

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_x), and sulfur dioxide (SO₂ - if sulfur is present in the fuel). Emissions of fugitive dust and fuel combustion that exceed certain thresholds 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 forms are available through the APCD and downloadable at: www.cdphe.state.co.us/ap/downloadforms.asp

➤ Reporting Emissions for Surface Mining Sites

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. 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.

➤ 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. 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).

- 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: Initial Approval and Final Approval.

- An Initial Approval (IA) Permit allows the plant or process equipment to be constructed and begin operation. When an air permit is required, it is illegal to commence operation of the plant or process equipment until an IA Permit is issued by the APCD. Some exceptions for crushers and screens are provided under House Bill 1326.
- A Final Approval (FA) permit is issued after the owner certifies that the permitted operation is in compliance with the conditions of the Initial Approval Permit.

A permit describes key areas that an operator needs to address to comply with Colorado air regulations. 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.

➤ **Obtaining a Final Approval Permit**

In order to receive a Final Approval Permit for your surface mining site or equipment, you must certify compliance with your Initial Approval Permit. This self-certification process must be completed within 180 days (six months) of being issued an Initial Approval Permit. After 180 days, the APCD must finalize the permit or determine to continue or revoke the permit.

Certifying compliance with the IA permit for a surface mining site typically involves submitting a Final Approval Self Certification Form. This form is available through the APCD and downloadable at:

www.cdphe.state.co.us/ap/downloadforms.asp

Certifying compliance with the IA permit for process equipment typically involves submitting a Final Approval Self Certification Form and the required opacity test results (i.e., either a 6-minute opacity reading or a 1-3 hour opacity reading may be required depending on the type and design rate of the equipment). The APCD can assist you in determining the opacity readings required for your equipment.

➤ **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 Filing Fee: A filing fee of \$119.96 is required to be submitted with each APEN.

Annual Emission Fees: All sources required to file APENs must pay annual air emission fees. The APCD bills each source that is subject to an APEN an annual fee of \$13.54 per ton of criteria pollutants emitted and \$90.34 per ton of non-criteria (hazardous air pollutants) emitted. Fees are not assessed for fugitive dust emissions. Invoices are mailed in March through June of each year. Fees are subject to change by the legislature on an annual basis.

Permitting Fees: The APCD assesses a permitting fee based on the amount of time it takes the APCD to process the application. The current processing fee is \$59.98 per hour. These fees are also subject to change.

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.