



# Municipal Solid Waste Landfill APEN Form APCD-231

## 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 municipal solid waste landfills only. If your emission source does not fall into this category, there may be a more specific APEN for your source (e.g. mining operations, land development, boiler, 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]

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### Section 1 - Administrative Information

Company Name<sup>1</sup>: \_\_\_\_\_

Site Name: \_\_\_\_\_

Site Location: \_\_\_\_\_

Site Location County: \_\_\_\_\_

Mailing Address: \_\_\_\_\_

(Include Zip Code) \_\_\_\_\_

NAICS or SIC Code: \_\_\_\_\_

Contact Person: \_\_\_\_\_

Phone Number: \_\_\_\_\_

E-Mail Address<sup>2</sup>: \_\_\_\_\_

<sup>1</sup> 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.

<sup>2</sup> 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 permit limit
  - Change company name<sup>3</sup>
  - Change design capacity
  - Change waste accepted
  - Transfer of ownership<sup>4</sup>
  - 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: \_\_\_\_\_

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

**Section 3 - Design Capacity Information**

For *new* landfills, on what date will construction commence? \_\_\_\_\_

- Complete the "Design Capacity Report Form" and attach it to this APEN.  
 List the landfill design capacity in volume *and* mass<sup>5</sup>: \_\_\_\_\_ m<sup>3</sup> and \_\_\_\_\_ Mg

For *existing* landfills, when did construction commence? \_\_\_\_\_

- No change to the "Design Capacity Report Form" that was submitted on *(date)*: \_\_\_\_\_  
 List the landfill design capacity in volume *and* mass<sup>5</sup>: \_\_\_\_\_ m<sup>3</sup> and \_\_\_\_\_ Mg
- Change a previously reported design capacity
  - Complete the "Design Capacity Report Form" and attach it to this APEN.  
 PREVIOUS landfill design capacity in volume *and* mass<sup>5</sup>: \_\_\_\_\_ m<sup>3</sup> and \_\_\_\_\_ Mg  
 NEW landfill design capacity in volume *and* mass<sup>5</sup>: \_\_\_\_\_ m<sup>3</sup> and \_\_\_\_\_ Mg

For *closed* landfills, on what date did the landfill close? \_\_\_\_\_

<sup>5</sup> Calculate m<sup>3</sup> by multiplying yd<sup>3</sup> by 0.7646. Calculate Mg by multiplying tons by 0.907.

Permit Number: \_\_\_\_\_

AIRS ID Number: \_\_\_\_\_ / \_\_\_\_\_ / \_\_\_\_\_

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

**Section 4 - Landfill Activities**

**Section 4A: Wastes Accepted**

From what year is the *actual annual amount*? \_\_\_\_\_

Description of Materials Accepted <sup>6</sup>	Actual Annual Waste Acceptance (Specify Units)	Requested Annual Permit Limit for Waste Acceptance <sup>7</sup> (Specify Units)

<sup>6</sup> Petroleum Contaminated Soil (PCS) acceptance rates should be included in this section, if applicable.

<sup>7</sup> 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.

Describe how waste acceptance is tracked (*gate scale, yd<sup>3</sup> converted to tons, etc.*): \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

**Section 4B: Waste Acceptance Records**

Beginning with the year the landfill opened, provide the total annual waste acceptance amount for each year (up to the current year). This information may be provided via LandGEM, in the table provided below, or as an attachment to this APEN form in the same format as the table below.

If any acceptance rates are estimated, attach documentation that demonstrates how these rates were calculated.

Has LandGEM data been submitted with this APEN?  Yes  No

Year	Waste Accepted (Specify Units)

**Section 4C: Other Landfill Activities**

Check the appropriate boxes below to indicate any other activities or equipment at the landfill that may require submission of a separate APEN form. A list of all available APEN forms can be found on the Air Pollution Control Division (APCD) website.

Activity	Description
<input type="checkbox"/> Composting	
<input type="checkbox"/> Engines or Generators	
<input type="checkbox"/> Parts Washer	
<input type="checkbox"/> Sand & Gravel Operations	
<input type="checkbox"/> Screening Operations	
<input type="checkbox"/> Solidification Basin	
<input type="checkbox"/> Other:	

Permit Number: \_\_\_\_\_

AIRS ID Number: \_\_\_\_\_ / \_\_\_\_\_ / \_\_\_\_\_

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

**Section 5 - Geographical Information**

Geographical Coordinates (Latitude/Longitude or UTM)

**Section 6 - Landfill Gas Collection System and Flare Information**

Check this box if there is no landfill gas collection system, and skip to Section 7.

**Section 6A: Landfill Gas Collection System Information**

Landfill gas collection system type:

- Passive venting
- Active venting; system vents to: \_\_\_\_\_
- Active collection and control system
  - Required by NSPS
  - Voluntary (not required by NSPS)

Control device(s) used<sup>8</sup>: \_\_\_\_\_ (e.g. flare, engine, etc.)

<sup>8</sup> Flares used as control devices can be reported on this APEN form in the following sections. Engines and other equipment used as control devices must be reported on separate APEN forms.

**Section 6B: General Flare Information**

Operator Stack ID No.	Open Flare or Enclosed Combustor?	Manufacturer	Model Number	Serial Number

**Section 6C: Flare Stack Information**

Operator Stack ID No.	Geographical Coordinates of Stack Outlet (Lat/Long or UTM)	Discharge Height Above Ground Level (Feet)	Temp. (° F)	Flow Rate (ACFM)	Velocity (ft/sec)

Operator Stack ID No.	Stack Outlet: Upward, Upward with Rain Cap, or Other (Specify)?	Stack Outlet Diameter (In Inches, for Circular Stacks)	Stack Outlet Width and Depth (In Inches, for Square/Rectangular Stacks)	'Other' Stack Outlet Dimensions (Specify Units)

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

**Section 6D: Flare Use Information**

Operator Stack ID No.	Design Input Rate (MMSCF/hr)	Actual Annual Landfill Gas Combusted (MMSCF/year)	Requested Annual Permit Limit <sup>7,9</sup> for Landfill Gas Combustion (MMSCF/year)

From what year is the actual annual landfill gas combustion data? \_\_\_\_\_

Landfill gas heating value: \_\_\_\_\_ BTU/SCF

<sup>7</sup> 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.

<sup>9</sup> If a control device is not specified, landfill gas emissions will be permitted to accommodate the maximum predicted uncontrolled landfill gas generation. Permit limits for flares will be based on the year with maximum emissions, even after landfill closure.

**Section 7 - Fugitive Dust Control Measures**

**Section 7A: Onsite Hauling, Loading, and Unloading**

Vehicle Type	Number of Vehicles Per Month	Empty Vehicle Weight (tons)	Loaded Vehicle Weight (tons)	Length of Haul Road (feet) - One Way

What is the maximum posted speed limit on the haul roads? \_\_\_\_\_ mph

Which control measures are used for hauling, loading, and unloading? (Check all that apply)

- Watering
- Paved Surfaces
- Graveled Surfaces
- Chemical Stabilizer
- Other (describe): \_\_\_\_\_

**Section 7B: Soil Handling and Removal**

What is the maximum amount of soil handled at this landfill? \_\_\_\_\_ tons per year

Which control measures are used for soil handling and removal? (Check all that apply)

- Watering
- Moist Materials
- Other (describe): \_\_\_\_\_

**Section 7C: Disturbed Area**

What is the total area of the site? \_\_\_\_\_ acres

What is the total disturbed area of the site? \_\_\_\_\_ acres

Which control measures are used for the disturbed area? (Check all that apply)

- Watering
- Revegetation
- Compaction
- Other (describe): \_\_\_\_\_

**Section 8 - Criteria Pollutant Emissions Information**

Attach a complete copy of the LandGEM 'Results' tab to this APEN form. Sources may have approved site-specific values based on performance testing. Waste acceptance for future years should be equivalent to the requested waste acceptance limit.

From what year is the following reported *actual annual emissions data*? \_\_\_\_\_

Emissions calculated using:

- LandGEM
- Other (describe): \_\_\_\_\_

C<sub>NMOC</sub> value used in calculation: \_\_\_\_\_ ppmv

Source of C<sub>NMOC</sub> value:

- Inventory Default (956 ppmv)
- Tier II test conducted on (date): \_\_\_\_\_
- Other (describe): \_\_\_\_\_

Total uncontrolled actual NMOC emissions for data year listed above: \_\_\_\_\_ tons

VOC calculated as:

- 39% of NMOC
- 85% of NMOC
- Other (describe): \_\_\_\_\_

Total uncontrolled actual VOC emissions for data year listed above: \_\_\_\_\_ tons

Is a landfill Gas Collection and Control System (GCCS) used to reduce emissions?  Yes  No

If yes, state the collection and control efficiencies. Attach all supporting documentation to this APEN form.

Pollutant	GCCS Collection Efficiency (% of total emissions captured by GCCS)	Control Efficiency (% reduction of captured emissions)
VOC		
Other:		

VOC emissions from *uncollected* landfill gas: \_\_\_\_\_ tons

VOC emissions from landfill gas *collected but not controlled* by the GCCS: \_\_\_\_\_ tons

Total controlled actual VOC emissions for data year listed above<sup>10</sup>: \_\_\_\_\_ tons

Requested VOC annual permit emission limit<sup>7,9</sup>: \_\_\_\_\_ tons/year

Note: Active landfills are permitted at the maximum predicted VOC emission rate considering the waste in place, the remaining capacity, and the requested annual waste acceptance limit. The highest VOC emission rate usually occurs in the year of or in the year following landfill closure. Closed landfills may request a limit lower than the maximum because emissions decrease each year.

<sup>7</sup> 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.

<sup>9</sup> If a control device is not specified, landfill gas emissions will be permitted to accommodate the maximum predicted uncontrolled landfill gas generation. Permit limits for flares will be based on the year with maximum emissions, even after landfill closure.

<sup>10</sup> 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]

Use the following table to report other criteria pollutant emissions from the source, including both combustion byproducts and landfill emissions:  
(Use the data reported in Sections 4 and 6 to calculate these emissions.)

Pollutant <sup>11</sup>	Uncontrolled Emission Factor (Specify Units)	Emission Factor Source (AP-42, Mfg., etc.)	Actual Annual Emissions		Requested Annual Permit Emission Limit(s) <sup>7,9</sup>	
			Uncontrolled (tons/year)	Controlled <sup>10</sup> (tons/year)	Uncontrolled (tons/year)	Controlled (tons/year)
TSP (PM) - Point						
PM <sub>10</sub> - Point						
PM <sub>2.5</sub> - Point						
SO <sub>x</sub>						
NO <sub>x</sub>						
CO						
Other:						

If you have calculated the fugitive particulate emissions, provide values in the following table and attach all emissions calculations and emission factor documentation to this APEN form, or check this box to have the APCD calculate these emissions and skip to Section 9.

Pollutant <sup>11</sup>	Uncontrolled Emission Factor (Specify Units)	Emission Factor Source (AP-42, Mfg., etc.)	Actual Annual Emissions		Requested Annual Permit Emission Limit(s) <sup>7</sup>	
			Uncontrolled (tons/year)	Controlled <sup>10</sup> (tons/year)	Uncontrolled (tons/year)	Controlled (tons/year)
TSP (PM) - Fugitive						
PM <sub>10</sub> - Fugitive						
PM <sub>2.5</sub> - Fugitive						

<sup>7</sup> 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.

<sup>9</sup> If a control device is not specified, landfill gas emissions will be permitted to accommodate the maximum predicted uncontrolled landfill gas generation. Permit limits for flares will be based on the year with maximum emissions, even after landfill closure.

<sup>10</sup> Annual emission fees will be based on actual controlled emissions reported. If source has not yet started operating, provide projected emissions.

<sup>11</sup> This table should include emissions data from both the landfill and combustion sources listed in Section 6, as applicable.

### Section 9 - 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

Non-criteria pollutant emissions (e.g. HAP - hazardous air pollutant) calculated using:

- No co-disposal default concentrations
- Co-disposal default concentrations
- Other (describe): \_\_\_\_\_

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

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

CAS Number <sup>11</sup>	Chemical Name	LandGEM Concentration (ppmv) OR Uncontrolled Emission Factor (Specify Units)	Emission Factor Source (AP-42, Mfg., etc.)	Uncontrolled Actual Emissions (lbs/year)	Controlled Actual Emissions <sup>10</sup> (lbs/year)

<sup>10</sup> Annual emission fees will be based on actual controlled emissions reported. If source has not yet started operating, provide projected emissions.

<sup>11</sup> This table should include emissions data from both the landfill and combustion sources listed in Section 6, as applicable.

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### Section 10 - 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)

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.

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