

Ohio EPA

Division of Air Pollution Control

Engineering Guide #37

**Question:**

Should equipment such as cyclones or baghouses, that are an integral part of a process operation and that are used to separate and/or recover a raw material or an intermediate or final product from a gas stream, be considered as "control equipment" for the purpose of applying Figure II of OAC rule 3745-17-11?

(This question was originally answered in the now defunct Policy Guideline Series. The policy expressed in that guideline was subsequently updated and reissued as an engineering guide.)

**Answer:**

The answer to this question involves a case-by-case analysis of each specific process. The principal consideration is whether or not the equipment serves as a necessary component of the process or was added to the source for the primary purpose of controlling air pollutant emissions. Generally, if such equipment is an integral part of the manufacturing process and the process could not properly operate without these separation/recovery units, the equipment should not be considered as "control equipment."

Federal and Ohio statutes define air pollution control equipment and facilities. The pertinent statutes and regulations are as follows:

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| ORC 5709.20 (B)  | "Air pollution control facility" means any property designed, constructed or installed <u>for the primary purpose of</u> eliminating or reducing the emission of, or ground level concentrations of, air contaminants generated at an industrial or commercial plant or site that renders air harmful or inimical to the public health or to property within this state...." (Emphasis added.) |
| OAC 3745-15-01 (K)   | "Control Equipment" means any device or contrivance which prevents or reduces emissions.   |
| Code of Federal Regulations (CFR)<br>Title 40 Part 20,<br>§ 20.2 (f), 1978 | " <i>Facility</i> " means property comprising any new identifiable treatment facility, which removes, alters, disposes of, stores, or prevents the creation of pollutants, contaminants, wastes or heat. (Applicable for both air and water pollution control facilities.)   |

P.L. 94-455  
§ 2112 (b)(2)  
(Tax Reform Act  
of 1976) and  
40 CFR Part 20,  
August 4, 1977

"It removes, alters, disposes, stores or prevents the creation of emission of pollutants, contaminants, wastes or heat, which, but for the facility, would be released into the environment."

40 CFR Part 20  
§ 20.8 (a)(2)(i), 1978

"(That the facility:) removes, alters, disposes of, stores, or prevents the creation of pollutants, contaminants, wastes or heat, which, but for the facility, would be released into the environment."

Some examples of product separation/recovery applications are wood waste cyclone systems, carbon black/air baghouse separators, cyclone precleaners, and grain handling cyclone systems.

In general, product separation/recovery equipment is not designed to provide a specific level of air pollution control or to meet a rule-based allowable emission rate. If the normal industry practice is to employ product separation/recovery equipment as an integral part of the manufacturing process, then that is how the equipment should be viewed in applying Figure II of OAC rule 3745-17-11; and the worst-case emissions from the equipment would be the "uncontrolled mass rate of emissions" for the equipment. If an entity takes the position that the equipment was designed to provide a specific level of air pollution control or to meet a rule-based allowable emission rate, then the engineering design documents and calculations for the equipment and the relative timing of the equipment installation in comparison to the adoption of air pollution control rules should be evaluated to determine whether or not the information supports the entity's contention.

In summary, the determination of whether or not product separation/recovery equipment should be considered as control equipment when applying Figure II of OAC rule 3745-17-11 must be carefully made on a case-by-case basis.

JGL/JO/JB

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