

# What is the Kansas Air Quality Act?

The Kansas Air Quality Act includes the following requirements for air pollution sources in Kansas: 1) preconstruction review, 2) operating permits, 3) annual emissions fees, and 4) other air requirements.

## Do you need a preconstruction review?

During preconstruction review, the Kansas Department of Health and Environment (KDHE) ensures that proposed construction projects at new facilities and modifications at existing facilities can meet applicable Kansas and federal air quality requirements.

You need a construction permit if your potential-to-emit, or your increase in potential-to-emit, exceeds the levels shown in Table 1, or if the construction activity includes an incinerator. If you are not required to obtain a construction permit, you may need a construction *approval* if you will be a new or modified source and

- your potential-to-emit (or your increase in potential-to-emit) equals or exceeds the thresholds in Table 2;
- you are subject to a New Source Performance Standard (NSPS); or
- your facility is subject to a maximum achievable control technology (MACT) standard or a national emission standard for hazardous air pollutants (NESHAP).

The primary difference between a construction permit and a construction approval is that the permit requires an application fee while the approval does not. The fee is equivalent to 0.05% of the capital cost of the proposed activity.

## What are air operating permits?

An air operating permit is a legal document that describes how your facility is meeting federal and state air quality regulations. The Kansas Department of Health and Environment's (KDHE) Bureau of Air and Radiation issues these permits. There are three classes of air operating permits.

### Class I

The Class I permit is for Kansas' major air emission sources. You are a major source if you have the potential to annually emit

- 10 tons or more of any hazardous air pollutant (HAP)
- 25 tons or more of any combination of HAPs
- 100 tons or more of any other regulated air pollutant including nitrogen oxides (NO<sub>x</sub>), sulfur oxides (SO<sub>x</sub>), particulate matter less than 10 microns (PM<sub>10</sub>), volatile organic compounds (VOC), and carbon monoxide (CO)

The Class I permit application process can be very involved, time consuming, and expensive (\$1,000 application fee or a \$500 modification fee). The permit application includes all of your air requirements for all emission units at your facility.

Once KDHE receives your application, it has 60 days to determine whether it is complete. Both the public and the U.S. Environmental Protection Agency (EPA) can participate in the application review process. Once issued, your Class I permit is good for five years. You will need to submit a renewal application at least six months before it expires. New or minor air emissions sources undergoing modification that causes their facilities to become Class I sources have one year from the time of becoming a Class I source to submit the permit application. It is recommended that businesses that will exceed their Class II permits apply for a Class I permit before the date of excess.



**Table 1. Construction Permit Thresholds**

<u>Pollutant</u>	<u>PTE threshold</u>
Lead	0.6 tons per year
PM10	15 tons per year
PM	25 tons per year
SOx	40 tons per year
VOC	40 tons per year
NOx	40 tons per year
CO	100 tons per year
HAPs (individual)	10 tons per year
HAPs (any combination)	25 tons per year

Class II

A Class II operating permit may be an option for you if you have actual emissions less than the 10/25/100 ton thresholds but potential emissions exceeding them. The Class II permit allows you to specify how you will limit your potential emissions to below the major source thresholds and thus avoid the need for a Class I permit.

The Class II operating permit is less expensive (\$200 application fee) and also less detailed and time consuming than the Class I permit. The Class II permit application asks for information KDHE needs to determine your facility's potential-to-emit, such as material safety data sheets and chemical usage rates, and how you will limit your potential to emit.

EPA, KDHE, and the public can review Class II permits. Once issued, the permit remains valid with no required renewal unless it is revoked, you are unable to limit your potential emissions to below the major source thresholds, or facility modification create the need for a revision. By June 1 of each year, you will need to submit operating information, such as material usage rates and material safety data sheets, for the previous year so that KDHE can calculate your air emissions.

If you are a minor source (your potential emissions below the major source threshold) but your potential emissions later exceed the major source threshold, you have one year from the time you exceed the threshold to submit a Class II permit application.

Class II "permit-by-rule"

KDHE developed a shortened Class II application, or permits-by-rule, for solvent evaporative sources, reciprocating engines, hot mix asphalt plants, and sources whose actual emissions are less than 50% of the major source thresholds. You may qualify for a permit-by-rule if you can work within the specified material use and purchase limitations for solvent evaporative sources, equipment specification, and use

**Table 2. Construction Approval Thresholds**

<u>Pollutant</u>	<u>PTE threshold</u>
Lead or lead compounds	0.1 pounds per hour
SO <sub>2</sub> or SO <sub>3</sub>	2 pounds per hour
PM10	2 pounds per hour
PM	5 pounds per hour
NOx	50 pounds per 24 hours
CO	50 pounds per 24 hours
(In Wyandotte and Johnson Counties)	
VOCs	3 pounds per hour 15 pounds per 24 hours
(Areas Except for Wyandotte and Johnson Counties)	
VOCs	50 pounds per 24 hours

limitations for reciprocating engines, or production limitations for hot mix asphalt plants or 50% emission limitations established by KDHE.

Under the permit-by-rule, you will need to maintain records on site, demonstrating that you meet the permit restrictions and submit emission-related information by June 1 of each year. The fee is \$50 and there is no public review. If you exceed your permit levels, then you may be required to obtain a Class II or Class I operating permit.

Class III operating permits

The Class III operating permit is primarily a registration form you need to complete if you are not required to obtain a Class I or Class II permit but are subject to a New Source Performance Standard (NSPS) or Part 61 National Emission Standard for Hazardous Air Pollutants (NESHAPs), or are located in Johnson or Wyandotte counties and are subject to VOC regulations, or if you have an incinerator. New sources required to obtain a Class III permit have one year from start-up to submit their application.

General permits

General permits are developed by KDHE for a group of similar sources requiring the same class of permit. The permit application and approval process for a general permit is less complex since less source-specific information is required. Also, if you are applying for a general permit, your application will not have to undergo individual public review since the general permit itself has already been publicly reviewed.

KDHE has a general permit for aggregate producers (rock crushers). Class I general permit application fee of \$250. The Class II general permit fee is \$50.

## Annual emissions fees

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You must pay for your emissions on a per ton basis if you have actual annual emissions of 10 tons or more of any single HAP; 25 tons or more of any combination of HAPs; or 100 tons or more of any of the following: VOCs, sulfur oxides (SO<sub>x</sub>), particulate matter less than 10 microns (PM<sub>10</sub>), or nitrogen oxides (NO<sub>x</sub>).

There is an annual 4000 ton-per-pollutant cap on charges incurred. As of 2001, the fee is \$20 per ton of emissions.

## Other air requirements that may apply to you

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### RACT rules

Certain Johnson and Wyandotte county VOC sources must meet reasonably available control technology (RACT) rules. Such rules go into effect because these counties have exceeded federally allowable ozone levels in the past. Because VOCs help form ozone, RACT rules look for ways to control VOC emissions. These rules remain in effect as part of each county's maintenance plan for ozone. Some industries with RACT requirements include printers with 100 or more tons of VOC emissions, solvent degreasers, and facilities painting metal products.

### MACT standards

Maximum Achievable Control Technology (MACT) standards are EPA-promulgated technology-based standards. MACT standards apply to sources of HAP emissions within certain source categories. Typically, major sources of HAP emissions have to meet a MACT standard. Chrome electroplaters, perchloroethylene dry cleaners, and halogenated solvent vapor degreasers are examples of sources that have been regulated under a MACT standard to date.

National Emission Standards for Hazardous Air Pollutants (NESHAPs) are health-based standards developed by EPA prior to 1990. The NESHAPs regulate sources emitting arsenic, asbestos, beryllium, benzene, mercury, radionuclides, and vinyl chloride.

### NSPS

New Source Performance Standards (NSPS) apply to certain newly constructed, reconstructed, or modified sources. They are based on the date of construction, modification, and reconstruction. Industries that have NSPSs include certain grain elevators, metal smelters and asphalt processors.

## Some common questions and answers about air permits

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### *Do I need an air permit for the oven in which I bake off paint hooks? May I burn my paint filters in my oven?*

First you need to decide whether the device you're using to burn off the paint hooks is classified as an incinerator. If it uses a direct flame and burns anything in addition to paint hooks, it is an incinerator. If it is an oven type, it still may be classified as an incinerator. If the device is classified as an incinerator, you need a construction permit. Otherwise, an individual evaluation must be done to determine the types of air emissions. A potential-to-emit calculation also must be performed to determine whether the oven exceeds any permitting threshold.

If the incinerator has been approved to burn non-hazardous paint filters, you may use it for that purpose. If it hasn't been approved, you need to request a modification to your permit. Please note that hazardous waste paint filters can't be incinerated without a hazardous waste treatment, storage, and disposal facility permit. If the paints used in your business contain metals, there are hazardous waste considerations as well. Always review the material safety data sheet (MSDS) for the products you use. If you are baking off paint hooks and have been using a paint containing chromium, for example, evaluate the residue metals content.

### *Is the ash from an electric bakeoff oven used to clean engine parts considered hazardous?*

Residues adhering to engine parts may contain metals. As a result, the ash produced through the operation of bakeoff ovens would have hazardous waste considerations. Because engine parts are made from a variety of metals and other materials, and because various lubricating oils and other chemical agents are used in engines, it generally is not possible to obtain adequate information from MSDS. Therefore, if you are baking off engine residues, you need to test the metals content of the ash to know whether it is hazardous.

### *What is the purpose of 112(r)? How do I know whether it applies to me?*

The purpose of section 112(r) of the Clean Air Act (CAA) is to prevent and minimize the consequences of accidental releases of certain hazardous substances that could harm public health and the environment. The accidental release regulations require that affected facilities minimize their chemical hazards by developing a risk management program and submitting a risk management plan (RMP).

## Kansas air regulations

Your facility must comply with the regulations if it produces, handles, processes, distributes, or stores more than the threshold quantity of a regulated substance at any given time. Call the Small Business Environmental Assistance Program at KSU at 800-578-8898 for a list of regulated substances.

### *When am I required to obtain an air construction permit?*

KDHE administers three basic construction permit programs: the prevention of significant deterioration (PSD) program, the state construction permit program, and the state approval program.

The PSD program is a complex federal program administered by KDHE. Early contact with KDHE is encouraged if it appears that the PSD permit may be applicable. A PSD permit is required for a new facility if the potential-to-emit for specified pollutants exceeds 250 tons per year (100 tons for certain listed sources). A PSD permit is required for a modification to a major PSD source if the potential-to-emit of the modification exceeds certain "significant" levels. A PSD permit is required for a modification to a minor PSD source if the potential-to-emit of the modification exceeds 250 tons per year (100 tons per year for certain listed sources). If the potential-to-emit of the proposed project exceeds the PSD program limits, the source will be required to limit emissions using the best available control technology (BACT). Sources sometimes implement physical restrictions, such as control equipment, or operational restrictions, such as limiting hours of operation or amount of product produced, to lower the potential-to-emit of the project, thus avoiding the PSD program.

A state construction permit is required if the potential-to-emit for a new facility, or the increase in the potential-to-emit due to the modification of an existing facility, equals or exceeds any of the construction permit thresholds listed in Table 1. Construction permits are also required for major sources of hazardous air pollutants, incinerators, and affected sources subject to Title IV acid deposition requirements of the federal Clean Air Act.

A state construction approval is required if the potential-to-emit for a new facility, or the increase in the potential-to-emit due to the modification of an existing facility, equals or exceeds any of the construction approval thresholds listed in Table 2. Construc-

tion approvals are also required for sources subject to certain federal regulations – new source performance standards, or national emission standards for hazardous air pollutants (NESHAPs or MACT standards) – if the source is not otherwise required to obtain a construction permit.

The project will be reviewed to determine whether applicable state implementation plan rules will be met, such as the process weight ratio for particulate matter sources. Control equipment or operational restrictions will be required for sources that cannot satisfy these requirements. All emission sources in Kansas are also subject to an opacity (density of smoke) standard.

### *I'm regulated by one of the new maximum achievable control technology (MACT) standards. Is KDHE or EPA enforcing the program?*

The state of Kansas is handling MACT standards that have been adopted by the state, and has adopted all MACT standards promulgated by EPA on or before July 1, 1998. KDHE works with EPA to implement MACT standards that KDHE has not yet adopted. EPA remains primarily responsible for enforcement of a MACT standard until KDHE adopts it.

### *We recently discovered that we should have an air permit. What should we do?*

Contact the Air Permit Section of KDHE's Bureau of Air and Radiation at 785-296-6422, if you discover that you should have an air permit. The bureau will work with you to obtain the proper permits and to comply with applicable requirements. It is important that you do this as soon as you can. As of March 1, 1997, federal law made it illegal to operate a major source of air pollutants in Kansas unless the source meets one of the following three criteria:

- the source has a Class I or Class II operating permit,
- the source has a complete and timely filed Class I application on file with KDHE, or
- the source has been in operation for less than one year.

EPA or any citizen is authorized to seek enforcement of the federal law in district court. If you have any further questions, contact SBEAP at 800-578-8898.



The Small Business Environmental Assistance Program's (SBEAP) mission is to help Kansas small businesses comply with environmental regulations and identify pollution prevention opportunities. SBEAP is funded through a contract with the Kansas Department of Health and Environment. SBEAP services are free and confidential. For more information, call 800-578-8898, send an e-mail to [SBEAP@ksu.edu](mailto:SBEAP@ksu.edu), or visit our Web site at [www.sbeap.org](http://www.sbeap.org). Kansas State University is an EEO/AA provider.