

ABOVEGROUND STORAGE TANKS

FACT SHEET

Background

The Kansas Department of Health and Environment (KDHE) is authorized to adopt rules and regulations necessary to carry out the provisions of the [Kansas Storage Tank Act](#), signed into law in 1989. KDHE later adopted [regulations](#), effective Nov. 26, 1990, to specifically regulate petroleum products storage tanks in Kansas. While emphasis of storage tank statutes and regulations is on underground storage tanks, or USTs, specific provisions are related to aboveground storage tanks, or ASTs, only, as well as to both ASTs and USTs. [An AST program overview document](#) expands on some of the information provided in this fact sheet.



What exactly is an AST?

An AST is any storage tank where more than 90% of the tank volume, including piping volume, is above the ground surface. If a storage tank happens to be situated in an underground area, such as a basement or cellar, it would also be considered an AST if it sits on or above the floor surface.

Which ASTs are NOT regulated?

The statute exempts many tanks, primarily based on tank size, type of use, and type of facility or operation. Although other jurisdictional or regulatory authorities may have an interest, such as the Kansas State Fire Marshal's Office (KSFMO) or a local municipality, exemptions include but are not limited to the following:

- ASTs with less than a 660-gallon capacity.
- Farm or residential motor fuel tanks of 1,100 gallons or less.
- Single-family residential heating-oil tanks.
- [ASTs containing agricultural materials regulated by the Kansas Department of Agriculture \(KDA\)](#).
- Liquid traps, storage tanks or gathering lines associated with oil and natural gas production.
- Surface impoundments, pits, ponds, septic tanks or lagoons.
- A pipeline facility including gathering lines regulated under U.S. Department of Transportation or an integral part of a pipeline; OR intrastate pipelines.
- Storm water or wastewater collection.
- Flow-through process tank.
- AST located at a petroleum refining facility.
- Pipeline terminals.

When does KDHE require registration and permitting of existing tanks?

The KDHE AST program requires any person who is or was the owner of any AST in use on July 1, 1992, or which was brought into use since that date, to register and obtain an operating permit for all nonexempt ASTs that contain the following:

- Liquid petroleum product fuels such as fuel oil, diesel, gasoline, gasohol, kerosene, aviation fuels and bio-fuels (i.e., ethanol, gasoline-ethanol blends, biodiesel and associated blends).
- Flammable or combustible liquids.
- Liquid hazardous substances listed in [40 CFR 302.4 that are not RCRA hazardous waste](#).
- Used oil.

After March 1, 1994, any of the liquid or regulated substances listed above must not be placed in an AST unless a valid permit is openly displayed at the facility. If it is determined you are operating an unpermitted storage tank, you may be subject to fines in the amount of \$10,000 per violation.

For exempt tanks containing petroleum products, the owner may elect to register them with KDHE. No permit is required for these small tanks and no charge is assessed for registration. The advantage to registering smaller ASTs with KDHE is to allow reimbursement from the trust fund to owners for approved corrective action associated with tank spills or leaks.

KDHE does not require registration and permitting for temporary ASTs such as those mounted on wheels or those at the same physical location for less than a year. These temporary ASTs, instead, fall under jurisdiction of the Kansas Department of Transportation (KDOT). Call KDOT at 785-296-3566 for more information.



What is required for new tank construction?

KDHE and KSFMO work together closely to permit and register new tanks to achieve overall environmental protection and to ensure fire code compliance. Construction can be started after approval from KSFMO/KDHE. No product can be delivered until a permit is issued. What your new tanks contain will dictate the process below to be followed:

- *For tanks containing flammable and/or combustible liquids, including fuels:* In order to ensure fire codes are met, all new or replacement tank construction for this category of ASTs must be approved in advance by using [the KSFMO application form](#). The review process will generally take anywhere from 4-6 weeks. Specific installation questions should be directed to KSFMO at 785-296-3401. Depending on who submits the application, KSFMO will issue an approval letter to either the tank owner or the construction contractor acting on the owner's behalf. At that time, KSFMO will also send a copy of the approval letter to KDHE.
- *For all regulated ASTs,* tank owners need to submit a permit application through the Kansas Environmental Information Management Systems (KEIMS), KDHE's online system for managing compliance documents and communication. Detailed instructions for registering new ASTs can be found on the [SBEAP website](#) in document or video form or on [YouTube](#). Owners will need to provide information about the facility and the tanks and pay a fee of \$10 per nonexempt tank. For tanks containing flammable and/or combustible liquids, this will include the letter of approval from KSFMO, and much of the information needed to complete the permit application is also included in the form submitted to KSFMO.
- KDHE may request the applicant provide additional information on a case-by-case basis. Specific installation questions should be directed to KDHE at 785-296-1678.
- Once an application has been approved, the permit will be available for download in [KEIMS](#) for users linked to the site.

What are notification and registration requirements?

All KDHE AST permits are valid from Aug. 1 to July 31 and must be renewed by Dec. 31 of each year. Renewals must be submitted in KEIMS and can be submitted as early as Oct. 1. The renewal process is fairly short and involves submitting some basic facility information and paying a fee of \$10 per nonexempt tank. Late submission will result in an additional fee of \$50 per tank. Detailed instructions for registering new ASTs and renewing AST permits can be found on the [SBEAP website](#) in document or video form or on [YouTube](#).

Anytime there is a change in ownership, status or product stored, the current owner is required to notify KDHE by submitting an AST change form in KEIMS. Detailed instructions for this process can be found on the [SBEAP website](#).

Are there secondary containment requirements?

Most ASTs need to meet federal spill, prevention, control and countermeasure (SPCC) requirements detailed in [40 CFR 112](#). For ASTs in Kansas, the U.S. Environmental Protection Agency (EPA) and KSFMO should be contacted to determine specific secondary containment requirements for your particular situation.

For those ASTs regulated by KSFMO/KDHE, secondary containment is required to contain 110% of the largest tank volume within the containment area. For your convenience, example and blank secondary containment calculation worksheets

for typical AST-facility scenarios are available on the [EPA's website](#). Specifically, KSFMO requires containment diking be provided for any size AST used for retail vehicle refueling, or any other tank of 660 gallons or more capacity. Unless the ASTs are double-lined, KDHE also recommends that all permitted ASTs have some type of impermeable secondary containment system. More information and guidance is available on the [KSFMO website](#).

In contrast, federal SPCC regulations contained in 40 CFR 112 prescribe secondary containment requirements, including container sizes, above and beyond those required by KSFMO for those facilities meeting certain criteria involving drilling, production, gathering, storing, processing, refining, or transferring or consuming oil or oil products. In particular, federal SPCC regulations require an AST owner/operator prepare and follow a facility-specific SPCC plan when total aboveground oil storage capacity is more than 1,320 gallons. The secondary containment area surrounding the AST must be impermeable to the materials being stored and should be able to hold the full capacity of the largest tank plus freeboard capacity for precipitation. Similar to state requirements, the EPA requires sufficient precipitation freeboard capacity with an amount necessary to contain a 25-year, 24-hour storm event. Several different types of secondary containment measures could be used at a facility. The EPA does not dictate which secondary containment method (e.g., berms, dikes, liners, vaults and double-walled tanks) must be used, only that the general design criteria and performance specifications mentioned above must be achieved. More information is available on the [EPA's website](#), or you may contact the EPA Region 7 office at 913-551-7205.

[The EPA provides further information on how to prepare or amend, and implement your plan.](#)

What is required in the event of a spill?

If your facility discharges, releases or spills oil to navigable waters or adjoining shorelines, federal reporting requirements apply under the Clean Water Act and you must immediately notify the National Response Center (NRC) at 800-424-8802 of the discharge. More information on reporting of oil spills and hazardous substance releases is available on the [EPA's website](#).

Additional state as well as local reporting requirements may also apply. In Kansas, KDHE and the Kansas Division of Emergency Management (KDEM) are responsible for ensuring that spills, discharges and emergency releases are properly addressed in a timely manner. Spills must be reported to KDHE at 785-296-1679, anytime day or night, 365 days per year. More information is available on [the KDHE website](#), including spill reporting instructions and relevant contact numbers.

Best Practices

Overall, there are few compliance requirements for ASTs compared to USTs, which can make them much simpler to operate legally. However, some practices and equipment that are not required for ASTs in Kansas can still provide value in avoiding problems. Resources are available in the event of a release, but your property will still be affected, and you may lose use of tanks or the land on which they sit during investigation and remediation efforts.



Generally speaking, the longer a release goes undetected, the more severe it will be, meaning remediation will take longer and affect more land. Some of these steps can also help in early detection of other issues, such as theft.

- Visual inspection—though owners and operators are not required to carry out regular visual inspections of their ASTs, regular checks for signs of wear and tear can help catch problems with your system before they lead to a release.
- Inventory control—this is good business practice in general, and is the most general way to identify loss. Consistent inventory control can let you know quickly about possible releases as well as other issues such as improper delivery practices and theft. Inventory control for ASTs can be done in much the same way as inventory control for USTs. Resources on inventory control are available through [SBEAP](#) and [KDHE](#).
- Corrosion Protection—metal components of storage tanks are constantly exposed to the elements, and without some form of protection, they are prone to corrosion from contact with air, soil and precipitation. Corrosion protection can extend the life of your storage tank system. This can include cathodic protection, using either an impressed current or sacrificial anode system, noncorrosive coatings to protect corrosive materials, or using parts constructed of noncorrosive materials, such as fiberglass.
- Release detection—Several methods are commonly used to monitor tank systems for releases and catch them when they are small, or ideally before they actually reach the environment. Common methods include the use of an automatic tank gauge, which automatically tests for releases, or interstitial monitoring, which involves sensors placed in the secondary containment of the tank to monitor for product. Though vapor monitoring and groundwater monitoring are technically considered release detection methods, they are less preferred because they cannot alert to a release until it has actually reached the environment, whereas other methods can detect a leak while it is still only leaking into secondary containment.

Registration is also recommended, even for tanks that are not required to be registered. Registering your tank and maintaining an annual permit makes you eligible to apply for reimbursement from the trust fund in the event of a release. Tanks that do not require a permit can be permitted free of charge.

Important Phone Numbers

KDHE Environmental Spill Hotline

785-296-1679

KDHE

785-296-1678

Kansas Division of Emergency Management (KDEM)

24-Hour All Hazards Reporting Number

785-291-3333

KSFMO

785-296-3401

Kansas Fire Marshal Office

Hazmat Regional Response Team Request

866-KHAZMAT or 866-542-9628

(Local authorities may request mutual aid response)

KDOT

785-296-3566

SPILLS

785-296-1679 or 785-291-3333

Other Resources

If you need help in understanding these AST requirements, you may also contact the Kansas Small Business Environmental Assistance Program (SBEAP) at K-State by calling our toll-free hotline at 800-578-8898, or by visiting [our website](#) for confidential and free technical assistance.

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