PROPOSED PROJECT INFORMATION
WATER AND WASTEWATER REGULATORY REQUIREMENTS
KANSAS DEPARTMENT OF HEALTH AND ENVIRONMENT - BUREAU OF WATER

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Bureau of Water - Industrial Programs Section
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The purpose of this document is to provide information regarding various regulatory and environmental programs, administered by the Kansas Department of Health and Environment (KDHE) Bureau of Water (BOW), that may need to be addressed for a proposed project. Without specific project information regarding the proposed facility, site location, process operations employed, water source, and the quantity and quality of the wastewater that will be produced, it is not possible for KDHE to provide project specific limits, criteria, or requirements a facility will be expected to meet. To provide guidance in developing a project, the KDHE BOW developed this document to summarize information addressing the regulation of wastewater treatment and disposal, wastewater pretreatment systems, stormwater runoff requirements, and water supply systems.

The following information addresses, in detail, requirements associated with KDHE’s regulation and permitting of wastewater treatment or wastewater pretreatment systems. While this document also references requirements associated with 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, we suggest you familiarize yourself with the detailed specific program and regulatory requirements found on the Kansas Department of Health and Environment’s - Bureau of Water homepage or by contacting specific programs referenced in this document:

www.kdheks.gov/water/index.html

Information regarding other environmental regulatory programs administered by the KDHE Division of Environment, which may impact the proposed project can be accessed from the Division’s homepage or by contacting program staff listed in this document:

www.kdheks.gov/environment/index.html
Permitting Process - General Information:

We recommend that at the earliest possible date, KDHE BOW staff meet with company officials and their consultant regarding the proposed project. The BOW attempts to 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 company proposing the project as well as their consultant. Issues the BOW typically address 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.

Without project specific background information regarding the proposed wastewater treatment or pretreatment system to be employed, we have addressed the regulatory procedures employed for each separately. Both State and EPA regulations require the submission of applications a minimum of 180 days in advance of a proposed discharge or the proposed start-up of a wastewater treatment system. KDHE will make every effort to provide a timely review and processing of permit applications. While KDHE can never guarantee issuance of a permit for a proposed project, early contact and coordination with KDHE, the submission of complete application materials, and timely responses to KDHE inquiries can help
ensure timely reviews and permit processing. Identifying potential problems and resolving them in a timely fashion will help minimize the potential for delaying construction activities or the start-up of production operations at the plant.

**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. KDHE received National Pollutant Discharge Elimination System (NPDES) program delegation authority from EPA in 1974. KDHE issues NPDES permits on behalf of EPA in Kansas. KDHE also administers a State water pollution control permitting program for wastewater treatment systems which do not discharge wastewater to “Waters of the U.S.”. These facilities are typically exempt from NPDES wastewater permitting but require a Kansas Water Pollution Control Permit. Facilities addressed by the Kansas Water Pollution Control Permit typically employ a wastewater treatment lagoon, a buried or partially buried waste storage tank(s), 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, company officials and their 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. A water pollution control permit application can be obtained by contacting Ed Dillingham [785-296-5513], Joe Mester [785-296-6804], or Don Carlson at [785-296-5547]. At the time a permit application is requested, we will need the legal description (section, township, range) of the proposed facility site or 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). KDHE needs this information to assign a facility specific permit number and to calculate the required permit fee.

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.
3. KDHE reviews the engineering report and permit application and addresses outstanding issues or concerns with the applicant and their consultant. Following approval of the engineering report by KDHE, construction plans and specifications for the wastewater treatment system must be developed and submitted for KDHE 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 begins processing the draft water pollution control permit.

4. KDHE addresses outstanding issues or concerns and approves the construction plans and specifications. KDHE develops a draft water pollution control permit and places 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 with comments and information for consideration regarding the project and draft permit.

5. Following the 30-day public notice period, KDHE reviews, addresses, and resolves any comments received from EPA, the permit applicant, the public, and other interested parties regarding the draft permit. Once all issues and concerns are addressed to KDHE’s satisfaction, the water pollution control permit is issued. If comments received during the public notice period indicate significant public interest in the permit, or if information is 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, prepares a hearing report and recommendations for the KDHE Secretary. The KDHE Secretary reviews the hearing report and recommendations then makes a determination whether the proposed permit is to be issued, denied, or modified and issued.

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 Kansas water pollution control permit, if allowed by statute and/or regulations is done solely at the permittee’s risk. While certain Kansas water pollution control regulations prohibit the start of construction without an issued permit, there are other KDHE regulatory programs which not only prohibit the start of construction of pollution controls or systems, but may prohibit any type of construction activity being initiated, including site preparation. We strongly recommend the project owner and their consultant
contact the various Division of Environment bureaus regarding this matter prior to initiating construction activities.

7. Following the completion of construction, the permittee notifies KDHE that construction of the water pollution controls have been completed and forwards 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 complete and acceptable, KDHE authorizes use of the water pollution control system.

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

9. Independent of the water pollution control permit referenced above, there is the potential need for issuance of a separate NPDES stormwater runoff permit associated with the construction activities for the project. If the project will involve construction activities that result in disturbing one acre or more, the project owner (party responsible for the project) needs to file a National Pollutant Discharge Elimination System (NPDES) permit application, for stormwater runoff resulting from construction activities, with KDHE. Any questions regarding the required permitting or a request for the permit application forms should be directed to Dorothy Geisler [785-296-5545]. KDHE currently issues an NPDES general permit for stormwater runoff associated with construction activities. Notice of Intent (application) forms, an explanation as to whom is eligible 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 needs to accompany the stormwater permit Notice of Intent (NOI). Where no wetlands, threatened and 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. We recommend 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 submitted to KDHE.
10. The facility may be subject to EPA NPDES stormwater runoff permitting requirements associated with industrial activities. This is different than the NPDES stormwater runoff permit associated with construction activities. Industries subject to these EPA stormwater permitting requirements are required to file with KDHE an NPDES 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 contact Eric Staab at [785-296-4347]. 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 permit will be issued requiring the submission of the Notice of Intent.

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. The project owner/manager needs to advise and seek authorization from the municipal authority responsible for the operation of the municipal sanitary sewer and wastewater treatment system for this purpose. Should project conditions dictate that a discharge of water will be required following the test(s), the project owner/manager needs to inform KDHE as soon as possible regarding the proposed discharge to address the need for permitting. The project owner/manager should contact either Joe Mester at (785) 296-6804 or Don Carlson at (785) 296-5547 regarding the need for permitting.

**Wastewater Directed To A Municipal Sanitary Sewer And Wastewater Treatment Facility:**

If the facility will be located near a municipality and you propose 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 municipalities/governmental entities to administer local municipal pretreatment programs. These 18 municipalities/governmental entities, 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/governmental entities with approved local pretreatment programs include:

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

If the facility will employ the use of a POTW sanitary sewer for process wastewater generated at the facility, you should contact Steve Caspers at [785-296-5551]. 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 POTW.

In municipalities which have not developed a KDHE/EPA approved local pretreatment program, KDHE will issue 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 utilities and wastewater treatment system.

Unless the facility, whether located in a KDHE/EPA approved POTW or NOT, 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, And Criteria:

KDHE issued NPDES, Kansas Water Pollution Control, and Pretreatment Permits utilize the most stringent permit limit 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 or cooling water have to comply with Kansas Surface Water Quality Standards. The antidegradation provision of the standards is 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 attained designated uses, will the lowering of water quality will 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.

Permit Costs

Permit fees are determined by KDHE and are facility specific depending upon the classification as to the type of facility or discharge, number of outfalls and rate of wastewater/cooling water generated. The permit fee schedule is established in K.A.R. 28-16-56d. The following is provided for general information purposes only:
NPDES General Permit: $60/year

Industrial Wastewater Permit: $320/year/MGD of design flow or any portion thereof. $320 minimum fee

Cooling Water Surface Discharges: Either $60/year or $120/year/MGD of design flow or any portion thereof with a minimum fee of $120/year.

Dewatering Discharge: $60/year

Pretreatment Permit: $320/year

**Public Water Supply:**

If you will utilize a private well or surface water source 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, you need to contact KDHE regarding potential state or federal public water supply laws or requirements that may pertain. Questions regarding drinking water regulations or design requirements associated with the water treatment or distribution system, should be directed to Dave Waldo at [785-296-5503]. BOW’s Public Water Supply Section can also provide advice and guidance regarding cross-connection control to prevent the introducing wastes and chemicals into the drinking water system.

**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 BOW homepage or by contacting Vickie Wessel [785-296-2976] or Teresa Schuyler [785-296-5511].

**Septic Tanks:**

In the event a septic tank and lateral field system is being considered for use anywhere at the facility, we recommend that only domestic sanitary waste (stools, sinks, etc.) be directed to the septic tank system. Floor drains or other connections that may introduce non-domestic waste into the septic tank system may subject the company to EPA 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. If you should have any questions regarding directing non-domestic waste to a septic tank system or how to register a “large capacity septic tank and lateral field system”, contact Mike Cochran at [785-296-5560].
**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. If you should have any questions regarding UIC Program requirements, please contact Mike Cochran at [785-295-5560] or Kirk Hoeffner at [785-296-1843].

**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 Dave Waldo at [785-296-5503]. 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 Richard Harper at [785-296-3565].

**Laboratory Certification Program:**

Water pollution control and water supply permits typically require sampling and analysis be conducted by the permittee. 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 laboratory analysis conducted is done in a manner where acceptable laboratory and 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. On-site laboratories utilized by the permittee must also receive a KDHE laboratory certification. Information regarding laboratory certification requirements or to obtain a listing of certified commercial laboratories and the parameters for which they are certified can be obtained by contacting either Michelle Wade [785-296-6198] or Michelle Probasco at [7985-296-1639].

**KDHE BUREAU OF WATER PROGRAM CONTACTS**

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<tr>
<th>Program</th>
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<tr>
<td>Director, Bureau of Water</td>
<td>Karl Mueldener</td>
<td>785-296-5500</td>
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<tr>
<td>Water Pollution Control Permit Application</td>
<td>Ed Dillingham</td>
<td>785-296-5513</td>
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<td>Industrial Wastewater &amp; Stormwater Permitting</td>
<td>Don Carlson</td>
<td>785-296-5547</td>
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<td>Joe Mester</td>
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<td>Eric Staab</td>
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<td>Steve Caspers</td>
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<td>Rod Geisler</td>
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<td>Mike Cochran</td>
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<td>Kirk Hoeffner</td>
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<td>Industrial Pretreatment Program</td>
<td>Richard Harper</td>
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<td>Municipal Wastewater Permitting</td>
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We recommend contacting the KDHE Bureau of Air and Radiation 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. You can obtain information regarding air permitting requirements by contacting Marian Massoth at (785) 296-0616.

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 contacting Randy Carlson at (785) 296-1684.

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.

A regulatory program which KDHE does not administer, involving the on-site storage of petroleum products, is administered directly by the U.S. Environmental Protection Agency (EPA). The 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.

While it may be some time before decisions are made regarding the implementation of the project, we want to direct your attention various environmental and regulatory program issues that may need to be addressed so you can take into account agency review and processing time for permits early in the project planning phase. Hopefully this information will assist you in developing a project schedule whereby permitting and environmental regulatory requirements do not create any unanticipated delays. As KDHE can never guarantee issuance of any permit, we recommend and encourage the submission of permit applications and associated materials at the earliest possible date. Should there be any questions regarding the information in this document or you desire to meet with KDHE staff, please contact Don Carlson at [785-296-5547].