

United States **Environmental Protection** Agency

Solid Waste and **Emergency Response** (5305W)

Office of Solid Waste

# EPA Environmental Fact Sheet

### Interim Emission Standards for **1999 Hazardous Waste Combustor Rule**

The Environmental Protection Agency (EPA) is publishing interim air emission standards and revised compliance provisions for hazardous waste combustion sources as a result of a consensus settlement of issues among the environmental and regulated communities and EPA. The Agency believes that these interim standards will better protect human health and the environment than if the standards were vacated by the Court. These interim standards leave critical parts of the 1999 rule intact, make compliance easier for the regulated community and the implementing states, and achieve most of its emission reductions.

n September 30, 1999, EPA issued standards to control emissions of hazardous air pollutants from incinerators, cement kilns, and lightweight aggregate kilns that burn hazardous wastes. These standards were based on the performance of Maximum Achievable Control Technology (MACT), and implemented section 112(d) of the Clean Air Act. The rule regulated emissions of dioxins and furans, mercury, and other toxic metals, among other hazardous air pollutants. A number of parties, representing both industrial and environmental communities, requested judicial review of this rule, and challenged its emission standards and several implementation provisions.

On July 24, 2001, the United States Court of Appeals for the District of Columbia Circuit (the Court) vacated the emission standards. When it made its decision, the Court invited any of the parties to request, either that the current standards remain intact, or that EPA be allowed time to publish interim standards. On October 19, 2001, EPA and the other parties jointly asked the Court for additional time to develop interim standards, and the Court granted this request. These consensus revisions to the 1999 emission standards and compliance provisions are the product of that effort. The Agency believes that these interim standards will better protect human health and the environment than if the standards had been vacated by the Court. These interim standards preserve the most critical elements of the original standards, guaranteeing that most of the emission reductions will be achieved. It also avoids the need to develop requirements for facilities on a siteby-site basis, as would be required by the Clean Air Act if the standards had been vacated.

All hazardous waste combustors must comply with these interim standards by September 30, 2003. Tables containing details of the emission standards follow. The interim standards apply until EPA issues "replacement" standards that satisfy the Court. Those standards must be promulgated by June 14, 2005.

#### **For More Information**

Information about this regulation is available on the Web at: http://www.epa.gov/ epaoswer/hazwaste/combust/preamble.htm. For additional information call the RCRA Call Center at 1-800-424-9346 or TDD 1-800-553-7672 (hearing impaired). Callers within the Washington Metropolitan Area must dial 703-412-9810 or TDD 703-412-3323 (hearing impaired).

#### INTERIM STANDARDS FOR EXISTING AND NEW INCINERATORS

Hazardous Air Pollutant or Hazardous Air Pollutant	Interim Emission Standard <sup>1</sup>	
Surrogate	Existing Sources	New Sources
Dioxin /Furan	0.20 ng TEQ/dscm; or 0.40 ng TEQ/dscm and temperature at inlet to the initial particulate matter control device ≤400° F	0.20 ng TEQ/dscm
Mercury	130 µg/dscm	45 µg/dscm
Particulate Matter	34mg/dscm	34mg/dscm
	(0.015gr/dscf)	(0.015gr/dscf)
Semivolatile Metals	240 µg/dscm	120 µg/dscm
Low Volatile Metals	97 μg/dscm	97 µg/dscm
Hydrochloric Acid/Chlorine Gas	77 ppmv	21 ppmv
Hydrocarbons	10 ppmv (or 100 ppmv carbon monoxide)	10 ppmv (or 100 ppmv carbon monoxide)
Destruction and Removal Efficiency	For existing and new sources, 99.99% for each principal organic hazardous constituent (POHC) designated. For sources burning hazardous wastes F020, F021, F022, F023, F026, or F027, 99.9999% for each POHC designated.	

All emission levels are corrected to 7 percent oxygen

#### INTERIM STANDARDS FOR EXISTING AND NEW CEMENT KILNS

Hazardous Air Pollutant or Hazardous Air Pollutant Surrogate	Interim Emission Standard <sup>1</sup>		
	Existing Sources	New Sources	
Dioxin and Furan	0.20 ng TEQ/dscm; or 0.40 ng TEQ/dscm and control of flue gas temperature not to exceed 400°F at the inlet to the particulate matter control device	0.20 ng TEQ/dscm; or 0.40 ng TEQ/dscm and control of flue gas temperature not to exceed 400°F at the inlet to the particulate matter control device	
Mercury	120 µg/dscm	120 µg/dscm	
Particulate Matter	0.15 kg/Mg dry feed and 20% opacity	0.15 kg/Mg dry feed and 20% opacity	
Semivolatile Metals	330 μg/dscm	180 μg/dscm	
Low Volatile Metals	56 μg/dscm	54 µg/dscm	
Hydrochloric Acid and Chlorine Gas	130 ppmv	86 ppmv	
Hydrocarbons: Kilns without By-pass	20 ppmv (or 100 ppmv carbon monoxide)	Greenfield kilns: 20 ppmv (or 100 ppmv carbon monoxide and 50 ppmv hydrocarbons)	
		All others: 20 ppmv (or 100 ppmv carbon monoxide)	
Hydrocarbons: Kilns with By-pass; Main Stack	No main stack standard	50 ppmv	
Hydrocarbons: Kilns with By-pass; By-pass Duct and Stack	10 ppmv (or 100 ppmv carbon monoxide)	10 ppmv (or 100 ppmv carbon monoxide)	
Destruction and Removal Efficiency	For existing and new sources, 99.99% for each principal organic hazardous constituent (POHC) designated. For sources burning hazardous wastes F020, F021, F022, F023, F026, or F027, 99.9999% for each POHC designated.		

All emission levels are corrected to  $7\% O_2$ , dry basis.

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## INTERIM STANDARDS FOR EXISTING AND NEW LIGHTWEIGHT AGGREGATE KILNS

Hazardous Air Pollutant or Hazardous Air Pollutant Surrogate	Interim Emission Standard <sup>1</sup>		
	Existing Sources	New Sources	
Dioxin/Furan	0.20 ng TEQ/dscm; or rapid quench of the flue gas at the exit of the kiln to less than 400°F	0.20 ng TEQ/dscm; or rapid quench of the flue gas at the exit of the kiln to less than 400°F	
Mercury	120 μg/dscm	120 μg/dscm	
Particulate Matter	57 mg/dscm (0.025 gr/dscf)	57 mg/dscm (0.025 gr/dscf)	
Semivolatile Metals	250 μg/dscm	43 µg/dscm	
Low Volatile Metals	110 μg/dscm	110 μg/dscm	
Hydrochloric Acid/Chlorine Gas	600 ppmv	600 ppmv	
Hydrocarbons	20 ppmv (or 100 ppmv carbon monoxide)	20 ppmv (or 100 ppmv carbon monoxide)	
Destruction and Removal Efficiency	For existing and new sources, 99.99% for each principal organic hazardous constituent (POHC) designated. For sources burning hazardous wastes F020, F021, F022, F023, F026, or F027, 99.9999% for each POHC designated.		

All emission levels are corrected to 7% O<sub>2</sub>, dry basis.

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