



**Guidance Document – Form APCD-211**  
**Natural Gas Venting**  
**Air Pollutant Emissions Notice (APEN)**

Ver. January 24, 2013

The following guidance document is intended to provide further detail on completing the Air Pollutant Emissions Notice (APEN). Please include the permit number and AIRS ID of the reported equipment if the Air Pollution Control Division (APCD) has previously assigned these numbers. Otherwise, please leave these spaces at the top of the form blank.

The APEN submitted is valid for five (5) years from the date it is received by the APCD. An APEN update must be submitted to the APCD no later than 30 days before this 5-year term expires.

The applicant must submit a \$152.90 filing fee with each Natural Gas Venting APEN submitted. The application will not be processed without an APEN filing fee.

An applicant may group emission points on a single APEN according to Regulation No. 3, Part A, II.B.4. *Guidance on emissions source grouping may be found in Memo 95-13 online at: [www.colorado.gov/cdphe/psmemos](http://www.colorado.gov/cdphe/psmemos)*

**Section 01 - Administration Information**

This section contains general information for the company.

**NAICS codes:** can be found online at- <http://www.naics.com/search.htm>

**SIC codes:** can be found online at- <http://www.osha.gov/pls/imis/sicsearch.html>

**Section 02 - Requested Action**

*Guidance on Revised APENs may be found online in Memo 02-01 at: [www.colorado.gov/cdphe/psmemos](http://www.colorado.gov/cdphe/psmemos)*

**NEW:** Check this box if reported equipment has not been assigned a permit number and you are applying for a new permit.

**MODIFICATION:** Check this box if reported equipment already has a permit issued and you would like to modify the permit. Specify all the modifications you are requesting in an attached cover letter.

**LIMIT HAP PTE:** Check this box if your equipment has the potential to emit (PTE) Hazardous Air Pollutants (HAPs) at Major Source levels (10 ton/yr of any HAP, or 25 ton/yr of any combination of HAPs) and you would like a permit limit to reduce the PTE below Major Source levels. *Guidance regarding HAP PTE may be found in Memo 97-001 online at: [www.colorado.gov/cdphe/psmemos](http://www.colorado.gov/cdphe/psmemos)*

**APEN UPDATE:** Check this box to update your APEN without any permit modifications. If you submit an APEN to update your actual calendar year emissions, this will also update the 5-year APEN term. Please review your previously submitted APEN and permit to verify that no changes have occurred, that would require a permit modification, prior to submittal of an APEN update. Please refer to the most recent annual fee invoice to determine the APEN expiration date for each emissions point. For any questions regarding a specific expiration date call the Division at (303)-692-3150.

Other than the 5-year term expiration, a revised APEN must be submitted:

- Prior to the installation of new, or replacement of equipment or pollution control equipment
- Prior to any change in the ownership or operator of a facility or location.
- To change a permit process/emission limit or condition.

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- Whenever a significant change in annual (calendar year) actual emissions occurs.

A significant change for a criteria pollutant is defined as:

Sources that emit 100 tons per year or more: any change of 5% or 50 tons/year or more of actual emissions, whichever is less.

Sources that emit less than 100 tons per year: any change of 5 tons/year or more of actual emissions, except for sources of volatile organic compounds and nitrogen oxides in ozone nonattainment areas which must report any change of 1 ton/year or 5% of actual emissions, whichever is greater.

A significant change for Non-Criteria Reportable Air Pollutants (See Regulation 3, Part A, Appendix A) is defined as:

Any increase of 50% or 5 tons/year of actual emissions, whichever is less.

***Please Note: For an APEN to be considered complete, all appropriate fields for current operating and company data must be filled out. The application will not be accepted if all fields are not completed.***

### **Section 03 - General Information**

Provide overall source schedule, times, and dates of operation and a general description of equipment used, and the purpose of the equipment.

Answer questions listed in the general information section as they pertain to the source.

Please indicate if your facility is located in a nonattainment area for any *National Ambient Air Quality Standard* (NAAQS) criteria pollutant (Nitrogen Oxide, Sulfur Dioxide, Ozone, Volatile Organic Compounds, PM<sub>10</sub>, PM<sub>2.5</sub>, TSP, Carbon Monoxide, Lead). This website will direct you to those areas that are designated as attainment/nonattainment- <http://www.colorado.gov/cdphe/attainment>

### **Section 04 - Processing/Manufacturing Equipment Information & Material Use**

**Description of Source:** Identify equipment contributing to the emissions. Include Manufacturer, Model and Serial No., if applicable. Enter "TBD" (to be determined) if this information is not yet available. Attach a separate sheet with equipment information if more room is needed.

- Well Head Casing: Natural gas vapor released via surface pressure control equipment at a well head.
- Gas/Liquid Separator: Natural gas vented to the atmosphere as part of normal operation of any vessel used to separate oil, water and gas from the fluid stream. (Two-phase or Three-phase)
- Compressor: Normal operating emissions of natural gas from the rod packing system and distance piece..
- Pneumatic pump: Natural gas vented to the atmosphere as part of normal operation of a pneumatic device.
- Blowdowns: **Scheduled**, functional releases of natural gas vapor as a result of depressurizing a well, process unit or production system for maintenance or other operational purposes.

**Maximum Vent Rate:** Design capacity or design flow rate.

**Actual Volume:** Actual consumption or throughput of raw material annually, and actual production of finished products. Use the previous calendar year to determine this level if possible. You will need to note the "data year" in Section 07 of the APEN.

**Annual Requested Volume:** This level will be your permit limit (maximum allowed). This level should be higher than the actual level to allow room for process growth. Since the APEN term is 5 years, you may want to request a permit limit that will consider operational growth over the next five years.

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Vent Gas Heating Value: Heating value of gas vented and routed to combustor. (from an extended gas analysis) Use BTU/scf

Vented Gas Properties: The molecular weight and BTEX composition (mole%) of the gas being vented. (from the extended gas analysis).

Draft Permit Review: Check the appropriate boxes if you would like to review a draft copy of the permit prior to issuance and/or the public notice period (if required).

**Section 05 – Stack Information**

Provide this information for any combustion device used to control the loading emissions. If your equipment contains multiple stacks or emission release points, you must submit a separate sheet with relevant information.

Operator Stack ID No.: The in-house identification number for a stack, if any.

Base Elevation (feet): Elevation of the base of the stack or emission point.

Discharge Height Above Ground Level: Vertical distance in feet from ground level to emission outlet level.

Temperature: Exhaust stream exit temperatures under normal operating conditions, to nearest 1°F.

Flow Rate: Actual cubic feet per minute (ACFM) at normal operating temperature and pressure, to nearest 1 ACFM.

Velocity: To the nearest 0.1 ft./sec., obtained by dividing Flow Rate by area of exit.

Moisture: Percent by weight of exhaust gases.

**Section 06 – Stack (Source, if no combustion) Location**

If no combustion device is used to control emissions, list location information for the loading rack(s).

Horizontal Datum (NAD27, NAD83, WGS84): The horizontal geodetic datum of the source location coordinates. One of the following datum must be referenced: NAD27, NAD83, WGS84.

Latitude/Longitude *OR* UTM description: *provide one or the other.* These are coordinate systems and a means for identifying a point on the earth on a planimetric map. These can be found using Internet tools such as Google Earth or obtained from a geo-referenced plot plan of the facility. UTM descriptions will include a zone number.

Method of Collection for Location Data: Identify how the Latitude/Longitude or UTM coordinates were obtained. Methods include: map (identify map name or type), GPS, GoogleEarth, etc.

**Section 07 – Control Device Information**

Select the appropriate control device operated by the source, if applicable. Complete the additional information requested under the device selected for control. Provide supporting documentation for control device utilized in process.

**Section 08 - Emissions Inventory Information & Emission Control Information**

Control Device Description: List all air pollution control equipment used for controlling emissions through the stack or vent, according to the pollutant it controls (one device may be listed more than once). If two or more controls are used, the FIRST encountered by the exhaust is listed as PRIMARY, and subsequent devices are SECONDARY.

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Overall Collection Efficiency: How efficient a system is at capturing the emissions. For example, if a hood above a wood sawing operation captures 90% of the sawdust emissions (and routes them to a control device), the collection efficiency is 90%. If boiler emissions are hard-piped to a control device, the collection efficiency is 100%.

Control Efficiency: A measure of how efficient the reported control device will control the captured emissions. Generally, use the control device manufacturer's control efficiency or a control efficiency established during a stack test.

Total pollutant reductions will be based on both the collection efficiency and control efficiency.

Emission Factor: List the emission factor used to calculate the emission rates listed in the emission columns. The Division will determine the emission factor in the event that the applicant is unable to determine it. Include the units that relate to the emission factor (e.g. lb/scf, lb/ton). "Uncontrolled Basis" means the emission factor prior to taking any credit for reductions due to a control device.

Actual Calendar Year Emissions: The actual amount of emissions emitted annually. Use the previous calendar year emissions if possible. Note the data year (in the box above) that was used to determine these actual emissions.

"Uncontrolled" = calculated emissions prior to taking any credit for reductions due to a control device.

"Controlled" = calculated emissions downstream from any control device.

Requested Permitted Emissions: This level will be your permit limit (maximum allowed). The emission level should relate to the annual requested process level you requested in Section 04 or 06.

Emission Method or Factor Source: Identify how your emissions were estimated. Example emission factor sources/methods include: EPA's AP-42, Manufacturer's Emission Factors, stack test results, and Mass Balance. If emission estimations are based upon methods other than those supplied by the Division or EPA, sufficient supporting documentation must be included.

**Section 09 – Applicant Certification**

An original signature, the date signed, printed name and title of person legally authorized to supply data must be provided for the application to be considered complete.

Additional guidance can be obtained here:

The Air Pollution Control Division at (303) 692-3150, or at their website-

[www.colorado.gov/cdphe/apcd](http://www.colorado.gov/cdphe/apcd)

The Small Business Assistance Program at (303) 692-3175, (303) 692-3148, or at their website-

[www.colorado.gov/cdphe/SBAP](http://www.colorado.gov/cdphe/SBAP)