Kansas Department of Health and Environment
Bureau of Water: Watershed Management Section
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# Kennel Wastewater Permitting
## Technical Guidance Document WMS 2009-09

This Technical Guidance Document (TGD) is designed to help Local Environmental Protection Programs (LEPPs) determine the responsible agency for kennel wastewater permitting. Local County codes may provide more restrictive requirements than the information contained in this document.

## ***Background***

Wastewater generated in by the daily operations of a kennel should be directed to some type of holding tank or treatment system. Frequently this wastewater is allowed to flow uncontrolled from the facility. These uncontrolled discharges have the potential to leave the property or create a pollution threat to neighboring property or the environment.

## ***Applicability***

Kansas Statutes Annotated (K.S.A.) 65-3701 et seq. and 19-101 et seq. give counties general authority to adopt codes under which private, onsite wastewater systems are permitted.

Kansas County Codes have primacy in counties with codes. Local codes may be more restrictive than State requirements. County Codes may be viewed at:
http://www.kdheks.gov/nps/lepp/CountyCodes.html

K.S.A. 65-165(a) provides KDHE with the general authority to permit sewage discharges that are in the interest of public health, do not detract from beneficial uses of the waters of the state, and meet applicable water quality and effluent standards.

## ***Wastewater Permitting Guidance***

Kennel wastewater treatment systems may be permitted by county LEPPs or the KDHE Livestock Waste Management (LWM) section depending upon the situation. Typically, county LEPPs would permit domestic wastewater flows from a residence combined with kennel wash water flows utilizing an onsite wastewater system. KDHE LWM would permit a kennel which poses a significant pollution potential. Listed below are permitting recommendations:

LEPP Permit

- Wash water used to clean indoor and outdoor kennel pens may be comingled with domestic sewage and treated by an on-site wastewater system. Residential domestic wastewater and kennel washing flows must be determined to verify the system will accommodate the wastewater flow rate. Solid manure and bedding material must be scraped and removed prior to washing the kennel. Installation of a screen prior to the wastewater system is highly recommended to exclude solids from entering the treatment

system. Dip solutions must also be excluded from entering the treatment system. Types of onsite wastewater treatment systems include:

- Septic tank and soil absorption field. The installation of an effluent filter between the septic tank and soil absorption field is highly recommended. Special attention must be given when washing the kennels to utilize only the amount of wash water designed for the system. Excess water use may cause soil absorption field failure. Kennels requiring an animal/retail breeders or shelter license and/or serves 20 people per day anytime during the year, must register with KDHE as Class V injection well and follow the Best Management Practices (BMPs) for Veterinary clinics. http://www.kdheks.gov/uic/download/UICIV_Veterinary.pdf
- Domestic wastewater lagoon. Wastewater flows exceeding 2,500 gallons per day may be permitted by the KDHE LWM section.
- Designed grass filter system. **Solid manure, bedding, dips and residential wastewater flows may not be directed to a grass filter system.** Daily kennel washing may require a grass filter designed with multiple runs for rotation to maintain a grass cover over the filter area. County extension agents, County Conservation District personnel, NRCS personnel or KDHE Watershed Field Coordinators are available to provide technical assistance with the design of a grass filter area. Design information can be found at: http://www.ksre.ksu.edu/library/h20ql2/mf2725.pdf

All septage removed from a septic tank or lagoon is subject to the disposal requirements listed in the Kansas EPA 503 Land Application of Septage document.
http://www.kdheks.gov/nps/lepp/Kansas_EPA_503_Land_Application_of_Septage.pdf

KDHE LWM Permit

- KDHE district staff will conduct a site appraisal to determine if the facility poses a significant pollution potential. If the facility does not pose a significant pollution potential, a certification of compliance can be issued for the facility indicating the facility does not pose a significant pollution potential if it is operated according to the description listed in certification of compliance. If the facility poses a significant pollution potential, a registration form, permit application and water pollution controls will be required.

  If the facility has restroom facilities for staff, and it utilizes a septic tank and soil absorption field, a county LEPP permit will be required. Depending upon the number of persons utilizing the system, it may be considered a Class V injection well.

## ***Solid Manure Disposal Guidance***

Solid manure from kennels contains pathogens harmful to humans. Disposal of solid manure must be done to minimize the risk of pathogen transfer. Options for solid manure disposal include:

- An in-ground digester. Many types are available through retail outlets. Digestion during the winter months will be slower and digestion may not be able to keep up with generation.
- Storage in a covered container for pickup by a solid waste hauler or land application.
  - Precipitation and stormwater runoff must be excluded from the storage container.

    - Manure stored on the ground should be placed on a concrete or compacted clay pad to prevent leachate from permeating to groundwater.
- Land application.
    - Solid manure must only be applied at agronomic rates.
    - Apply manure to non-food cropland such as forage sorghum, pasture land or Conservation Reserve Program (CRP) land.
    - Apply manure no closer than 50 feet from surface waters and preferably 200 feet away.

The attached flow chart describes the permitting and disposal process.

## ***Dead Animal Disposal Guidance***

KDHE has developed Technical Guidance Documents (TGD) for the disposal of dead animals, they include:

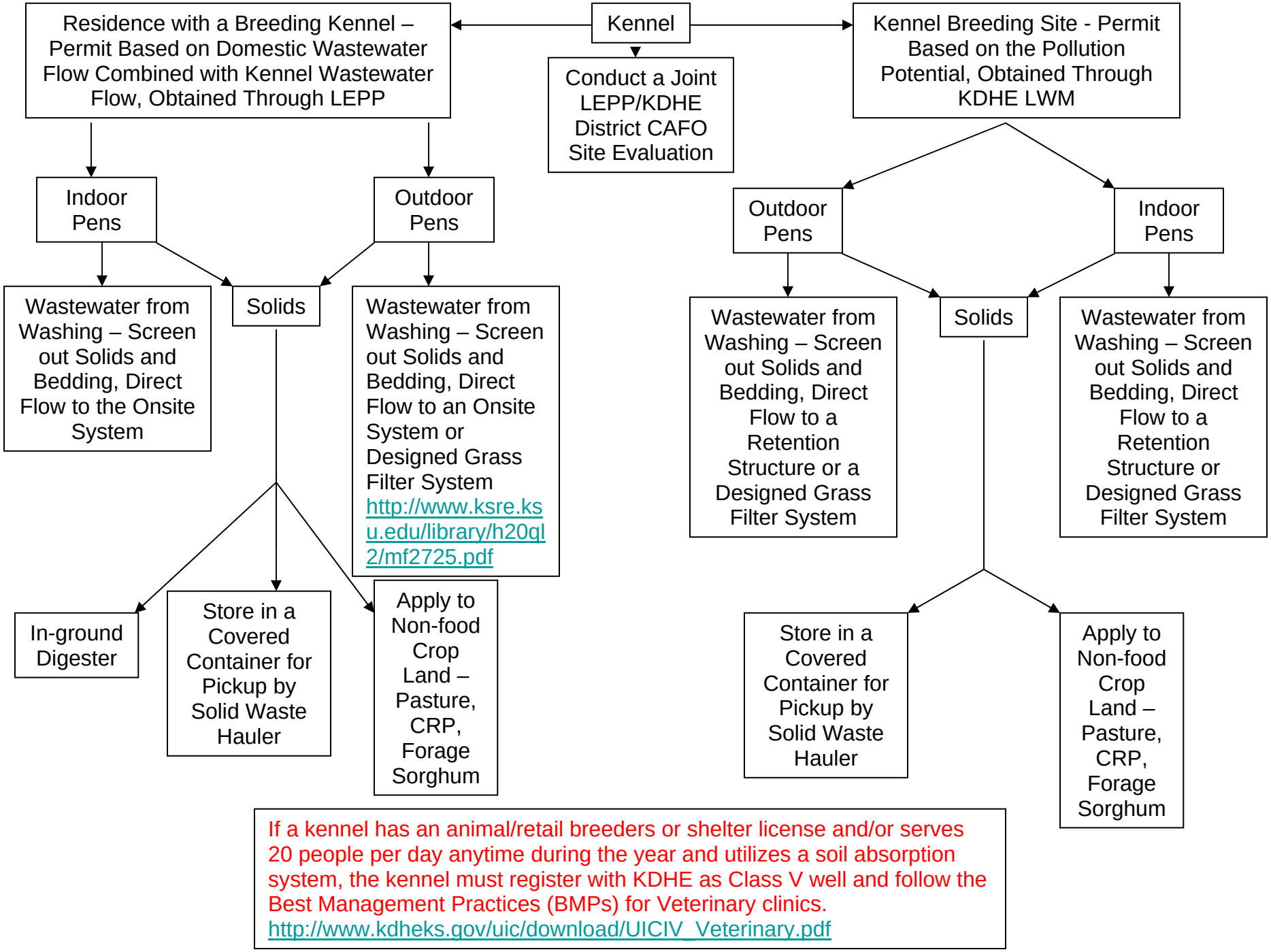
- KDHE Bureau of Waste Management (BWM) TGD SW 94-01 Disposal Options for Small Quantities of Dead Animals http://www.kdheks.gov/waste/techguide/sw94-01.pdf
- KDHE BWM TGD SW 01-01 Disposal Options for Large Quantities of Dead Animals http://www.kdheks.gov/waste/techguide/sw01-01.pdf

Mortality composting is an option for facilities permitted by KDHE BWM. Kennels permitted by LEPPs may also utilize mortality composting at their facility, but they are required to obtain a permit through KDHE BWM. KDHE BWM has developed a composting informational sheet available at:
http://www.kdheks.gov/waste/compost/compostingatlivestockfacilitiesinfosheet.pdf

Kennels permitted by KDHE are required to develop and implement a waste management plan which addresses manure and dead animal disposal. LEPPs are encouraged to require waste management plans for the facilities they permit. A KDHE waste management plan form is available at: http://www.kdheks.gov/feedlots/download/Waste_Management_Plan.doc

## ***Additional Information***

- LEPP http://www.kdheks.gov/nps/lepp/
- KDHE LWM http://www.kdheks.gov/feedlots/
- KDHE Watershed Management Section www.kdheks.gov/nps
- Kansas Animal Health Department, Kansas Pet Animal Act http://www.kansas.gov/kahd/laws/pet_animal_act.shtml
- Kansas State University Small Business Environmental Assistance Program (SBEAP) has developed a comprehensive on-line water quality assessment tool for Vet clinics and fairground wastewater. This tool can be used to address water quality concerns at kennels as well. Some of the information in this document was adapted from the assessment tool. The tool is available at: http://assess.sbeap.org/vetandfairground/




If a kennel has an animal/retail breeders or shelter license and/or serves 20 people per day anytime during the year and utilizes a soil absorption system, the kennel must register with KDHE as Class V well and follow the Best Management Practices (BMPs) for Veterinary clinics. http://www.kdheks.gov/uic/download/UICIV_Veterinary.pdf