

[Estimated Plume Rise (in Meters) Based on Stack Exit Flow Rate and Gas Temperature]

Flow rate (m <sup>3</sup> /s)	Exhaust Temperature (K <sup>o</sup> )										
	<325	325-349	350-399	400-449	450-499	500-599	600-699	700-799	800-999	1000-1499	>1499
>199.9 .....	26	33	41	49	54	58	62	65	67	69	73

[56 FR 7233, Feb. 21, 1991, as amended at 71 FR 40277, July 14, 2006]

APPENDIX VII TO PART 266—HEALTH-BASED LIMITS FOR EXCLUSION OF WASTE-DERIVED RESIDUES\*

METALS—TCLP EXTRACT CONCENTRATION LIMITS

Constituent	CAS No.	Concentration limits (mg/L)
Antimony .....	7440-36-0	1X + 00
Arsenic .....	7440-38-2	5X + 00
Barium .....	7440-39-3	1X + 02
Beryllium .....	7440-41-7	7X - 03
Cadmium .....	7440-43-9	1X + 00
Chromium .....	7440-47-3	5X + 00
Lead .....	7439-92-1	5X + 00
Mercury .....	7439-97-6	2X - 01
Nickel .....	7440-02-0	7X + 01
Selenium .....	7782-49-2	1X + 00
Silver .....	7440-22-4	5X + 00
Thallium .....	7440-28-0	7X + 00

NONMETALS—RESIDUE CONCENTRATION LIMITS—Continued

Constituent	CAS No.	Concentration limits for residues (mg/kg)
Diethylstilbesterol .....	56-53-1	7X - 07
Dimethoate .....	60-51-5	3X - 02
2,4-Dinitrotoluene .....	121-14-2	5X - 04
Diphenylamine .....	122-39-4	9X - 01
1,2-Diphenylhydrazine .....	122-66-7	5X - 04
Endosulfan .....	115-29-7	2X - 03
Endrin .....	72-20-8	2X - 04
Epichlorohydrin .....	106-89-8	4X - 02
Ethylene dibromide .....	106-93-4	4X - 07
Ethylene oxide .....	75-21-8	3X - 04
Fluorine .....	7782-41-4	4X + 00
Formic acid .....	64-18-6	7X + 01
Heptachlor .....	76-44-8	8X - 05
Heptachlor epoxide .....	1024-57-3	4X - 05
Hexachlorobenzene .....	118-74-1	2X - 04
Hexachlorobutadiene .....	87-68-3	5X - 03
Hexachlorocyclopentadiene ...	77-47-4	2X - 01
Hexachlorodibenzo-p-dioxins	19408-74-3	6X - 08
Hexachloroethane .....	67-72-1	3X - 02
Hydrazine .....	302-01-1	1X - 04
Hydrogen cyanide .....	74-90-8	7X - 05
Hydrogen sulfide .....	7783-06-4	1X - 06
Isobutyl alcohol .....	78-83-1	1X + 01
Methomyl .....	16752-77-5	1X + 00
Methoxychlor .....	72-43-5	1X - 01
3-Methylcholanthrene .....	56-49-5	4X - 05
4,4'-Methylenebis (2-chloroaniline).	101-14-4	2X - 03
Methylene chloride .....	75-09-2	5X - 02
Methyl ethyl ketone (MEK) ...	78-93-3	2X + 00
Methyl hydrazine .....	60-34-4	3X - 04
Methyl parathion .....	298-00-0	2X - 02
Naphthalene .....	91-20-3	1X + 01
Nickel cyanide .....	557-19-7	7X - 01
Nitric oxide .....	10102-43-9	4X + 00
Nitrobenzene .....	98-95-3	2X - 02
N-Nitrosodi-n-butylamine .....	924-16-3	6X - 05
N-Nitrosodiethylamine .....	55-18-5	2X - 06
N-Nitroso-N-methylurea .....	684-93-5	1X - 07
N-Nitrosopyrrolidine .....	930-55-2	2X - 04
Pentachlorobenzene .....	608-93-5	3X - 02
Pentachloronitrobenzene (PCNB).	82-68-8	1X - 01
Pentachlorophenol .....	87-86-5	1X + 00
Phenol .....	108-95-2	1X + 00
Phenylmercury acetate .....	62-38-4	3X - 03
Phosphine .....	7803-51-2	1X - 02
Polychlorinated biphenyls, N.O.S.	1336-36-3	5X - 05
Potassium cyanide .....	151-50-8	2X + 00
Potassium silver cyanide .....	506-61-6	7X + 00
Pronamide .....	23950-58-5	3X + 00
Pyridine .....	110-86-1	4X - 02
Reserpine .....	50-55-5	3X - 05

NONMETALS—RESIDUE CONCENTRATION LIMITS

Constituent	CAS No.	Concentration limits for residues (mg/kg)
Acetonitrile .....	75-05-8	2X - 01
Acetophenone .....	98-86-2	4X + 00
Acrolein .....	107-02-8	5X - 01
Acrylamide .....	79-06-1	2X - 04
Acrylonitrile .....	107-13-1	7X - 04
Aldrin .....	309-00-2	2X - 05
Allyl alcohol .....	107-18-6	2X - 01
Aluminum phosphide .....	20859-73-8	1X - 02
Aniline .....	62-53-3	6X - 02
Barium cyanide .....	542-62-1	1X + 00
Benz(a)anthracene .....	56-55-3	1X - 04
Benzene .....	71-43-2	5X - 03
Benzidine .....	92-87-5	1X - 06
Bis(2-chloroethyl) ether .....	111-44-4	3X - 04
Bis(chloromethyl) ether .....	542-88-1	2X - 06
Bis(2-ethylhexyl) phthalate ...	117-81-7	3X + 01
Bromoform .....	75-25-2	7X - 01
Calcium cyanide .....	592-01-8	1X - 06
Carbon disulfide .....	75-15-0	4X + 00
Carbon tetrachloride .....	56-23-5	5X - 03
Chlordane .....	57-74-9	3X - 04
Chlorobenzene .....	108-90-7	1X + 00
Chloroform .....	67-66-3	6X - 02
Copper cyanide .....	544-92-3	2X - 01
Cresols (Cresylic acid) .....	1319-77-3	2X + 00
Cyanogen .....	460-19-5	1X + 00
DDT .....	50-29-3	1X - 03
Dibenz(a, h)-anthracene .....	53-70-3	7X - 06
1,2-Dibromo-3-chloropropane .....	96-12-8	2X - 05
p-Dichlorobenzene .....	106-46-7	7.5X - 02
Dichlorodifluoromethane .....	75-71-8	7X + 00
1,1-Dichloroethylene .....	75-35-4	5X - 03
2,4-Dichlorophenol .....	120-83-2	1X - 01
1,3-Dichloropropene .....	542-75-6	1X - 03
Dieldrin .....	60-57-1	2X - 05
Diethyl phthalate .....	84-66-2	3X + 01

NONMETALS—RESIDUE CONCENTRATION  
LIMITS—Continued

Constituent	CAS No.	Concentration limits for residues (mg/kg)
Selenourea .....	630-10-4	2xE-01
Silver cyanide .....	506-64-9	4xE+00
Sodium cyanide .....	143-33-9	1xE+00
Strychnine .....	57-24-9	1xE-02
1,2,4,5-Tetrachlorobenzene ...	95-94-3	1xE-02
1,1,2,2-tetrachloroethane .....	79-34-5	2xE-03
Tetrachloroethylene .....	127-18-4	7xE-01
2,3,4,6-Tetrachlorophenol .....	58-90-2	1xE-02
Tetraethyl lead .....	78-00-2	4xE-06
Thiourea .....	62-56-6	2xE-04
Toluene .....	108-88-3	1xE+01
Toxaphene .....	8001-35-2	5xE-03
1,1,2-Trichloroethane .....	79-00-5	6xE-03
Trichloroethylene .....	79-01-6	5xE-03
Trichloromonofluoromethane .....	75-69-4	1xE+01
2,4,5-Trichlorophenol .....	95-95-4	4xE+00
2,4,6-Trichlorophenol .....	88-06-2	4xE+00
Vanadium pentoxide .....	1314-62-1	7xE-01
Vinyl chloride .....	75-01-4	2xE-03

\*NOTE 1: The health-based concentration limits for appendix VIII part 261 constituents for which a health-based concentration is not provided below is 2xE-06 mg/kg.

NOTE 2: The levels specified in this appendix and the default level of 0.002 micrograms per kilogram or the level of detection for constituents as identified in Note 1 of this appendix are administratively stayed under the condition, for those constituents specified in §266.112(b)(1), that the owner or operator complies with alternative levels defined as the land disposal restriction limits specified in §268.43 of this chapter for FO39 nonwastewaters. See §266.112(b)(2)(i).

[56 FR 7234, Feb. 21, 1991; 56 FR 32691, July 17, 1991, as amended at 58 FR 59603, Nov. 9, 1993]

APPENDIX VIII TO PART 266—ORGANIC  
COMPOUNDS FOR WHICH RESIDUES  
MUST BE ANALYZED

Volatiles	Semivolatiles
Benzene .....	Bis(2-ethylhexyl)phthalate
Toluene .....	Naphthalene
Carbon tetrachloride .....	Phenol
Chloroform .....	Diethyl phthalate
Methylene chloride .....	Butyl benzyl phthalate
Trichloroethylene .....	2,4-Dimethylphenol
Tetra chloroethylene .....	o-Dichlorobenzene
1,1,1-Trichloroethane .....	m-Dichlorobenzene
Chlorobenzene .....	p-Dichlorobenzene
cis-1,4-Dichloro-2-butene .....	Hexachlorobenzene
Bromochloromethane .....	2,4,6-Trichlorophenol
Bromodichloromethane .....	Fluoranthene
Bromoform .....	o-Nitrophenol
Bromomethane .....	1,2,4-Trichlorobenzene
Methylene bromide .....	o-Chlorophenol

Volatiles	Semivolatiles
Methyl ethyl ketone .....	Pentachlorophenol
	Pyrene
	Dimethyl phthalate
	Mononitrobenzene
	2,6-Toluene diisocyanate
	Polychlorinated dibenzo-p-dioxins <sup>1</sup>
	Polychlorinated dibenzofurans <sup>1</sup>

<sup>1</sup>Analyses for polychlorinated dibenzo-p-dioxins and polychlorinated dibenzofurans are required only for residues collected from areas downstream of the combustion chamber (e.g., ductwork, boiler tubes, heat exchange surfaces, air pollution control devices, etc.).

NOTE TO THE TABLE: Analysis is not required for those compounds that do not have an established F039 nonwastewater concentration limit.

[64 FR 53076, Sept. 30, 1999, as amended at 64 FR 63213, Nov. 19, 1999; 71 FR 40277, July 14, 2006]

APPENDIX IX TO PART 266—METHODS  
MANUAL FOR COMPLIANCE WITH THE  
BIF REGULATIONS

*Burning Hazardous Waste in Boilers and  
Industrial Furnaces*

TABLE OF CONTENTS

- 1.0 Introduction
- 2.0 Performance Specifications for Continuous Emission Monitoring Systems
- 2.1 Performance Specifications for Continuous Emission Monitoring of Carbon Monoxide and Oxygen for Incinerators, Boilers, and industrial Furnaces Burning Hazardous Waste
- 2.2 Performance Specifications for Continuous Emission Monitoring of Hydrocarbons for Incinerators, Boilers, and Industrial Furnaces
- 3.0 Sampling and Analytical Methods
- 4.0 Procedure for Estimating the Toxicity Equivalence of Chlorinated Dibenzo-P-Dioxin and Dibenzofuran Congeners
- 5.0 Hazardous Waste Combustion Air Quality Screening Procedure
- 6.0 Simplified Land Use Classification Procedure for Compliance With Tier I and Tier II Limits
- 7.0 Statistical Methodology for Bevill Residue Determinations
- 8.0 Procedures for Determining Default Values for Air Pollution Control System Removal Efficiencies
- 8.1 APCS RE Default Values for Metals
- 8.2 APCS RE Default Values for HCl and Cl<sub>2</sub>
- 8.3 APCS RE Default Values for Ash
- 8.4 References
- 9.0 Procedures for Determining Default Values for Partitioning of Metals, Ash, and Total Chloride/Chlorine
- 9.1 Partitioning Default Value for Metals