

Facts About Maximum Achievable Control Technology Standards

Title 3 of the federal Clean Air Act Amendments of 1990 included provisions for regulating emissions of hazardous air pollutants, or “HAPs.” These provisions are contained in Section 112 of the Clean Air Act. This fact sheet summarizes the 1990 legislation’s HAPs provisions.

The legislation itself originally included a list of 189 substances to be regulated. The U.S. Environmental Protection Agency (EPA) has developed procedures for adding or deleting substances from the list. The current list, as of the date of this fact sheet, is included in this fact sheet as Table 1.

Identifying Sources of HAPs

The first step in regulating releases of HAPs is to identify the types of sources that emit them. The EPA published a list of categories for which standards would be issued. A schedule was proposed, listing deadlines for the EPA’s issuance of standards for each of the categories (*Federal Register*, Sept. 24, 1992).

Regulations apply to both **new** and **existing** sources. Sources that have the potential to emit 10 or more tons per year of any one of the HAPs or a combination of HAPs that totals 25 tons or more per year are considered “major sources.”

Any source that emits HAPs but does not constitute a major source is considered an “area source.” Areas sources are discussed later in this fact sheet.

Regulating Major Sources

Major new sources are expected to meet a standard for Maximum Achievable Control Technology (MACT). The EPA has established MACT standards for most source categories based on the emission control actually achieved by the best controlled source in that category.

MACT standards for existing major sources may be less stringent than for new sources but must be either of the following:

- For sources in categories or subcategories containing at least 30 sources, at least as stringent as the average emission limitation met by the best performing 12 percent of existing sources.
- For sources in categories containing fewer than 30 sources, at least as stringent as the average emission limitation met by the best performing five sources.

Each standard includes its own compliance schedule, usually with a maximum of three years for existing sources to comply. Reductions in emissions of 90 percent below 1987 levels achieved before a standard has been proposed may extend the compliance date by six years, under the Early Reductions Program. A source seeking an extension under the Early Reductions Program must have sought the extension before the standard was proposed.

MACT may be either limits on emissions of HAPs or technology requirements for controlling emissions. The EPA must consider cost, energy consumption, and any possible environmental or health effects resulting from non-air quality considerations, such as waste disposal and water quality.

The Clean Air Act Amendments called for the EPA and the National Academy of Sciences to study risk assessment procedures and any health or potential environmental risks that would remain after MACT has been applied. Then, if an “ample margin of safety” does not exist, the EPA must issue additional control requirements, referred to as residual risk standards. The EPA is currently working on residual risk standards.

Regulating Area Sources

The Clean Air Act Amendments required the EPA to identify at least 30 HAPs that present the greatest threat to public health in the largest number of urban areas, then identify the source categories that account of 90 percent of the emissions of these HAPs and develop a strategy for reducing the risks from those sources.

Area source categories include a wide variety of sources, including dry cleaners, chrome platers, and degreasing operations.

Such sources must meet “Generally Available Control Technology,” or GACT (not defined in the law). Information on these types of sources is available from the Air Quality Small Business Environmental Assistance Program at 651-282-6143 or 1-800-657-3938.

The EPA’s strategy for area sources must result in a reduction in cancer incidence attributed to human exposure to these sources by at least 75 percent.

As with major sources, area sources that have reduced emissions by 90 percent before a standard is proposed may have six extra years to meet the standard, under the Early Reductions Program.

Implementing HAPs Regulations

The operating permit program, Title 5 of the Clean Air Act Amendments, is the tool for carrying out the HAPs regulations.

All major sources of HAPs are required to obtain Part 70 operating permits. Most area sources of HAPs are required to obtain state operating permits, although some require a Part 70 permit. Many (but not all) sources subject to an area source MACT can obtain a registration or capped permit.

The Minnesota Pollution Control Agency (MPCA) adopted rules to implement the federal permitting program and sought EPA authority to manage the program in Minnesota. The MPCA program has been approved, and the MPCA has been delegated the authority to enforce the major source MACT standards. With a few exceptions, the MPCA does not have delegated authority over the area source MACT standards. However, these are still applicable requirements and will appear in your permit (except registration and capped permits, which do not include itemized applicable requirements).

Once-In, Always-In

A source that is an existing major source of HAPs can take limits to avoid being subject to a major source MACT standard. However, such a limit must be included in a permit issued before the compliance date listed in the applicable MACT standard. If a source is a major source on the compliance date (meaning that potential HAP emissions fall into the major source category, and a permit limiting the emissions has not been issued), then the source will remain subject to that standard, including the requirement to obtain a Part 70 operating permit, “forever.”

What This Means to You

If your facility is in one of the listed source categories, you will be affected. Watch for Federal Register notices for rules for your source category. Also be aware of rulemaking activities for the permit program.

You should also develop and maintain records on your emissions of HAPs and your processes that may be affected so that you can determine which regulations apply to you. It will also be helpful to be aware of the state of the art for pollution control, including pollution prevention, in your industry.

Other Title 3 Requirements

Title 3 of the Clean Air Act Amendments includes accidental release prevention provisions. These will require some facilities to develop release prevention plans. For further information, see EPA’s fact sheets entitled “Clean Air Act Section 112(r): Accidental Release Prevention/Risk Management Plan Rule,” at http://www.epa.gov/oem/docs/chem/caa112_rmp_factsheet.pdf.

For More Information

The MACT standards can be found on EPA’s website at <http://www.epa.gov/ttn/atw/mactfnlalph.html>. If you have questions, you can contact the EPA staff person listed on the EPA Web page for the specific MACT standard, or contact the MPCA at 651-296-6300 or 800-657-3864.