

Boiler Area Source Rule “Boiler GACT” summary (40 CFR 63 subpart JJJJJ)

This final rule would control emissions of hazardous air pollutants from the following area source categories: Industrial boilers and commercial and institutional boilers.

Important Dates:

April 29, 2010-Rule was proposed

August 23, 2010-Comment period ended

February 21, 2011-Rule was signed by the Administrator

MACT: control of mercury (Hg) and polycyclic organic matter (POM) emissions from coal-fired boilers

GACT: control of HAPs from biomass-fired and oil-fired boilers

APPLICABILITY AND EXEMPTIONS

Applicability:

Industrial boilers include boilers used in manufacturing, processing, mining, refining, or other industries. Commercial boilers include boilers used in commercial establishments such as stores/malls, laundries, apartments, restaurants, and hotels/motels. Institutional boilers include boilers used in medical centers, educational/religious facilities, and municipal buildings.

Sources not covered by this rule include:

1. Sources that are subject to another standard under 40 CFR part 63 or a standard established under CAA sec-

2. Hazardous waste boilers (boilers required to have a permit under section 3005 of the Solid Waste Disposal Act or covered by subpart EEE of this part).
3. Boilers specifically used for research and development.
4. Gas fired boilers (as defined in this rule)
5. Hot water heaters
6. Boilers used as control devices for facilities to comply with another subpart if at least 50% of the heat input to the boiler is provided by the gas stream

Source description	Compliance Date (§63.11196)
Existing sources subject to a work practice/management practice standard of a tune-up to meet compliance with this final rule	No later than 1 year after this rule is published in the Federal Register
Existing sources subject to emission limits or an energy assessment requirement are required to meet compliance with this final rule	No later than 3 years after the date this rule is published in the Federal Register
New sources (on or before 60 days after this rule is published in Federal Register)	60 days after this rule is published in the Federal Register
New sources (after 60 days after this rule is published in the Federal Register)	Upon start-up of source
Sources who cease combusting solid waste (originally subject to 40 CFR 60 subpart CCCC or subpart DDDD)	On the date the unit ceased to combust solid waste

SUBCATEGORIES OF BOILERS

coal subcategory: Boiler burns any solid fossil fuel and no more than 15% biomass on a total fuel annual heat input basis

oil subcategory: Boiler burns any liquid fuel and is not in either the coal or biomass subcategory

biomass subcategory: Boiler burns at least 15% biomass on a total fuel annual heat input basis

Remember:
 An affected source is an *existing source* if you commenced construction or reconstruction of the affected source on or before **June 4, 2010**.
 An affected source is a *new source* if you commenced construction or reconstruction of the affected source after **June 4, 2010**. An affected source is a *new source* if fuel switching was commenced from natural gas to solid fossil fuel, biomass, or liquid fuel after **June 4, 2010**.
 This rule applies to boilers which combust natural gas but switch to combusting solid fossil fuels, biomass, or liquid fuels after **June 4, 2010**.

Subcategory	Heat Input (MMBtu/hr)	Pollutants	Emission Limits
New coal-fired boiler	≥ 30	PM	0.03 lb per MMBtu of heat input
New coal-fired boiler	≥ 30	Mercury	0.000048 lb per MMBtu of heat input
New coal-fired boiler	≥ 30	CO	400 ppm by volume on a dry basis corrected to 3% O ₂
New coal-fired boiler	≥ 10 and < 30	PM	0.42 lb per MMBtu of heat input
New coal-fired boiler	≥ 10 and < 30	Hg	0.000048 lb per MMBtu of heat input
New coal-fired boiler	≥ 10 and < 30	CO	400 ppm by volume on a dry basis corrected to 3% O ₂
New biomass-fired boiler	≥ 30	PM	0.03 lb per MMBtu of heat input
New biomass-fired boiler	≥ 10 and < 30	PM	0.07 lb per MMBtu of heat input
New oil-fired boiler	≥ 30	PM	0.03 lb per MMBtu of heat input
New oil-fired boiler	≥ 10 and < 30	PM	0.03 lb per MMBtu of heat input
Existing coal-fired boiler	≥ 10	Hg	0.000048 lb per MMBtu of heat input
Existing coal-fired boiler	≥ 10	CO	400 ppm by volume on a dry basis corrected to 3% O ₂

Boiler Subcategory	Work/Management Practice
Existing or new coal (units with heat input capacity of 10 MMBtu/hr or greater)	Follow manufacturer's recommended procedures for start-up/shutdown
Existing or new coal (units with a heat input capacity of less than 10 MMBtu/hr)	Tune up of boiler biennially
Existing or new biomass or oil unit (all)	Tune up of boiler biennially
Existing coal, biomass, or oil (units with a heat input capacity of 10 MMBtu/hr or greater)	Must conduct the one-time energy assessment.

Initial compliance requirements and dates (§63.11210):

New and existing area source boilers with applicable emission limits must conduct initial performance tests to determine compliance with PM, mercury, and CO emission limits. These must be conducted no later than 180 days after the applicable compliance date (§63.11196). Owners/operators must monitor specified operating parameters during initial performance tests that demonstrate compliance with the PM, mercury, and CO emission limits for area source boilers. These must be conducted no later than 180 days after the applicable compliance date (§63.11196). Existing and new coal-fired area source boilers having a heat input capacity of less than 10 MMBtu/hr and all existing and new bio-mass fired and oil-fired area source boilers must submit documentation that a tune-up was conducted. Existing area source boilers with a heat input capacity of 10 MMBtu/hr or greater must submit documentation that an energy assessment was conducted. For sources that cease to burn solid waste, initial compliance with this rule must be demonstrated within 60 days of the effective date of the waste-to-fuel switch.