







Office of Waste, Air, Radiation & Remediation

Overview of BAQ-GPA/GP-5 Conditions and Implementation Requirements

Bureau of Air Quality July 22, 2015

GP-5 General Information

- BAQ-GPA/GP-5 is the General Plan Approval and/or General Operating Permit for sources located at natural gas compression and/or processing facilities. The current GP-5 became effective on January 16, 2015.
- The GP-5 is applicable only to non-major facilities.
- The <u>actual emissions</u> from all sources and associated air pollution control equipment must not equal or exceed any of the following thresholds on a 12-month rolling sum basis:

 $NO_x - 100 \text{ tons}$ CO - 100 tons

 $SO_2 - 100 \text{ tons}, \qquad PM_{10} - 100 \text{ tons},$

 $PM_{2.5} - 100 \text{ tons}$ VOCs - 50 tons

Single HAP – 10 tons Total HAPs – 25 tons



How the Minor Source General Permit Works

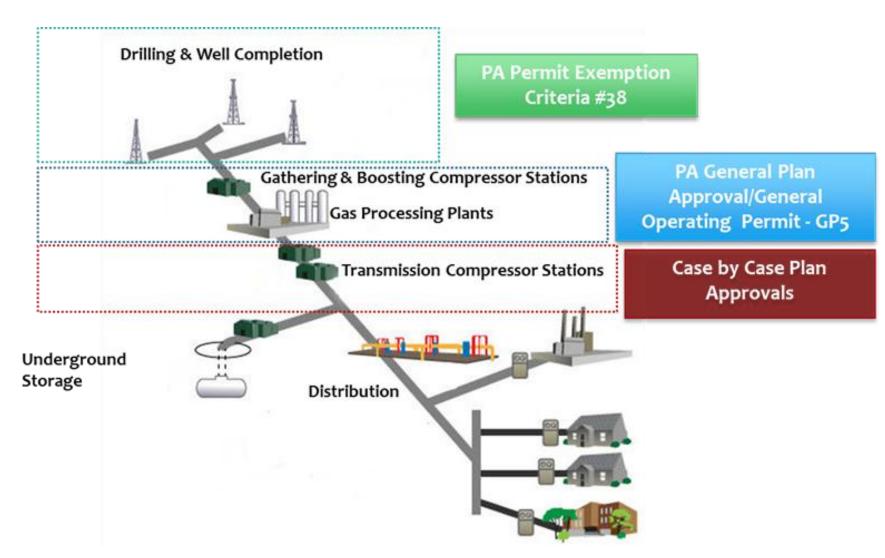
- Compliance with minor source permit limits is based on the facility's <u>actual</u> emissions.
- Actual emissions must not exceed any of the major facility thresholds on a 12month rolling basis.
- Individual sources cannot exceed any source specific emission limitation specified in GP-5.

Key Changes in the Current GP-5

- Deletion of the applicability threshold requirement for greenhouse gases due to the vacation of EPA's GHG Tailoring Rule;
- Addition of an annual compliance certification requirement;
- Clarification of the applicability provisions for natural gas compressors;
- Clarification of the appropriate test method for formaldehyde emissions; and
- Other minor clarifying modifications.



Where BAQ-GPA/GP-5 may be applicable?



Air Pollution Sources Authorized Under GP-5

Compressor Stations

 Natural gas fired engines, natural gas fired simple cycle turbines, dehydrators, storage tanks, pneumatic controllers, reciprocating and centrifugal compressors and equipment leaks.

Processing Plants

 Dehydrators, fractionation units, equipment including depropanizers, sweetening units, natural gas fired engines used in the refrigerator cycle, pneumatic controllers and equipment leaks.



GP-5 Application Form

The GP-5 Application Form must, at a minimum, include the following:

- General information about Owner/Operator and Site
- Facility information
- Land use information
- Source specific information and emissions data
- Facility wide emissions data
- Proof of municipal and county notifications

Please see GP- 5 Application Form instructions for details.



Include the following requirements:

- Municipal notification
- Annual compliance certification
- Source specific emission limits and other requirements
- Performance testing
- Notification, recordkeeping and reporting
- Work practice and monitoring
- Malfunction reporting
- Applicable federal requirements



- The terms and conditions cannot be modified in the authorization to use GP-5.
- Specific BAT emission limits established for gas engines and gas turbines.
- Requirements included to document operations below major source thresholds (every month).
- Testing requirements and verification of the emission rates required every 2500 hours of operations.
- LDAR program required over entire compressor station.



The owner or operator must:

- Notify the local municipality prior to submitting application.
- Submit annual compliance certifications to DEP signed by a responsible official no later than March 1st each year.
- Submit performance test results for each applicable source.
- Submit notifications and report malfunctions to DEP in accordance with GP-5 conditions.



The owner or operator must also:

- Report annual emissions data to the DEP by March 1 each year.
- Maintain records of work practice and monitoring.
- Maintain all records for at least five years.



GP-5 Compliance Certification

- The owner or operator of the facility must submit a Compliance Certification Form to the DEP by no later March 1 each year for the previous year.
- The Compliance Certification Form must be signed by a "responsible official" (defined in 25 Pa. Code §121.1) as to truth, accuracy, and completeness as required under 25 Pa. Code §127.402(d). The form must be postmarked or hand-delivered to the appropriate regional office, no later than March 1.

GP-5 Compliance Certification

- The compliance certification must include:
 - The identification of each term or condition of the GP-5 that is the basis of the certification.
 - The compliance status.
 - The methods used for determining the compliance status of the source, currently and over the reporting period.
- For compliance certification purposes, the owner or operator of the facility must complete the Compliance Certification Form along with Table-1 which includes a noncompliance description and corrective actions.

GP-5 Compliance Certification

- The owner or operator should also complete the Compliance Certification Worksheet to indicate the compliance status for each GP-5 permit condition on the basis of its compliance with the specific requirements of the condition throughout the reporting period.
- The worksheet should be provided to DEP, upon request.

Equipment Leaks

- Applicable Regulations include: 25 Pa. Code § 127.1 & 40 CFR
 Part 63 Subpart HH and Part 60 Subpart KKK.
- Applicability: Valves, Piping, Pumps, Flanges, Seals, Loading Arms, Dehydrators, Storage Tanks.
- Audible, visual, and olfactory inspections for leak detections performed on a monthly basis.
- Leak detection monitoring required using Forward Looking Infrared (FLIR) cameras or other leak detection monitoring devices approved by the Department.
- The leak detection monitoring devices must, at a minimum, be used on a quarterly basis.

Equipment Leaks

- Any leaks detected must be repaired as expeditiously as practicable, but no later than 15 days unless facility shutdowns or ordering of replacement parts are necessary for repair of the leaks.
- Leaks detected and repaired must be recorded and the records maintained at the site.



Malfunction Reporting Requirements

 Malfunction means any sudden, infrequent, and not reasonably preventable failure of air pollution control or process equipment, or, operating in a non-permitted manner, which results in, or may possibly be resulting in, the emission of air contaminants in excess of any applicable limitations specified in GP-5.



Malfunction Reporting Requirements

- Incidents covered by the notification, recordkeeping and reporting requirements relating to performance testing, work practice and monitoring standards, equipment leaks or fugitive emissions noted in GP-5 are not subject to the reporting requirements.
- The owner/operator authorized to use GP-5 shall report to DEP each incident which results in, or may possibly be resulting in, the emission of air contaminants in excess of any applicable limitations specified in GP-5.



Malfunction Reporting Requirements

- Reportable vs. Non-reportable incidents.
- Examples of Reportable and Non-reportable incidents are listed in the "GP-5 Malfunction Reporting Instructions" document, which is available on DEP's website.



Emissions Inventory

- By March 1 each year, the owner or operator must submit a source report to DEP for the preceding calendar year.
- The source report must include emissions from all sources at natural gas compression and processing facilities. The emissions from leaks including methane emissions must also be included in the report.



FAQ

- DEP has posted a Frequently Asked Questions (FAQ) document concerning the implementation of GP-5 and Category No. 38 Exemption Criteria.
- The FAQ provides a clear explanation of the applicable requirements and answers questions often posed by owners and operators.



Links

 GP-5 conditions and the application forms may be accessed at:

http://www.elibrary.dep.state.pa.us/dsweb/View/Collection-9747

 The FAQ document can be found on DEP's website at:

http://www.dep.state.pa.us/dep/deputate/airwaste/aq/permits/gp.htm











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Questions?









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