



Engineering Guide #1 – Regulated Air Contaminants Under the Air Permitting Program

This engineering guide clarifies the permitting requirements for sources emitting different types of air contaminants.

Question

Is a permit required for sources that emit any kind of air contaminant?

Background

Ohio Administrative Code (OAC) rule 3745-31-02 defines the types of air contaminant sources that are required to obtain a Permit-to-install (PTI), Permit-to-Install and Operate (PTIO) or Title V permit.

According to OAC rule 3745-31-01, an *air contaminant source* is:

...each separate operation, or activity that results or may result in the emission of any of the following air contaminants:

- (1) An air contaminant or precursor of an air contaminant for which a national ambient air quality standard has been adopted under the Clean Air Act.*
- (2) An air contaminant for which the source is regulated under the Clean Air Act.*
- (3) A toxic air contaminant as listed in rule 3745-114-01 of the Administrative Code.*

Based on this definition, an air contaminant source is limited to operations or activities that emit three categories of air contaminants. The first category is air contaminants for which a national ambient air quality standard (NAAQS) has been adopted. These are known as the criteria pollutants and include Nitrogen Oxides (NO_x), Carbon Monoxide (CO), Ozone, Sulfur Dioxide (SO₂), Particulate Matter less than 10 micron in size (PM₁₀), Particulate Matter less than 2.5 micron in size (PM_{2.5}), and Lead. Both the criteria pollutant and any associated precursors are included.

The second category consists of air contaminants which are regulated under the Clean Air Act (CAA). These include criteria pollutants and other air contaminants regulated under the CAA. Most of these air contaminants are regulated by federal rules such as New Source Performance Standards (NSPS) (40 CFR Part 60) and the National Emission Standards for Hazardous Air Pollutants (NESHAP) (40 CFR Parts 61 and 63). To determine the air contaminants regulated under the NSPS under Part 60 and NESHAP under Part 61, it is best to look at the individual rules. For the NESHAPs covered under Part 63 (called Maximum Achievable Control Technologies (MACTs)), the original Clean Air

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Act (CAA) list and a link to changes can be found at <https://www.epa.gov/haps/initial-list-hazardous-air-pollutants-modifications>.

Besides the NSPS, NESHAP, and MACT regulated air contaminants, there may be other air contaminants regulated under the CAA through other federal rules. To determine if some other pollutant is regulated under the CAA, a legal analysis would typically need to be done.

Another category of pollutants that may fit into the “regulated under the CAA” category are any pollutants that are regulated under any Ohio State Implementation Plan (SIP) approved rules. Since the Ohio SIP-approved rules are federally regulated under the CAA, if there are any otherwise not regulated pollutants, they would also be regulated for the purposes of getting a permit. These would have to be figured out on a case-by-case basis.

The final category includes air contaminants that the State of Ohio regulates as toxic air contaminants, which are listed in OAC rule 3745-114-01.

If the operation or activity emits any one of the above categories of air contaminants, then the operation or activity would meet the definition of an air contaminant source. However, just because the operation or activity is determined to be an air contaminant source, does not mean it needs a permit.

Exemptions

Some operations or activities are exempt from the need to obtain a permit. This includes operations or activities that meet the *de minimis* air contaminant source exemption established under OAC rule 3745-15-05, and/or operations or activities that qualify for an exemption established under OAC rule 3745-31-03. These rules are designed to exempt small, insignificant sources from the need to obtain a PTI or PTIO. Note that in some cases, the source may be exempt from the need to obtain a PTI or PTIO but will still need to be listed in a Title V permit as an insignificant activity.

Other Air Contaminants

If an operation or activity results in emissions of **only** air contaminants that are not included in the categories discussed above, then a permit is not required.

If an operation or activity results in emissions of an air contaminant included in the categories discussed above and no other permit exemption applies, then a permit is required.

If in the case where a permit is required because the operation or activity emits a regulated pollutant, and it also emits a non-regulated pollutant, you would not include requirements that apply to the non-regulated pollutant.

Previously Issued Permits That Didn’t Follow this Guidance

If a permit writer identifies a permit for a source that emits only non-regulated air contaminants (not in the above lists), then they should bring this issue up with their Central Office Permit Reviewer. The appropriate resolution of that permit can get complex so the situation will need to be reviewed closely.

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Revision History

This guidance was originally issued September 11, 1979.

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