



## Air Pollution Control Division Small Business Assistance Program

### Air Quality Requirements for Surface Mining Operations

If you own or operate a surface mining operation, including a sand and gravel pit, borrow pit, or quarry, you may need to report air emissions to, or obtain an air permit from, the Air Pollution Control Division (APCD) at the Colorado Department of Public Health and Environment (CDPHE). This document provides an overview of the air pollution reporting and permitting requirements that apply to Colorado surface mining operations.

#### *What Must Be Reported?*

The APCD regulates air pollutants released from surface mining operations and from the equipment used at mining sites. Surface mining activities and mining equipment (such as crushers and screens) release fugitive dust that can be carried from the site by the wind. In addition, many surface mining operations use generators fueled with natural gas, oil, propane, or diesel that release byproducts of combustion such as volatile organic compounds (VOCs), carbon monoxide (CO), nitrogen oxides (NO<sub>x</sub>), and sulfur dioxide (SO<sub>2</sub> - if sulfur is present in the fuel). Emissions of fugitive dust and fuel combustion that exceed the Reporting thresholds presented in Table 1 must be reported to the APCD through the submission of an Air Pollutant Emission Notice (APEN). Almost all surface mining operations and associated equipment require the filing of an APEN. The APEN form titled *Mining Operations - APEN and Application for Construction Permit and Fugitive Particulate Emissions Control Plan* is used to report emissions from the mining site and is available through the APCD and online at:

[www.colorado.gov/pacific/cdphe/specialty-apens](http://www.colorado.gov/pacific/cdphe/specialty-apens)

This form requests information on the location and ownership of the site and detailed information on the nature of site emissions, production, and associated equipment. The APEN also requests information on the site-specific Fugitive Dust Control Plan.

Table 1  
APEN Reporting Thresholds

	Attainment (Ton per year)	Nonattainment (Ton per year)
Criteria Pollutants (NO <sub>x</sub> , Ozone)	2	1
Other Criteria Pollutants (CO, SO <sub>x</sub> , PM, PM-10, etc.)	2	1
Non-Criteria Pollutant (HAPs & other reportable pollutants)	≥ 250 pounds per year of any individual non- criteria reportable pollutant	

#### ➤ *Reporting Emissions for Process Equipment*

The *General APEN* form is used to report air emissions from process equipment such as generators, crushers, screen decks, and conveyor systems. This form requires information about the equipment such as the type of equipment, make, model, and serial number, hours of operation, and quantity of material processed through the equipment. This form also requires information regarding whether the process equipment is portable or stationary:

- Portable equipment can be moved from site to site; however, a “Notice of Relocation” must be submitted to the Division at least 10 days prior to relocation of permitted equipment. At your home base, maintain an up-to-date list of your equipment locations.
- To be considered “stationary” or “fixed,” equipment must remain at the location indicated on the APEN for at least two years. If you decide to move permitted stationary equipment, you must submit an APEN to modify the permit for that equipment to a portable source prior to the move.

Each individual piece of process equipment is typically reported on a separate *General APEN* form. However, multiple pieces of equipment may be grouped and reported on a single *General APEN* form if the equipment will always remain together (i.e., pieces of equipment can not be added or removed from the group). For example, if a portable group of equipment is moved to a new site, each piece of equipment in that group must move to the new site; no piece of equipment can be left behind. Grouping equipment onto a single *General APEN* can help you avoid extra APEN filing fees.

## What Must Be Permitted?

Based on the information provided on the APEN, the APCD will determine whether an air permit is required for your surface mining operation and/or equipment. If your emissions are equal to or greater than the levels listed in Table 2, you must have a permit to operate.

Table 2  
AIR PERMIT Reporting Thresholds

Pollutant	Uncontrolled Actual Emissions (tons per year)	
	Attainment Area	Non-attainment Area
VOC	5	2
PM 10, PM 2.5	5	1
TSP, CO, SO <sub>x</sub> , NO <sub>x</sub>	10	5
Non-Criteria Pollutant (HAP)	10 per each pollutant	

As a rule of thumb:

- Surface mining operations that mine over 70,000 tons of product material per year (i.e., raw material removal or processing for sale, which could include top soil, overburden, and raw material) almost always require an air permit.
- Surface mining activities that mine less than 70,000 tons of product material per year are specifically exempt from permitting requirements (although they still require an APEN) requirements per Regulation 3, Part B Section II.D.1.g and Part C II.E.3.qqq.
- Surface mining *equipment* almost always requires an air permit.

When a permit is required, the APEN will become part of the permit application package.

### ➤ The Permit Process:

In Colorado, Construction Permits are issued in two phases: "Issuance 1" and "Final Approval to Operate".

- Issuance 1 of a permit allows the plant to be constructed and begin operation. The source must self-certify to Issuance 1 of the permit once in operation within 180 days of receiving the first issued permit.
- After the owner certifies that the operation is in compliance with the conditions of Issuance 1 of the permit, the Division issues a "Final Approval to Operate" letter to operate under the conditions of Construction Permit Issuance 1. This letter confirms the completion of the self-certification requirements of that permit. The source is issued an invoice for processing time for this letter, and must pay the invoice

within 30 days of receipt. Please note that if the permit processing fee is not paid within 30 days of receipt, you will be in violation of your permit conditions and may result in revocation of the permit.

- If the source modifies an existing permit, the source will be issued Construction Permit Issuance 2 (Issuance number determined by modification sequence). The source may have to self-certify to the new Issuance if required by the permit.

A permit describes key areas that an operator needs to address. The permit defines the type of air pollution control measures to be used, limits the annual production at the site, provides guidelines for opacity (how dense the visible emissions are allowed to be), and includes recordkeeping requirements.

The final approval air permit is valid for the life of the equipment. In the event of a change of ownership or equipment, a revised APEN form must be filed and will result in a new Issuance number.

### ➤ New Source Performance Standard IIII

On July 11, 2006 the EPA promulgated a rule that would decrease emissions from Stationary Compression Ignition Internal Combustion Engines (CI ICE's). Owners or operators of CI ICE's that commence construction, reconstruction, or modification (as defined at 40 CFR 60.14) after July 11, 2005 will be subject to this rule. A CI ICE is generally a diesel generator that is not portable. All CI ICE's manufactured after 2007 will have to be certified to EPA Non-road engine standards. Under this rule emergency generators will have to have non-resettable hour meters to track hours of operation. All Stationary Compression Ignition Internal Combustion Engines shall be reported to the Division.

### ➤ House Bill 1326 - Flexibility for Crushers and Screens

Owners or operators of surface mining operations are typically required to obtain an IA permit for process equipment *prior* to operating the equipment at the site. However, Colorado House Bill 1326 provides some flexibility for reporting and permitting crushers and screens. Under House Bill 1326, the owner or operator of a *permitted* sand and gravel pit or crushed stone quarry may bring a new crusher or screen (and the engines that are integral to those crushers and screens) onsite and begin operation of this equipment by submitting an APEN to the APCD. Submission of an

APEN will allow the source to operate the equipment until such time as the APCD is able to process and issue an IA Permit, or for temporary or rented equipment, until the equipment is removed from the site. You must notify the APCD (by adding a note to the APEN form) that you are submitting an APEN under the provisions of House Bill 1326. In cases where you intend to retain ownership of the equipment for the foreseeable future, you must request in writing that the APCD proceed with the permitting process. In cases where you intend to return temporary or rented equipment within a few months, you can avoid unnecessary permitting fees by requesting that the APCD “hold” the APEN until you remove the equipment and submit a cancellation letter to the APCD.

### *Applicable Fees*

**APEN Fee:** A filing fee is required for each APEN submitted. This includes APENs submitted for administrative changes (e.g., change in ownership, change in location). Fees are subject to change by the legislature on an annual basis.

**Annual Fee:** All sources required to file APENs must pay annual fees. The Division bills each source subject to an APEN filing fee per ton of criteria pollutants emitted and per ton of non-criteria (hazardous air pollutants) emitted. The Division mails invoices for these fees in May or June of each year (these fees account for the emissions from the previous year’s operation). Fees are subject to change by the legislature on an annual basis.

**Permit Processing Fee:** In addition to the APEN filing fee, permit-processing fees will be assessed at an hourly rate. If the total processing time is anticipated to be more than 30 hours the Division will contact the applicant in writing and provide an estimate of the projected processing time. The applicant can waive this notice by submitting a letter making this request when the application is submitted.

*Current fee information* is available online at:  
[www.colorado.gov/pacific/cdphe/emissions-and-permitting-fees](http://www.colorado.gov/pacific/cdphe/emissions-and-permitting-fees)

### *Questions?*

The Small Business Assistance Program (SBAP) is available to assist you with questions you may have regarding environmental issues at your site. Contact the SBAP at (303) 692-3175 or (303) 692-3148.