







Office of Waste, Air, Radiation & Remediation

Overview and Implementation of Category No. 38 Exemption Criteria

Bureau of Air Quality July 22, 2015

On August 10, 2013, DEP issued final permit exemption criteria for the following:

- conventional wells;
- unconventional wells;
- wellheads; and
- all other associated equipment such as nonroad engines, storage vessels/tanks, and flaring activities.



- Sources located at the natural gas well sites are exempt from permitting requirements only if the owner or operator meets all applicable requirements established in the Category No. 38 Exemption Criteria.
- While a source may be exempt from permitting requirements, the owner or operator of the source must still comply with all applicable federal and state laws and regulations.

 The owner or operator of sources not meeting the Category No. 38 exemption criteria may submit a Request for Determination (RFD) Form or Plan Approval Application to the appropriate DEP Regional Program Manager.



Sources	Exemption Eligibility Criteria
Flowback	 Reduced Emission Completions (Green Completions) are required under 40 CFR Part 60, Subpart OOOO.
Fugitive Leaks	 The entire well pad/facility is subject to a leak detection and repair (LDAR) program using a FLIR camera or other DEP- approved detection devices. Initial inspection within 60 days after a well is put into production. LDAR inspections must be conducted annually thereafter. Leaks must be repaired within 15 day unless the facility shutdowns or ordering of replacement parts are necessary for repair of the leaks. Leaks are considered repaired using either of the following criteria: the methane (CH4) concentration is 2.5% or less and a VOC concentration of 500 PPM or less; no visible leak is detected using an optical imaging camera; or other DEP-approved detection methods.



Sources	Exemption Eligibility Criteria
Storage Tanks/Storage Vessels or other Equipment (e.g. truck load-out)	 Limit facility wide total VOC emissions to less than 2.7 tons per year. If not, install controls capable of achieving VOC emission reduction of 95% or greater. Owners or operators of storage tanks/storage vessels must comply with the Subpart OOOO requirements.
Non-road Engines	 Non-road engines are subject to the Tier 1-Tier 4 requirements specified in 40 CFR Part 89.
Flaring Activities	 Enclosed combustion device including an enclosed flare must be used for all permanent flaring operations. Flaring operations must be designed and operated in accordance with 40 CFR § 60.18.
Stationary IC Engines	 Combined facility NOx emissions must be less than 100 lbs/hr, 1000 lbs/day, 2.75 tons per ozone season, and 6.6 tons per year on a 12-month rolling basis.

Compliance Demonstrations

 The owner or operator is required to demonstrate compliance with all Category No. 38 Exemption Criteria using any generally accepted model or calculation methodology by submitting a Compliance Demonstration Report (CDR) to the Department.

 The CDR <u>must be submitted to the appropriate DEP</u> <u>Regional Office</u> within 180 days after the "well completion" (as defined in 40 CFR § 60.5430) or installation of an air contamination source.



Compliance Demonstrations

 Compliance demonstration instructions for the Category No. 38 Exemption Criteria is posted at:

http://files.dep.state.pa.us/Air/AirQuality/AQPortalFiles/Permits/gp/COMPLIANCE DEMONSTRATION INSTRUCTIONS FOR EXEMPTION CATEGORY NO 38.pdf



Emission Inventory Submittals

- By March 1st of each year, an owner or operator must submit a source report for the previous calendar year for Pennsylvania's annual emissions inventory.
- The source report shall include emissions from all sources at unconventional natural gas well sites during the preceding calendar year. The emissions from leaks including methane emissions must also be included in the report.



Category No. 38 Compliance Demonstration Criteria

Exemption Criteria	Compliance Demonstration Documentation (Details provided in the DEP Compliance Demonstration Instructions)
Well drilling, completion and work-over activities	 The owner or operator must provide 24-hr advance notice to appropriate DEP Regional Office prior to commencement of each well completion The notice must include the following: Contact info, Name of well site, County, Township, API Well No., Latitude/Longitude, Planned date of flowback Details of the Reduced Emissions Completion (duration of flowback, combustion, venting, or photograph of well containing REC with date)



Category No. 38 Compliance Demonstration Criteria

Exemption Criteria	Compliance Demonstration Documentation (Details provided in the DEP Compliance Demonstration Instructions)
Fugitive Leaks	 Report containing equipment or component, date of leak detection, detection method, visual image. Repairs not completed within 15 days with reasons and scheduled dates of repairs. List of equipment or components that could not be repaired and reason.
Storage Tanks/Storage Vessels or other Equipment (e.g. truck load-out)	 Identification of storage vessel. Calculate VOC emissions using EPA TANKS, ProMax, API E&P Tanks, HYSIM HYSIS etc. Performance test results to demonstrate 95% or greater VOC reduction efficiency. For Truck load-out, copy of MACT-level annual leak test results or NSPS-level annual test results or alternate test results as approved by the Department.

Category No. 38 Compliance Demonstration Criteria

Exemption Criteria	Compliance Demonstration Documentation (Details provided in the DEP Compliance Demonstration Instructions)
VOC and HAP Emission Thresholds	 Calculations for VOC and HAP emissions using generally accepted models/calculations, including vendor data, direct measurement, EPA emission factors, or modeling programs.
Flaring Activities	 Manufacturer's certifications, spec sheet etc. showing permanent flares are enclosed.
Stationary IC Engines	 Calculations for NOx emissions using generally accepted calculations, vendors data, test data from identical source, or EPA emission factors.



Implementation Instructions Clarification - June 1, 2015

On June 1, 2015, DEP issued a clarification of the Implementation Instructions for the Category No. 38 Exemption Criteria. The updated instructions clarify the following:

- The owner or operator of exploratory wells, wildcat wells, or delineation wells <u>are</u> <u>not required</u> to submit any CDR to the Department. However, the owner or operator must comply with all applicable requirements including 40 CFR Part 60, Subpart OOOO requirements.
- Within 60 calendar days after the well is "put into production", and annually thereafter, the owner/operator is required to perform a leak detection and repair (LDAR) program. No well will be considered to be "put into production" unless gas is flowing continuously into a sales line or to a storage vessel. Temporarily shut-in wells are required to perform a LDAR program within 60 calendar days after the well is put into production and gas is flowing into a sales line. However, the owner or operator must repair any leak as expeditiously as practicable but no later than 15 calendar days after it is detected for a temporarily shut-in well.



Implementation Instructions Clarification - Continued

- The owner or operator of a "non-road engine" as defined in 40 CFR § 89.2 is not required to submit compliance demonstrations to the Department. However, the owner or operator must report emissions from all sources at the facility, including non-road engines in the annual source report, which must be submitted to DEP by March 1st each calendar year.
- Only "flaring operations" are required to be designed and operated in accordance with the requirements of 40 CFR § 60.18. Enclosed devices such as thermal oxidizers are not required to comply with the § 60.18 provisions.



Implementation Instructions and FAQ

- DEP has posted the FAQ document concerning the implementation of the Category No. 38 Exemption Criteria and GP-5 and the Category No. 38 implementation instructions on DEP's website.
- Both documents provide explanations of the implementation requirements for the Category No. 38 Exemption and answers questions often posed by owners or operators.
- These documents can be accessed at:

http://www.portal.state.pa.us/portal/server.pt/community/permits/21826/general_permits/1830638











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Questions?









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