3745-266-109 **Low risk waste exemption.**

(A) Waiver of the destruction and removal efficiency standard. The destruction and removal efficiency standard of paragraph (A) of rule 3745-266-104 of the Administrative Code does not apply if the boiler or industrial furnace is operated in conformance with paragraph (A)(1) of this rule and the owner or operator demonstrates by procedures prescribed in paragraph (A)(2) of this rule that the burning will not result in unacceptable adverse health effects.

(1) The device ~~must~~shall be operated as follows:

(a) A minimum of fifty per cent of fuel fired to the device ~~must~~shall be fossil fuel, fuels derived from fossil fuel, tall oil, or, if approved by the director on a case-by-case basis, other nonhazardous fuel with combustion characteristics comparable to fossil fuel. Such fuels are termed "primary fuel" for purposes of this rule. (Tall oil is a fuel derived from vegetable and rosin fatty acids.) The fifty per cent primary fuel firing rate ~~must~~shall be determined on a total heat or mass input basis, whichever results in the greater mass feed rate of primary fuel fired;

(b) Primary fuels and hazardous waste fuels ~~must~~shall have a minimum as-fired heating value of eight thousand British thermal units (Btu) per pound;

(c) The hazardous waste is fired directly into the primary fuel flame zone of the combustion chamber; and

(d) The device operates in conformance with the carbon monoxide controls provided by paragraph (B)(1) of rule 3745-266-104 of the Administrative Code. Devices subject to the exemption provided by this rule are not eligible for the alternative carbon monoxide controls provided by paragraph (C) of rule 3745-266-104 of the Administrative Code.

(2) Procedures to demonstrate that the hazardous waste burning will not pose unacceptable adverse public health effects are as follows:

(a) Identify and quantify those nonmetal compounds listed in the appendix to rule 3745-51-11 of the Administrative Code that could reasonably be expected to be present in the hazardous waste. The constituents excluded from analysis ~~must~~shall be identified and the basis for ~~their~~the exclusion of such constituents shall be explained;

(b) Calculate reasonable, worst case emission rates for each constituent identified in paragraph (A)(2)(a) of this rule by assuming the device achieves 99.9 per cent destruction and removal efficiency. That is, assume that 0.1 per cent of the mass weight of each constituent fed to the device is emitted.

(c) For each constituent identified in paragraph (A)(2)(a) of this rule, use emissions dispersion modeling to predict the maximum annual average ground level concentration of the constituent.

(i) Dispersion modeling ~~must~~shall be conducted using methods specified in paragraph (H) of rule 3745-266-106 of the Administrative Code.

(ii) Owners and operators of facilities with more than one on-site stack from a boiler or industrial furnace that is exempt under this rule ~~must~~shall conduct dispersion modeling of emissions from all stacks exempt under this rule to predict ambient levels prescribed by paragraphs (A) to (A)(2)(d)(iii) of this rule.

(d) Ground level concentrations of constituents predicted under paragraph (A)(2)(c) of this rule ~~must~~shall not exceed the following levels:

(i) For the noncarcinogenic compounds listed in appendix ~~I~~A to this rule, the levels established in appendix ~~I~~A to this rule;

(ii) For the carcinogenic compounds listed in appendix ~~H~~B to this rule, the sum for all constituents of the ratios of the actual ground level concentration to the level established in appendix ~~H~~B to this rule cannot exceed 1.0; and

(iii) For constituents not listed in appendix ~~I~~A or appendix ~~H~~B to this rule, 0.1 micrograms per cubic meter.

(B) Waiver of particulate matter standard. The particulate matter standard of rule 3745-266-105 of the Administrative Code does not apply if:

(1) The destruction and removal efficiency standard is waived under paragraph (A) of this rule; and

(2) The owner or operator complies with the "Tier I" or "Adjusted Tier I" metals feed rate screening limits provided by paragraph (B) or (E) of rule 3745-266-106 of the Administrative Code.

Effective: 10/31/2015

Five Year Review (FYR) Dates: Exempt

CERTIFIED ELECTRONICALLY

Certification

10/07/2015

Date

Promulgated Under: 119.03
Statutory Authority: 3734.12
Rule Amplifies: 3734.12
Prior Effective Dates: 12/07/2004, 09/05/2010

Appendix ~~I~~A to rule 3745-266-109 of the Administrative Code

| Reference Air Concentrations* | | |
|---|---|---|
| Constituent | CAS No. | RAC ($\mu g/m^3$) |
| Acetaldehyde | 75–07–0 | 10.0 |
| Acetonitrile | 75–05–8 | 10.0 |
| Acetophenone | 98–86–2 | 100.0 |
| Acrolein | 107–02–8 | 20.0 |
| Aldicarb | 116–06–3 | 1.0 |
| Aluminum Phosphide | 20859–73–8 | 0.3 |
| Allyl Alcohol | 107–18–6 | 5.0 |
| Antimony | 7440–36–0 | 0.3 |
| Barium | 7440–39–3 | 50.0 |
| Barium Cyanide | 542–62–1 | 50.0 |
| Bromomethane | 74–83–9 | 0.8 |
| Calcium Cyanide | 592–01–8 | 30.0 |
| Carbon Disulfide | 75–15–0 | 200.0 |
| Chloral | 75–87–6 | 2.0 |
| Chlorine (free) | ---- | 0.4 |
| 2-Chloro-1,3-butadiene | 126–99–8 | 3.0 |
| Chromium III | 16065–83–1 | 1000.0 |
| Copper Cyanide | 544–92–3 | 5.0 |
| Cresols | 1319–77–3 | 50.0 |
| Cumene | 98–82–8 | 1.0 |
| Cyanide (free) | 57–12–15 | 20.0 |
| Cyanogen | 460–19–5 | 30.0 |
| Cyanogen Bromide | 506–68–3 | 80.0 |
| Di-n-butyl Phthalate | 84–74–2 | 100.0 |
| o-Dichlorobenzene | 95–50–1 | 10.0 |
| p-Dichlorobenzene | 106–46–7 | 10.0 |
| Dichlorodifluoromethane | 75–71–8 | 200.0 |
| 2,4-Dichlorophenol | 120–83–2 | 3.0 |
| Diethyl Phthalate | 84–66–2 | 800.0 |

| Reference Air Concentrations* | | |
|---|---|---|
| Constituent | CAS No. | RAC (µg/m$^3$) |
| Dimethoate | 60–51–5 | 0.8 |
| 2,4-Dinitrophenol | 51–28–5 | 2.0 |
| Dinoseb | 88–85–7 | 0.9 |
| Diphenylamine | 122–39–4 | 20.0 |
| Endosulfan | 115–29–1 | 0.05 |
| Endrin | 72–20–8 | 0.3 |
| Fluorine | 7782–41–4 | 50.0 |
| Formic Acid | 64–18–6 | 2000.0 |
| Glycidyaldehyde | 765–34–4 | 0.3 |
| Hexachlorocyclopentadiene | 77–47–4 | 5.0 |
| Hexachlorophene | 70–30–4 | 0.3 |
| Hydrocyanic Acid | 74–90–8 | 20.0 |
| Hydrogen Chloride | 7647–01–1 | 7.0 |
| Hydrogen Sulfide | 7783–06–4 | 3.0 |
| Isobutyl Alcohol | 78–83–1 | 300.0 |
| Lead | 7439–92–1 | 0.09 |
| Maleic Anhydride | 108–31–6 | 100.0 |
| Mercury | 7439–97–6 | 0.3 |
| Methacrylonitrile | 126–98–7 | 0.1 |
| Methomyl | 16752–77–5 | 20.0 |
| Methoxychlor | 72–43–5 | 50.0 |
| Methyl Chlorocarbonate | 79–22–1 | 1000.0 |
| Methyl Ethyl Ketone | 78–93–3 | 80.0 |
| Methyl Parathion | 298–00–0 | 0.3 |
| Nickel Cyanide | 557–19–7 | 20.0 |
| Nitric Oxide | 10102–43–9 | 100.0 |
| Nitrobenzene | 98–95–3 | 0.8 |
| Pentachlorobenzene | 608–93–5 | 0.8 |
| Pentachlorophenol | 87–86–5 | 30.0 |
| Phenol | 108–95–2 | 30.0 |
| M-Phenylenediamine | 108–45–2 | 5.0 |

| Reference Air Concentrations* | | |
|---|---|---|
| Constituent | CAS No. | RAC (µg/m$^3$) |
| Phenylmercuric Acetate | 62–38–4 | 0.075 |
| Phosphine | 7803–51–2 | 0.3 |
| Phthalic Anhydride | 85–44–9 | 2000.0 |
| Potassium Cyanide | 151–50–8 | 50.0 |
| Potassium Silver Cyanide | 506–61–6 | 200.0 |
| Pyridine | 110–86–1 | 1.0 |
| Selenious Acid | 7783–60–8 | 3.0 |
| Selenourea | 630–10–4 | 5.0 |
| Silver | 7440–22–4 | 3.0 |
| Silver Cyanide | 506–64–9 | 100.0 |
| Sodium Cyanide | 143–33–9 | 30.0 |
| Strychnine | 57–24–9 | 0.3 |
| 1,2,4,5-Tetrachlorobenzene | 95–94–3 | 0.3 |
| 2,3,4,6-Tetrachlorophenol | 58–90–2 | 30.0 |
| Tetraethyl Lead | 78–00–2 | 0.0001 |
| Tetrahydrofuran | 109–99–9 | 10.0 |
| Thallic Oxide | 1314–32–5 | 0.3 |
| Thallium | 7440–28–0 | 0.5 |
| Thallium (I) Acetate | 563–68–8 | 0.5 |
| Thallium (I) Carbonate | 6533–73–9 | 0.3 |
| Thallium (I) Chloride | 7791–12–0 | 0.3 |
| Thallium (I) Nitrate | 10102–45–1 | 0.5 |
| Thallium Selenite | 12039–52–0 | 0.5 |
| Thallium (I) Sulfate | 7446–18–6 | 0.075 |
| Thiram | 137–26–8 | 5.0 |
| Toluene | 108–88–3 | 300.0 |
| 1,2,4-Trichlorobenzene | 120–82–1 | 20.0 |
| Trichloromonofluoromethane | 75–69–4 | 300.0 |
| 2,4,5-Trichlorophenol | 95–95–4 | 100.0 |
| Vanadium Pentoxide | 1314–62–1 | 20.0 |
| Warfarin | 81–81–2 | 0.3 |

| Reference Air Concentrations* | | |
|---|---|---|
| Constituent | CAS No. | RAC (µg/m$^3$) |
| Xylenes | 1330–20–7 | 80.0 |
| Zinc Cyanide | 557–21–1 | 50.0 |
| Zinc Phosphide | 1314–84–7 | 0.3 |

* The RAC for other constituents that are found in the appendix to rule 3745-51-11 of the Administrative Code that are not listed herein or in appendix ~~II~~B to this rule is 0.1 ug/m$^3$.

Appendix ~~H~~B to rule 3745-266-109 of the Administrative Code

| Risk Specific Doses ($10^{-5}$) | | | |
|---|---|---|---|
| Constituent | CAS Number | Unit risk ($m^3/\mu g$) | ~~RsD~~RSD ($\mu g/m^3$) |
| Acrylamide | 79-06-1 | 1.3E-03 | 7.7E-03 |
| Acrylonitrile | 107-13-1 | 6.8E-05 | 1.5E-01 |
| Aldrin | 309-00-2 | 4.9E-03 | 2.0E-03 |
| Aniline | 62-53-3 | 7.4E-06 | 1.4E+00 |
| Arsenic | 7440-38-2 | 4.3E-03 | 2.3E-03 |
| Benz(a)anthracene | 56-55-3 | 8.9E-04 | 1.1E-02 |
| Benzene | 71-43-2 | 8.3E-06 | 1.2E+00 |
| Benzidine | 92-87-5 | 6.7E-02 | 1.5E-04 |
| Benzo(a)pyrene | 50-32-8 | 3.3E-03 | 3.0E-03 |
| Beryllium | 7440-41-7 | 2.4E-03 | 4.2E-03 |
| Bis(2-chloroethyl)ether | 111-44-4 | 3.3E-04 | 3.0E-02 |
| Bis(chloromethyl)ether | 542-88-1 | 6.2E-02 | 1.6E-04 |
| Bis(2-ethylhexyl)phthalate | 117-81-7 | 2.4E-07 | 4.2E+01 |
| 1,3-Butadiene | 106-99-0 | 2.8E-04 | 3.6E-02 |
| Cadmium | 7440-43-9 | 1.8E-03 | 5.6E-03 |
| Carbon Tetrachloride | 56-23-5 | 1.5E-05 | 6.7E-01 |
| Chlordane | 57-74-9 | 3.7E-04 | 2.7E-02 |
| Chloroform | 67-66-3 | 2.3E-05 | 4.3E-01 |
| Chloromethane | 74-87-3 | 3.6E-06 | 2.8E+00 |
| Chromium VI | 7440-47-3 | 1.2E-02 | 8.3E-04 |
| DDT | 50-29-3 | 9.7E-05 | 1.0E-01 |
| Dibenz(a,h)anthracene | 53-70-3 | 1.4E-02 | 7.1E-04 |
| 1,2-Dibromo-3-chloropropane | 96-12-8 | 6.3E-03 | 1.6E-03 |
| 1,2-Dibromoethane | 106-93-4 | 2.2E-04 | 4.5E-02 |
| 1,1-Dichloroethane | 75-34-3 | 2.6E-05 | 3.8E-01 |
| 1,2-Dichloroethane | 107-06-2 | 2.6E-05 | 3.8E-01 |
| 1,1-Dichloroethylene | 75-35-4 | 5.0E-05 | 2.0E-01 |

| Risk Specific Doses ($10^{-5}$) | | | |
|---|---|---|---|
| Constituent | CAS Number | Unit risk ($m^3/\mu g$) | ~~RsD~~RSD ($\mu g/m^3$) |
| 1,3-Dichloropropene | 542-75-6 | 3.5E-01 | 2.9E-05 |
| Dieldrin | 60-57-1 | 4.6E-03 | 2.2E-03 |
| Diethylstilbestrol | 56-5-1 | 1.4E-01 | 7.1E-05 |
| Dimethylnitrosamine | 62-75-9 | 1.4E-02 | 7.1E-04 |
| 2,4-Dinitrotoluene | 121-14-2 | 8.8E-05 | 1.1E-01 |
| 1,2-Diphenylhydrazine | 122-66-7 | 2.2E-04 | 4.5E-02 |
| 1,4-Dioxane | 123-91-1 | 1.4E-06 | 7.1E+00 |
| Epichlorohydrin | 106-89-8 | 1.2E-06 | 8.3E+00 |
| Ethylene Oxide | 75-21-8 | 1.0E-04 | 1.0E-01 |
| Ethylene Dibromide | 106-93-4 | 2.2E-04 | 4.5E-02 |
| Formaldehyde | 50-00-0 | 1.3E-05 | 7.7E-01 |
| Heptachlor | 76-44-8 | 1.3E-03 | 7.7E-03 |
| Heptachlor Epoxide | 1024-57-3 | 2.6E-03 | 3.8E-03 |
| Hexachlorobenzene | 118-74-1 | 4.9E-04 | 2.0E-02 |
| Hexachlorobutadiene | 87-68-3 | 2.0E-05 | 5.0E-01 |
| Alpha-hexachlorocyclohexane | 319-84-6 | 1.8E-03 | 5.6E-03 |
| Beta-hexachlorocyclohexane | 319-85-7 | 5.3E-04 | 1.9E-02 |
| Gamma-hexachlorocyclohexane | 58-89-9 | 3.8E-04 | 2.6E-02 |
| Hexachlorocyclohexane, Technical | ---- | 5.1E-04 | 2.0E-02 |
| Hexachlorodibenzo-p-dioxin (1,2 Mixture) | ---- | 1.3E+0 | 7.7E-06 |
| Hexachloroethane | 67-72-1 | 4.0E-06 | 2.5E+00 |
| Hydrazine | 302-01-2 | 2.9E-03 | 3.4E-03 |
| Hydrazine Sulfate | 302-01-2 | 2.9E-03 | 3.4E-03 |
| 3-Methylcholanthrene | 56-49-5 | 2.7E-03 | 3.7E-03 |
| Methyl Hydrazine | 60-34-4 | 3.1E-04 | 3.2E-02 |
| Methylene Chloride | 75-09-2 | 4.1E-06 | 2.4E+00 |
| 4,4’-Methylene-bis-2-chloroaniline | 101-14-4 | 4.7E-05 | 2.1E-01 |
| Nickel | 7440-02-0 | 2.4E-04 | 4.2E-02 |
| Nickel Refinery Dust | 7440-02-0 | 2.4E-04 | 4.2E-02 |

| Risk Specific Doses ($10^{-5}$ ) | | | |
|---|---|---|---|
| Constituent | CAS Number | Unit risk ($m^3/\mu g$) | ~~RsD~~RSD ($\mu g/m^3$) |
| Nickel Subsulfide | 12035-72-2 | 4.8E-04 | 2.1E-02 |
| 2-Nitropropane | 79-46-9 | 2.7E-02 | 3.7E-04 |
| N-Nitroso-n-butylamine | 924-16-3 | 1.6E-03 | 6.3E-03 |
| N-Nitroso-n-methylurea | 684-93-5 | 8.6E-02 | 1.2E-04 |
| N-Nitrosodiethylamine | 55-18-5 | 4.3E-02 | 2.3E-04 |
| N-Nitrosopyrrolidine | 930-55-2 | 6.1E-04 | 1.6E-02 |
| Pentachloronitrobenzene | 82-68-8 | 7.3E-05 | 1.4E-01 |
| PCBs | 1336-36-3 | 1.2E-03 | 8.3E-03 |
| Pronamide | 23950-58-5 | 4.6E-06 | 2.2E+00 |
| Reserpine | 50-55-5 | 3.0E-03 | 3.3E-03 |
| 2,3,7,8-Tetrachloro-dibenzo-p-dioxin | 1746-01-6 | 4.5E+01 | 2.2E-07 |
| 1,1,2,2-Tetrachloroethane | 79-34-5 | 5.8E-05 | 1.7E-01 |
| Tetrachloroethylene | 127-18-4 | 4.8E-07 | 2.1E+01 |
| Thiourea | 62-56-6 | 5.5E-04 | 1.8E-02 |
| 1,1,2-Trichloroethane | 79-005 | 1.6E-05 | 6.3E-01 |
| Trichloroethylene | 79-01-6 | 1.3E-06 | 7.7E+00 |
| 2,4,6-Trichlorophenol | 88-06-2 | 5.7E-06 | 1.8E+00 |
| Toxaphene | 8001-35-2 | 3.2E-04 | 3.1E-02 |
| Vinyl Chloride | 75-01-4 | 7.1E-06 | 1.4E+00 |