State Air Quality Rules

Flares – 45CSR6

Air Permits – 45CSR13 (Rule 13)

Annual Operating Fee – 45CSR22

G70-D Annual Certification Fee

Road Dust – 45CSR17

Air Pollution – WV Code 22-5

Federal Regulations

- ***Engines (compressor, VRU, etc.) – 40CFR63 subpart ZZZZ and 40CFR60 subpart JJJJ***
- ***Dehydration Units – 40CFR63 subpart HH***
- ***Flares – 40CFR60.18 and 40CFR63.11***
- ***Accident Prevention – Clean Air Act 112(r)***

We are here to help

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New Federal NSPS OOOOa

This regulation (40CFR60 Subpart OOOOa) applies to each oil/gas well that is hydraulically fractured/refractured after September 18, 2015, each centrifugal compressor using wet seals, each reciprocating compressor, continuous bleed natural gas-driven pneumatic controllers and storage vessels at oil and gas wells.

NSPS OOOOa Exemptions:

- Storage vessels less than 6 tpy PTE VOCs.
- Compressors at well pads.
- Pneumatic controllers with a single "continuous bleed" rate ≤6 scfh.

US EPA has been inspecting well pads as well as other oil and gas sites for compliance with the 112(r) General Duty Clause ("GDC"). For more information go to https://dep.wv.gov/daq/Air%20Toxics/Pages/112(r)-Prevention-of-Accidental-Releases-and-General-Duty-Clause.aspx

Oil & Gas Well Pads Guidance

West Virginia Department of Environmental Protection
Division of Air Quality (DAQ)

Air Permitting and Compliance Guide

Phone: 304-926-0475
www.dep.wv.gov/daq

Updated 3/2018

Permits

- An air quality permit may be required prior to construction and operation of any air emissions units under 45CSR13 **(Rule 13).**
- DAQ has developed **General Permit G70-D,** which covers a wider variety of changes at a well pad and provides greater flexibility. G70-D requires an **"Annual Certification"** submittal to evaluate changes and an annual certification fee of **$1,000.**
- Submittal of G70-D permit applications, Alternative Operating Scenarios and Annual Certifications must be through DEP's ESS System (https://apps.dep.wv.gov/eplogin.cfm) as of March 1, 2018.
- "Rule of thumb" – brand new well sites that produce **"Condensate"** generally require an air permit – **0.5 bbl (21 gallons/day production triggers a permit).**
- Storage Tanks are considered "permanent" if they are **"intended"** to be located at a site for 180 consecutive days or more and could trigger Rule 13 permitting.
- Air emissions units may be **"stored/ received"** on-site prior to an air permit being issued, but you may **not "install/erect"** air emission units – please contact DAQ for any questions.

Flares/Combustors

- Permanent flares/combustors automatically require an air permit (under 45CSR6 - Rule 6).

Engines (compressors and generators)

- Engines greater than 500 hp may require annual emission testing.
- Engines greater than or equal to 100 hp may require an initial emission test.
- Engines smaller than 100 hp may require a field emission test.
- If the engine is USEPA certified, it is generally exempt from emission tests.

Federal NSPS OOOO/OOOOa

- Federal NSPS OOOO regulates gas wells drilled after **August 23, 2011 and on or before September 18, 2015.**
- Federal NSPS OOOOa regulates oil/gas wells that were drilled **after September 18, 2015** and regulates VOCs **and "GHG"** (for the first time).
- NSPS OOOOa regulates fugitive emissions (leaking component monitoring) of VOC/GHG by June 2017.
- Storage Tanks that receive liquids sixty (60) days after production starts trigger NSPS OOOO and OOOOa and could trigger Rule 13 permitting.
- Notification is required two (2) days prior to flowback. Notifications can be emailed to USEPA Region III (r3wellcompletion@epa.gov) and DAQ (DEPOilandGasSector@wv.gov).
- **"Green Completions"** are required for oil/gas wells and gas may not to be flared/vented if the gas can be separated (exemption for <300 scf/bbl wells).
- Temporary flares/combustors used for flowback generally do not require an air permit (less than 30 days in 12 month period per site).

Pre-Drilling Checklist

- *Will I need to use a flare/combustor more than 30 days to control emissions for safety or any other reason?* If yes, then you are required to obtain an air permit.
- *Do I expect condensate production?* If yes, you will need to estimate how much may be produced by using estimates from existing or "representative" (in the area) wells and how much VOCs will be emitted from the storage tanks to determine if a permit is needed.
- *Will I need an engine (VRU, compressor, etc.) at the well pad?* If so, you will need to determine the horsepower required, engine manufacture date, whether the engine needs a catalyst installed and the air emissions from the engine to determine if a permit is needed.
- *Will I need a triethylene glycol dehydration unit?* If so, you will need to get a wet gas extended analysis, estimate the expected gas production, and use the maximum glycol pump(s) rate to estimate the emissions to determine if you need a permit.

Potential to Emit (PTE)

- An air permit is required if the facility-wide VOC PTE is 6 lbs./hr. (144 lbs./day) or greater OR if the benzene and/or formaldehyde PTE is 1,000 lbs./year or greater.
- PTE is based on 8,760 hours without controls/ emission reduction limitations.
- An air permit is required if a facility triggers any substantive requirement of an emissions control rule, including NSPS OOOOa storage vessel controls or LDAR.
- Storage vessels use maximum throughput based on first 30 days of production for emission calculations.[1]

	Rule 13	Federal NSPS OOOO
VOC	≥6 lbs./hour facility-wide uncontrolled	≥6 TPY per storage vessel
Benzene	≥1,000 lbs./year facility-wide uncontrolled	N/A
Vapor Recovery Unit (VRU)[2,3]	Does "not" count toward emissions reductions for PTE	Counts towards emissions reductions from a storage vessel conditionally

[1]Use maximum throughput (storage vessels) for NSPS OOOOa applicability.
[2]VRU limiting VOC emissions from storage vessels (6 tpy trigger) is required to follow conditions set forth in NSPS OOOOa.
[3]If VRU removed, then the storage vessel's VOC PTE must be redetermined within 30 days (NSPS OOOOa).