

# Advisory: Noxious Fumes from Blasting

**From:** Bureau of Mining Program, Explosives & Safety Section Chief

**Date:** April 4, 2023

**Re:** Carbon Monoxide and Other Noxious Fumes

**To:** All Pennsylvania Blasters and Blasting Activity Permittees

To Whom it May Concern:

Over the course of the last year or so, the Department has taken a proactive approach to preserving the health and safety of the public with regard to noxious gases produced by blasting, primarily carbon monoxide. We have been evaluating blasting permits with more attention paid to possible risk factors that could contribute to the underground migration of these fumes. Having noted risk factors, many in the explosives industry have been asked to include precautionary measures in their permit application comments. In some cases, the Department has asked for specific reasonable precautionary practices, such as placing carbon monoxide detectors in nearby homes thought to be at considerable risk and limiting the size of blasts so they may be more quickly excavated after the blast. Our precautionary recommendations and requirements have been grounded in research conducted by organizations such as NIOSH, and we have attempted to apply the findings of such studies as site-specifically as possible

The risks of exposure to these dangerous fumes cannot be overstated. In recent years, Pennsylvania has experienced number of cases in which noxious fumes from blasting have infiltrated occupied spaces, a few of which have required rescue and hospitalization of residents or workers. Research in other jurisdictions in the U.S. and Canada suggest that there have probably been a number of other unreported cases, as well.

The Department has developed a Fact Sheet with additional information on this topic ([EXCAVATION BLASTING AND THE RISK OF NOXIOUS FUMES FACTSHEET no. 5600-FS-DEP5550](#)). Please feel free to reference and distribute this document as needed.

On behalf of the Department, the blasting and explosives regulatory staff, and the public we serve, thank you for your past and continued cooperation in doing all we can to reduce the risk of exposing the public to noxious fumes generated by blasting. We each have a responsibility to do our part to ensure the public safety and the safety of those with whom we work.

Sincerely,

A handwritten signature in black ink, appearing to read "Christopher D. Catalano". The signature is fluid and cursive, with a long horizontal stroke at the end.

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