



Amine Sweetening Unit APEN Form APCD-206

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 amine sweetening units only. If your emission unit does not fall into this category, there may be a more specific APEN available for your source (e.g. glycol dehydration unit, hydrocarbon liquid loading, condensate storage tanks, 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.

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: _____
Mailing Address: _____ NAICS or SIC Code: _____
(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.

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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)

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: _____

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

For *existing* sources, operation began on: _____

For *new 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

Will this equipment be operated in any NAAQS nonattainment area? Yes No

Does this facility have a design capacity less than 2 long tons/day of H₂S in the acid gas? Yes No

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Section 4 - Amine Unit Equipment Information

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

Absorber Column Stages: _____ stages

Amine Type: MEA DEA TEA MDEA DGA

Pump Make and Model: _____ # of pumps: _____

Sour Gas Throughput:	Design Capacity: _____ MMSCF/day
	Requested ⁵ : _____ MMSCF/year Actual: _____ MMSCF/year

Sour Gas:	Pressure: _____ psig	Temperature: _____ °F
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Lean Amine Stream:	Pressure: _____ psia	Temperature: _____ °F
	Flowrate: _____ gal/min	Wt. % amine: _____
	Mole loading H ₂ S: _____	Mole Loading CO ₂ : _____

NGL Input:	Pressure: _____ psia	Temperature: _____ °F
	Flowrate: _____ Gal/min	

Flash Tank:	Pressure: _____ psia	Temperature: _____ °F
<input type="checkbox"/> No Flash Tank		

Additional Required Documentation:
<input type="checkbox"/> Attach a Process Flow Diagram (this item is not required for APEN updates) <input type="checkbox"/> Attach the simulation model inputs & emissions report <input type="checkbox"/> Attach composition reports for the rich amine feed, sour gas feed, NGL feed, & outlet stream (emissions) <input type="checkbox"/> Attach the extended gas analysis (including BTEX & n-Hexane, H ₂ S, CO ₂ , temperature, and pressure)

⁵ 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.

Permit Number: _____

AIRS ID Number: _____ / _____ / _____

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

Section 5 - Geographical/Stack Information

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

Check box if the following information is not applicable to the source because emissions will not be emitted from a stack. If this is the case, the rest of this section may remain blank.

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 6 - Control Device Information

Check this box if no emission control equipment or practices are used to reduce emissions, and skip to the next section.

<input type="checkbox"/> VRU:	Used for control of: _____
	Size: _____ Make/Model: _____
	Requested Control Efficiency: _____ %
	VRU Downtime or Bypassed: _____ %

<input type="checkbox"/> Combustion Device:	Used for control of: _____
	Rating: _____ MMBtu/hr
	Type: _____ Make/Model: _____
	Requested Control Efficiency: _____ %
	Manufacturer Guaranteed Control Efficiency: _____ %
	Minimum Temperature: _____ °F Waste Gas Heat Content: _____ Btu/scf
	Constant Pilot Light: <input type="checkbox"/> Yes <input type="checkbox"/> No Pilot Burner Rating: _____ MMBtu/hr
	Supplemental Fuel Flow: _____ MMscf/year
Supplemental Fuel Heat Content: _____ Btu/scf	

<input type="checkbox"/> Closed Loop System:	Used for control of: _____
	Description: _____
	System Downtime: _____ %

<input type="checkbox"/> Other:	Used for control of: _____
	Description: _____
	Requested Control Efficiency: _____ %

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

Section 7 - 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 requested control efficiencies (report the overall, or combined, values if multiple emission control methods were identified in Section 6):

Pollutant	Control Equipment Description	Overall Requested Control Efficiency (% reduction in emissions)
PM		
SO _x		
H ₂ S		
NO _x		
CO		
VOC		
HAPs		
Other:		

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

Use the following table to report the criteria pollutant emissions from source:

Pollutant	Emission Factor			Actual Annual Emissions		Requested Annual Permit Emission Limit(s) ⁵	
	Uncontrolled Basis	Units	Source (AP-42, Mfg., etc.)	Uncontrolled Emissions (tons/year)	Controlled Emissions ⁶ (tons/year)	Uncontrolled Emissions (tons/year)	Controlled Emissions (tons/year)
PM							
SO _x							
H ₂ S							
NO _x							
CO							
VOC							

⁵ 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.

⁶ Annual emission fees will be based on actual controlled emissions reported. If source has not yet started operating, provide projected emissions.

Section 8 - 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:

Chemical Name	Chemical Abstract Service (CAS) Number	Emission Factor			Actual Annual Emissions	
		Uncontrolled Basis	Units	Source (AP-42, Mfg., etc.)	Uncontrolled Emissions (lbs/year)	Controlled Emissions ⁶ (lbs/year)
Benzene	71432					
Toluene	108883					
Ethylbenzene	100414					
Xylene	1330207					
n-Hexane	110543					
2,2,4-Trimethylpentane	540841					
Other:						

⁶ 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]

Section 9 - Applicant Certification

I hereby certify that all information contained herein and information submitted with this application is complete, true, and correct.

Signature of Legally Authorized Person (not a vendor or consultant)

Date

Name (print)

Title

Check the appropriate box to request a copy of the:

- Draft permit prior to issuance
- Draft permit prior to public notice

(Checking any of these boxes may result in an increased fee and/or processing time)

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Send this form along with \$216.00 to:

Colorado Department of Public Health and Environment
Air Pollution Control Division
APCD-SS-B1
4300 Cherry Creek Drive South
Denver, CO 80246-1530

Make check payable to:

Colorado Department of Public Health and Environment

For more information or assistance call:

Small Business Assistance Program
(303) 692-3175
OR
(303) 692-3148

APCD Main Phone Number
(303) 692-3150