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[EPA Home](#) > [Technology Transfer Network](#) > [Air Toxics Website](#) > Municipal Waste Combustors

Municipal Waste Combustors

Rules & Implementation
National-Scale Air Toxics Assessment
Urban, Great Waters, Regional Programs
Education & Outreach
About Air Toxics
Pollutants & Sources
State, Local, Tribal Resources
Publications
Contacts
Technical Resources
ATW Home
TTN Home

FINAL AIR REGULATION FOR MUNICIPAL WASTE COMBUSTORS

October 31, 1995

TODAY'S ACTION...

The Environmental Protection Agency (EPA) is today issuing a final regulation to reduce air pollution from municipal waste combustors (waste-to-energy plants, which generate energy from garbage, and incinerators). EPA's final rule will substantially reduce emissions of a number of harmful air pollutants, including dioxin and mercury.

EPA has worked in close partnership with major stakeholders, including state and local government agencies, such as the National Association of Counties and the U.S. Conference of Mayors; industry; and environmental groups to develop the final regulation.

WHAT ARE THE HEALTH AND ENVIRONMENTAL BENEFITS?

EPA's final rule will reduce emissions of a number of air pollutants including cadmium, lead, mercury, dioxin, sulfur dioxide, hydrogen chloride, nitrogen dioxide, and particulate matter by approximately 145,000 tons per year.

Based on emissions data collected over the last five years, EPA estimates that full implementation of this new rule will reduce dioxin emissions from municipal waste combustors by at least 99 percent; municipal waste combustors will represent less than one percent of the known sources of dioxin when EPA's rule is fully implemented. Dioxin is a pollutant of particular concern because it is persistent in the environment and bioaccumulates. These characteristics cause dioxin to move through the food web, biomagnify, and cause adverse effects to humans and wildlife. Reproductive and developmental effects associated with exposure to dioxin are a significant public health concern.

EPA's final rule will also yield about a 90% reduction in emissions of mercury from municipal waste combustors, based on 1990 emissions levels; municipal waste combustors will represent about 3 percent of the U.S. inventory for mercury emissions when EPA's rule is implemented. Mercury is highly toxic, persistent in the environment and bioaccumulates, particularly in fish. Human exposure to mercury occurs primarily through ingestion of fish. Exposure to mercury can cause adverse health effects in humans and wildlife, including birth and developmental effects.

WHO WILL BE AFFECTED BY THE FINAL RULE?

EPA's final regulation applies to all new and existing waste-to-energy plants and incinerators with the capacity to burn more than 40 tons of garbage per day.

The final regulation covers approximately 130 existing waste-to-energy plants and incinerators, and any new plants and incinerators built in the future.

BACKGROUND

About 90 percent of municipal waste combustors generate electricity or steam from burning garbage for commercial and residential use. Currently 20 percent of municipal solid waste generated in the United States is incinerated; 20 percent is recycled; and 60 percent is landfilled.

EPA's final rule is required under section 129 of the Clean Air Act Amendments of 1990. The regulation takes the form of standards for new waste-to-energy plants and incinerators (new source performance standards) and guidelines for States to use in developing standards for existing waste-to-energy plants and incinerator. EPA's final rule defines new plants as those that are constructed after September 20, 1994 and existing plants as those that are constructed on or before that date.

Prior to the Clean Air Act Amendments of 1990, EPA was under a court order to propose and promulgate performance standards for new municipal waste combustors and guidelines for existing combustors under section 111 of the Clean Air Act. These regulations were proposed in December 1989, and promulgated in February 1991.

While reauthorizing the Clean Air Act in late 1990, Congress recognized that EPA was close to promulgating court-ordered regulations for municipal waste combustors. Accordingly, the 1990 amendments directed EPA to proceed with promulgation of the court-ordered regulation, but to do so only for municipal waste combustors that burn more than 250 tons per day of garbage (large combustors). The Clean Air Act Amendments also directed that specific revisions and additional requirements be made to the regulation promulgated in 1991 and that new regulations be introduced for small municipal waste combustors (those that burn less than 250 tons per day of garbage).

WHAT ARE THE MAIN COMPONENTS OF EPA'S FINAL AIR REGULATIONS FOR MUNICIPAL WASTE COMBUSTORS?

EPA's final rule is based on the following main components, as prescribed by the Clean Air Act Amendments:

Revises the current new source performance standards and existing guidelines for municipal waste combustors that burn more than 250 tons per day of garbage---- new regulations must require the application of maximum achievable control technology (MACT), as defined by the Clean Air Act Amendments;

Adopts stringent new source performance standards and guidelines for municipal waste combustors that burn less than 250 tons per day of garbage---regulations must require the application of MACT;

Includes stringent emission limits in the new source performance standards for particulate matter, opacity, sulfur dioxide, hydrogen chloride, dioxin, nitrogen oxides, cadmium, lead, carbon monoxide, and mercury;

Includes specific requirements in the new source performance standards for public participation and materials separation/recycling plans for new waste-to-energy plants and incinerators (siting requirements); the regulation allows local communities to consider their own unique circumstances in helping to plan for new plants, including the design of materials separation/recycling plans--this ensures efficient planning for building new facilities and promotes pollution prevention;

After states adopt the final rule and EPA has approved their state implementation plans, large combustors (those that burn more than 250 tons per day of garbage) have one year to comply with the regulation (or up to 3 years in special circumstances, on a case-by-case basis). Small combustors (those that burn less than 250 tons per day of garbage) will have three years to comply with the regulation.

HOW MUCH DOES THE FINAL RULE COST?

The total nationwide annual cost of the regulation is projected to be \$488 million for new and existing sources. Consumer waste disposal costs, per household, are anticipated to increase from \$0-3 per month.

FOR FURTHER INFORMATION...

... contact Walt Stevenson of EPA's Office of Air Quality Planning and Standards at (919) 541-5264.

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