

# Federal Emission Control Requirements

Increasing Stringency

Requirement/Type	Meaning	Applicable Pollutants	Applicable Sources	Requirement	Cost
LAER Case by Case	Lowest Achievable Emission Rate	Criteria pollutants for which the area is designated nonattainment	New major source or major modification in nonattainment areas	1. Emissions limitation contained in the SIP for a class or source category or; 2. The most stringent emissions limitation which is achieved in practice by a class or source category.	Cost is not considered in LAER determination.
BACT Case by Case	Best Available Control Technology	Each regulated NSR pollutant (including, but not limited to, criteria pollutants and precursors)	Any proposed major stationary source or major modification emitting a regulated air pollutant	Ensure appropriate emission limitations considering technical practicability and economic reasonableness.	Cost is considered in BACT determination.
MACT Standard in Rule	Maximum Achievable Control Technology	HAP	Major sources of a HAP	Emission limitation achieved by the best performing 12 percent of the existing sources.	Cost is not considered in development of MACT standard.
BART Case by Case	Best Available Retrofit Technology	52 air toxics with ambient benchmark concentrations in existing DEQ regulations	Existing industrial sources of air toxics that qualify for the Safety Net Program	(12) "Toxics Best Available Retrofit Technology", or "TBART" means an air toxics emissions limitation based on the maximum degree of reduction of air toxics, determined on a case-by-case basis, that is feasible taking into consideration: (a) What has been achieved in practice for that source category, or for similar processes or emissions; (b) Energy and non-air quality health or environmental impacts; and (c) Economic impacts, including the costs of changing existing processes or equipment or adding equipment or controls to existing processes and equipment. Such limitation may be based on a design, equipment, work practice or other operational standard, or combination thereof.	Cost is considered in BART determination.
RACT Standard in Rule	Reasonably Available Control Technology	Criteria pollutants for which the area is designated nonattainment or maintenance	Existing stationary sources in nonattainment areas and certain attainment areas	Most stringent control technology requirement that has been adopted as a retrofit control of existing sources.	Cost is considered in development of RACT standard.
GACT Standard in Rule	Generally Achievable Control Technology	HAP	Area sources that emit less than 10 tpy of any single HAP or less than 25 tpy of any combination of HAPs	Methods, practices and techniques which are commercially available and appropriate for application by the sources in the category considering economic impacts and the technical capabilities of the firms to operate and maintain the emissions control systems.	Cost is considered in development of GACT standard.

- o Emission control does not always involve a pollution control device; may involve handling practices, use of lower-emitting materials, etc.
- o BACT, MACT, BART and RACT may be equivalent control. LAER may also be equivalent except that cost is not considered.
- o Standard in Rule must be met if applicable.
- o Case by Case determinations may result in "no additional control" if reducing emissions is not feasible.