



Boiler APEN – Form APCD-220

Air Pollutant Emission Notice (APEN) and
Application for Construction Permit

All sections of this APEN and application must be completed for both new and existing facilities, including APEN updates. Incomplete APENs will be rejected and will require re-submittal. *Your APEN will be rejected if it is filled out incorrectly, is missing information, or lacks payment for the filing fee. The re-submittal will require payment for a new filing fee.*

This APEN is to be used for boilers, hot oil heaters, process heaters, and similar equipment. If your emission unit does not fall into one of these categories, there may be a more specific APEN for your source (e.g. print shop, mining operations, engines, etc.). In addition, the General APEN (Form APCD-200) is available if the specialty APEN options will not satisfy your reporting needs. A list of all available APEN forms can be found on the Air Pollution Control Division (APCD) website.

Do not complete this form for the following source categories:

- Heaters or boilers with a design capacity less than or equal to 5 MMBtu/hour that are fueled solely by natural gas or liquid petroleum gas (LPG).
- Heaters or boilers with a design capacity less than or equal to 10 MMBtu/hour used solely for heating buildings for personal comfort that are fueled solely by natural gas or liquid petroleum gas (LPG).

This emission notice is valid for five (5) years. Submission of a revised APEN is required 30 days prior to expiration of the five-year term, or when a reportable change is made (significant emissions increase, increase production, new equipment, change in fuel type, etc.). See Regulation No. 3, Part A, II.C. for revised APEN requirements.

Permit Number: _____ **AIRS ID Number:** _____ / _____ / _____
[Leave blank unless APCD has already assigned a permit # and AIRS ID]

Section 1 - Administrative Information

Company Name¹: _____

Site Name: _____

Site Location: _____

Site Location County: _____

NAICS or SIC Code: _____

Mailing Address: _____
(Include Zip Code)

Contact Person: _____

Phone Number: _____

E-Mail Address²: _____

¹ Please use the full, legal company name registered with the Colorado Secretary of State. This is the company name that will appear on all documents issued by the APCD. Any changes will require additional paperwork.

² Permits, exemption letters, and any processing invoices will be issued by the APCD via e-mail to the address provided.

Permit Number: _____ AIRS ID Number: _____ / _____ / _____
[Leave blank unless APCD has already assigned a permit # and AIRS ID]

Section 2 - Requested Action

- NEW permit OR newly-reported emission source
- OR -
- MODIFICATION to existing permit *(check each box below that applies)*
- Change fuel or equipment Change company name³ Add point to existing permit
- Change permit limit Transfer of ownership⁴ Other *(describe below)*
- OR -
- APEN submittal for update only (Note blank APENs will not be accepted)
- ADDITIONAL PERMIT ACTIONS -
- Limit Hazardous Air Pollutants (HAPs) with a federally-enforceable limit on Potential To Emit (PTE)
- APEN submittal for permit exempt/grandfathered source

Additional Info & Notes: _____

³ For company name change, a completed Company Name Change Certification Form (Form APCD-106) must be submitted.
⁴ For transfer of ownership, a completed Transfer of Ownership Certification Form (Form APCD-104) must be submitted.

Section 3 - General Information

General description of equipment and purpose: _____

Manufacturer: _____ Model No.: _____ Serial No.: _____

Company equipment Identification No. *(optional)*: _____

For *existing* sources, operation began on: _____

For *new, modified, or reconstructed* sources, the projected start-up date is: _____

Check this box if operating hours are 8,760 hours per year; if fewer, fill out the fields below:

Normal Hours of Source Operation: _____ hours/day _____ days/week _____ weeks/year

Seasonal use percentage: Dec- Mar- June- Sept-
Feb: May: Aug: Nov: _____

Are you reporting multiple identical boilers on this APEN? Yes No

If yes, please describe how the fuel usage will be measured for each boiler *(e.g., one meter for all boilers or separate meters for each unit)*:

Permit Number: _____

AIRS ID Number: _____ / _____ / _____

[Leave blank unless APCD has already assigned a permit # and AIRS ID]

Section 4 - Geographical/Stack Information

Geographical Coordinates <i>(Latitude/Longitude or UTM)</i>

Operator Stack ID No.	Discharge Height Above Ground Level (Feet)	Temp. (°F)	Flow Rate (ACFM)	Velocity (ft/sec)

Indicate the direction of the stack outlet: *(check one)*

- Upward Downward Upward with obstructing raincap
 Horizontal Other *(describe)*: _____

Indicate the stack opening and size: *(check one)*

- Circular Interior stack diameter *(inches)*: _____
 Square/rectangle Interior stack width *(inches)*: _____ Interior stack depth *(inches)*: _____
 Other *(describe)*: _____

Section 5 - Fuel Consumption Information

Design Input Rate <i>(MMBTU/hr)</i>	Actual Annual Fuel Use ⁵ <i>(Specify Units)</i>	Requested Annual Permit Limit ⁶ <i>(Specify Units)</i>

From what year is the actual annual fuel use data? _____

Fuel consumption values entered above are for: Each Boiler All Boilers N/A

Indicate the type(s) of fuel used⁷:

- Pipeline Natural Gas *(assumed fuel heating value of 1,020 BTU/SCF)*
 Field Natural Gas Heating value: _____ BTU/SCF
 Ultra Low Sulfur Diesel *(assumed fuel heating value of 138,000 BTU/gallon)*
 Propane *(assumed fuel heating value of 2,300 BTU/SCF)*
 Coal Heating value: _____ BTU/lb Ash content: _____ Sulfur Content: _____
 Other *(describe)*: _____ Heating value *(give units)*: _____

⁵ If you are reporting multiple identical boilers on one APEN, be sure to clarify if the values in this section are on an individual boiler basis, or if the values represent total fuel usage for multiple boilers.

⁶ Requested values will become permit limitations or will be evaluated for exempt status, as applicable, and should consider future process growth. Requested values are required on all APENs, including APEN updates.

⁷ If fuel heating value is different than the listed assumed value, please provide this information in the "Other" field.

Permit Number: _____

AIRS ID Number: _____ / _____ / _____

[Leave blank unless APCD has already assigned a permit # and AIRS ID]

Section 6 - Criteria Pollutant Emissions Information

Attach all emissions calculations and emission factor documentation to this APEN form.

Is any emission control equipment or practice used to reduce emissions? Yes No

If yes, describe the control equipment AND state the collection and control efficiencies:

Pollutant	Control Equipment Description	Collection Efficiency (% of total emissions captured by control equipment)	Control Efficiency (% reduction of captured emissions)
TSP (PM)			
PM ₁₀			
PM _{2.5}			
SO _x			
NO _x			
CO			
VOC			

From what year is the following reported actual annual emissions data? _____

Use the following tables to report the criteria pollutant emissions from source:
(Use the data reported in Section 5 to calculate these emissions.)

Primary Fuel Type (natural gas, #2 diesel, etc.)	Pollutant	Uncontrolled Emission Factor (Specify Units)	Emission Factor Source (AP-42, Mfg., etc.)	Actual Annual Emissions		Requested Annual Permit Emission Limit(s) ⁶	
				Uncontrolled (tons/year)	Controlled ⁸ (tons/year)	Uncontrolled (tons/year)	Controlled (tons/year)
	TSP (PM)						
	PM ₁₀						
	PM _{2.5}						
	SO _x						
	NO _x						
	CO						
	VOC						

Check this box if multiple fuels were **NOT** fired during this reporting period and skip to Section 7.

If multiple fuels were fired during this reporting period, complete this secondary fuel emissions table and the total criteria pollutant emissions table below:

Secondary Fuel Type (#2 diesel, waste oil, etc.)	Pollutant	Uncontrolled Emission Factor (Specify Units)	Emission Factor Source (AP-42, Mfg., etc.)	Actual Annual Emissions		Requested Annual Permit Emission Limit(s) ⁶	
				Uncontrolled (tons/year)	Controlled ⁸ (tons/year)	Uncontrolled (tons/year)	Controlled (tons/year)
	TSP (PM)						
	PM ₁₀						
	PM _{2.5}						
	SO _x						
	NO _x						
	CO						
	VOC						

⁶ Requested values will become permit limitations or will be evaluated for exempt status, as applicable, and should consider future process growth. Requested values are required on all APENs, including APEN updates.

⁸ Annual emission fees will be based on actual controlled emissions reported. If source has not yet started operating, provide projected emissions.

Permit Number: _____

AIRS ID Number: _____ / _____ / _____

[Leave blank unless APCD has already assigned a permit # and AIRS ID]

If multiple fuels were fired during this reporting period, use the following table to report the **TOTAL** criteria pollutant emissions from the source. Values listed below should be the sum of the reported emissions from the primary and secondary fuels' emissions tables in this Section 6:

Pollutant	Actual Annual Emissions		Requested Annual Permit Emission Limit(s) ⁶	
	Uncontrolled (tons/year)	Controlled ⁸ (tons/year)	Uncontrolled (tons/year)	Controlled (tons/year)
TSP (PM)				
PM ₁₀				
PM _{2.5}				
SO _x				
NO _x				
CO				
VOC				

⁶ Requested values will become permit limitations or will be evaluated for exempt status, as applicable, and should consider future process growth. Requested values are required on all APENs, including APEN updates.

⁸ Annual emission fees will be based on actual controlled emissions reported. If source has not yet started operating, provide projected emissions.

Section 7 - Non-Criteria Pollutant Emissions Information

Does the emissions source have any uncontrolled actual emissions of non-criteria pollutants (e.g. HAP - hazardous air pollutant) equal to or greater than 250 lbs/year? Yes No

If yes, use the following table to report the non-criteria pollutant (HAP) emissions from source:

Primary Fuel Type (natural gas, #2 diesel, etc.)						
CAS Number	Chemical Name	Overall Control Efficiency	Uncontrolled Emission Factor (Specify units)	Emission Factor Source (AP-42, Mfg., etc.)	Uncontrolled Actual Emissions (lbs/year)	Controlled Actual Emissions ⁸ (lbs/year)

Check this box if multiple fuels were **NOT** fired during this reporting period and skip to Section 8.

If multiple fuels were fired during this reporting period, complete this secondary fuel emissions table and the total non-criteria pollutant (HAP) emissions table below:

Secondary Fuel Type (#2 diesel, waste oil, etc.)						
CAS Number	Chemical Name	Overall Control Efficiency	Uncontrolled Emission Factor (Specify units)	Emission Factor Source (AP-42, Mfg., etc.)	Uncontrolled Actual Emissions (lbs/year)	Controlled Actual Emissions ⁸ (lbs/year)

⁸ Annual emission fees will be based on actual controlled emissions reported. If source has not yet started operating, provide projected emissions.

