

New Air Quality General Permit G70-A

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Why is DAQ involved in the Oil and Natural Gas Industry?

- * Largest source of VOC emissions, a group of chemicals that contribute to the formation of ground-level ozone (smog).
 - * Exposure to ozone is linked to a wide range of health effects, including aggravated asthma, hospital and emergency department visits, increased school absences, and other serious health effects.
- * Significant source of methane emissions, a greenhouse gas
 - * Methane reacts in the air to form ground-level ozone.
- * Emissions of air toxics such as benzene, ethylbenzene, and n-hexane.
 - * Air toxics are pollutants that are known, or suspected of causing cancer and other irreversible health effects.

EPA Issues Air Rules for the Oil and Natural Gas Industry

- * 4/17/12 EPA issued regulations, required by the Clean Air Act, to reduce air pollution from the oil and natural gas industry
- * 8/16/12 regulations were published in the Federal Register
- * First federal air standards for NG wells that are hydraulically fractured, along with requirements for several other sources of pollution in the industry that were not previously regulated at the federal level.

DAQ Air Permit Thresholds

Air Quality permits are required if any of following are met:

- * Criteria pollutants (CO, NO_x, SO₂, PM, VOC): *potential to emit (PTE)* of 6 lbs/hr and 10 tpy or 144 lb/day of each individual pollutant
- * Hazardous air pollutants: *PTE* of 2 lb/hr or 5 tpy of HAPs on an aggregated basis
- * Toxic air pollutants: Any TAP with *PTE* in amount greater than shown in Table 45-13A (formaldehyde limit is 1,000 lb/yr)
- * Subject to any substantive requirement
 - Rule 6 requires a rule 13 permit for combustion devices (incinerators)

DAQ General Permits

What is an Air Quality General Permit?

- * General permits are authorized under 45CSR13 for the construction, modification or relocation of a category of sources by the same owner or operator or involving the same or similar processes or pollutants upon the terms and conditions specified in the general permit
- * **Other Existing DAQ General Permits:** Coal (G10), Asphalt (G20), NG Compressor Stations (G30, G33), NG Compressor Station w/ Dehydration (G35), Materials Handling (G40), Concrete (G50), Emergency Generators (G60, G65)

DAQ General Permits

Benefits of General Permits include:

- * Consistent requirements for all facilities in the General Permit
- * Facility specific information contained in the Registration
- * Class II General Permits
 - Applicants provide public notice when the application is submitted
 - Timeframe is 45 days from the date a COMPLETE permit application is received vs. 90 days for construction permits
- * Lower cost for the application

DAQ General Permit G70-A

- * Prevention and Control of Air Pollution in regard to the construction, modification, relocation, administrative update and operation of natural gas production facilities located at the well site
- * G70-A designed to be flexible and cover as many sources as possible

G70-A Applicability

- * All natural gas exploration and production facility included in NAICS Code 21111 (Crude Petroleum and Natural Gas Exploration) and/or SIC Code 1311 (Crude Petroleum and Natural Gas) are eligible for the G70-A General Permit except as identified on the following slides

G70-A Applicability

Excluded from applicability:

- * Any NG production facility that is a “major source”
 - “major source” - PTE 100 tpy of any criteria pollutant, or 10 tpy individual HAP, or 25 tpy aggregate HAPs
- * Any NG prod facility requiring a RACT analysis (R21)
- * Any NG prod facility using fuel other than NG (for fuel burning units or engines)
- * Any NG prod facility with a dehydration unit

G70-A Applicability

Excluded from applicability (cont.):

- * Any NG processing plant
- * Any NG sweetening plant
- * Any NG transmission compressor station
- * Any NG prod facility subject to NSPS, Subpart Kb
- * Any NG prod facility that will require individual permit review process or provisions or to incorporate requirement other than established in G70-A

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State Air Pollution Regulations included:

- * 45CSR2 (Control of PM from fuel burning units)
- * 45CSR4 (Prevention & control of objectionable odor)
- * 45CSR6 (Control of PM & smoke from flares, etc.)
- * 45CSR10 (Control of SO₂ from fuel burning units)
- * 45CSR13 (Permits)
- * 45CSR16 (NSPS requirements)
- * 45CSR22 (Fee program)
- * 45CSR34 (Emission Standards for HAPs)

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Federal Air Pollution Regulations included:

- * **NSPS, Subpart OOOO** (Standards of Performance for Crude Oil and Natural Gas Production, Transmission & Distribution)
 - * Natural Gas Wells
 - * Storage Vessels
 - * Pneumatic Controllers
- * **NSPS, Subpart JJJJ** (Standards of Performance for Stationary Spark Ignition Internal Combustion Engines)
- * **MACT, Subpart ZZZZ** (National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines)

G70-A General Permit Section Overview

- * 1.0 Emission Units
- * 2.0 General Conditions
- * 3.0 Facility-Wide Requirements

Source Specific Requirements:

- * 4.0 Units listed in GP Registration
- * 5.0 Natural Gas Well Affected Facility
- * 6.0 Storage Vessels
- * 7.0 Gas Production Units, Line Heaters,
Heater Treaters
- * 8.0 Pneumatic Controllers Affected Facility

G70-A General Permit Section Overview

- * 9.0 (*Reserved Section*)
- * 10.0 Natural Gas-Fired Compressor Engine (RICE)
- * 11.0 Tank Truck Loading Facility
- * 12.0 NSPS, Subpart OOOO Requirements for
Storage Vessel Affected Facilities
- * 13.0 NSPS, Subpart JJJJ Requirements for RICE
- * 14.0 Control Devices not subject to NSPS,
Subpart OOOO Requirements
- * 15.0 NESHAP, Subpart ZZZZ for RICE

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Requirements for Air Pollution Control Devices not subject to NSPS, Subpart OOOO include:

- * Enclosed combustion devices:
 - Thermal vapor incinerators, catalytic vapor incinerators, boilers, process heaters
- * Flares
- * Vapor recovery devices:
 - Carbon Adsorption Systems
 - Vapor Recovery Systems
- * Closed vent systems

G70-A General Permit Registrations

G70-A Registrations will include facility specific information, including:

- * Facility location, address, coordinates, directions
- * Permit section applicability
- * Emissions unit table
- * NG wells identification
- * Emission limits
- * Throughput limits

Accurate, & Consistent Information for Applicant's Public Notice

- * Directions to the NG production pad must be specific and accurate
- * Longitude & Latitude coordinates must be as accurate as possible
- * Locations must be consistent with what is provided to OOG.
- * Potential to Emit emissions must be consistent with information provided in the application

General Permit G70-A

Q&A:

Q: What is the current status of G70-A?

A: DRAFT Permit G70-A went to public notice 3/29/13

- * Legal notices were published in: WV State Register, Dominion Post, Herald Dispatch, The Journal, Charleston Gazette, Wheeling Intelligencer, Parkersburg News, and Exponent-Telegram
- * The 30-day public comment period was scheduled to conclude on April 29, 2013 at 5:00 pm
- * The comment period was extended from Friday, April 29 to Friday, May 17 at 5:00 pm.

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Q&A:

Q: Is a permit required prior to the completion operation?

A (1): Completion combustion operations ALONE typically do not trigger DAQ permitting. Extended use of completion combustion devices however, may require permitting.

A(2): The two-day notification for completion operations is required for all NG well completion operations. Instructions and forms are on DAQ's website www/dep.wv.gov/daq

General Permit G70-A

Q&A:

Q: If I want to submit an application for a G70-A permit registration after the G70-A is effective, what do I need to do?

A: After you verify that all eligibility requirements are met, complete and submit the following to DAQ:

- * General Permit Registration Application, along with all required attachments & support documents
- * Certification of Information (Signed by Responsible Official or Authorized Representative)
- * G70-A Application Fee
- * Publish Class I Legal Advertisement
- * *Instructions, Applications, Forms, and other information will be available on DAQ's website*
[www/dep.wv.gov/daq/permitting/General Permit Registration](http://www.dep.wv.gov/daq/permitting/General%20Permit%20Registration)

General Permit G70-A

Q&A:

Q: Are there plans to update the other NG General Permits?

A: Yes, DAQ's future plans include:

- * Updating G-35A (NG compressor stations with Glycol dehydration units) to include NSPS, Subpart OOOO language and amended MACT, Subpart HH language
- * Updating G-30D (NG compressor stations) to include NSPS, Subpart OOOO language
- * Updating G-33A (engines ≥ 25 HP and ≤ 500 HP) to include NSPS, Subpart OOOO language

Questions?

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