

18.0 REGULATION OF NON-PROCESS EMISSIONS

18.1 Non-Process Emission Standards

- A. On or after the effective date of these regulations, no person shall cause, suffer, allow, or permit non-process emissions in excess of the standards set forth in this section.
- B. Upon mutual agreement of any air contaminant source and the Director, an emission limit more restrictive than that otherwise specified in the Knox County Air Quality Management Regulations may be established. Also, upon mutual agreement of any air contaminant source and the Director, operating hours, process flow rates, or any other operating parameter may be established as a binding limit which the source must adhere to. Any items mutually agreed to shall be stated as a special condition for any permit or order concerning the source. Violations of this mutual agreement shall result in revocation of the issued permit. In addition to these provisions the following criteria must be met by any such agreements and the associated permits:
 - 1. Operating permit holders must adhere to the terms and limitations of such permits (or subsequent revision of the permit made in accordance with the approved operating permit program), and any such permits which do not conform to the operating permit program requirements and the requirements of EPA's underlying regulations may be deemed not "federally enforceable" by EPA.
 - 2. All emission limitations, controls, and other requirements imposed by such permits will be at least as stringent as any other applicable limitations and requirements contained in the State Implementation Plan (SIP) or enforceable under the SIP, the Department may not issue permits that waive, or make less stringent, any limitations or requirements contained in or issued pursuant to the SIP, or that are otherwise "federally enforceable" (e.g. standards established under Sections 111 and 112 of the Clean Air Act).
 - 3. The limitations, controls, and requirements in the operating permits are permanent, quantifiable, and otherwise enforceable as a practical matter.
 - 4. The permits are issued subject to public participation. This means that the Department will provide EPA and the public with a timely notice of the proposal and issuance of such permits, and to provide EPA, on a timely basis, with a copy of each proposed (or draft) and final permit intended to be federally enforceable. This process must also provide for an opportunity for public comment on the permit applications prior to issuance of the final permit. Timely notice will be at least 30 days.

18.2 Non-Process Particulate Matter Emissions

- A. On or after the effective date of these regulations, no person shall cause, suffer, allow, or permit discharge of particulate matter emissions from any fuel burning installation that is a new source (as defined in Section 13.0) in excess of the allowable particulate matter emissions set forth in Table 18.1.

TABLE 18.1
ALLOWABLE PARTICULATE MATTER EMISSIONS
FROM NEW FUEL BURNING INSTALLATIONS^a

Total Installation Heat Input (Million Btu per hour)	Allowable Particulate Matter Emissions (lb per Million Btu (per hour))
Less than or equal to 10	0.600
25	0.360
50	0.245
75	0.195
100	0.167
125	0.147
150	0.133
200	0.113
Greater than or equal to 250	0.100

^aInterpolation of the data in this table for total installation heat inputs between 10 million Btu per hour to 250 million Btu per hour shall be accomplished by using the equation:

$$E = 2.1615 H^{-0.5566}$$

Where: E = allowable particulate matter emissions in lb per Million Btu (per hour)

H = total installation heat input in Million Btu per hour

- B. On or after October 1, 1972, no person shall cause, suffer, allow, or permit discharge of particulate matter emissions from any fuel burning installation that is an existing source (as defined in Section 13.0) in excess of the allowable particulate matter emissions set forth in Table 18.2.

TABLE 18.2
ALLOWABLE PARTICULATE MATTER EMISSIONS
FROM EXISTING FUEL BURNING INSTALLATIONS^a

Total Installation Heat Input (Million Btu per hour)	Allowable Particulate Matter Emissions (lb per Million Btu (per hour))
Less than or equal to 10	0.60
50	0.45
100	0.40
500	0.30
1,000	0.27
2,500	0.23
5,000	0.20
7,500	0.19
Greater than or equal to 10,000	0.18

^aInterpolation of the data in this table for total installation heat inputs between 10 million Btu per hour to 10,000 million Btu per hour shall be accomplished by using the equation:

$$E = 0.895 H^{0.175}$$

Where: E = allowable particulate matter emissions in lb per Million Btu (per hour)
H = total installation heat input in Million Btu per hour

- C. On or after July 1, 1975, no person shall cause, suffer, allow, or permit discharge of particulate matter emissions from any fuel burning installation in excess of the allowable particulate matter emissions set forth in Table 18.1.

18.3 Gaseous Non-Process Emissions

- A. On or after the effective date of these regulations, no person shall cause, suffer, allow, or permit gaseous emissions in excess of the standards as specified in this section.

- B. Any person constructing or otherwise establishing air contaminant sources emitting gaseous air contaminants after the effective date of these regulations shall install and utilize the best equipment and technology currently available for controlling such gaseous emissions.

18.4 Sulfur Oxide Emission Standards

- A. For the purpose of this rule, the total heat input (based on maximum rated capacity) from all fuel combustion units at a plant, premises, or installation shall be used for determining the maximum allowable emission of sulfur dioxide that passes through a stack or stacks.
- B. Fuel burning equipment with a rated capacity of 250 million BTU per hour or less heat input shall not cause, suffer, allow, or permit the emission of sulfur dioxide in excess of 4.0 (four) pounds per million BTU heat input (one hour average).
- C. The owner or operator of a fuel burning equipment constructed or modified after the effective date of these regulations with a rated capacity greater than 250 million BTU per hour heat input shall not cause, suffer, allow, or permit the emissions from that source of sulfur dioxide in excess of the following:
 - 1. 0.80 lbs. per million BTU heat input, maximum one hour average, when liquid fossil fuel is burned.
 - 2. 1.2 lbs. per million BTU heat input, maximum one hour average, when solid fossil fuel is burned.
 - 3. Where different fossil fuels are burned simultaneously in any combination, the applicable standard shall be determined by using the following formula:
$$\frac{Y(0.80) + Z(1.2)}{Y + Z}$$
where:
 - a. Y is the percent of total heat input derived from liquid fossil fuel and,
 - b. Z is the percent of total heat input derived from solid fossil fuel.
- D. Limiting the effect of the Definition of Modification: If an owner or operator of a fuel burning equipment is ordered by the U.S. Department of Energy under the Energy Supply and Environmental Co-ordination Act of 1974, or any amendments thereto, or any subsequent enactment which supersedes such provisions, to switch fuels, required alterations to existing fuel burning equipment to accommodate these additional fuels shall not be deemed a modification for the purpose of determining the allowable emissions of SO₂ as established by this regulation.

- E. For the purposes of Section 18.4, thermal oxidizers and incinerators shall be construed as a process emission sources and the requirements of Section 19.4 shall apply to thermal oxidizers and incinerators.

18.5 Total Emissions

- A. The total non-process emissions from all sources at any one location shall be used for determining the maximum allowable emissions into the atmosphere.

18.6 Exceptions

The provisions of this section do not apply to potentially hazardous or toxic air pollutants which will be handled on a case by case basis as determined by the Director with the advice and consent of the Board.

