

PART REGULATION 5

Standards for Toxic Air Contaminants and Hazardous Air Pollutants

REGULATION 5.01 General Provisions

**Air Pollution Control District of Jefferson County
Jefferson County, Kentucky**

Relates To: KRS Chapter 77 Air Pollution Control

Pursuant To: KRS Chapter 77 Air Pollution Control

Necessity And Function: KRS 77.180 ~~authorizes provides that~~ the Air Pollution Control Board ~~to adopt may make~~ and enforce all ~~needful~~ orders, rules, and regulations necessary or proper to accomplish the purposes of KRS Chapter 77. This regulation establishes the general provisions for ~~toxic air contaminants, the requirement for environmental acceptability of toxic air contaminant emissions, and the requirement that new or modified processes or process equipment comply with all applicable emission standards upon commencing operation testing and monitoring to comply with the standards for hazardous air pollutants.~~

SECTION 14 Definitions

Terms used in this regulation ~~that are~~ not defined in this regulation ~~herein~~ shall have the meaning given to them in Regulation 1.02 *Definitions*. ~~As used in the Part 5 Regulations 5.01, 5.20, 5.21, 5.22, 5.23, and 5.30, the following terms shall have the meaning given to them in this section.~~

~~4.1 "Stationary source" means any building, structure, facility, or installation that emits or may emit any air pollutant that has been designated as hazardous by the District.~~

1.1 "Benchmark ambient concentration" means the concentration of a toxic air contaminant that is used in determining environmental acceptability pursuant to Regulation 5.21 *Environmental Acceptability for Toxic Air Contaminants*.

1.1.1 The benchmark ambient concentration for a carcinogen (BAC_C) is the concentration, including an averaging time frame, of a toxic air contaminant that is representative of an additional lifetime cancer risk of one in one million (1 \times 10⁻⁶). The benchmark ambient concentration for a carcinogen is established pursuant to Regulation 5.20 *Methodology for Determining Benchmark Ambient Concentration for a Toxic Air Contaminant* Section 3.

1.1.2 The benchmark ambient concentration for the noncarcinogenic effects of a toxic air contaminant (BAC_{NC}) is the concentration, including an averaging time frame, of a toxic air contaminant that is likely to be without an appreciable risk of deleterious effects during a lifetime. The benchmark ambient concentration for the noncarcinogenic effects of a toxic air contaminant is established pursuant to Regulation 5.20 Section 4.

1.2 "Category 1 TAC" means a toxic air contaminant listed in Regulation 5.23 *Categories of Toxic Air Contaminants* Section 1.

1.3 "Category 2 TAC" means a toxic air contaminant listed in Regulation 5.23 Section 2.

1.4 "Category 3 TAC" means a toxic air contaminant listed in Regulation 5.23 Section 3.

1.5 "Category 4 TAC" means a toxic air contaminant listed in Regulation 5.23 Section 4.

1.6 "De minimis emission" means any of the following:

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[Changes to Draft #2 (the proposed regulation) are redlined and double underlined]

- 41 1.6.1 If the estimation of the emission of a TAC that may be contained in a mixture of
42 chemicals is based upon the information contained on the Material Safety Data Sheet
43 (MSDS) for that mixture, then the emission of the TAC is deemed to be de minimis if
44 the concentration of that TAC is less than either of the following:
- 45 1.6.1.1 For a TAC that is determined to be a carcinogen, 0.1% by weight, or
46 1.6.1.2 For any other TAC, 1.0% by weight,
- 47 1.6.2 The emissions from a process or process equipment or activity that is included on the
48 Trivial Activity list that is part of the District's EPA-approved Title V Operating Permit
49 Program, available on the Internet at "<http://www.apcd.org/permit/t5/trivial.pdf>",
50 1.6.3 The emissions from a process or process equipment or activity that is included on the
51 Insignificant Activity list that is part of the District's EPA-approved Title V Operating
52 Permit Program, available on the Internet at "[http://www.apcd.org/permit/t5/](http://www.apcd.org/permit/t5/insignificant.pdf)
53 [insignificant.pdf](http://www.apcd.org/permit/t5/insignificant.pdf)". This includes both of the following:
- 54 1.6.3.1 A process or process equipment or activity at a Group 1 stationary source that was
55 approved on a case-by-case basis pursuant to Regulation 2.16 Title V Operating
56 Permits section 1.22.1.2 and is identified in the Title V Operating Permit, and
57 1.6.3.2 A process or process equipment or activity at a Group 2 stationary source that was
58 approved by the District as having met the provisions of Regulation 2.16 sections
59 1.22.1.2.1 and 1.22.1.2.2 and for which there was an opportunity for public review
60 and comment, or
- 61 1.6.4 The allowed emission of a TAC from a process or process equipment that is equal to or
62 less than the amounts calculated by using the following method:
- 63 1.6.4.1 Determine the benchmark ambient concentrations pursuant to Regulation 5.20
64 *Methodology for Determining Benchmark Ambient Concentration of a Toxic Air*
65 *Contaminant* Section 4 (BAC_{NC}) and, if the TAC is determined to be a carcinogen,
66 Section 3 (BAC_C),
- 67 1.6.4.2 Multiply the BAC_{NC} (in $\mu\text{g}/\text{m}^3$) by:
- 68 1.6.4.2.1 0.54 (The applicable (based upon the averaging time period of the BAC_{NC}) 1-
69 Hour Factor in Regulation 5.22 *Procedures for Determining the Maximum*
70 *Ambient Concentration of a Toxic Air Contaminant* Section 2 Table 1) to derive
71 the pound-per-hour de minimis value for the BAC_{NC}, and
- 72 1.6.4.2.2 ByThe applicable (based upon the averaging time period of the BAC_{NC}) Annual,
73 24-Hour, or 8-Hour Factor in Regulation 5.22 Section 2 Table 1 to derive the
74 applicable pound-per-averaging time period de minimis value for the BAC_{NC},
- 75 1.6.4.3 If the TAC is a carcinogen, multiply the BAC_C (in $\mu\text{g}/\text{m}^3$) by:
- 76 1.6.4.3.1 0.54 (the 1-Hour Factor in Regulation 5.22 Section 2 Table 1) to derive the
77 pound-per-hour de minimis value for the BAC_C, and
- 78 1.6.4.3.2 480 (the Annual Factor in Regulation 5.22 Section 2 Table 1) to derive the
79 annual pound-per-year de minimis value for the BAC_C,
- 80 1.6.4.4 If the TAC is not determined to be a carcinogen, then an emission of that TAC that
81 is less than both the pound-per-hour de minimis value determined in section 1.6.4.2.1
82 and the applicable pound-per-averaging time period de minimis value determined in
83 section 1.6.4.2.2 is deemed to be a de minimis emission,
- 84 1.6.4.5 If the TAC is determined to be a carcinogen, then compare the pound-per-hour

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- 85 de minimis values derived in sections 1.6.4.2.1 and 1.6.4.3.1 to determine which
86 value is smaller. An emission of that TAC that is less than both the smaller pound-
87 per-hour de minimis value and the corresponding applicable averaging time period
88 de minimis value determined in section 1.6.4.2.2 or 1.6.4.3.2 is deemed to be a de
89 minimis emission, or
- 90 1.6.5 The emissions from a new or modified surface coating process, including a coating
91 change, or process equipment, as defined for which the construction permit application
92 qualifies under any of the circumstances described in Regulation 5.21 section 1.65, and
93 for which the potential volatile organic compound emissions are less than 5.0 tons per
94 year. These emissions shall no longer be deemed “de minimis emissions” 18 months
95 after beginning operation of the new or modified surface coating process, including a
96 coating change, or process equipment, and shall comply with Regulation 5.21, or
- 97 1.6.6 The emissions from a motor vehicle fueling or refueling process and process equipment
98 for gasoline and other liquid fuels.
- 99 1.7 “Exempt stationary source” means any of the following, but does not include a stationary
100 source that has a permitted process or process equipment other than the processes and
101 process equipment identified in the following sections:
- 102 1.7.1 A gasoline dispensing facility subject to the provisions of Regulation 6.40 *Standards of*
103 *Performance for Gasoline Transfer to Motor Vehicles (Stage II Vapor Recovery and*
104 *Control)*, that may also include a cold cleaner subject to the provisions of
105 Regulation 6.18 *Standards of Performance for Solvent Metal Cleaning Equipment*
106 *Section 4 Cold Cleaners*. A gasoline dispensing facility does not include the initial
107 transfer of gasoline into the fuel tanks of new motor vehicles at an automobile or truck
108 assembly plant,
- 109 1.7.2 A stationary source subject to the provisions of Regulation 6.44 *Standards of*
110 *Performance For Existing Commercial Motor Vehicle And Mobile Equipment*
111 *Refinishing Operations* or Regulation 7.79 *Standards of Performance For New*
112 *Commercial Motor Vehicle And Mobile Equipment Refinishing Operations*, that may
113 also include a cold cleaner subject to the provisions of Regulation 6.18,
- 114 1.7.3 A stationary source subject to the provisions of Regulation 5.02 *Adoption of National*
115 *Emission Standards for Hazardous Air Pollutants* section 3.12 *National*
116 *Perchloroethylene Air Emission Standards for Dry Cleaning Facilities*, or
- 117 1.7.4 A stationary source whose only permitted process or process equipment is a cold cleaner
118 subject to the provisions of Regulation 6.18 Section 4.
- 119 1.8 “Group 1 stationary source” means a stationary source subject to Regulation 2.16 *Title V*
120 *Operating Permits*.
- 121 1.9 “Group 2 stationary source” means a stationary source that either:
- 122 1.9.1 Is not a Group 1 or Exempt stationary source, and has applied for an operating permit
123 pursuant to Regulation 2.17 *Federally Enforceable District Origin Operating Permits*
124 (FEDOOP stationary source), or
- 125 1.9.2 Is not a Group 1, FEDOOP, or Exempt stationary source, and the actual emissions from
126 the stationary source are 25 or more tons per year individually of sulfur dioxide,
127 particulate matter, volatile organic compounds, or oxides of nitrogen.

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128 **SECTION 2~~1~~ Applicability**

129 This regulation applies to the owner or operator of any ~~process or process equipment that emits or~~
130 ~~may emit a toxic air contaminant or hazardous air pollutant or stationary source~~ for which a ~~toxic~~
131 ~~air contaminant or hazardous air pollutant emission standard or other requirement~~ is prescribed in
132 a Part 5 ~~under this~~ regulation. A new or modified ~~process or process equipment shall~~ ~~sources must~~
133 comply with all ~~applicable emission~~ standards upon commencing operation.

134 **SECTION 3 General Duty**

135 The owner or operator of a process or process equipment from which a toxic air contaminant is or
136 may be emitted shall provide the utmost care and consideration to prevent the potential harmful
137 effects of the emissions resulting from the process or process equipment. A person shall not allow
138 any process or process equipment to emit a toxic air contaminant in a quantity or duration as to be
139 harmful to the health and welfare of humans, animals, and plants.

140 **SECTION 4 Effect on Federal and SIP Emission Standards**

141 If the application of Regulation 5.01, 5.20, 5.21, 5.22, 5.23, or 5.30 results in an emission standard
142 that is less stringent than an applicable federal emission standard promulgated under the Clean Air
143 Act or an applicable emission standard in the State Implementation Plan (SIP), then the federal or
144 SIP emission standard shall apply.

145 **SECTION 2 — Emission Tests and Monitoring**

146 Emission tests and monitoring shall be conducted and reported as set forth in this regulation and the
147 EPA Regulation on National Emission Standards for Hazardous Air Pollutants (40 CFR 61) and its
148 appendices. Where the test results using an alternative method do not adequately indicate whether
149 a source is in compliance with a standard, the District may require use of the reference method or
150 its equivalent. Equivalent test methods for Federal Regulations incorporated in Regulations 5.02
151 and 5.04 require EPA approval.

152 **SECTION 3 — Emission Testing Facilities**

153 The owner or operator of a new source subject to Regulation 5 and, at the request of the District, the
154 owner or operator of an existing source subject to Regulation 5 shall provide or cause to be provided
155 emission testing facilities as follows:

- 156 3.1 — ~~Sampling ports adequate for test methods applicable to such source;~~
157 3.2 — ~~Safe sampling platforms;~~
158 3.3 — ~~Safe access to sampling platforms, and~~
159 3.4 — ~~Utilities for sampling and testing equipment.~~

160 Adopted v1/7-14-76; effective 9-1-76; amended v2/6-13-79, v3/4-20-88.