

**401 KAR 63:001. Definitions and abbreviations of terms used in 401 KAR Chapter 63.**

**NATURAL RESOURCES AND ENVIRONMENTAL PROTECTION CABINET**

Department for Environmental Protection Division for Air Quality

RELATES TO: KRS 224.01-010, 224.20-100, 224.20-110, 224.20-120; 40 CFR Chapter 1; Appendices A through K to 40 CFR 50; 40 CFR 5 1. 100(s); 40 CFR 53; 40 CFR 60; Appendices A and B to 40 CFR 60; Appendix B to 40 CFR 61; 42 USC 7410; 42 USC 7411(a)(8).

STATUTORY AUTHORITY: KRS 224. 10-100.

NECESSITY AND FUNCTION: KRS 224.10-100 requires the Environmental and Public Protection Cabinet to promulgate regulations for the prevention, abatement, and control of air pollution. This administrative regulation provides for the definition of terms used in 401 KAR Chapter 63.

**Section 1. General definitions.** As used in the Division for Air Quality administrative regulations of 401 KAR Chapter 63, unless the content clearly indicates otherwise in a specific administrative regulation, the following words shall have the following meanings:

- (1) "Affected facility" means an apparatus, building, operation, road, or other entity or series of entities that emits or may emit an air contaminant into the outdoor atmosphere.
- (2) "Air contaminant" has the meaning given it in KRS 224.01-010.
- (3) "Air pollutant" means an air contaminant.
- (4) "Air pollution" has the meaning given it in KRS 224.01-010.
- (5) "Air pollution control equipment" means a mechanism, device or contrivance used to control or prevent air pollution, that is not, aside from air pollution control laws and regulations, vital to production of the normal product of the source or to its normal operation.
- (6) "Alteration" means:
  - (a) The installation or replacement of air pollution control equipment at a source;
  - (b) A physical change in or change in the method of operation of an affected facility that increases the potential to emit of a pollutant (to which a standard applies) emitted by the facility or that results in the emission of an air pollutant (to which a standard applies) not previously emitted.
- (7) "Alternative method" means a method of sampling and analyzing for an air pollutant that

is not a reference method or equivalent method and has been demonstrated to the cabinet's and the U.S. EPA's satisfaction to, in specific cases, produce results adequate for its determination of compliance.

- (8) "Ambient air" means that portion of the atmosphere, external to buildings, to which the general public has access.
- (9) "Ambient air quality standard" means a numerical expression of a specified concentration level for a particular air contaminant and the time averaging interval over which that concentration level is measured and is a goal to be achieved in a stated time through the application of appropriate preventive or control measures.
- (10) "Cabinet" has the meaning given it in KRS 224.01-010.
- (11) "Capital expenditure" is defined in 40 C.F.R. 60.2.
- (12) "Commence" means that an owner or operator has undertaken a continuous program of construction, modification, or reconstruction of an affected facility, or that an owner or operator has entered into a contractual obligation to undertake and complete, within a reasonable time, a continuous program of construction, modification, or reconstruction of an affected facility.
- (13) "Compliance schedule" means a time schedule of remedial measures including an enforceable sequence of actions or operations leading to compliance with a limitation or standard.
- (14) "Construction" means fabrication, erection, installation or modification of an air contaminant source.
- (15) "Continuous monitoring system" means the total equipment, required under the applicable regulations used to sample, to condition (if applicable), to analyze and to provide a permanent record of emissions or process parameters.
- (16) "Director" means Director of the Division for Air Quality of the Environmental and Public Protection Cabinet.
- (17) "District" has the meaning given it in KRS 224.01-010.
- (18) "Emission standard" means that numerical limit that fixes the amount of an air contaminant or air contaminants that may be vented into the atmosphere (open air) from an affected facility or from air pollution control equipment installed in an affected facility.
- (19) "Equivalent method" means a method of sampling and analyzing for an air pollutant that

has been demonstrated to the cabinet's and the U.S. EPA's satisfaction to have a consistent and quantitatively known relationship to the reference method, under specified conditions.

- (20) "Exempt compound" or "Exempt solvent" means an organic compound listed in the definition of volatile organic compound as not participating in atmospheric photochemical reactions.
- (21) "Existing source" means a source that is not a new source.
- (22) "Extreme nonattainment county" or "extreme nonattainment area" means a county or portion of a county designated extreme nonattainment in 401 KAR 51:010.
- (23) "Fixed capital cost" means the capital needed to provide all the depreciable components.
- (24) "Fuel" means natural gas, petroleum, coal, wood, and any form of solid, liquid, or gaseous fuel derived from these materials for the purpose of creating useful heat.
- (25) "Fugitive emissions" means the emissions of an air contaminant into the open air other than from a stack or air pollution control equipment exhaust.
- (26) "Hydrocarbon" means an organic compound consisting predominantly of carbon and hydrogen.
- (27) "Incineration" means the process of igniting and burning solid, semi-solid, liquid, or gaseous combustible wastes.
- (28) "Intermittent emissions" means emissions of particulate matter into the open air from a process that operates for less than any six (6) consecutive minutes.
- (29) "Major source" means a source of which the potential emission rate is equal to or greater than 100 tons per year of any one (1) of the following pollutants: particulate matter, sulfur oxides, nitrogen oxides, volatile organic compounds or carbon monoxide.
- (30) "Malfunction" means a failure of air pollution control equipment, or process equipment, or of a process to operate in a normal or usual manner. Failures that are caused entirely or in part by poor maintenance, careless operation, or any other preventable upset condition or preventable equipment breakdown shall not be considered malfunctions.
- (31) "Marginal nonattainment county" or "marginal nonattainment area" means a county or portion of a county designated marginal nonattainment in 401 KAR 51:010.

"µg" means microgram.

"min" means minute.

"MM" means million.

- (32) "Moderate nonattainment county" or "moderate nonattainment area" means a county or portion of a county designated moderate nonattainment in 401 KAR 51:010.
- (33) "Modification" means any physical change in, or change in the method of operation of, an affected facility that increases the amount of an air pollutant (to which a standard applies) emitted into the atmosphere by that facility or that results in the emission of an air pollutant (to which a standard applies) into the atmosphere not previously emitted. The following shall not, by themselves, be considered modifications:
- (a) Maintenance, repair, and replacement that the cabinet determines to be routine for a source category;
  - (b) An increase in production rate of an affected facility, if that increase can be accomplished without a capital expenditure on that facility;
  - (c) An increase in the hours of operation;
  - (d) Use of an alternative fuel or raw material if, prior to the date any standard becomes applicable to that source type, the affected facility was designed to accommodate that alternative use. A facility shall be considered to be designed to accommodate an alternative fuel or raw material if that use could be accomplished under the facility's construction specifications as amended prior to the change. Conversion to coal required for energy considerations, as specified in 42 USC 7411 (a)(8), shall not be considered a modification;
  - (e) The addition or use of any system or device the primary function of which is the reduction of air pollutants, except when an emission control system is removed or is replaced by a system which the cabinet determines to be less environmentally beneficial;
  - (f) The relocation or change in ownership of an existing facility.
- (34) "Monitoring device" means the total equipment, required in applicable regulations, used to measure and record, if applicable, process parameters.
- (35) "New source" means a source, the construction, reconstruction, or modification of which commenced on or after the classification date as defined in the applicable regulation. A source, upon reconstruction, becomes a new source, irrespective of a change in emission

rate.

- (36) "Nitrogen oxides" means all oxides of nitrogen except nitrous oxide, as measured by test methods specified by the cabinet.
  - (37) "Opacity" means the degree to which emissions reduce the transmission of light and obscure the view of an object in the background.
  - (38) "Owner or operator" means, a person who owns, leases, operates, controls, or supervises an affected facility or a source to which an affected facility is a part.
  - (39) "Particulate matter" means a material, except uncombined water, which exists in a finely divided form as a liquid or a solid as measured by an approved test method.
  - (40) "Particulate matter emissions" means, except as used in 40 CFR 60, all finely divided solid or liquid material, other than uncombined water, emitted to the ambient air as measured by applicable reference methods, or an equivalent or alternative method specified in 40 CFR Chapter I, or by a test method specified in the approved state implementation plan.
  - (41) "Person" means an individual, public or private corporation, political subdivision, government agency, municipality, industry, co-partnership, association, firm, trust, estate, or other entity.
- "PM .5" means particulate matter with an aerodynamic diameter less than or equal to a nominal two-and-a-half (2.5) micrometers as measured by a reference method in 40 C.F.R. Part 50, Appendix L, and designated in accordance with 40 C.F.R. Part 53, or by an equivalent method designated in accordance with 40 C.F.R. Part 53.
- (42) "PM<sub>10</sub>" means particulate matter with an aerodynamic diameter less than or equal to a nominal ten (10) micrometers as measured by a reference method in 40 C.F.R. Part 50, Appendix J, which has been incorporated by reference in 401 KAR 50:015, and designated in accordance with 40 CFR Part 53, or by an equivalent method designated in accordance with 40 CFR Part 53.
  - (43) "PM<sub>10</sub> emissions" means finely divided solid or liquid material with an aerodynamic diameter less than or equal to a nominal ten (10) micrometers emitted to the ambient air as measured by an applicable reference method, or an equivalent or alternative method, specified in 40 CFR Chapter 1, or by a test method specified in the approved state implementation plan.
  - (44) "Potential to emit" or "PTE" means the maximum capacity of a stationary source to emit a pollutant under its physical and operational design. A physical or operational limitation

on the capacity of the source to emit, a pollutant, including air pollution control equipment and restrictions on hours of operation or on the type or amount of material combusted, stored, or processed, shall be treated as part of its design if the limitation or the effect it would have on emissions is federally enforceable. Secondary emissions shall not count in determining the potential to emit of a stationary source.

- (45) "Reconstruction" means the replacement of components of an existing affected facility to the extent that the fixed capital cost of the new components exceeds fifty (50) percent of the fixed capital cost that would be required to construct a comparable entirely new affected facility, and it is technologically and economically feasible to meet the applicable new source standards. Individual sections of these administrative regulations may include specific provisions which refine and delimit the concept of reconstruction set forth in this subsection. The cabinet's determination as to whether the proposed replacement constitutes reconstruction shall be based on:
- (a) The fixed capital cost of the replacements in comparison to the fixed capital cost that would be required to construct a comparable entirely new facility;
  - (b) The estimated life of the affected facility after the replacements compared to the life of a comparable entirely new affected facility;
  - (c) The extent to which the components being replaced cause or contribute to the emissions from the affected facility; and
  - (d) Economic or technical limitations on compliance with applicable standards of performance which are inherent in the proposed replacements.
- (46) "Reference method" means a method of sampling and analyzing for an air pollutant as published in Appendices A through n to 40 C.F.R. 50; 40 C.F.R. Part 53; Appendices A and B to 40 CFR 60; Appendix B to 40 CFR 61; 40 C.F.R. Part 63, Appendices A to D which have been incorporated by reference in 401 KAR 50:015. This term may be more narrowly defined within a specific administrative regulation.
- (47) "Run" means the net period of time when an emission sample is collected. Unless otherwise specified, a run may be either intermittent or continuous within the limits of good engineering practice.
- (48) "Secondary emissions" means emissions which occur as a result of the construction or operation of a major stationary source or major modification, but do not come from the major stationary source or major modification itself. Secondary emissions shall be specific, well defined, quantifiable, and shall impact the same general area as does the stationary source modification that causes the secondary emissions. Secondary emissions may include, but are not limited to emissions from an offsite support facility that would

not otherwise be constructed or increase its emissions as a result of the construction or operation of the major stationary source or major modification. Secondary emissions do not include emissions that come directly from a mobile source, such as the emissions from the tailpipe of a motor vehicle, from a train, or from a vessel.

- (49) "Serious nonattainment county" or "serious nonattainment area" means a county or portion of a county designated serious nonattainment in 401 KAR 51:010.
- (50) "Severe nonattainment county" or "severe nonattainment area" means a county or portion of a county designated severe nonattainment in 401 KAR 51:010.
- (51) "Shutdown" means the cessation of an operation.
- (52) "Source" means one (1) or more affected facilities contained within a given contiguous property line. The property shall be considered contiguous if separated only by a public thoroughfare, stream, or other right of way.
- (53) "Stack or chimney" means a flue, conduit, or duct arranged to conduct emissions to the atmosphere.
- (54) "Standard" means an emission standard, a standard of performance, or an ambient air quality standard as promulgated under the administrative regulations of the Division for Air Quality or the emission control requirements necessary to comply with 401 KAR Chapter 51, of the administrative regulations of the Division for Air Quality.
- (55) "Standard conditions" means:
  - (a) For source measurements means twenty (20) degrees Celsius (sixty-eight (68) degrees Fahrenheit) and a pressure of 760 mm Hg (29.92 in. of Hg);
  - (b) For the purpose of air quality determinations means twenty-five (25) degrees Celsius (seventy-seven (77) degrees Fahrenheit) and a reference pressure of 760 mm Hg (29.92 in. of Hg).
- (56) "Start-up" means the setting in operation of an affected facility.
- (57) "State implementation plan" means the most recently prepared plan or revision required by 42 USC 7410 that has been approved by the U.S. EPA.
- (58) "Total suspended particulate" or "TSP" means particulate matter as measured by the method described in 40 C.F.R. Part 50 Appendix B, which has been incorporated by reference in 401 KAR 50:015.

- (59) "Uncombined water" means water that can be separated from a compound by ordinary physical means and that is not bound to a compound by internal molecular forces.
- (60) "Urban county" means a county that is a part of an urbanized area with a population of greater than 200,000 based upon the 1980 census. If a portion of a county is a part of an urbanized area, then the entire county shall be classified as urban with respect to the administrative regulations of the Division for Air Quality.
- (61) "Urbanized area" means an area defined by the U.S. Department of Commerce, Bureau of Census.

"Volatile organic compound" or "VOC" is defined in 40 C.F.R. 51.100(s).

"yd" means yard.

**Section 2. Abbreviations.** The abbreviations used in the administrative regulations of 401 KAR Chapter 63, shall have the following meanings:

AOAC - Association of Official Analytical Chemists

ANSI - American National Standards Institute

ASTM - American Society for Testing and Materials

BOD - Biochemical oxidant demand

BTU - British Thermal Unit

°C - Degree Celsius (centigrade) Cal - calorie

cfm - cubic feet per minute

CFR - Code of Federal Regulations

CH<sub>4</sub> - methane

CO - Carbon monoxide

CO<sub>2</sub> - Carbon dioxide

COD - Chemical oxidant demand

dscf - dry cubic feet at standard conditions

dscm - dry cubic meter at standard conditions

°F - Degree Fahrenheit

ft - feet

g - gram

gal - gallon

gr - grain

hr - hour

HCl - Hydrochloric acid

Hg - mercury

HF - Hydrogen fluoride

H<sub>2</sub>O - water

H<sub>2</sub>S - Hydrogen sulfide



H<sub>2</sub>SO<sub>4</sub> - Sulfuric acid  
in - inch  
J - joule  
KAR - Kentucky Administrative Regulations  
kg - kilogram  
KRS - Kentucky Revised Statutes I - liter  
lb - pound  
m - meter  
m<sup>3</sup> - cubic meter  
min - minute  
mg - milligram  
MJ - megajoules  
MM - million mm - millimeter  
mo - month  
Ng - nanograms  
N<sub>2</sub>- Nitrogen  
NO - Nitric oxide  
NO<sub>2</sub> - Nitrogen dioxide  
NO<sub>x</sub> - Nitrogen oxides  
oz- ounce  
O<sub>2</sub>- oxygen  
O<sub>3</sub> - ozone  
ppb - parts per billion  
ppm - parts per million  
ppm (w/w) - parts per million (weight by weight)  
mg - microgram  
psia - pounds per square inch absolute  
psig - pounds per square inch gauge  
S - at standard conditions  
sec -second  
SIP - State implementation plan  
SO<sub>2</sub> - Sulfur dioxide  
sq - square  
TAPPI - Technical Association of the Pulp and Paper Industry  
TSP - Total suspended particulates  
TSS - Total suspended solids  
U.S. EPA - United States Environmental Protection Agency  
UTM - Universal Transverse Mercator  
VOC - Volatile organic compound  
yd - yard

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1st Revision	MAY 04, 1995	JUN 13, 1995	60 FR 31087
2nd Revision	JUN 19, 1996	JAN 21, 1997	62 FR 2915
3 <sup>rd</sup> Revision	DEC 14, 2006	SEP 13, 2007	72 FR 52282

## **401 KAR 63:005. Open burning.**

NATURAL RESOURCES AND ENVIRONMENTAL PROTECTION CABINET  
Department for Environmental Protection Division for Air Quality

RELATES TO: KRS 149.400, 224.10-100, 224.20-100, 224.20-110, 224.20-120, 42 USC 7401 through 7671q

STATUTORY AUTHORITY: KRS 224.10-100, 224.20-110

NECESSITY, FUNCTION, AND CONFORMITY: KRS 224.10-100 requires the Environmental and Public Protection Cabinet to promulgate administrative regulations for the prevention, abatement, and control of air pollution. KRS 224.20-110 prohibits any person from directly or indirectly, emitting into or discharging into the air under the jurisdiction of the commonwealth or causing permitting or allowing to be emitted or discharged into the air, any contaminants as provided for in subsection (1) of KRS 224.01-010 that shall cause or contribute to the pollution of the air of the commonwealth in contravention of any of the rules administrative regulations or orders of the cabinet. This administrative regulation establishes requirements for the control of open burning.

### **Section 1. Definitions.**

- (1) "Clean lumber" means wood or wood products that have been cut or shaped and includes wet air-dried and kiln-dried wood products and does not include commercial or industrial waste or wood products that have been painted, pigment-stained, or pressure-treated using any hazardous or toxic compounds.
- (2) "Fire training" means the instruction of industrial public and Private firefighters conducted in accordance with safety standards and procedures as accepted by the Kentucky State Fire Marshal the Kentucky Fire Commission or the National Wildfire Coordinating Group.
- (3) "Garbage" means putrescible animal and vegetable matter accumulated in the course of ordinary day to day living.
- (4) "Household rubbish" means waste material and trash, normally accumulated by a family in a residence in the course of ordinary day to day living, except for garbage, cans, glass, plastic, or other potentially hazardous waste materials.
- (5) "Land clearing" means clearing of land for agricultural residential industrial or commercial development purposes including the construction of roads.
- (6) "Open burning" means the burning of any matter without a burn chamber approved by the Kentucky Division for Air Quality, or without a stack or chimney with control

devices approved by the Kentucky Division for Air Quality.

- (7) "Priority I Region" means a region classified as Priority I in 401 KAR 50:020, Appendix A.
- (8) "Recognized agricultural, silvicultural, range, ecological, or wildlife management practices" means burning recognized by the Kentucky Department of Agriculture, the United States Department of Agriculture the Kentucky Division of Forestry, the United States Forest Service the Kentucky Department of Fish and Wildlife, the Kentucky State Nature Preserves Commission, or the United States Fish and Wildlife Service as necessary to promote cultivation of crops, range, and forest lands, weed and understory abatement and pest control and prevention.
- (9) "Wood waste" means untreated wood and untreated wood Products including tree stumps (whole or chipped), felled trees tree limbs (whole or chipped), bark, sawdust, chips, scraps, slabs, millings and shavings. Wood waste does not include:
  - (a) Yard waste:
  - (b) Construction renovation, or demolition wastes; or
  - (c) Clean lumber.
- (10) "Yard waste" means grass, grass clippings bushes, shrubs, and clippings from bushes and shrubs, which come from residential, commercial retail, institutional, or industrial sources as part of maintaining yards or other private or public lands. Yard waste does not include:
  - (a) Construction, renovation, and demolition wastes: or
  - (b) Clean lumber.

**Section 2. Applicability.** This administrative regulation shall apply to all open burning that is not subject to another administrative regulation in 401 KAR Chapters 50 to 65.

**Section 3. Prohibition of Open Burning.** Except as provided in Sections 4 and 5 of this administrative regulation, open burning shall be prohibited.

**Section 4. Allowable Open Burning.** Subject to the limitations contained in this section and the restrictions contained in Section 5 of this administrative regulation, open burning shall be allowed for:

- (1) Fires set for the cooking of food for human consumption;

- (2) Fires set for recreational or ceremonial purposes;
- (3) Small fires set by construction and other workers for comfort heating purposes if:
  - (a) The ambient temperature is below fifty (50)-degrees Fahrenheit;
  - (b) Excessive or unusual smoke is not created;
  - (c) Only clean lumber or vegetative matter is burned; and
  - (d) The fire is burned in a container not exceeding fifty-five (55) gallons in size;
- (4) Fires set for the purpose of weed abatement, disease, and pest prevention;
- (5) Fires set for prevention of a fire hazard, including the disposal of dangerous materials if no safe alternative is available;
- (6) Fires set for the purpose of instruction and training of public and industrial employees in the methods of fighting fires as set forth in Section 6(b) of this administrative regulation;
- (7) Fires set for recognized agricultural, silvicultural, range, ecological, and wildlife management practices;
- (8) Fires set by individual homeowners for burning of leaves except in cities greater than 8,000 population located in a Priority I Region;
- (9) Fires for disposal of household rubbish which shall not include garbage originating at dwellings of five (5) family units or less, if the fires are maintained by an occupant of the dwelling at the dwelling except in cities greater than 8,000 population located in a Priority I Region;
- (10) Fires set for the purpose of disposing of accidental spills or leaks of crude oil petroleum products or other organic materials and the disposal of absorbent material used in their removal, if no other economically feasible means of disposal is available and practical. Permission shall be obtained from the cabinet prior to burning;
- (11) Fires set for disposal of natural growth for land clearing and maintenance, and trees and tree limbs felled by storms if no extraneous materials such as tires or heavy oil which tend to produce dense smoke are used to cause ignition or aid combustion and the burning is done on days when conditions do not pose a threat of igniting a forest fire In regions classified Priority I with respect to particulate matter Pursuant to 401 KAR 50:020 Appendix A, the emissions from these fires shall not be equal to or greater than forty (40) percent opacity;

- (12) Heating ropes that are set on fire to repair steel rails during cold weather: and
- (13) Fires set by county or municipal governments to dispose of wood waste or clean lumber. This activity shall not be considered in violation of 401 KAR 47:030. Section 10.

**Section 5. Restrictions to Open Burning.**

- (1) For those counties or portions of counties which are or were previously, designated moderate nonattainment for the one (1) hour ozone or nonattainment for the National Ambient Air Quality Standards (NAAQS):.PM<sub>10</sub> or those counties, or portions of counties, which are, or were designated nonattainment for the eight (8) hour ozone or PM<sub>2.5</sub> national ambient air quality standards, pursuant to 401 KAR 51:010, fires may be set in accordance with this administrative regulation except during the months of May, June, July, August, and September. During these months, the only open burning activities allowed shall be:
  - (a) Fires set for the cooking of food for human consumption;
  - (b) Fires set for prevention of a fire hazard, including disposal of dangerous materials if no safe alternative is available;
  - (c) Fires set for the purpose of bona fide instruction and training of public and industrial employees in the methods of fighting fires;
  - (d) Fires set for recognized agricultural, silvicultural, range, ecological, and wildlife management practices;
  - (e) Fires set for the purpose of disposing of accidental spills or leaks of crude oil petroleum products or other organic materials and the disposal of absorbent material used in their removal, if no other economically feasible means of disposal is available and practical Permission shall be obtained from the cabinet prior to burning: and
  - (f) Fires set for recreational or ceremonial purposes.
- (2) Open burning shall comply with the fire hazard season requirements of KRS 149.400.
- (3) Open burning for land clearing purposes associated with residential commercial or industrial development shall be limited to a maximum of two (2) contiguous acres at any one (1) time.
- (4) This administrative regulation shall not authorize open burning that is prohibited by any local ordinance.

**Section 6. Procedures for Fire Training Burning.** Conducted in conjunction with training for public private and industrial firefighters shall be subject to the following criteria:

- (1) Excluding fire training that has been approved by the Kentucky State Fire Marshal or which has been certified by the Kentucky State Fire Commission, or which is conducted in accordance with standards adopted by the National Wildfire Coordinating Group any entity intending to conduct fire training shall submit written notification to the local Division for Air Quality regional office a minimum of fifteen (15) days prior to the scheduled training. The written notification shall state the location and the date of the proposed fire training the name and contact information for the on-site training coordinator, the number of firefighters to be trained the goals and the objectives of the training, and a brief summary of what is to be taught.
- (2) Any materials that contain asbestos shall not be burned.
- (3) Materials likely to produce hazardous or toxic emissions shall be removed prior to the fire training burning event to the extent practicable. and properly disposed.
- (4) Excluding fire training approved by the Kentucky Division of Forestry or the Kentucky State Fire Marshal or which has been certified by the Kentucky State Fire Commission, or which is conducted in accordance with standards adopted by the National Wildfire Coordinating Group, entities conducting fire training shall be limited to one burning event related to training per year for every ten firefighters under their supervision.
- (5) Excluding fire training approved by the Kentucky Division of Forestry or the Kentucky State Fire Marshal or which has been certified by the Kentucky State Fire Commission, or which is conducted in accordance with standards adopted by the National Wildfire Coordinating Group, between May 1 and September 30 fire training shall not be conducted in any counties or portions of counties which are or were previously, designated moderate nonattainment for ozone or designated or Previously designated nonattainment for the eight (8) hour ozone or PM<sub>2.5</sub> (particulate matter) national ambient air quality standard pursuant to 401 KAR 51:010.

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1st Revision	FEB 03, 1998	DEC 08, 1998	63 FR 67586
2nd Revision	SEP 14, 2005	OCT 17, 2007	72 FR 58759

## **401 KAR 63:010. Fugitive emissions.**

NATURAL RESOURCES AND ENVIRONMENTAL PROTECTION CABINET  
Department for Environmental Protection Division for Air Quality

Relates to: KRS 224.20, 224.10-100, 42 U.S.C. 7407

Pursuant to: KRS 13.082, 224.033

NECESSITY, FUNCTION, AND CONFORMITY: KRS 224.10-100(5) authorizes the Cabinet to promulgate regulations for the prevention, abatement, and control of air pollution. This regulation establishes requirements for the control of fugitive emissions.

**Section 1. Definitions.** Except as defined in this section, terms used in this regulation shall have the meaning established in 401 KAR 50:010.

- (1) "Affected facility" means an apparatus, operation, or road that emits or could emit fugitive emissions not elsewhere subject to an opacity standard within 401 KAR Chapters 50 through 68.
- (2) "Emission time" means the accumulated amount of time that emissions are visible during the observation period.
- (3) "Fugitive emissions" means the emissions of any air contaminant into the open air other than from a stack or air pollution control equipment exhaust.
- (4) "Observation period" means the accumulated time period during which observations are conducted.
- (5) "Open air" means the air outside buildings, structures, and equipment.

**Section 2. Applicability.** The provisions of this administrative regulation shall be applicable to each "affected facility" as defined by Section 1(1) of this administrative regulation.

## **Section 3. Standards for Fugitive emissions.**

- (1) A person shall not cause, suffer, or allow any material to be handled, processed, transported, or stored; a building or its appurtenances to be constructed, altered, repaired, or demolished; or a road to be used without taking reasonable precaution to prevent particulate matter from becoming airborne. Reasonable precautions shall include, as applicable:
  - (a) Use, if possible, of water or suitable chemicals for control of dust in the demolition of existing buildings or structures, construction operations, the grading



of roads or the clearing of land;

- (b) Application and maintenance of asphalt, oil, water, or suitable chemicals on roads, materials stockpiles, and other surfaces that can create airborne dusts;
  - (c) Installation and use of hoods, fans, and fabric filters to enclose and vent the handling of dusty materials, or the use of water sprays or other measures to suppress the dust emissions during handling. Adequate containment methods shall be employed during sandblasting or other similar operations;
  - (d) Covering, at all times while in motion, open bodied trucks transporting materials likely to become airborne;
  - (e) The maintenance of paved roadways in a clean condition; or
  - (f) The prompt removal of earth or other material from a paved street to which earth or other material has been transported by trucking or earth moving equipment or erosion by water.
- (2) A person shall not cause, suffer, or allow visible fugitive dust emission beyond the lot line of the property on which the emissions originate, as determined by Reference Method 22 of Appendix A in 40 C.F.R. Part 60 for:
- (a) More than five (5) minutes of emission time during any sixty (60) minute observation period; or
  - (b) More than twenty (20) minutes of emission time during any twenty-four (24) hour period.
- (3) If dust, fumes, gases, mist, odorous matter, vapors, or any combination thereof escape from a building or equipment in a manner and amount as to cause a nuisance or to violate any regulation, the secretary may, based on the cause, type, or amount of a fugitive emission, order that the building or equipment in which processing, handling and storage are done be tightly closed and ventilated in a way that all air and gases or air or gas-borne material leaving the building or equipment are treated by removal or destruction of air contaminants before discharge to the open air.
- (4) The provisions of this section shall not apply to agricultural practices such as tilling of land or application of fertilizers, which take place on a farm. Agricultural practices, such as tilling of land or application of fertilizers, which take place on a farm, shall be conducted in such a manner as to not create a nuisance to others residing in the area.

**Section 4. Additional Requirements.** In addition to the requirements of Section 3, the

following requirements established in subsection (1) through (3) of this section shall apply,

- (1) At all times while in motion, open bodied trucks, operating outside company property, transporting materials likely to become airborne shall be covered.
- (2) The provisions of Sections 3(1) and (2) shall not be applicable to temporary blasting or construction operations.
- (3) A person shall not cause, suffer, or allow earth or other material being transported by truck or earth moving equipment to be deposited onto a paved street or roadway.

Effective Date: June 6, 1979

	Date Submitted to EPA	Date Approved by EPA	Federal Register
Original Reg.	JUN 29, 1979	JUL 12, 1982	47 FR 30059
1st Revision:	OCT 16, 2020	MAY 9, 2022	87 FR 27524

**[NOTE: 63:010 WAS APPROVED FOR ATTAINMENT AREAS ONLY IN THE  
NON-PART D SIP]**

## **401 KAR 63:015. Flares.**

NATURAL RESOURCES AND ENVIRONMENTAL PROTECTION CABINET  
Department for Environmental Protection Division for Air Quality

Relates to: KRS Chapter 224

Pursuant to: KRS 13.082, 224.033

Necessity and Function: KRS 224.033 requires the Department for Natural Resources and Environmental Protection to prescribe regulations for the prevention, abatement, and control of air pollution. This regulation provides for the control of flares.

**Section 1. Applicability.** The provisions of this regulation are applicable to each affected facility which means flares as defined in Section 2.

**Section 2. Definitions.** Terms used in this regulation not defined herein shall have the meaning given to them in 401 KAR 50:010.

- (1) "Classification date" means April 9, 1972.
- (2) "Flare" means a device at the tip of a stack or other opening used for the disposal of waste gas stream by combustion.

### **Section 3. Standard for Particulate Matter.**

No person shall cause, suffer, or allow the emission into the open air of particulate matter from any flare which is greater than twenty (20) percent opacity for more than three (3) minutes in any one (1) day.

Effective Date: June 6, 1979

	Date Submitted to EPA	Date Approved by EPA	Federal Register
Original Reg.	JUN 29, 1979	DEC 24, 1980	45 FR 84999

## **401 KAR 63:025. Asphalt paving operations.**

### **NATURAL RESOURCES AND ENVIRONMENTAL PROTECTION CABINET**

Department for Environmental Protection Division for Air Quality

Relates to: KRS Chapter 224.20-100, 224.20-110, 224.20-120

Pursuant to: KRS 13.082, 224.10-100

Necessity and Function: KRS 224.10-100 requires the Department for Natural Resources and Environmental Protection to prescribe regulations for the prevention, abatement, and control of air pollution. This regulation provides for the control of volatile organic compound emissions due to asphalt paving operations.

**Section 1. Definitions.** Terms used in this regulation not defined in this section shall have the meaning given to them in 401 KAR 50:010.

- (1) "Asphalt paving operations" means the use of asphalt in any paving operation, public or private, including, but not limited to paving of roads, paving of parking lots, maintenance operations, application of tack coats, sealants, etc.
- (2) "Asphalt" means a dark-brown to black cementitious material (solid, semisolid, or liquid in consistency) in which the predominating constituents are bitumens which occur in nature as such or which are obtained as residue in refining petroleum.
- (3) "Cutback asphalt" means asphalt cement which has been liquefied by blending with VOCs as diluents. Upon exposure to atmospheric conditions the diluents evaporate, leaving the asphalt cement to perform its function.
- (4) "Emulsified asphalt" means an emulsion of asphalt cement, VOCs, and water which contains a small amount of an emulsifying agent; a heterogeneous system containing two (2) normally immiscible phases (asphalt and water) in which the water forms the continuous phase of the emulsion, and minute globules of asphalt form the discontinuous phase.
- (5) "Maintenance operation" means patching of holes and breaks in pavement as is necessary for safety.
- (6) "Penetrating prime coat" means an application of low- viscosity liquid asphalt to an absorbent surface. It is used to prepare an untreated base for an asphalt surface. The prime penetrates the base and plugs the voids, hardens the top, and helps bind it to the overlying asphalt course. It also reduces the necessity of maintaining an untreated base course prior to placing the asphalt paving.

- (7) "Unacceptable emulsion asphalt" means any emulsion asphalt which yields more than seven (7) percent by volume of oil distillate when tested according to AASHTO T 59-78, Sections 7 to 9, which have been incorporated by reference in 401 KAR 50:015.

**Section 2. Applicability**

This regulation is applicable to all asphalt paving operations which are located in a county or portion of a county which is designated ozone nonattainment, for any nonattainment classification except marginal, under 401 KAR 51:010.

**Section 3. Standard for VOCs.** On or after April 1, 1980, no person shall use cutback asphalts or unacceptable emulsion asphalts for asphalt paving operations. If this requirement becomes applicable because the county was previously designated nonurban nonattainment or redesignated in 401 KAR 51:010 after November 15, 1990, compliance is extended to May 31, 1995.

**Section 4. Exemptions.** This regulation shall not apply to the following asphalt paving operations:

- (1) Application of penetrating prime coat;
- (2) Dust suppression operations;
- (3) Maintenance operations during the months of November, December, January, February, and March.

Effective Date: June 24, 1992.

	Date Submitted to EPA	Date Approved by EPA	Federal Register
Original Reg.	JUN 29, 1979	JUL 12, 1982	45 FR 84999
1st Revision	OCT 20, 1992	JUN 23, 1994	59 FR 32343

## **401 KAR 63:031 Leaks from gasoline tank trucks.**

### **NATURAL RESOURCES AND ENVIRONMENTAL PROTECTION CABINET**

#### **Department for Environmental Protection Division for Air Quality**

Relates to: KRS Chapter 224

Pursuant to: KRS 13.082, 224.033

Necessity and Function: KRS 224.033 requires the Department for Natural Resources and Environmental Protection to prescribe regulations for the prevention, abatement, and control of air pollution. This regulation provides for the control of volatile organic compound emissions from leaks from gasoline tank trucks.

#### **Section 1. Applicability.**

- (1) The provisions of this regulation shall apply to each affected facility which loads or unloads gasoline on or after November 1, 1982.
- (2) The provisions of this regulation shall not apply to affected facilities which are subject to the regulations of a local air pollution control district within the Commonwealth of Kentucky which have been approved by the department and the U.S. EPA.

**Section 2. Definitions.** As used in this regulation, all terms not defined herein shall have the meaning given to them in 401 KAR 50:010, 401 KAR 61:055, 401 KAR 61:056, and 401 KAR 61:085.

- (1) "Affected facility " means gasoline tank trucks that are equipped for vapor collection and which load or unload at bulk terminals regulated by 401 KAR 59:010 or 401 KAR 61:055, bulk plants in urban counties regulated by 401 KAR 59:101 or 401 KAR 61:056, and service stations regulated by 401 KAR 59:175 or 401 KAR 61:085.
- (2) "Volatile organic compounds" means chemical compounds of carbon (excluding methane, ethane, carbon monoxide, carbon dioxide, carbonic acid, metallic carbides, and ammonium carbonate) which have a vapor pressure greater than one-tenth (0.1) mmHg at conditions of twenty (20) degrees Celsius and 760 mm Hg.
- (3) "LEL" means lower explosive limit, measured as propane.
- (4) "Kentucky pressure-vacuum test sticker" means a sticker which is issued each year by the department, in accordance with the provisions of Section 5, to the owner or operator of a gasoline tank truck subject to this regulation or which may be issued by a local air pollution control district within the Commonwealth of Kentucky with an equivalent regulation approved by the department and the U.S. EPA. This sticker indicates the compliance of the gasoline tank truck as witnessed by the department with the standard in Section 3(1) or compliance with a program determined equivalent by the department but

administered by another state in which the gasoline tank truck is based.

### **Section 3. Standard for volatile organic compounds.**

- (1) No owner or operator of a gasoline tank truck subject to this regulation shall allow loading or unloading unless the gasoline tank truck has a valid Kentucky pressure-vacuum test sticker attached and visibly displayed. This sticker indicates that the gasoline tank truck and its vapor collection system have been tested as having a pressure change of no more than seventy-five (75) mm water (three (3) in. water) in five (5) minutes when pressurized to 450 mm water (eighteen (18) in. water) or evacuated to 150 mm water (six (6) in. water) using the test procedure referenced in Section 4. The sticker shall be attached to the tank, located near the Department of Transportation Certification plate, and clearly visible.
- (2) During loading or unloading operations at regulated service station, bulk plants in urban counties and bulk terminals, there shall be no reading greater than or equal to 100 percent of the lower explosive limit (LEL, measured as propane) at a distance of 2.5 centimeters around the perimeter of a potential leak source as detected by a combustible gas detector using the test procedure referenced in Section 4.
- (3) During loading or unloading at service stations, bulk plants in urban counties and bulk terminals, there shall be no avoidable visible liquid leaks.

### **Section 4. Compliance.**

- (1) The test procedure as defined in Appendix A to "Control of Volatile Organic Compound Leaks from Gasoline Tank Trucks and Vapor Collection Systems" (OAQPS 1.2-119, U.S. EPA, Office of Air Quality Planning and Standards), filed by reference in 401 KAR 50:015, or an equivalent procedure approved by the department shall be used to determine compliance with the standard prescribed in Section 3(1). The owner or operator of the tank truck shall have the tank truck tested annually in the presence of a representative from the department and shall maintain records of test data, date of testing, identification of tank truck, type of repair, retest data and date. Records shall be maintained by the owner or operator for two (2) years after the date of testing and made available upon request to the department. The owner or operator of a gasoline tank truck shall provide the department ten (10) working days prior notice of the test to enable the department to have an observer present.
- (2) The test procedure as defined in Appendix B to "Control of Volatile Organic Compound Leaks from Gasoline Tank Trucks and Vapor Collection Systems" (OAQPS 1.2-119, U.S. EPA, Office of Air Quality Planning and Standards), filed by reference in 401 KAR 50:015, or an equivalent procedure approved by the department shall be used to determine compliance with the standard prescribed in Section 3(2) during inspections conducted pursuant to KRS 224.033(10). Trucks with leaks greater than or equal to 100 percent of the LEL shall be repaired and shall pass the pressure and vacuum test

described in Section 3(1) within fifteen (15) days.

**Section 5. Sticker Application and Fee.**

- (1) The owner or operator of a gasoline tank truck subject to this regulation shall apply to the department each year for a sticker. Applications shall be made on forms prepared by the department for such purpose. Applications shall be signed by the corporate president or by another duly authorized agent of the corporation; or by an equivalently responsible officer in the case of organizations other than corporations; or, in other cases, by the source owner or operator; or, in the case of political subdivisions, by the highest executive or official of such subdivision. Such signature shall constitute personal affirmation that the statements made in the application are true and complete. Failure to supply information required or deemed necessary by the department shall result in denial of the application. The department shall deny an application if the applicant willfully makes material misstatements in the application. Applications shall be received by the department at least fifteen (15) working days before a test.
- (2) Any owner or operator who submits an application for a sticker shall include with the application a certified check or money order in the amount of the sticker fee assessed by the department, payable to the Kentucky State Treasurer. The sticker fee for each gasoline tank truck is seventy dollars (\$70) per year. Retests on current applications for obtaining a sticker shall not require additional applications or fees. The fee is ten dollars (\$10) for each gasoline tank truck which is in compliance with a program determined equivalent by the department, but administered by another state in which the gasoline tank truck is based. The provisions of 401 KAR 50:035 and 401 KAR 50:036 shall not apply to the owner or operator of a gasoline tank truck subject to this regulation. Sticker fees are not refundable if a sticker is denied or an application is withdrawn. Fees are payable at the time of application.
- (3) Provisions of subsection (2) of this section shall not apply to publicly owned affected facilities.

Effective Date: February 8, 1993

	Date Submitted to EPA	Date Approved by EPA	Federal Register
Original Reg.	SEP 24, 1982	MAR 30, 1983	48 FR 13168
1st Revision	FEB 17, 1993	JUN 23, 1994	59 FR 32343