

Notice

This Engineering Guide was recently converted to a PC format and it has not been proof read by our engineering staff. Therefore, it is subject to change at a later date.

Ohio EPA

Division of Air Pollution Control

Engineering Section

Engineering Guide #42

Question:

The permit to install rule (OAC rule 3745-31-05) requires the application of best available technology (BAT) on all new sources. What is the definition of BAT?

Answer:

For each new source, regardless of size or location, BAT is a case-by-case determination of an emission limit and/or control technique which, taking into account environmental, energy, and economic considerations, represents the maximum emission control achievable by the source. In no instance shall the emission level or control measure specified in the BAT determination be less stringent than that allowed under any applicable state or federal rule.

The primary purpose of this requirement is to assure that all new sources are controlled with BAT at the time of source installation. This level of control is necessary to ensure that the ambient air impact of the new source is minimized. When the impact of new source is minimized, air quality is protected as much as possible with clean areas remaining attainment and nonattainment areas continuing progress toward the ambient air quality standards as expeditiously as possible.

A secondary purpose of the BAT determination is to ensure that any new source must meet uniform emission requirements regardless of the proposed location. By applying standards consistently throughout the state sources will not gain economic advantage by selecting one location over another. The application of uniform BAT will avoid the situation whereby cities or counties may use less stringent air pollution requirements as an economic bargaining incentive to attract new industry.

The BAT determination also considers the energy and economic

costs of controls which should be estimated through a cost-effective analysis. The primary purpose of such an analysis is to eliminate control technologies with excessive costs, although the analysis can also be used in the selection of competing technologies. The environmental analysis includes air and water quality, land, and aesthetic impacts and is included to avoid excessive degradation of these environmental areas.

The applicable federal and state requirements which must be met are as follows:

<u>Federal</u>	<u>State</u>
SIP	Chapters 15, 17, 21, 23
NSPS	25, 31, and 71 of the
NESHAPS	Ohio Administrative Code
PSD	
Section 173 of the <u>CAA</u>	
RCRA (for hazardous waste incinerators only)	

For each permit to install the BAT determination will be made with state and federal rules providing a ceiling wherever applicable. BAT may be more stringent than any of the above rules, but BAT may never be more lenient. If a source is equipped with control measures which meet the LAER requirement of Section 173 of the CAA, the BAT requirement of OAC 3745-31-05 is also satisfied.

Please note that the appropriate SIP or OAC emission rule establishes the emission ceiling regardless of location. Thus, a new source locating in one of the "rural" counties must meet the RACM or RACT requirements as would be required in an "Appendix A" or urban demonstration area.

4004 &
4005

December 30, 1982