

**KANSAS DEPARTMENT OF HEALTH AND ENVIRONMENT
BUREAU OF WATER**

WASTEWATER PERMITTING REQUIREMENTS FOR PROPOSED PROJECTS

The purpose of this document is to provide information regarding various environmental programs administered by the Kansas Department of Health and Environment (KDHE) with emphasis on wastewater permitting requirements associated with Bureau of Water (BOW) regulatory activities. Specifically, this document summarizes information addressing the permitting procedures and requirements for the general topic of wastewater treatment and disposal and the specific areas of wastewater pretreatment systems, stormwater runoff requirements, hydrostatic test discharges, and wastewater from water supply treatment systems.

This document also provides resource information for public water supply systems, underground injection control (UIC) injection wells, water well/monitoring well construction and plugging, septic tank and lateral field systems, wastewater treatment and water supply operator certification, and wastewater treatment and water supply laboratory certification. Detailed specific program and regulatory requirements can be found on the Kansas Department of Health and Environment's - Bureau of Water homepage at www.kdheks.gov/water/index.html or by contacting specific programs referenced in this document.

Information regarding other environmental regulatory programs administered by the KDHE-Division of Environment which may impact a proposed project can be accessed from the Division's homepage at www.kdheks.gov/environment/index.html or by contacting the various programs listed at that site.

Permitting Process - General Information

KDHE recommends that at the earliest possible date, KDHE BOW staff, the permit applicant and its consultant meet regarding the proposed project. When appropriate, the BOW will coordinate these meetings with other KDHE bureaus so agency staff can receive the same information and provide input regarding their respective regulatory program areas. This coordination also helps to minimize time and resources for both the entity proposing the project as well as its consultant. Issues the BOW typically addresses at such meetings include:

- Siting options and any potential concerns the BOW may have i.e., limited receiving stream flows, water quality impacted stream segments, groundwater contamination issues associated with the site or surrounding area, available capacity of municipal sanitary sewer systems and wastewater treatment plants, water supply systems, etc.

- Addressing the proposed concepts being considered in regard to wastewater treatment, wastewater pretreatment, and water supply treatment. Highlighting regulatory / design concerns and requirements.
- Advising the parties of existing regulatory requirements and potential regulations being developed or adopted by KDHE.
- Advising the parties of existing regulatory requirements and potential regulations being developed or promulgated by the U.S. Environmental Protection Agency (EPA).
- Identifying and coordinating issues which may involve other KDHE environmental programs.
- Providing information regarding the basis for potential permit limits and conditions, monitoring, and other regulatory requirements.

The normal permitting process for a project which involves the construction of a wastewater treatment system takes a minimum of four months and can typically be completed within six months, assuming no problems arise, the required information submitted is complete, and responses to KDHE inquiries are timely. KDHE-issued pretreatment permits can typically be processed in two to three months. General permits for stormwater related activities, hydrostatic testing activities and ready-mix concrete plants can be processed within two - four weeks of receipt of all information.

General On-Site Wastewater Treatment and Disposal

If a facility proposes to treat and dispose of its wastewater, there are two types of water pollution control permits issued by KDHE - a Kansas/EPA National Pollutant Discharge Elimination System (NPDES) permit for discharges to surface waters of the State or a Kansas Water Pollution Control Permit (state permit) for total containment systems which do not discharge treated wastewater to surface waters of the State. (Septic tank/lateral field systems for domestic wastes are permitted by the county authorities. See the write-up on septic tank/lateral field systems below.) Facilities addressed by the state permit typically employ a wastewater treatment lagoon, a buried or partially buried waste storage tank, a concrete basin or other similar structure which employs evaporation (natural or induced), land application for beneficial use onto agricultural cropland, or periodic removal of the wastewater and directing it to a commercial or municipal wastewater treatment system for treatment and disposal. The permitting process for either of these permit options is generally the same and includes:

1. KDHE staff, the applicant and its consultant meeting to discuss the wastewater treatment and disposal concepts proposed for the project.
2. Development and submission of an engineering report to KDHE for review and approval addressing the proposed project; the source, amount, and quality of wastewater generated; the proposed method(s) of treatment and disposal; site location; etc.

The appropriate water pollution control permit application and fee needs to be submitted with the engineering report. Most water pollution control permit applications can be obtained by logging onto the Technical Services Section website at www.kdheks.gov/water/tech.html and selecting the appropriate form(s) according to the type of wastewater being generated. General information needed on the permit application includes the applicant's name and address, project legal description (quarter section, section, township, range, county), the latitude/longitude of the proposed facility site, street address if located within a city, the estimated daily volume of wastewater generated by type (domestic, process, noncontact cooling, contact cooling, or cooling water to which chemicals have been added to address scaling or biological control), and the person authorized as the facility/project contact (name, mailing address, telephone number, fax number, and email address).

Upon receipt of the engineering report, KDHE will request a preliminary site appraisal be conducted by the appropriate KDHE District Office. KDHE has District Offices located in Lawrence, Salina, Hays, Dodge City, Wichita, and Chanute. Current information on these offices can be found at www.kdheks.gov/befs/dist_office.html .

3. KDHE will review the engineering report and permit application and address outstanding issues or concerns with the applicant and its consultant. KDHE will develop a draft water pollution control permit and place the draft permit on public notice for a period of 30 days during which the permit applicant, the public, or other interested parties can provide KDHE comments and information for consideration regarding the project and draft permit.

4. Following the 30-day public notice period, KDHE will review, address, and resolve any comments received. After all issues and concerns are addressed, the water pollution control permit may be issued. If comments received during the public notice period indicate significant public interest in the permit, or if issues are raised which requires further clarification, KDHE may schedule a public hearing on the draft water pollution control permit. The scheduling of the public hearing will require a public notice period of 30 days prior to the scheduled hearing date. If it becomes obvious that significant public interest in the draft permit will exist, KDHE can concurrently public notice the draft permit and hearing notice to save time. If a public hearing is scheduled, KDHE staff conduct the hearing, summarize and evaluate the information obtained during the public notice period and at the hearing, prepare a hearing report and provide recommendations for the KDHE Secretary. The KDHE Secretary will review the hearing report and recommendations and then make a determination whether the proposed permit is to be issued, denied, or modified and issued.
5. Following approval of the engineering report by KDHE, construction plans and specifications for the wastewater treatment system must be developed and submitted for KDHE's review and approval. The engineering report, construction plans, and specifications are required to be prepared by/under the direction of, and sealed by a professional engineer licensed to practice in Kansas. KDHE will address outstanding issues or concerns prior to approving the construction plans and specifications.
6. Certain Kansas water pollution control regulations prohibit the start of construction prior to issuance of a water pollution control permit. KDHE **strongly recommends** the start of construction, including site preparation or contractor mobilization, not be initiated until the water pollution control permit has been issued. KDHE can never guarantee the issuance of any permit. Starting construction prior to the issuance of a water pollution control permit, if not prohibited by statute and/or regulations, is done solely at the permittee's risk.
7. Following the completion of construction, the permittee must notify KDHE that construction of the water pollution controls has been completed and forward to KDHE, from either the design engineer or construction inspector, a certification the water pollution controls were constructed in conformance with the KDHE approved plans and specifications. KDHE District Office staff will be notified to conduct a final inspection of the water pollution control system. If the KDHE final inspection determines the construction is substantially complete and acceptable, KDHE will authorize use of the water pollution control system.

8. The permittee shall then begin implementing routine monitoring and reporting consistent with the water pollution control permit requirements and conditions.

Construction Stormwater Runoff Permits

9. Independent of the water pollution control permit referenced above, a separate NPDES stormwater runoff permit associated with the construction activities for the project may be required (Construction Stormwater permit). If the project will involve construction activities that result in disturbing one acre or more of land, the project owner (party responsible for the project) must file with KDHE a National Pollutant Discharge Elimination System (NPDES) permit application for stormwater runoff resulting from construction activities. KDHE currently issues an NPDES general permit for stormwater runoff associated with construction activities. Notice of Intent (application) forms, an explanation of eligibility for a general permit, and a copy of the NPDES general permit can all be found at the KDHE Bureau of Water stormwater website at www.kdheks.gov/stormwater/index.html. A permit fee of \$60 must accompany the Construction Stormwater permit Notice of Intent (NOI). Where no wetlands, threatened or endangered species, or critical water quality stream segments are associated with the proposed project, the processing time for the general permit is typically two to four weeks. Areas in which critical water quality stream segments, wetlands, or threatened or endangered species are involved may require significantly longer time frames for permit processing. If the project is controversial and there is significant opposition regarding the proposed project, there may also be legal challenges to the issued permit which may create delays. KDHE recommends the NPDES Stormwater Construction Runoff permit be obtained as soon as possible. Upon completion of construction activities and stabilization of the disturbed areas, a request for termination of the permit is to be submitted to KDHE. Any questions regarding Construction Stormwater Runoff permitting should be directed to the Bureau of Water - Industrial Programs Section. Contacts can be found at www.kdheks.gov/indust/index.htm.

Industrial Stormwater Runoff Permitting

10. The facility may be subject to EPA NPDES stormwater runoff permitting requirements associated with industrial activities. This permit is different from the Construction Stormwater Runoff permit. Industries subject to the EPA industrial stormwater permitting requirements are required to file with KDHE an NPDES Industrial Stormwater permit Notice of Intent (application) for runoff associated with industrial activities. To obtain information regarding the need for a permit or to obtain the appropriate application form, please refer to the Industrial Programs Section website at www.kdheks.gov/indust/index.htm for contacts and information. If an NPDES permit addressing cooling water, domestic wastewater, or process wastewater discharges is required for the facility,

the NPDES stormwater runoff permitting requirements associated with industrial activities will typically be incorporated into the NPDES permit as a specific supplemental condition, otherwise a separate NPDES industrial stormwater runoff permit will be issued.

Hydrostatic Testing of Pipes and Tanks

11. Hydrostatic testing of piping or tankage involving water that will be wasted following the test may require permitting. If the water can be directed to a municipal sanitary sewer following the test, no permit from KDHE is required but permission from the municipality must be obtained. (Most municipalities will not allow large amounts of relatively clean water to be discharged to their sanitary sewer system.) If project conditions dictate that a discharge to surface waters of the state (including municipal stormwater sewers) will be required following the hydrostatic test(s), the project owner/manager needs to obtain a hydrostatic test general permit from KDHE. Information and the Notice of Intent (permit application) are available at the BOW - Technical Services Section website at www.kdheks.gov/water/tech.html.

Pretreatment of Wastewater Directed to a Municipal Sanitary Sewer System

12. If the facility will be located near a municipality and proposes to direct all or a portion of the industrial process wastewater to the municipal wastewater collection and treatment system for treatment and disposal, the facility may be subject to EPA effluent guideline pretreatment standards. While KDHE does not have full delegation regarding pretreatment program matters, KDHE administers the NPDES Pretreatment Program in Kansas for EPA. KDHE and EPA have currently authorized 18 municipal entities to administer local municipal pretreatment programs. These 18 municipalities, typically referred to as publicly owned treatment works (POTWs), are authorized to issue NPDES pretreatment permits to industrial contributors which utilize their sanitary sewer system and wastewater treatment plant. The 18 municipalities with approved local pretreatment programs are:

Arkansas City	Kansas City
Chanute	Lawrence
Coffeyville	McPherson
Emporia	Manhattan
Great Bend	Olathe
Hutchinson	Pittsburg
Independence	Salina
Iola	Topeka
Johnson County Wastewater Districts	Wichita

If the facility will employ the use of a POTW sanitary sewer for process wastewater generated at the facility, it should contact the Pretreatment Program Coordinator, Steve Caspers, as shown on the website

www.kdheks.gov/indust/index.htm . In addition to having to comply with the EPA promulgated national pretreatment criteria and standards, all industries, regardless of whether they are subject to EPA promulgated national pretreatment criteria, must comply with local sewer use ordinance limits established by the owners of the POTW.

In municipalities which have not developed a KDHE/EPA approved local pretreatment program, KDHE will issue the NPDES pretreatment permits to industries subject to EPA promulgated pretreatment standards. The permit will incorporate the EPA categorical pretreatment effluent guideline standards. The industry still needs to gain authorization from the POTW for use of the sanitary sewer and wastewater treatment plant and must comply with local sewer use ordinance requirements. The POTW retains ultimate authority as to who may utilize their wastewater collection and treatment utilities. Capacity of the collection system and wastewater treatment plant may be an issue as well as compatibility of the industrial waste with the POTW collection and wastewater treatment system.

Unless the facility will utilize some type of earthen structure (wastewater pond, lined or unlined), buried or partially buried wastewater storage tanks, or some other type of pretreatment unit which could create a pathway for pollutants to enter groundwater, KDHE is currently not reviewing construction plans and specifications for pretreatment wastewater treatment units as many are off-the-shelf package units. KDHE still desires to receive a copy of an engineering report addressing the collection, containment, treatment, and disposal of the process wastewater and any resulting wastewater pretreatment residuals (sludge).

The processing of a KDHE-issued pretreatment permit follows the same procedure as for the wastewater permits addressed previously i.e., submission of an application, appropriate forms and fee; review and resolution of any issues, concerns, or incomplete information; preparation of a draft permit; placement of the permit on public notice; receipt and resolution of any comments or issues; possible need for a public hearing; issuance of a pretreatment permit; and implementation of monitoring and reporting required by the pretreatment permit.

Permit Limits, Standards, Antidegradation and Criteria

KDHE-issued NPDES, Kansas Water Pollution Control, and Pretreatment Permits utilize the most stringent permit limits based on consideration of EPA promulgated effluent guideline standards, best engineering judgment, and Kansas surface water quality criteria. Without knowledge of the specific production operations proposed, production rates, wastewater volumes, treatment technology to be employed, receiving water body, proposed POTW, and other detailed information provided in the applications, forms, and engineering reports addressed previously, it is not possible for KDHE to provide specific permit limits or requirements.

Facilities proposing to discharge wastewater including contact and non-contact cooling water have to comply with Kansas Surface Water Quality Standards. The antidegradation provisions of the Standards are directed at addressing either a proposal for a new wastewater discharge or an increase in an existing wastewater discharge which would lower or negatively impact the quality of the receiving water. The purpose of the antidegradation requirement is to limit discharges and other activities that will negatively impact water quality, impair designated uses, or threaten to impair designated uses of surface waters. The antidegradation process provides a baseline level of protection relative to established water quality criteria for all classified surface waters, and a higher level of protection for those waterbodies recognized as unique ecologically, highly valued for its resources, or for having high water quality. New or expanded discharges to “Outstanding National Resource Waters” will not be allowed. New or expanded discharges to either an “Exceptional State Water” or a “General Purpose Water” will be allowed, only if the existing water quality will be maintained and protected. Existing water quality may be lowered only if KDHE determines there is an important social or economic need to lower existing water quality, as demonstrated through the guidelines provided in the U.S. Environmental Protection Agency’s guidance document “Interim Economic Guidance for Water Quality Standards, March 1995” (EPA-823-b-95-002). Only after satisfaction of public participation and intergovernmental coordination requirements, and a determination is made by KDHE that based on important economic and social development of the area that degradation of existing water quality conditions in Exceptional State Waters or General Purpose Waters is acceptable and will maintain existing and attainable designated uses, will the lowering of water quality be allowed. The time required to develop and submit the antidegradation documentation to KDHE, as well as time for review and processing by KDHE should be considered when developing the project’s schedule. The antidegradation documentation should be submitted with the permit application and the engineering report. Receiving streams and lake classifications can be found at the KDHE website at www.kdheks.gov/befs/download/Current_Kansas_Surface_Register.pdf

Permit Fees

Permit fees are set in Kansas Administrative Regulations and are facility specific depending upon the classification of the facility, type of wastewater, and discharge rate of wastewater/cooling water generated. The permit fee schedule is established in K.A.R. 28-16-56d. Permit fee information is generally included in the permit application instructions and/or on the application form.

Public Water Supply

If a private well or surface water source is used to supply drinking water for the proposed facility, and the facility will serve 25 people or more per day, 60 or more days per year, the facility will need to contact KDHE regarding potential state or federal public water supply laws or requirements that may pertain. For water generated at the water treatment plant that will be disposed of: If the water to be wasted from the treatment process is retained on-site (recycled or placed in a lagoon with no overflow to surface waters of the state), disposal is permitted under the public water supply treatment plant permit. If the water to be wasted from the treatment process is discharged to surface waters of the state, the facility is required to have a Kansas/EPA NPDES permit. The procedure for obtaining the permit for this discharge is discussed in **General On-Site Wastewater Treatment and Disposal**.

Questions regarding drinking water regulations or design requirements associated with the water treatment or distribution system, should be directed to the Public Water Supply section at www.kdheks.gov/pws/index.html.

Wastewater and Water Supply Operator Certification

Wastewater treatment and water supply system operators may be required to be certified by KDHE. KDHE administers an operator certification program which provides training, assistance, continuing education, testing and certification. Information regarding the operator certification program may be obtained from the Bureau of Water's Technical Services Section website at www.kdheks.gov/water/www.html.

Septic Tanks/Lateral Fields

Oversight and permitting of most septic tank/lateral field installations for treating and disposal of domestic wastewater (wastewater from stools, sinks, kitchens, showers, etc.) are under the control of the county/local health departments or sanitarians. For industrial sites, if a septic tank and lateral field system is being considered for use anywhere at the facility, KDHE recommends that only domestic sanitary waste be directed to the septic tank/lateral field system. Floor drains or other connections that may introduce non-domestic waste into the septic tank/lateral field system may subject the entity to EPA's Underground Injection Control (UIC) Class V injection well requirements. EPA also requires the registration of "large capacity septic tank and lateral field systems" as Class V injection wells. EPA defines a large capacity septic tank and lateral

field system to be one that serves 20 or more people per day. The KDHE-BOW Geology section administers the UIC program in Kansas. Questions regarding directing non-domestic waste to a septic tank system or how to register a “large capacity septic tank and lateral field system”, can be referred to the KDHE-BOW Geology section at website www.kdheks.gov/geo/index.html .

Injection Wells

Any proposal to dispose of wastewater by directing it to a disposal/injection well will be subject to both State and Federal Underground Injection Control (UIC) regulations. KDHE administers both a State and the EPA UIC Program in Kansas. Questions regarding the UIC Program requirements can be referred to the KDHE-BOW Geology section at website www.kdheks.gov/geo/index.html .

Water Wells

Water wells constructed at the site which will be used for public water supply purposes will have to conform to design standards established by the Public Water Supply section. Design requirements can be obtained by contacting the Public Water Supply section at www.kdheks.gov/pws/index.html. Regardless of whether the water well will be used as a public water supply or for non-potable purposes, water wells in Kansas are required to be constructed (and plugged) by a KDHE-licensed water well contractor. This requirement also includes installation of any monitoring wells that may be employed at the facility. Information regarding water well construction and plugging, regulations, and licensed water well contractors can be obtained by contacting the KDHE Bureau of Water's Geology Section at www.kdheks.gov/geo/index.html.

Laboratory Certification Program

Water pollution control and water supply permits typically require sampling and analysis. To assure the quality of the data generated by this monitoring, KDHE provides a laboratory certification program. The purpose of the program is to ensure that the laboratory analyses are conducted in a manner where acceptable laboratory and Quality Assurance/Quality Control (QA/QC) procedures have been utilized by knowledgeable technical staff using proper laboratory procedures. Commercial laboratories retained to conduct analytical testing as a provision of a permit, must be certified for the specific parameter in the specified type of water i.e. wastewater or drinking water. On-site laboratories utilized by the permittee for compliance purposes must also receive KDHE laboratory certification. Information regarding laboratory certification requirements or to obtain a list of KDHE-certified commercial laboratories and the parameters for which they are certified can be obtained from the Environmental Laboratories - Laboratory Improvement Program Office website at www.kdheks.gov/labs/index.html.

Air Pollution Control

KDHE recommends contacting the KDHE Bureau of Air at the earliest possible date regarding the need for obtaining an air pollution control permit. If an air pollution control permit is needed, regulations may require that the permit be issued prior to starting any construction activities associated with the proposed project. Information regarding air permitting requirements can be obtained from the Bureau of Air's website at www.kdheks.gov/bar/index.html.

Onsite Storage Tanks

Onsite storage tanks used for petroleum products, hazardous substances regulated by the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), and flammable substances regulated by the State Fire Marshall may be subject to specific regulatory requirements administered by the KDHE Bureau of Environmental Remediation - Storage Tank Section. Program specific information can be obtained by referring to the Bureau's website at www.kdheks.gov/ber/index.html.

Other Water Related Programs

There are a number of water related regulatory programs administered by other State agencies. If a facility proposes to utilize a surface water or groundwater source to supply the facility, water rights may be an issue. The Kansas Department of Agriculture - Division of Water Resources administers a water rights program which regulates the use and quantity of surface water and groundwater a facility can use. They also have programs which address changes to stream channels, stream obstructions, and constructing structures in flood plains. A general contact number for these programs is (785) 296-3717.

Onsite storage of petroleum hydrocarbon products may be subject to the Spill Prevention, Control, and Countermeasure Program (SPCC Program) which, in Kansas is administered by the U.S. Environmental Protection Agency Region VII Office located in Kansas City, Kansas. EPA Region VII - Customer Service can be contacted by calling either (800) 223-0425 or (913) 551-7122.