recommendations. Otherwise, non-compliance may occur.
- All of the requested information on this form is not included with the manufacturer's data sheet. Therefore, the APCD manufacturer's data sheet must be included and the form must be completed.

DAQ Action
None.

COMMENT #140
Application Attachment O – Glycol Dehydration Unit Data Sheet.

- In the "Date Installed/Modified/Removed" field, the reference to "removal" should be deleted. Why would a form be completed for the removal of a dehy? Corresponding changes should be made to footnotes 1 and 2 on page 25.
- The purpose of the series of questions relating to NESHAP Subpart HH is not clear. If this subpart is referenced generally in the Draft General Permit and an applicant has the option to have a dehy that is either above or below the control thresholds in NESHAP Subpart HH, there is no purpose for including these questions in the application.

Received by: WVONGA

DAQ Response

- This information would be required in those instances where the registrant is applying for an administrative update and chooses to use the DAQ 'potential to potential' netting policy.
- These questions allow the DAQ to assist in the determination of which regulatory requirements apply to the registrant.

DAQ Action

- None.
- None.

COMMENT #141
Application Attachment Q – APCD/ERD Data Sheets.

- Consistent with its comments elsewhere, all references to "Emission Reduction Device" should be changed to "Process Modification."
- Comments on the "Vapor Combustion" form on page 28:
  The form prompts the registrant to "Describe all operating ranges and maintenance procedures required by the manufacturer to maintain the warranty. *(If unavailable, please indicate).*" The purpose and relevance of this information is unclear. Further, in many cases specific units will not have been purchased yet at the time that the registration is filled out; by requiring this type of extremely specific information, the agency is encouraging last-minute permitting and precluding permitting ahead, which thereby creates a need for permits to be processed in a more expedited fashion than they

otherwise would have been. WVONGA requests clarification/confirmation that a permit application may be submitted without this specific information (i.e., such that the information would be indicated as "unavailable" here on the form) and the application would still be considered "complete" for purposes of its processing by the agency in accordance with applicable statutory timeframes.

- Comments on the "Adsorption System" form on page 30:
  It is unclear what certification WVDAQ is referring to by the question "Has the control device been tested by the manufacturer and certified?" If the purpose of the question is to determine whether the control efficiency is guaranteed, that information is on the form elsewhere. WVONGA requests the removal of this question.

Received by: WVONGA

DAQ Response

- The term 'modification' is defined in 45CSR13, therefore, ERDs as described in this section are not modifications. Section 8.1 outlines possible control and emission reduction devices meeting the scope of this section.

  Possible control and emission reduction devices meeting the scope of this section include: (1) control devices used to control VOC and HAP emissions from the tanker truck loading operations; (2) control devices used to control VOC and HAP emissions from the storage vessel(s) below the NSPS, Subpart OOOO threshold of 6 tpy VOC. Control devices that are permitted under a legally and practically enforceable state permit achieve a "federally enforceable PTE" for VOC emissions at the storage vessels; and (3) control devices used to control VOC and HAP emissions from dehydration units.

- This requirement ensures that the vapor combustor is being operated per manufacturer's recommendations. Otherwise, non-compliance may occur. If the information is unavailable, please indicate why.
- All of the requested information on this form is not included in this question. Therefore, this question must be answered and the form must be completed.

DAQ Action

None.

COMMENT #142

Application Attachment R – Emission Calculations.

- WVONGA requests that WVDAQ make its emissions summary sheets available in Excel format. This will make the provision of the requested information much simpler and foster consistency.
- WVONGA notes that it is unnecessarily duplicative to provide emissions on separate forms AND here. This increases the likelihood of unintentional errors and confusion without any corresponding benefit. Information should only have to be provided once.
- WVONGA requests clarification regarding what the agency intends by requiring "speciated emissions calculations."
- For purposes of clarity, WVONGA recommends the following revision to this language: "If calculations are based on a compositional analysis of the gas, attach the laboratory analysis. Include the following information: the location that the sample was

taken (and whether the sample was taken from the actual site or a representative site); the date the sample was taken; and, if the sample is considered representative . . .”

Received by: WVONGA

DAQ Response

- DAQ will make the emissions summary sheets available in MS Excel on our website upon issuance of this permit.
- The standardized forms developed by the DAQ expedite internal permit application review.
- Speciated emissions calculations must be included for HAPs. The HAP emissions shall include formaldehyde, benzene, toluene, ethylbenzene, xylenes and hexane. Totals HAPs shall also be included. This information is necessary in making major source and other regulatory applicability determinations.
- DAQ agrees with suggested change.

DAQ Action

- DAQ will make the emissions summary sheets available in MS Excel on our website upon issuance of this permit.
- None.
- None.
- The suggested change was made.

COMMENT #143

Application Attachment S - Facility Wide Emissions Summary Sheet.
For clarity, WVONGA suggests retitling the form on page 36 "Requested Permitted Potential to Emit for Facility."

Note: The same comment applies to the "Facility Wide HAP Controlled Emissions Summary Sheet” on page 34.

Received by: WVONGA

DAQ Response

Sections 1.1.1 and 1.1.2 of General Permit G35-C establishes the maximum annual emission limit of any registered facility. Attachment T summarizes the facility’s potential to emit (PTE) in order to show that Sections 1.1.1 and 1.1.2 will be met. Therefore, Attachment S is not a PTE request made by a registrant.

DAQ Action

None.

COMMENT #144

Application Attachment T – Class I Legal Advertisement.
With regard to the "Air Quality Permit Notice" on page 37 of the forms, WVONGA recommends adding a header to this page reflecting that this constitutes a "Recommended Template." If the agency intends to reject permit applications for not following the exact wording of this notice—despite the lack of any regulatory authority for being so prescriptive—then that should be very clearly stated to minimize unnecessary delays.
Received by: WVONGA

DAQ Response

The DAQ agrees with adding a header to the page that contains the suggested Air Quality Permit Notice.

DAQ Action

A header was added to this page that states, "RECOMMENDED PUBLIC NOTICE TEMPLATE".

COMMENT #145

Mobile/Temporary Tanks
The oil and gas industry uses many mobile tanks on a temporary basis during drilling, completion, production and midstream operations. In the midstream sector, mobile rental tanks hold fresh water used for hydrostatic testing and water removed from the pipeline after hydrostatic testing. These mobile tanks move with the associated operations, similar to the drilling rig and the completion equipment moving from site to site, and are not used for long-term storage. Due to the portable and temporary nature of these mobile tanks, Antero proposes to specifically exclude mobile tanks used for drilling, completion, production and midstream activities from the permit application and associated permitting requirements under the West Virginia air quality and permitting program.

This proposal is consistent with WV DAQ's Oil and Gas - Permitting & Enforcement Guidance (10-9-2014 by Robert Keatley) that indicates "Permanent Storage Tanks/Vessels shall obtain a permit prior to construction and installation" and further provides "Permanent Storage Tanks are 1intended' to be located at a site for 180 consecutive days or more" thus tanks intended to be on site less than 180 days should not be included in the permit application or associated permitting updates and should be explicitly exempted. However, Antero proposes that consistent with the recently adopted statutory changes by the Legislature to the Aboveground Storage Tank laws a permanent tank should be defined as one that is maintained on site for a period of 365 days. Therefore, tanks onsite less than 365 days should be excluded from the air permit application.

Antero also suggests that the Attachment L - Storage Tank Data Table specifically exclude materials such as lube oils with very low vapor pressures (<0.1mmHg at 20°C), because they emit de minimis VOCs.
Received by: Antero Resources

DAQ Response
This language is consistent with the 180 day requirement in 40CFR60 Subpart OOOO. Additionally, the comparison to the AST law is in error since the current legislation exempts the storage tanks included with your example.

DAQ Action
None.

COMMENT #146
Application Forms
The proposed attachments for G35-C include Attachment A through Attachment T. The proposed attachments for G70-B include Attachment A through Attachment U. The difference in the attachments is that G70-B contains Attachment K - Gas Well Affected Facility Data Sheet.

Antero suggests that Attachment K in the G35-C permit application be changed to reserved so all attachments (except for Attachment K) between the two applications are the same.
Received by: Antero Resources

DAQ Response
These forms are specific to General Permit G35-C and labeling changes will not be made.

DAQ Action
None.

COMMENT #147
Timing of Notifications
General Permit G35-A requires a 15 day notification for many requirements in the permit [Conditions 3.4.1.c. and 14.5.2]. Antero urges WVDEP to develop an online procedure for submitting these notifications within the required 15 days of the change.
Received by: Antero Resources

DAQ Response
There are no plans at this time to develop an online notification process.

DAQ Action
None.

COMMENT #148

Attachment N – Internal Combustion Engine Data Sheet

Antero supports the following comment of WVONGA relating to Attachment N - Internal Combustion Engine Data Sheet:

- In the seventh row of the table on page 20, WVONGA requests clarification regarding what the agency means by "NESHAP ZZZZ/NSPS JJJJ Window."
- WVONGA requests clarification of whether, by checking "yes" in response to the question of whether the Air Pollution Control Device Manufacturer's Data Sheet is included on the "Engine Air Pollution Control Device" form on page 22, the remainder of the form can be left blank.
- The "Engine Air Pollution Control Device" form on page 22 requires the registrant to specify the "Service life of the catalyst." This is unnecessary and will vary. The "Pressure drop against the catalyst bed" also changes.
- WVONGA objects to the requirement in the "Engine Air Pollution Control Device" form on page 22 to specify the recommended frequency of replacement of the catalyst as unnecessary and irrelevant. The purpose of this requirement is unclear.
- As a global comment on the "Engine Air Pollution Control Device" form on page 22, WVONGA notes that much of this information should not be necessary to provide if the manufacturer's data sheet is included with the application. The agency should take all efforts to minimize unnecessary duplication.

Received by: Antero Resources

DAQ Response

- NESHAP ZZZZ/NSPS JJJJ Window refers to engines that fall into a 'window' where there are no requirements under either 40CFR63 Subpart ZZZZ or 40CFR60 Subpart JJJJ. Therefore, those engines that are 'new' under 40CFR63 Subpart ZZZZ (i.e. construction or reconstruction commenced on or after June 12, 2006) located at an area source of HAP emissions, and ordered or manufactured before the applicable dates in 40CFR60 Subpart JJJJ, do not have to meet the requirements of either rule.

- No. The APCD manufacturer's data sheet must be included and the form must be completed.

- This requirement ensures that the air pollution control device is being operated per manufacturer's recommendations. Otherwise, non-compliance may occur.

- All of the requested information on this form is not included with the manufacturer's data sheet. Therefore, the APCD manufacturer's data sheet must be included and the form must be completed.

DAQ Action

None.

COMMENT #149

Conversion of Permits

Antero believes there should be a streamlined process identified as part of the issuance of the permit to allow for the conversion of permits from the General Permit G35-A to the General Permit G35-C where applicable and proper, and particularly where there is no additional equipment being proposed and no change in total emissions making the request almost strictly an administrative request. Such a streamlined process is advantageous to both the permittee and the WVDEP as it removes any potential confusion regarding the proper permitting of a site and assures that activities, which naturally fall within the confines of the new permit, can be moved swiftly and without delay.

Antero would suggest a process similar to an administrative update, which would allow for the easy conversion of permits so that they fall within their proper respective categories.

Received by: Antero Resources

DAQ Response

Conversion of a G35-C permit registration to a G35-A permit registration would require a modification permitting action. This is required in order for the proposed conversion to undergo permit review to ensure that all G35-C requirements will be met and to accommodate the required 45CSR13 public notice procedures.

DAQ Action

None.