



# Construction Permits and Approvals

## INFORMATIONAL SHEET

**KDHE, BUREAU OF AIR (785) 296- 1570**

<http://www.kdheks.gov/bar/index.html>

**ANY PERSON WHO PROPOSES TO CONSTRUCT OR MODIFY A SOURCE OF AIR EMISSIONS MAY NEED A PERMIT OR AN APPROVAL PRIOR TO COMMENCING ANY CONSTRUCTION ACTIVITY. (K.A.R. 28-19-300)**

This document addresses, in summary form, the following:

- I. Who needs a construction permit prior to commencing construction or modification;
- II. Who needs a construction approval prior to commencing construction or modification;
- III. Calculating potential-to-emit;
- IV. Submitting a construction permit application;
- V. Submitting a construction approval application

Sources which meet applicability standards described in K.A.R. 28-19-500 are required to submit an operating permit application. Construction permits approve the construction, installation or modification of proposed sources of air emissions. Operating permits establish conditions for continued operation. If the facility requires an operating permit, simultaneous processing of the construction and operating permits is possible, but not required.

### **I. WHO NEEDS A CONSTRUCTION PERMIT**

[These requirements can be found at K.A.R. 28-19-300(a).]

A permit to construct or modify\* an air emission source is required if:

1. The potential-to-emit of the proposed source or the increase in the potential-to-emit due to the modification equals or exceeds:
  - a. 100 tons per year of particulate matter for an agricultural-related activity;
  - b. 25 tons per year of particulate matter or 15 tons per year of PM<sub>10</sub> for any activity which is not an agricultural- related activity;
  - c. 10 tons of directly emitted PM<sub>2.5</sub> per year.
  - d. 40 tons per year of sulfur dioxide (SO<sub>2</sub>) or sulfur trioxide (SO<sub>3</sub>), or a combination thereof; volatile organic compounds; or oxides of nitrogen (NO<sub>x</sub>);
  - e. 100 tons per year of carbon monoxide;
  - f. 0.6 tons per year of lead; or
  - g. 10 tons per year of any single hazardous air pollutant or 25 tons per year of a combination of hazardous air pollutants. (The hazardous air pollutants are listed at K.A.R. 28-19-7(gg).)
2. The facility is requesting a federally enforceable operation restriction or permit condition pursuant to K.A.R 28-19-302(b).
3. The emissions unit or stationary source is an incinerator used to dispose of refuse by burning or pyrolysis or used for the processing of salvageable materials, except incinerators installed on residential premises that contain less than six dwelling units and that are used to burn waste materials associated with normal habitation of those dwelling units.

## II. WHO NEEDS A CONSTRUCTION APPROVAL

[These requirements can be found at K.A.R. 28-19-300(b).]

An approval to construct or modify\* an air emission source is required for certain sources not required to obtain a construction permit if:

1. The potential-to-emit of the proposed source or the increase in the potential-to-emit due to the modification equals or exceeds:
  - a. 5 pounds per hour of particulate matter or, in the case of a non-agricultural related activity, 2 pounds per hour of PM<sub>10</sub>;
  - b. 2 pounds per hour of sulfur dioxide (SO<sub>2</sub>) or sulfur trioxide (SO<sub>3</sub>), or a combination thereof;
  - c. 50 pounds per 24 hour period of carbon monoxide, oxides of nitrogen calculated as nitrogen dioxide, or volatile organic compounds (except in Wyandotte and Johnson Counties, approval is necessary if volatile organic compound emissions equal or exceed either 15 pounds per 24 hour period or 3 pounds per hour);
  - d. 0.1 pound per hour of lead or lead compounds;
2. The construction, reconstruction, or modification project triggers:
  - a. 40 CFR Part 60
  - b. 40 CFR Part 61
  - c. 40 CFR Part 63 (exceptions include Subpart M, CCCCCC, and Area Source ZZZZ)
3. The source is seeking an approval with operation restrictions pursuant to K.A.R. 28-19-302(c).

## III. CALCULATING POTENTIAL-TO-EMIT (PTE)

Contact KDHE for additional guidance if you are unfamiliar with or have questions pertaining to the procedure for calculating potential-to-emit.

Potential-to-emit is determined by estimating worst-case emissions for each pollutant of concern and calculating those emissions as if the source was continuously operating at maximum capacity.

For example, if, under maximum emission rate conditions, NO<sub>x</sub> emissions from the source were determined to be 3 pounds per hour, the potential-to-emit of the source in tons per year would be determined by multiplying the hourly emission rate (3 pounds) times the number of hours in a year (8760) and divided by the number of pounds in a ton (2000), in which case the potential-to-emit of the source would be 13.14 tons per year.

$$\frac{\text{Maximum emission rate in pounds per hour} \times 8760 \text{ hours per year}}{2000 \text{ pounds / ton}} = \text{PTE in tons per year}$$

The only exception to this rule pertains to calculating the potential-to-emit for volatile organic compound (VOC) emissions from surface coating operations (spray-painting, for example) and printing presses. In these cases, the potential-to-emit for VOC emissions can be calculated by dividing total actual (or proposed) annual usage of VOCs (in pounds) by the actual (or proposed) hours of operation during the annual period, multiplying the quotient by 8760 hours per year and dividing the product by 2000 pounds per ton.

$$\frac{\text{Actual, annual VOC used (pounds)}}{\text{Annual hours of operation}} = \text{pounds of VOC used per hour}$$

$$\frac{\text{Pounds of VOC used per hour} \times 8760 \text{ hours per year}}{2000 \text{ pounds / ton}} = \text{PTE in tons per year}$$

#### **IV. SUBMITTING A CONSTRUCTION PERMIT APPLICATION**

[These requirements are found at K.A.R. 28-19-301(a) and 28-19-304(b, c, and d).]

The following must be submitted to the Kansas Department of Health and Environment, Bureau of Air, before an application for a construction permit can be processed:

1. A completed Notification of Construction or Modification cover sheet.
2. All applicable reporting forms and other information as stated in the Notification of Construction or Modification cover sheet.
3. Submission of the permit application fee. Application fees are determined according to the source categories specified in K.A.R 28-19-304(b and c)
4. Application fee(s) for a PSD permit application is specified in K.A.R 28-19-304(d).
5. Permit Applications (except PSD) can be emailed to [KDHE.BOAspermit@ks.gov](mailto:KDHE.BOAspermit@ks.gov). PSD applications may be mailed to the address below.

The necessary forms may be obtained from and submitted to:

Kansas Department of Health and Environment  
Bureau of Air  
1000 SW Jackson, Suite 310  
Topeka, Kansas  
66612-1366  
(785) 296-1570  
<http://www.kdheks.gov/air-permit/download.html>

Sources located in Wyandotte County should obtain forms from, and submit forms to:

Wyandotte County Health Department  
Department of Air Quality  
619 Ann Avenue  
Kansas City, Kansas  
66101  
(913) 573-6700

#### **V. SUBMITTING A CONSTRUCTION APPROVAL APPLICATION**

[These requirements are found at K.A.R. 28-19-301(a) and K.A.R 28-19-304(a).]

The following must be submitted to the Kansas Department of Health and Environment, Bureau of Air, before an application for a construction approval can be processed:

1. A completed Notification of Construction or Modification cover sheet.
2. All applicable reporting forms and other information as stated in the Notification of Construction or Modification cover sheet.
3. Submission of the approval application fee. The fee for each construction approval application is \$750.
4. Approval Applications can be emailed to [KDHE.BOAspermit@ks.gov](mailto:KDHE.BOAspermit@ks.gov).

The necessary forms may be obtained from and submitted to:

Kansas Department of Health and Environment  
Bureau of Air  
1000 SW Jackson, Suite 310  
Topeka, Kansas  
66612-1366  
(785) 296-1570  
<http://www.kdheks.gov/airpermit/download.html>

Sources located in Wyandotte County should obtain forms from, and submit forms to:

Wyandotte County Health Department  
Department of Air Quality

619 Ann Avenue  
Kansas City, Kansas  
66101  
(913) 573-6700

- \* For purposes of construction permit or approval applications, the following are not considered modifications:
1. Routine maintenance or parts replacement.
  2. An increase or decrease in operating hours or production rates if:
    - a. production rate increases do not exceed the originally approved design capacity of the stationary source or emissions unit; and
    - b. the increased potential-to-emit resulting from the change in operating hours or production rates do not exceed any emission or operating limitations imposed as a permit condition.