

TO BE RESCINDED

3745-51-38 Comparable/syngas fuel exclusion.

Materials that meet the following comparable/syngas fuel requirements are not wastes:

- (A) Comparable fuel specifications.
- (1) Physical specifications.
- (a) Heating value. The heating value must exceed five thousand British thermal unit (Btu) per pounds (eleven thousand five hundred Joules per gram).
- (b) Viscosity. The viscosity must not exceed fifty centistokes, as-fired.
- (2) Constituent specifications. For compounds listed in the table in this rule, the specification levels and, where non-detect is the specification, minimum required detection limits are:

Table: Detection and detection limit values for comparable fuel specification					
Chemical name	CAS #	Composite value (mg/kg)	Heating value (Btu/lb)	Concentration limit (mg/kg at 10,000 Btu/lb)	Minimum required detection limit (mg/kg)
Total nitrogen as N	NA	9,000	18400	4,900	--
Total halogens as Cl	NA	1,000	18400	540	--
Total organic halogens as Cl	NA	--	--	25 or individual halogenated organics listed below	--
Polychlorinated biphenyls, total [arocolors, total]	1336-36-3	nondetect	--	nondetect	1.4
Cyanide, total	57-12-5	nondetect	--	nondetect	1
Metals:					
Antimony, total	7440-36-0	nondetect	--	12	--
Arsenic, total	7440-38-2	nondetect	--	0.23	--
Barium, total	7440-39-3	nondetect	--	23	--
Beryllium, total	7440-41-7	nondetect	--	1.2	--
Cadmium, total	7440-43-9	nondetect	nondetect	--	1.2
Chromium, total	7440-47-3	nondetect	--	2.3	--
Cobalt	7440-48-4	nondetect	--	4.6	--
Lead, total	7439-92-1	57	18400	31	--
Manganese	7439-96-5	nondetect	--	1.2	--

Chemical name	CAS #	Composite value (mg/kg)	Heating value (Btu/lb)	Concentration limit (mg/kg at 10,000 Btu/lb)	Minimum required detection limit (mg/kg)
Mercury, total	7439-97-6	nondetect	--	0.25	--
Nickel, total	7440-02-0	106	18400	58	--
Selenium, total	7782-49-2	nondetect	--	0.23	--
Silver, total	7440-22-4	nondetect	--	2.3	--
Thallium, total	7440-28-0	nondetect	--	23	--
Hydrocarbons:					
Benzo[a]anthracene	56-55-3	nondetect	--	2,400	--
Benzene	71-43-2	8,000	19600	4,100	--
Benzo[b]fluoranthene	205-99-2	nondetect	--	2,400	--
Benzo[k]fluoranthene	207-08-9	nondetect	--	2,400	--
Benzo[a]pyrene	50-32-8	nondetect	--	2,400	--
Chrysene	218-01-9	nondetect	--	2,400	--
Dibenzo[a,h]anthracene	53-70-3	nondetect	--	2,400	--
7,12-Dimethylbenz[a]anthracene	57-97-6	nondetect	--	2,400	--
Fluoranthene	206-44-0	nondetect	--	2,400	--
Indeno(1,2,3-cd)pyrene	193-39-5	nondetect	--	2,400	--
3-Methylcholanthrene	56-49-5	nondetect	--	2,400	--
Naphthalene	91-20-3	6,200	19400	3,200	--
Toluene	108-88-3	69,000	19400	36,000	--
Oxygenates:					
Acetophenone	98-86-2	nondetect	--	2,400	--
Acrolein	107-02-8	nondetect	--	39	--
Allyl alcohol	107-18-6	nondetect	--	30	--
Bis(2-ethylhexyl) phthalate [Di-2-ethylhexyl phthalate]	117-81-7	nondetect	--	2,400	--
Butyl benzyl phthalate	85-68-7	nondetect	--	2,400	--
o-Cresol [2-Methyl phenol]	95-48-7	nondetect	--	2,400	--
m-Cresol [3-Methyl phenol]	108-39-4	nondetect	--	2,400	--
p-Cresol [4-Methyl phenol]	106-44-5	nondetect	--	2,400	--
Di-n-butyl phthalate	84-74-2	nondetect	--	2,400	--
Diethyl phthalate	84-66-2	nondetect	--	2,400	--

Chemical name	CAS #	Composite value (mg/kg)	Heating value (Btu/lb)	Concentration limit (mg/kg at 10,000 Btu/lb)	Minimum required detection limit (mg/kg)
2,4-Dimethylphenol	105-67-9	nondetect	--	2,400	--
Dimethyl phthalate	131-11-3	nondetect	--	2,400	--
Di-n-octyl phthalate	117-84-0	nondetect	--	2,400	--
Endothall	145-73-3	nondetect	--	100	--
Ethyl methacrylate	97-63-2	nondetect	--	39	--
2-Ethoxyethanol [Ethylene glycol monoethyl ether]	110-80-5	nondetect	--	100	--
Isobutyl alcohol	78-83-1	nondetect	--	39	--
Isosafrole	120-58-1	nondetect	--	2,400	--
Methyl ethyl ketone [2-Butanone]	78-93-3	nondetect	--	39	--
Methyl methacrylate	80-62-6	nondetect	--	39	--
1,4-Naphthoquinone	130-15-4	nondetect	--	2,400	--
Phenol	108-95-2	nondetect	--	2,400	--
Propargyl alcohol [2-Propyn-1-ol]	107-19-7	nondetect	--	30	--
Safrole	94-59-7	nondetect	--	2,400	--
Sulfonated organics:					
Carbon disulfide	75-15-0	nondetect	--	nondetect	39
Disulfoton	298-04-4	nondetect	--	nondetect	2,400
Ethyl methanesulfonate	62-50-0	nondetect	--	nondetect	2,400
Methyl methanesulfonate	66-27-3	nondetect	--	nondetect	2,400
Phorate	298-02-2	nondetect	--	nondetect	2,400
1,3-Propane sultone	1120-71-4	nondetect	--	nondetect	100
Tetraethyldithiopyrophos phate [Sulfotepp]	3689-24-5	nondetect	--	nondetect	2,400
Thiophenol [Benzenethiol]	108-98-5	nondetect	--	nondetect	30
O,O,O-Triethyl phosphorothioate	126-68-1	nondetect	--	nondetect	2,400
Nitrogenated organics:					
Acetonitrile [Methyl cyanide]	75-05-8	nondetect	--	nondetect	39
2-Acetylaminofluorene [2-AAF]	53-96-3	nondetect	--	nondetect	2,400
Acrylonitrile	107-13-1	nondetect	--	nondetect	39
4-Aminobiphenyl	92-67-1	nondetect	--	nondetect	2,400

Chemical name	CAS #	Composite value (mg/kg)	Heating value (Btu/lb)	Concentration limit (mg/kg at 10,000 Btu/lb)	Minimum required detection limit (mg/kg)
4-Aminopyridine	504-24-5	nondetect	--	nondetect	100
Aniline	62-53-3	nondetect	--	nondetect	2,400
Benzidine	92-87-5	nondetect	--	nondetect	2,400
Dibenz[a,j]acridine	224-42-0	nondetect	--	nondetect	2,400
O,O-Diethyl O-pyrazinyl phosphoro-thioate [Thionazin]	297-97-2	nondetect	--	nondetect	2,400
Dimethoate	60-51-5	nondetect	--	nondetect	2,400
p-(Dimethylamino) azobenzene [4-Dimethylamino azobenzene]	60-11-7	nondetect	--	nondetect	2,400
3,3'-Dimethylbenzidine	119-93-7	nondetect	--	nondetect	2,400
alpha,alpha-Dimethyl phenethylamine	122-09-8	nondetect	--	nondetect	2,400
3,3'-Dimethoxybenzidine	119-90-4	nondetect	--	nondetect	100
1,3-Dinitrobenzene]	99-65-0	nondetect	--	nondetect	2,400
4,6-Dinitro-o-cresol	534-52-1	nondetect	--	nondetect	2,400
2,4-Dinitrophenol	51-28-5	nondetect	--	nondetect	2,400
2,4-Dinitrotoluene	121-14-2	nondetect	--	nondetect	2,400
2,6-Dinitrotoluene	606-20-2	nondetect	--	nondetect	2,400
Dinoseb [2-sec-Butyl-4,6-dinitrophenol]	88-85-7	nondetect	--	nondetect	2,400
Diphenylamine	122-39-4	nondetect	--	nondetect	2,400
Ethyl carbamate [Urethane]	51-79-6	nondetect	--	nondetect	100
Ethylenethiourea (2-Imidazolidinethione)	96-45-7	nondetect	--	nondetect	110
Famphur	52-85-7	nondetect	--	nondetect	2,400
Methacrylonitrile	126-98-7	nondetect	--	nondetect	39
Methapyrilene	91-80-5	nondetect	--	nondetect	2,400
Methomyl	16752-77-5	nondetect	--	nondetect	57
2-Methylactonitrile [Acetone cyanohydrin]	75-86-5	nondetect	--	nondetect	100
Methyl parathion	298-00-0	nondetect	--	nondetect	2,400
MNNG (N-Metyl-N-nitroso-N'-nitroguanidine)	70-25-7	nondetect	--	nondetect	110

Chemical name	CAS #	Composite value (mg/kg)	Heating value (Btu/lb)	Concentration limit (mg/kg at 10,000 Btu/lb)	Minimum required detection limit (mg/kg)
1-Naphthylamine, [alpha-Naphthylamine]	134-32-7	nondetect	--	nondetect	2,400
2-Naphthylamine, [beta-Naphthylamine]	91-59-8	nondetect	--	nondetect	2,400
Nicotine	54-11-5	nondetect	--	nondetect	100
4-Nitroaniline, [p-Nitroaniline]	100-01-6	nondetect	--	nondetect	2,400
Nitrobenzene	98-95-3	nondetect	--	nondetect	2,400
p-Nitrophenol, [p-Nitrophenol]	100-02-7	nondetect	--	nondetect	2,400
5-Nitro-o-toluidine	99-55-8	nondetect	--	nondetect	2,400
N-Nitrosodi-n-butylamine	924-16-3	nondetect	--	nondetect	2,400
N-Nitrosodiethylamine	55-18-5	nondetect	--	nondetect	2,400
N-Nitrosodiphenylamine, [Diphenylnitrosamine]	86-30-6	nondetect	--	nondetect	2,400
N-Nitroso-n-methylethylamine	10595-95-6	nondetect	--	nondetect	2,400
N-Nitrosomorpholine	59-89-2	nondetect	--	nondetect	2,400
N-Nitrosopiperidine	100-75-4	nondetect	--	nondetect	2,400
N-Nitrosopyrrolidine	930-55-2	nondetect	--	nondetect	2,400
2-Nitropropane	79-46-9	nondetect	--	nondetect	30
Parathion	56-38-2	nondetect	--	nondetect	2,400
Phenacetin	62-44-2	nondetect	--	nondetect	2,400
1,4-Phenylene diamine, [p-Phenylenediamine]	106-50-3	nondetect	--	nondetect	2,400
N-Phenylthiourea	103-85-5	nondetect	--	nondetect	57
2-Picoline [alpha-Picoline]	109-06-8	nondetect	--	nondetect	2,400
Propylthiouracil [6-Propyl-2-thiouracil]	51-52-5	nondetect	--	nondetect	100
Pyridine	110-86-1	nondetect	--	nondetect	2,400
Strychnine	57-24-9	nondetect	--	nondetect	100
Thioacetamide	62-55-5	nondetect	--	nondetect	57
Thiofanox	39196-18-4	nondetect	--	nondetect	100
Thiourea	62-56-6	nondetect	--	nondetect	57
Toluene-2,4-diamine [2,4-Diaminotoluene]	95-80-7	nondetect	--	nondetect	57

Chemical name	CAS #	Composite value (mg/kg)	Heating value (Btu/lb)	Concentration limit (mg/kg at 10,000 Btu/lb)	Minimum required detection limit (mg/kg)
Toluene-2,6-diamine [2,6-Diaminotoluene]	823-40-5	nondetect	--	nondetect	57
o-Toluidine	95-53-4	nondetect	--	nondetect	2,400
p-Toluidine	106-49-0	nondetect	--	nondetect	100
1,3,5-Trinitrobenzne, [sym-Trinitobenzene]	99-35-4	nondetect	--	nondetect	2,400
Halogenated organics:					
Allyl chloride	107-05-1	nondetect	--	nondetect	39
Aramite	140-57-8	nondetect	--	nondetect	2,400
Benzal chloride [Dichloromethyl benzene]	98-87-3	nondetect	--	nondetect	100
Benzyl chloride	100-44-77	nondetect	--	nondetect	100
bis(2-Chloroethyl)ether [Dichloroethyl ether]	111-44-4	nondetect	--	nondetect	2,400
Bromoform [Tribromomethane]	75-25-2	nondetect	--	nondetect	39
Bromomethane [Methyl bromide]	74-83-9	nondetect	--	nondetect	39
4-Bromophenyl phenyl ether [p-Bromo diphenyl ether]	101-55-3	nondetect	--	nondetect	2,400
Carbon tetrachloride	56-23-5	nondetect	--	nondetect	39
Chlordane	57-74-9	nondetect	--	nondetect	14
p-Chloroaniline	106-47-8	nondetect	--	nondetect	2,400
Chlorobenzene	108-90-7	nondetect	--	nondetect	39
Chlorobenzilate	510-15-6	nondetect	--	nondetect	2,400
p-Chloro-m-cresol	59-50-7	nondetect	--	nondetect	2,400
2-Chloroethyl vinyl ether	110-75-8	nondetect	--	nondetect	39
Chloroform	67-66-3	nondetect	--	nondetect	39
Chloromethane [Methyl chloride]	74-87-3	nondetect	--	nondetect	39
2-Chlorophthalene [beta-Chlorophthalene]	91-58-7	nondetect	--	nondetect	2,400
2-Chlorophenol [o-Chlorophenol]	95-57-8	nondetect	--	nondetect	2,400
Chloroprene [2-Chloro-1,3-butadiene]	1126-99-8	nondetect	--	nondetect	39

Chemical name	CAS #	Composite value (mg/kg)	Heating value (Btu/lb)	Concentration limit (mg/kg at 10,000 Btu/lb)	Minimum required detection limit (mg/kg)
2,4-D [2,4- Dichlorophenoxy acetic acid]	94-75-7	nondetect	--	nondetect	7
Diallate	2303-16-4	nondetect	--	nondetect	2,400
1,2-Dibromo-3-chloro propane	96-12-8	nondetect	--	nondetect	39
1,2-Dichlorobenzene [o-Dichlorobenzene]	95-50-1	nondetect	--	nondetect	2,400
1,3-Dichlorobenzene [m-Dichlorobenzene]	541-73-1	nondetect	--	nondetect	2,400
1,4-Dichlorobenzene [p-Dichlorobenzene]	106-46-7	nondetect	--	nondetect	2,400
3,3'-Dichlorobenzidine	91-94-1	nondetect	--	nondetect	2,400
Dichlorodifluoromethane [CFC-12]	75-71-8	nondetect	--	nondetect	39
1,2-Dichloroethane [Ethylene dichloride]	107-06-2	nondetect	--	nondetect	39
1,1-Dichloroethylene [Vinylidene chloride]	75-35-4	nondetect	--	nondetect	39
Dichloromethoxy ethane [Bis(2-chloroethoxy) methane]	111-91-1	nondetect	--	nondetect	2,400
2,4-Dichlorophenol	120-83-2	nondetect	--	nondetect	2,400
2,6-Dichlorophenol	87-65-0	nondetect	--	nondetect	2,400
1,2-Dichloropropane [Propylene dichloride]	78-87-5	nondetect	--	nondetect	39
cis-1,3-Dichloro propylene	10061-01-5	nondetect	--	nondetect	39
trans-1,3-Dichloro propylene	10061-02-6	nondetect	--	nondetect	39
1,3-Dichloro-2-propanol	96-23-1	nondetect	--	nondetect	30
Endosulfan I	959-98-8	nondetect	--	nondetect	1.4
Endosulfan II	33213-65-9	nondetect	--	nondetect	1.4
Endrin	72-20-8	nondetect	--	nondetect	1.4
Endrin aldehyde	7421-93-4	nondetect	--	nondetect	1.4
Endrin Ketone	53494-70-5	nondetect	--	nondetect	1.4

Chemical name	CAS #	Composite value (mg/kg)	Heating value (Btu/lb)	Concentration limit (mg/kg at 10,000 Btu/lb)	Minimum required detection limit (mg/kg)
Epichlorohydrin [1-Chloro-2,3-epoxy propane]	106-89-8	nondetect	--	nondetect	30
Ethylidene dichloride [1,1-Dichloroethane]	75-34-3	nondetect	--	nondetect	39
2-Fluoroacetamide	640-19-7	nondetect	--	nondetect	100
Heptachlor	76-44-8	nondetect	--	nondetect	1.4
Heptachlor epoxide	1024-57-3	nondetect	--	nondetect	2.8
Hexachlorobenzene	118-74-1	nondetect	--	nondetect	2,400
Hexachloro-1,3-butadiene [Hexachlorobutadiene]	87-68-3	nondetect	--	nondetect	2,400
Hexachlorocyclopentadiene	77-47-4	nondetect	--	nondetect	2,400
Hexachloroethane	67-72-1	nondetect	--	nondetect	2,400
Hexachlorophene	70-30-4	nondetect	--	nondetect	59,000
Hexachloropropene [Hexachloropropylene]	1888-71-7	nondetect	--	nondetect	2,400
Isodrin	465-73-6	nondetect	--	nondetect	2,400
Kepone [Chlordecone]	143-50-0	nondetect	--	nondetect	4,700
Lindane [gamma-BHC] [gamma-Hexachloro cyclohexane]	58-89-9	nondetect	--	nondetect	1.4
Methylene chloride [Dichloromethane]	75-09-2	nondetect	--	nondetect	39
4,4'-Methylene-bis(2-chloroaniline)	101-14-4	nondetect	--	nondetect	100
Methyl iodide [Iodomethane]	74-88-4	nondetect	--	nondetect	39
Pentachlorobenzene	608-93-5	nondetect	--	nondetect	2,400
Pentachloroethane	76-01-7	nondetect	--	nondetect	39
Pentachloronitrobenzene [PCNB] [Quintobenzene] [Quintozene]	82-68-8	nondetect	--	nondetect	2,400
Pentachlorophenol	87-86-5	nondetect	--	nondetect	2,400
Pronamide	23950-58-5	nondetect	--	nondetect	2,400

Chemical name	CAS #	Composite value (mg/kg)	Heating value (Btu/lb)	Concentration limit (mg/kg at 10,000 Btu/lb)	Minimum required detection limit (mg/kg)
Silvex [2,4,5-Trichloro phenoxypropionic acid]	93-72-1	nondetect	--	nondetect	7
2,3,7,8-Tetrachloro dibenzo-p-dioxin [2,3,7,8-TCDD]	1746-01-6	nondetect	--	nondetect	30
1,2,4,5-Tetrachloro benzene	95-94-3	nondetect	--	nondetect	2,400
1,1,2-Tetrachloro ethane	79-34-5	nondetect	--	nondetect	39
Tetrachloroethylene [Perchloroethylene]	127-18-4	nondetect	--	nondetect	39
2,3,4,6-Tetrachloro phenol	58-90-2	nondetect	--	nondetect	2,400
1,2,4-Trichlorobenzene	120-82-1	nondetect	--	nondetect	2,400
1,1,1-Trichloroethane [Methyl chloroform]	71-55-6	nondetect	--	nondetect	39
1,1,2-Trichloroethane [Vinyl trichloride]	79-00-5	nondetect	--	nondetect	39
Trichloroethylene	79-01-6	nondetect	--	nondetect	39
Trichlorofluoromethane [Trichloromonofluoro methane]	75-69-4	nondetect	--	nondetect	39
2,4,5-Trichlorophenol	95-95-4	nondetect	--	nondetect	2,400
2,4,6-Trichlorophenol	88-06-2	nondetect	--	nondetect	2,400
1,2,3-Trichloropropane	96-18-4	nondetect	--	nondetect	39
Vinyl Chloride	75-01-4	nondetect	--	nondetect	39

Note: NA means Not Applicable

(B) Synthesis gas fuel specification. Synthesis gas fuel (i.e., syngas fuel) that is generated from hazardous waste must:

- (1) Have a minimum Btu value of one hundred Btu per standard cubic foot;
- (2) Contain less than one part per million by volume (ppmv) of total halogen;
- (3) Contain less than three hundred ppmv of total nitrogen other than diatomic nitrogen (N₂);

- (4) Contain less than two hundred ppmv of hydrogen sulfide; and
 - (5) Contain less than one ppmv of each hazardous constituent in the target list of constituents in the appendix to rule 3745-51-11 of the Administrative Code.
- (C) Implementation. Waste that meets the comparable or syngas fuel specifications provided by paragraph (A) or (B) of this rule [these constituent levels must be achieved by the comparable fuel when generated, or as a result of treatment or blending, as provided in paragraph (C)(3) or (C)(4) of this rule] is excluded from being a waste provided that the following requirements are met:
- (1) Notices. For purposes of this rule, the person claiming and qualifying for the exclusion is called the comparable/syngas fuel generator and the person burning the comparable/syngas fuel is called the comparable/syngas burner. The person who generates the comparable fuel or syngas fuel must claim and certify to the exclusion.
 - (a) The director and authorized state/unauthorized states.
 - (i) If the comparable/syngas fuel is generated and burned in Ohio, the generator must submit a one-time notice to the director certifying compliance with the conditions of the exclusion and providing documentation as required by paragraph (C)(1)(a)(v) of this rule;
 - (ii) If the comparable/syngas fuel is generated in Ohio but will be burned in an authorized state, the generator must submit a one-time notice to the director and to the state RCRA and Clean Air Act (CAA) directors in the authorized state, certifying compliance with the conditions of the exclusion and providing documentation as required by paragraph (C)(1)(a)(v) of this rule. If the comparable/syngas fuel is generated in Ohio but will be burned in an unauthorized state, the generator must submit a one-time notice to the director and to the U.S.EPA Regional RCRA and CAA director, certifying compliance with the conditions of the exclusion and providing documentation as required by paragraph (C)(1)(a)(v) of this rule.

- (iii) If the comparable/syngas fuel is generated in an authorized state and will be burned in Ohio, the generator must submit a one-time notice to the director and to the state RCRA and CAA directors in the authorized state, certifying compliance with the conditions of the exclusion and providing documentation as required by paragraph (C)(1)(a)(v) of this rule. If the comparable/syngas fuel is generated in an unauthorized state and will be burned in Ohio, the generator must submit a one-time notice to the director and to the U.S.EPA Regional RCRA and CAA director, certifying compliance with the conditions of the exclusion and providing documentation as required by paragraph (C)(1)(a)(v) of this rule.
- (iv) If the generator is a company that generates comparable/syngas fuel at more than one facility, the generator must specify at which sites the comparable/syngas fuel will be generated;
- (v) A comparable/syngas fuel generator's notification to the director must contain the following items:
 - (a) The name, address, and U.S. EPA identification number of the person claiming the exclusion;
 - (b) The applicable EPA hazardous waste numbers for the hazardous waste;
 - (c) Name and address of the units, meeting the requirements of paragraph (C)(2) of this rule, that will burn the comparable/syngas fuel; and
 - (d) The following statement is signed and submitted by the person claiming the exclusion, or his authorized representative:

"Under penalty of criminal and civil prosecution for making or submitting false statements, representations, or omissions, I certify that the requirements of rule 3745-51-38 of the Administrative Code have been met for all waste identified in this notification. Copies of the records and information required by paragraph (C)(10) of rule 3745-51-38 of the Administrative Code are available at the comparable/syngas fuel generator's facility. Based on my inquiry of the individuals immediately responsible for obtaining the information, the information is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for reckless violations."

- (b) Public notice. Prior to burning an excluded comparable/syngas fuel, the burner must publish in a major newspaper of general circulation local to the site where the fuel will be burned, a notice entitled "Notification of Burning a Comparable/Syngas Fuel Excluded Under the Resource Conservation and Recovery Act" containing the following information:
 - (i) Name, address, and U.S. EPA identification number of the generating facility;
 - (ii) Name and address of the unit(s) that will burn the comparable/syngas fuel;
 - (iii) A brief, general description of the manufacturing, treatment, or other process generating the comparable/syngas fuel;
 - (iv) An estimate of the average and maximum monthly and annual quantity of the waste claimed to be excluded; and
 - (v) Name and mailing address of the regional or state directors to whom the claim was submitted.
- (2) Burning. The comparable/syngas fuel exclusion for fuels meeting the requirements of paragraphs (A) or (B) and (C)(1) of this rule applies only if the fuel is burned in the following units that also must be subject to federal/state/local air emission requirements, including all applicable CAA "Maximum Achievable Control Technologies (MACT)" requirements:

- (a) "Industrial furnaces" as defined in rule 3745-50-10 of the Administrative Code;
 - (b) "Boilers," as defined in rule 3745-50-10 of the Administrative Code, that are further defined as follows:
 - (i) Industrial boilers located on the site of a facility engaged in a manufacturing process where substances are transformed into new products, including the component parts of products, by mechanical or chemical processes; or
 - (ii) Utility boilers used to produce electric power, steam, heated or cooled air, or other gases or fluids for sale;
 - (c) Hazardous waste incinerators subject to regulation under rules 3745-57-40 to 3745-57-51 or 3745-68-40 to 3745-68-52 of the Administrative Code or applicable CAA MACT standards.
 - (d) Gas turbines used to produce electric power, steam, heated or cooled air, or other gases or fluids for sale.
- (3) Blending to meet the viscosity specification. A hazardous waste blended to meet the viscosity specification must:
- (a) As generated and prior to any blending, manipulation, or processing meet the constituent and heating value specifications of paragraphs (A)(1)(a) and (A)(2) of this rule;
 - (b) Be blended at a facility that is subject to the applicable requirements of Chapters 3745-54 to 3745-57, 3745-65 to 3745-69, 3745-205, and 3745-256 of the Administrative Code, or rule 3745-52-34 of the Administrative Code; and
 - (c) Not violate the dilution prohibition of paragraph (C)(6) of this rule.
- (4) Treatment to meet the comparable fuel exclusion specifications.
- (a) A hazardous waste may be treated to meet the exclusion specifications of paragraphs (A)(1) and (A)(2) of this rule provided the treatment:
 - (i) Destroys or removes the constituent listed in the specification or raises the heating value by removing or destroying hazardous constituents or materials;

- (ii) Is performed at a facility that is subject to the applicable requirements of Chapters 3745-54 to 3745-57, 3745-65 to 3745-69, 3745-205, and 3745-256 of the Administrative Code, or rule 3745-52-34 of the Administrative Code; and
 - (iii) Does not violate the dilution prohibition of paragraph (C)(6) of this rule.
 - (b) Residuals resulting from the treatment of a hazardous waste listed in rules 3745-51-30 to 3745-51-35 of the Administrative Code to generate a comparable fuel remain a hazardous waste.
- (5) Generation of a syngas fuel.
 - (a) A syngas fuel can be generated from the processing of hazardous wastes to meet the exclusion specifications of paragraph (B) of this rule provided the processing:
 - (i) Destroys or removes the constituent listed in the specification or raises the heating value by removing or destroying constituents or materials;
 - (ii) Is performed at a facility that is subject to the applicable requirements of Chapters 3745-54 to 3745-57, 3745-65 to 3745-69, 3745-205, and 3745-256 of the Administrative Code, or rule 3745-52-34 of the Administrative Code or is an exempt recycling unit pursuant to paragraph (C) of rule 3745-51-06 of the Administrative Code; and
 - (iii) Does not violate the dilution prohibition of paragraph (C)(6) of this rule.
 - (b) Residuals resulting from the treatment of a hazardous waste listed in rules 3745-51-30 to 3745-51-35 of the Administrative Code to generate a syngas fuel remain a hazardous waste.
- (6) Dilution prohibition for comparable and syngas fuels. No generator, transporter, handler, or owner or operator of a treatment, storage, or disposal facility shall in any way dilute a hazardous waste to meet the exclusion specifications of paragraph (A)(1)(a), (A)(2), or (B) of this rule.

- (7) Waste analysis plans. The generator of a comparable/syngas fuel must develop and follow a written waste analysis plan which describes the procedures for sampling and analysis of the hazardous waste to be excluded. The plan must be followed and retained at the facility excluding the waste.
- (a) At a minimum, the plan must specify:
- (i) The parameters for which each hazardous waste will be analyzed and the rationale for the selection of those parameters;
 - (ii) The test methods which will be used to test for these parameters;
 - (iii) The sampling method which will be used to obtain a representative sample of the waste to be analyzed;
 - (iv) The frequency with which the initial analysis of the waste will be reviewed or repeated to ensure that the analysis is accurate and up to date; and
 - (v) If process knowledge is used in the waste determination, any information prepared by the generator in making such determination.
- (b) The waste analysis plan must also contain records of the following:
- (i) The dates and times waste samples were obtained, and the dates the samples were analyzed;
 - (ii) The names and qualifications of the person(s) who obtained the samples;
 - (iii) A description of the temporal and spatial locations of the samples;
 - (iv) The name and address of the laboratory facility at which analyses of the samples were performed;
 - (v) A description of the analytical methods used, including any clean-up and sample preparation methods;

- (vi) All quantitation limits achieved and all other quality control results for the analysis (including method blanks, duplicate analyses, matrix spikes, etc.), laboratory quality assurance data, and description of any deviations from analytical methods written in the plan or from any other activity written in the plan which occurred;
 - (vii) All laboratory results demonstrating that the exclusion specifications have been met for the waste; and
 - (viii) All laboratory documentation that support the analytical results, unless a contract between the claimant and the laboratory provides for the documentation to be maintained by the laboratory for the period specified in paragraph (C)(11) of this rule and also provides for the availability of the documentation to the claimant upon request.
 - (c) Syngas fuel generators must submit for approval, prior to performing sampling, analysis, or any management of a syngas fuel as an excluded waste, a waste analysis plan containing the elements of paragraph (C)(7)(a) of this rule to the director. The approval of waste analysis plans must be stated in writing and received by the facility prior to sampling and analysis to demonstrate the exclusion of a syngas. The approval of the waste analysis plan may contain such provisions and conditions as the director deems appropriate.
- (8) Comparable fuel sampling and analysis.
- (a) General. For each waste for which an exclusion is claimed, the generator of the hazardous waste must test for all the constituents in the appendix to rule 3745-51-11 of the Administrative Code, except those that the generator determines, based on testing or knowledge, should not be present in the waste. The generator is required to document the basis of each determination that a constituent should not be present. The generator may not determine that any of the following categories of constituents should not be present:
 - (i) A constituent that triggered the toxicity characteristic for the waste constituents that were the basis of the listing of the waste stream, or constituents for which there is a treatment standard for the waste code in rule 3745-270-40 of the Administrative Code;

- (ii) A constituent detected in previous analysis of the waste;
 - (iii) Constituents introduced into the process that generates the waste; or
 - (iv) Constituents that are byproducts or side reactions to the process that generates the waste.
- (b) For each waste for which the exclusion is claimed where the generator of the comparable/syngas fuel is not the original generator of the hazardous waste, the generator of the comparable/syngas fuel may not use process knowledge pursuant to paragraph (C)(8)(a) of this rule and must test to determine that all of the constituent specifications of paragraphs (A)(2) and (B) of this rule have been met.
- (c) The comparable/syngas fuel generator may use any reliable analytical method to demonstrate that no constituent of concern is present at concentrations above the specification levels. It is the responsibility of the generator to ensure that the sampling and analysis are unbiased, precise, and representative of the waste. For the waste to be eligible for exclusion, a generator must demonstrate that:
 - (i) Each constituent of concern is not present in the waste above the specification level at the ninety-five per cent upper confidence limit around the mean; and
 - (ii) The analysis could have detected the presence of the constituent at or below the specification level at the ninety-five per cent upper confidence limit around the mean.
- (d) Nothing in paragraphs (C) to (C)(13) of this rule preempts, overrides, or otherwise negates the provision in rule 3745-52-11 of the Administrative Code, which requires any person who generates a waste to determine if that waste is a hazardous waste.
- (e) In an enforcement action, the burden of proof to establish conformance with the exclusion specification shall be on the generator claiming the exclusion.
- (f) The generator must conduct sampling and analysis in accordance with their waste analysis plan developed under paragraph (C)(7) of this rule.

- (g) Syngas fuel and comparable fuel that has not been blended in order to meet the kinematic viscosity specifications must be analyzed as generated.
- (h) If a comparable fuel is blended in order to meet the kinematic viscosity specifications, the generator must:
 - (i) Analyze the fuel as generated to ensure that it meets the constituent and heating value specifications; and
 - (ii) After blending, analyze the fuel again to ensure that the blended fuel continues to meet all comparable/syngas fuel specifications.
- (i) Excluded comparable/syngas fuel must be re-tested, at a minimum, annually and must be retested after a process change that could change the chemical or physical properties of the waste.

[Note: Any claim under this rule must be valid and accurate for all hazardous constituents; a determination not to test for a hazardous constituent will not shield a generator from liability should that constituent later be found in the waste above the exclusion specifications.]

- (9) Speculative accumulation. Any persons handling a comparable/syngas fuel are subject to the speculative accumulation test under paragraph (C)(4) of rule 3745-51-02 of the Administrative Code.
- (10) Records. The generator must maintain records of the following information on-site:
 - (a) All information required to be submitted to the implementing authority as part of the notification of the claim:
 - (i) The owner/operator name, address, and U.S. EPA identification number of the person claiming the exclusion;
 - (ii) The applicable EPA hazardous waste numbers for each hazardous waste excluded as a fuel; and
 - (iii) The certification signed by the person claiming the exclusion or his authorized representative.

- (b) A brief description of the process that generated the hazardous waste and process that generated the excluded fuel, if not the same;
- (c) An estimate of the average and maximum monthly and annual quantities of each waste claimed to be excluded;
- (d) Documentation for any claim that a constituent is not present in the hazardous waste as required under paragraph (C)(8)(a) of this rule;
- (e) The results of all analyses and all detection limits achieved as required under paragraph (C)(8) of this rule;
- (f) If the excluded waste was generated through treatment or blending, documentation as required under paragraph (C)(3) or (C)(4) of this rule;
- (g) If the waste is to be shipped off-site, a certification from the burner as required under paragraph (C)(12) of this rule;
- (h) A waste analysis plan and the results of the sampling and analysis that includes the following:
 - (i) The dates and times waste samples were obtained, and the dates the samples were analyzed;
 - (ii) The names and qualifications of the person(s) who obtained the samples;
 - (iii) A description of the temporal and spatial locations of the samples;
 - (iv) The name and address of the laboratory facility at which analyses of the samples were performed;
 - (v) A description of the analytical methods used, including any clean-up and sample preparation methods;
 - (vi) All quantitation limits achieved and all other quality control results for the analysis (including method blanks, duplicate analyses, matrix spikes, etc.), laboratory quality assurance data, and description of any deviations from analytical methods written in the plan or from any other activity written in the plan which occurred;

- (vii) All laboratory analytical results demonstrating that the exclusion specifications have been met for the waste; and
- (viii) All laboratory documentation that support the analytical results, unless a contract between the claimant and the laboratory provides for the documentation to be maintained by the laboratory for the period specified in paragraph (C)(11) of this rule and also provides for the availability of the documentation to the claimant upon request; and
- (i) If the generator ships comparable/syngas fuel off-site for burning, the generator must retain for each shipment the following information on-site:
 - (i) The name and address of the facility receiving the comparable/syngas fuel for burning;
 - (ii) The quantity of comparable/syngas fuel shipped and delivered;
 - (iii) The date of shipment or delivery;
 - (iv) A cross-reference to the record of comparable/syngas fuel analysis or other information used to make the determination that the comparable/syngas fuel meets the specifications as required under paragraph (C)(8) of this rule; and
 - (v) A one-time certification by the burner as required under paragraph (C)(12) of this rule.
- (11) Records retention. Records must be maintained for the period of three years. A generator must maintain a current waste analysis plan during that three year period.
- (12) Burner certification. Prior to submitting a notification to the state and regional directors, a comparable/syngas fuel generator who intends to ship their fuel off-site for burning must obtain a one-time written, signed statement from the burner:
 - (a) Certifying that the comparable/syngas fuel will only be burned in an industrial furnace or boiler, utility boiler, or hazardous waste incinerator, as required under paragraph (C)(2) of this rule;

- (b) Identifying the name and address of the units that will burn the comparable/syngas fuel; and
 - (c) Certifying that the state in which the burner is located is authorized to exclude wastes as comparable/syngas fuel under the provisions of this rule, 40 CFR 261.38, or authorized law in another state.
- (13) Ineligible waste codes. Wastes that are listed because of presence of dioxins or furans, as set out in the appendix to rule 3745-51-30 of the Administrative Code, are not eligible for this exclusion, and any fuel produced from or otherwise containing these wastes remains a hazardous waste subject to full hazardous waste management requirements.

[Comment: For dates of non-regulatory government publications, publications of recognized organizations and associations, federal rules, and federal statutory provisions referenced in this rule, see rule 3745-50-11 of the Administrative Code titled "Incorporated by reference."]

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Certification

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