

# PADEP Finalizes General Operating Permit for Coal-Mine Methane Enclosed Flares

**November 1, 2023**

*Pittsburgh, PA and Washington, DC*

*FNREL Mineral and Energy Law Newsletter*

Pennsylvania – Mining

([Joseph K. Reinhart](#), [Sean M. McGovern](#), [Gina F. Buchman](#) and [Christina M. Puhnaty](#))

On September 23, 2023, PADEP published in the *Pennsylvania Bulletin* notice that the agency finalized its [General Plan Approval and/or General Operating Permit for Coal-Mine Methane Enclosed Flares](#) (GP-21). See 53 Pa. Bull. 6005 (Sept. 23, 2023). New or modified coal-mine methane enclosed flares in Pennsylvania are now subject to GP-21. Coal-mine methane enclosed flares with actual emission rates less than the following are exempted from GP-21's permitting requirements:

- 4 tons per year (tpy) of carbon monoxide (CO) from a single enclosed flare or 20 tpy of CO from multiple enclosed flares;
- 1 tpy of nitrogen oxides (NO<sub>x</sub>) from a single enclosed flare or 5 tpy of NO<sub>x</sub> from multiple enclosed flares;
- 1.6 tpy of the oxides of sulfur (SO<sub>x</sub>) from a single enclosed flare or 8 tpy of the SO<sub>x</sub> from multiple enclosed flares;
- 0.6 tpy of particulate matter with a diameter of 10 microns or less (PM<sub>10</sub>) from a single enclosed flare or 3 tpy of PM<sub>10</sub> from multiple enclosed flares;
- 1 tpy of volatile organic compounds (VOCs) from a single enclosed flare or 5 tpy of VOCs from multiple enclosed flares; and
- 0.5 tpy of a single hazardous air pollutant (HAP) from a single enclosed flare or 1 tpy of multiple HAPs from multiple enclosed flares. The HAPs may not contain Polychlorinated Biphenyls (PCBs), Chromium (Cr), Mercury (Hg), Lead (Pb), Polycyclic Organic Matter (POM), Dioxins, or Furans.

Those coal-mine methane enclosed flares that are not exempt from GP-21's requirements will have to meet the best available technology (BAT) compliance requirements established in GP-21. These requirements include operating the enclosed flare to (1) limit NO<sub>x</sub> emissions to less than or equal to 0.08 lb/MMBtu, (2) limit CO emissions to less than or equal to 0.30 lb/MMBtu, and (3) limit visible emissions to periods not to exceed an aggregate total of 60 seconds during any 15-minute period. GP-21 also requires that permittees sample and conduct a fractional gas analysis at the "inlet gas stream to the enclosed flares" on a quarterly basis to determine VOC, methane, and ethane concentrations, and the heat content of the inlet gas stream.

The Pennsylvania Department of Environmental Protection (PADEP) issued GP-21 in accordance with section 6.1(f) of Pennsylvania's Air Pollution Control Act, 35 Pa. Stat. § 4006.1(f), and 25 Pa. Code ch. 127, subch. H. Industry groups have appealed PADEP's issuance of GP-21 to Pennsylvania's Environmental Hearing Board.

*Copyright © 2023, The Foundation for Natural Resources and Energy Law, Westminster, Colorado*

**Babst | Calland**  
Attorneys at Law

PITTSBURGH, PA | CHARLESTON, WV | HARRISBURG, PA | LAKEWOOD, NY | STATE COLLEGE, PA | WASHINGTON, DC