

**SUBCHAPTER 41. CONTROL OF EMISSION OF HAZARDOUS AIR
POLLUTANTS AND TOXIC AIR CONTAMINANTS**

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PART 1. GENERAL PROVISIONS

252:100-41-1. Purpose

The purpose of this Subchapter is to control the routine emission of hazardous and toxic air contaminants from stationary sources, not to include accidental, or catastrophic releases.

252:100-41-1.1. Supersession by Subchapter 42

(a) This Subchapter, with the exception of Part 3, shall remain effective so long as it is not superseded by Subchapter 42 of this Chapter.

(b) Part 3 of this Subchapter shall not be superseded by any other subchapter of this Chapter.

252:100-41-2. Definitions

The following words and terms, when used in this Subchapter, shall have the following meaning, unless the context clearly indicates otherwise:

"Affected area" means any area in which the MAAC is being exceeded as the result of emissions from two or more area sources.

"Area source" means any source which, in combination with one or more other sources, emits a toxic air contaminant in sufficient quantities as to cause or contribute to a violation of the MAAC.

"Best available control technology (BACT)" means the best control technology that is available for each contaminant. This determination will be made by the Executive Director on a case by case basis taking into account energy, environmental, health risk, costs and economic impacts of alternative control systems.

"Confirmed human carcinogen" means substances recognized to have carcinogenic or cocarcinogenic potential in humans.

"Dose-response assessment" means the determination of the relation between the magnitude of exposure and the probability of occurrence of the health effects in question.

"Exposure assessment" means the determination of the extent of human exposure.

"Hazard identification" means the determination of whether a particular chemical is or is not causally linked to particular health effects.

"Hazardous air contaminant" means any hazardous air pollutant regulated under Section 112 of the federal Clean Air Act, 42 U.S.C. Section 7412, and subject to national emission standards (NESHAP).

"Maximum acceptable ambient concentration (MAAC)" means the maximum allowable twenty-four hour average concentration, in ambient air, of a toxic air contaminant.

"Median lethal concentration (LC₅₀)" means the atmospheric concentration found to be lethal to 50 percent of a group of test animals exposed for the specified time period.

"Median lethal dose (LD₅₀)" means the dose found to be lethal in 50 percent of a group of test animals when administered by the specified route, e.g., oral or dermal.

"NESHAP" means the National Emission Standards for Hazardous Air Pollutants as published by the Administrator of the U.S. Environmental Protection Agency (EPA) pursuant to Section 112 of the Federal Clean Air Act, 42 U.S.C. Section 7412.

"Occupational exposure limit (OEL)" means the most restrictive eight-hour time weighted average concentration specified for workroom air selected from either the

1986-1987 Threshold Limit Values and Biological Exposure Indices as adopted by the American Conference of Governmental Industrial Hygienists; the Recommended Standards for Occupational Exposure set forth in the July, 1985 summary of National Institute for Occupational Safety and Health Recommendations for Occupational Health Standards; or the 1986 Workplace Environmental Exposure Levels set forth by the American Industrial Hygiene Association.

"Risk characterization" means the description of the nature and often the magnitude of human risk, including a description of the attendant uncertainty.

"Stationary source" means any building, structure, facility or installation which emits or may emit any toxic air contaminant.

"Substances of high toxicity" means those chemicals having an acute toxicity of either:

- (A) median lethal dose, single oral dose, rat, less than or equal to 50 mg/kg, or
- (B) median lethal concentration, four-hour inhalation exposure, rat, less than or equal to 100 ppm, or,
- (C) median lethal dose, dermal exposure, rabbits, less than or equal to 100 mg/kg.

"Substances of low toxicity" means those substances which have been shown to produce low toxicity or irritation, or those chemicals having an acute toxicity of either:

- (A) median lethal dose, single oral dose, rat, greater than 500 mg/kg but less than 5 g/kg, or
- (B) median lethal concentration, four-hour inhalation exposure, rat, greater than 1,000 ppm but less than 10,000 ppm, or,
- (C) median lethal dose, dermal exposure, rabbits, greater than 500 mg/kg but less than 3,000 mg/kg.

"Substances of moderate toxicity" means those substances which have been shown to produce moderate toxicity following exposure or have been demonstrated to produce carcinogenic, mutagenic, or teratogenic action in a single animal species with little or no human evidence of carcinogenic, mutagenic, or teratogenic action, or those chemicals having an acute toxicity of either:

- (A) median lethal dose, single oral dose, rat, greater than 50 mg/kg but less than 500 mg/kg, or
- (B) median lethal concentration, four-hour inhalation exposure, rat, greater than 100 ppm but less than 1,000 ppm, or,

(C) median lethal dose, dermal exposure, rabbits, greater than 100 mg/kg but less than 500 mg/kg.

"Suspect human carcinogen" means a substance suspected of inducing cancer based on human evidence or demonstration by appropriate methods, or carcinogenesis in two or more animal species or strains.

"Threshold limit value (TLV)" means airborne concentrations of substances established by the American Conference of Governmental Industrial Hygienists which represent conditions under which it is believed that nearly all workers may be repeatedly exposed day after day without adverse effect.

"Toxic air contaminant" means any substance determined to be a category "A" (High Toxicity), category "B" (Moderate Toxicity) or category "C" (Low Toxicity) pollutant under the criteria set forth in 252:100-41-40.

"Workplace environmental exposure level" means workplace exposure levels set forth by the American Industrial Hygiene Association to which, it is believed, nearly all employees could be repeatedly exposed without adverse effects.

PART 3. HAZARDOUS AIR CONTAMINANTS

252:100-41-3. Purpose

The purpose of this Part is to establish emission control technology, performance criteria and work practice standards for achieving emission standard from existing, new or modified sources that emit or have the potential to emit hazardous air pollutants in accordance with the authority delegated by the EPA under Section 111(b) of the federal Clean Air Act.

252:100-41-4. Reference to 40 CFR

(a) Inclusions of CFR citations and definitions. When a provision of Title 40 of the Code of Federal Regulations (40 CFR) is incorporated by reference, all citations contained therein are also incorporated by reference.

(b) Inconsistencies or duplications. In the event that there are inconsistencies or duplications in the requirements of those provisions incorporated by reference in OAC 252:100-41-15 and the regulations in this Chapter, the provisions incorporated by reference shall prevail, except where the regulations in the Chapter are more stringent.

(c) Terminology related to 40 CFR. For purposes of interfacing with 40 CFR, the following terms apply

- (1) "Administrator" is synonymous with "Executive Director".
- (2) "EPA" is synonymous with "Department of Environmental Quality (DEQ)".

252:100-41-15. National emission standards for hazardous air pollutants (NESHAP)

(a) NESHAP, as found in 40 CFR Part 61, are hereby incorporated by reference as they exist on July 31, 2002, with the exception of Subparts B, H, I, K, Q, R, T, W and Appendices D and E, all of which address radionuclides. These standards shall apply to both existing and new sources of hazardous air pollutants (HAPs).

(b) General Provisions as found in 40 CFR Part 63, Subpart A, and the Maximum Achievable Control Technology (MACT) standards as found in 40 CFR Part 63, Subparts F, G, H, I, J, L, M, N, O, Q, R, S, T, U, W, X, Y, AA, BB, CC, DD, EE, GG, HH, II, JJ, LL, KK, MM, OO, PP, QQ, RR, SS, TT, UU, VV, WW, XX, YY, CCC, DDD, EEE, GGG, HHH, III, JJJ, LLL, MMM, NNN, OOO, PPP, QQQ, RRR, TTT, UUU, VVV, XXX, CCCC, GGGG, HHHH, NNNN, SSSS, TTTT, UUUU, VVVV, and XXXX are hereby incorporated by reference as they exist on July 31, 2002. These standards shall apply to both existing and new sources of HAPs.

252:100-41-16. Asbestos

In addition to the requirements set forth for the handling of asbestos found in 40 CFR Part 61 and incorporated by reference in Section 252:100-41-15, the following provisions shall also apply to owners, operators and other persons.

- (1) Before being handled, stored or transported in or to the outside air, friable asbestos from demolition/renovation operations shall be:
 - (A) double bagged in six-mil plastic bags, or,
 - (B) single bagged in one six-mil plastic bag and placed in a disposable drum, or,
 - (C) contained in any other manner approved in advance, by the Division Director.
- (2) When demolition/renovation operations must, of necessity take place in the outdoor air, friable asbestos removed in such operations shall be immediately bagged or contained in accordance with paragraph (1) of this Section.
- (3) Friable asbestos materials used on pipes or other outdoor structures shall not be allowed to weather

or deteriorate and become exposed to, or dispersed in the outside air.

- (4) Friable asbestos materials shall, in addition to other provisions concerning disposal, be disposed of in a facility approved for asbestos by the Oklahoma Department of Environmental Quality, Waste Management Division.

PART 5. TOXIC AIR CONTAMINANTS

252:100-41-35. Applicability

This Part applies to any new or existing stationary source which emits any toxic air contaminant.

252:100-41-36. General prohibition; scope

(a) Except as otherwise provided, upon the effective date of this Part no person shall cause or permit the emission of any toxic air contaminant in such concentration as to cause or contribute to a violation of the MAAC.

(b) All new sources which emit or may emit a toxic air contaminant are subject to the requirements of OAC 252:100-7.

252:100-41-37. New sources

(a) New sources emitting any category "A" pollutant shall be required, as a minimum, to install Best available control technology (BACT).

(b) New sources unable to demonstrate compliance with 252:100-41-36(a) because of the unavailability of economic or technically feasible controls and upon presentation of adequate proof of same, or can show that the MAAC is clearly unreasonable, may otherwise obtain a permit by:

- (1) installing, at a minimum, BACT; and,
- (2) submitting toxicological and other data sufficient to demonstrate that the resultant ground level concentrations will not create a condition of air pollution. Such demonstration may include any or all of the following:

- (A) hazard identification,
- (B) dose-response assessment,
- (C) exposure assessment, and,
- (D) risk characterization.

252:100-41-38. Existing sources

(a) Existing sources not emitting a confirmed human carcinogen and unable to demonstrate compliance with 252:100-41-36(a) shall install appropriate abatement

equipment to meet the MAAC requirement. However, upon presentation of adequate proof of the unavailability of economic or technically feasible control, or a showing that the MAAC is clearly unreasonable, existing sources may otherwise obtain authority to operate:

(1) by submitting:

(A) proof that reasonable control measures are being used or will be installed; and,

(B) toxicological and other data sufficient to demonstrate that the resultant ground level concentrations off site will not create a condition of air pollution.

Such demonstration may include any or all of the following:

- (i) hazard identification,
- (ii) dose-response assessment,
- (iii) exposure assessment, and,
- (iv) risk characterization; and,

(2) upon obtaining written approval of the Executive Director.

(b) In the case of a confirmed human carcinogen, an existing source unable to demonstrate compliance with 252:100-41-36(a) may otherwise obtain authority to operate by installing BACT, or:

(1) by submitting:

(A) proof that reasonable control measures are being used; and,

(B) a demonstration that maximum ground level concentrations off-site are:

(i) below analytical detection limits using gas chromatograph/mass spectrometer analysis or the equivalent, or,

(ii) below that concentration which has been determined to be associated with a lifetime cancer risk of one in one million (10^6) using standard cancer risk assessment techniques and assuming seventy (70) years of exposure, or,

(iii) below the threshold level divided by 100, provided that a threshold effect is known and accepted by the National Toxicology Program, the National Cancer Institute, or the International Agency for Research on Cancer; and,

(2) upon obtaining written approval of the Executive Director.

252:100-41-39. Area sources

In the event that it can be shown by monitoring data that the MAAC for any toxic air pollutant is being exceeded in an affected area, any area source shall be considered an

existing source and shall be subject to the requirements of 252:100-41-36 and 252:100-41-38.

252:100-41-40. Maximum acceptable ambient concentrations (MAAC)

(a) **Toxics classification.** The following categories, consistent with the definitions in 252:100-41-2 comprise the basis for determination of the MAAC:

- (1) category A - highly toxic substances, including:
 - (A) suspect and confirmed human carcinogens, and,
 - (B) substances of high toxicity;
- (2) category B - substances of moderate toxicity;
- (3) category C - substances of low toxicity.

(b) **Maximum acceptable ambient concentrations.** For those substances in each category having a prescribed occupational exposure limit, the maximum acceptable ambient concentration shall be as follows:

- (1) for category A substances, one-one hundredth of the OEL (MAAC = OEL/100);
- (2) for category B substances, one fiftieth of the OEL (MAAC = OEL/50);
- (3) for category C substances, one tenth of the OEL (MAAC = OEL/10).

(c) **Case-by-case determinations.** For substances in all categories not having a prescribed OEL, the MAAC will be determined on a case-by-case basis using the best scientific data available. Any MAAC so determined will be in accordance with the intent and purpose of the Oklahoma Clean Air Act and as determined necessary to prevent air pollution and protect the health, safety and welfare of the public. The applicant shall be responsible for providing information and data sufficient for staff review.

252:100-41-41. Emissions inventories

(a) All existing sources shall conduct an emissions inventory of toxic air contaminants. Said inventory shall be registered in accordance with OAC 252:100-5.

(b) Inventories will be submitted or updated upon request of the Executive Director and upon forms provided for that purpose. Emission inventory forms will generally consist of four data sets:

- (1) physical information which will include but is not limited to process unit size, stack diameter and stack flow rates;
- (2) process information, e.g., tons used, tons produced;
- (3) control equipment and their efficiencies; and,

(4) emission rates based on best information available from

- (A) actual test,
- (B) material balance,
- (C) emission factors, or
- (D) engineering estimates.

(c) All inventories shall be due in the offices of the Air Quality Division no later than three months from the date of request.

252:100-41-42. Compliance requirements

It shall be the responsibility of the Department to obtain routine modeling and/or monitoring data. However, upon the showing of the need for more extensive or more precise data, the source may be required to furnish additional modeling, using the most appropriate EPA approved model for the source, and/or monitoring.

(1) Said modeling and/or monitoring shall be required only upon a showing that the source may cause or contribute to the violation of the MAAC; all modeling, monitoring and testing shall be accomplished in accordance with a pre-test plan approved by the Executive Director.

(2) Failure, or denial by the source to provide the requested modeling, monitoring or testing shall be a violation of this subsection and subject to the order and hearing requirements under the Oklahoma Clean Air Act, 27A O.S. 1993 Supp. Sec. 2-5-101 *et seq.*

252:100-41-43. Exemptions

(a) This Part does not apply to the following:

- (1) any pollutant for which an Oklahoma Air Quality primary and secondary standard exists and has been set forth under OAC 252:100-3, to the extent of the criteria for which it was listed; or,
- (2) application of pesticides and fertilizers; or,
- (3) any source operation for which an emission standard is in effect under 252:100-41-15; or,
- (4) any substance which would be considered to be a toxic air contaminant by virtue of its radioactivity; or
- (5) sources with de minimis emissions as provided below:
 - (A) for category "C" (low toxicity) substances, six tons per year not to exceed 5.6 pounds per hour,
 - (B) for category "B" (moderate toxicity) substances, 1.2 tons per year, not to exceed 1.1 pounds per hour, or,
 - (C) for category "A" (highly toxic) substances, 1,200 pounds per year, not to exceed .57 pounds per hour.

(b) Provided further that de minimis exemptions under this Section shall not apply to any source which can be shown to cause or contribute to a violation of 252:100-41-36(a).

252:100-41-44. Compliance date

(a) Permits for all new sources shall be required upon the effective date of this Subchapter.

(b) Existing sources shall be in full compliance with the requirements of this Subchapter within one year of its effective date.

(c) For the purposes of this Subchapter, any source under construction on the effective date of this Subchapter shall be considered an existing source, provided that a permit to construct has been granted.

(d) Any existing source not currently in operation, and not under construction or modification, shall be in full compliance within one year of the start up of operations.