

ANIMAL BREEDING/CONFINEMENT

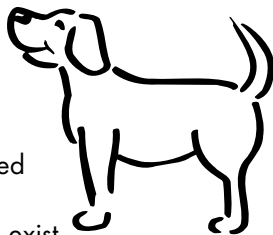
WHY BE CONCERNED?

Businesses that require confinement of animals deal with animal waste management. Runoff from animal lots carries manure, soil, and other debris, which could contaminate surface and groundwater sources. Results from a recent Kansas farmstead well study show animal feeding sites to be a significant source of high nitrates in Kansas farmstead water wells. High nitrates are found at kennels as well as stockyards. If managed improperly, waste from these facilities can also be a significant source of fecal coliform bacteria. A system is needed for preventing lot runoff from leaving the owner's property or entering surface or groundwater in a contaminated condition. Along with addressing the potential of animal lots to pollute water, other good reasons for improving management practices include improved animal health, ease of maintenance, and improved quality production.

IDENTIFY ENVIRONMENTAL RISKS

Processes and potential wastes associated with this business/hobby that could harm the environment are listed below. Check the activities or conditions that apply to your business.

- Animals are stabled or confined.
- Rain or snow contacts the ground surface where animals are kept and runs off.
- Surface and roof drainage runs through animal lots.
- Animals are kept indoors, but floor drains are tied to a waste disposal system other than the municipal sanitary sewer.
- Storm sewers, lakes, ponds, or streams are located within 400 feet of the animals.
- Drinking water well is located within 400 feet of the animals.
- Drinking water well is located downslope of the animals.
- Animal lot/kennel is cleaned and scraped.
- Abandoned or unused lots exist.
- Abandoned or unused well is on site.
- Waste/manure storage is practiced.
- Earthen waste storage pit, pond, or lagoon exists.
- Waste storage sits on cracked concrete pad.
- Animal waste is temporarily stockpiled.
- Dead animals are disposed of on-site.
- Animal waste is land-applied.



IDENTIFY METHODS OF WASTE DISPOSAL

Check the waste disposal methods that you use.

- Municipal sanitary sewer
- Septic system or lagoon
- Ground, storm sewer, or surface water
- Licensed hazardous waste disposal option
- Licensed sanitary landfill/transfer station
- Compost
- Recycle
- On-site landfill (prohibited in most cases)
- Incineration/on-site burning (see Solid Waste section)

If your home-based business discharges its non-domestic waste to a septic system, then your business is required to complete and submit an inventory form to KDHE. For inventory forms, call KDHE at 785-296-5560. Some wastes associated with a home business are considered "industrial waste" and may not be disposed of in a septic tank or domestic lagoon. Non-domestic waste from your home-based occupation should not be disposed of in a sanitary sewer without written permission from the municipality. Never put wastes in a storm drain or dump on the ground! See Wastewater section in the front of this publication.

BEST MANAGEMENT PRACTICES

- Use "dry cleanup" methods. Scrape and scoop before washing down.
- Land apply (*cow, sheep, chicken, pig*) manure at locations where nutrient needs have been tested. Do not land apply manure from kennels, as dogs and cats carry diseases that may be contagious to humans.
- Apply manure at rate equal to or less than plant needs, based on soil test.
- Apply manure or wastewater on areas more than 200 feet from surface water (regulations require 50 feet).
- Incorporate animal waste into soil; apply on no-till field; or apply at site with heavy vegetation. Never apply to frozen or saturated soil.
- Disposal of dead animals is regulated depending on the size and number of dead animals that need to be disposed of. Generally household pets are considered small animals and up to five of these

animals can be disposed of at a permitted sanitary landfill or buried on site. Other disposal options exist for both the small and the larger animals such as cows and horses. Call Bureau of Waste Management at 785-296-1600 for options.

- Dog and cat manure can be bagged and sent to a permitted solid waste facility for disposal.
- Avoid discharging wastewater to creeks or other surface waters when cleaning fish production tanks/ponds. Apply to a grassy, flat area large enough to absorb the wastewater.
- Unused or abandoned wells should be plugged in accordance with KDHE regulations. Abandoned wells, if not properly sealed, can provide a direct route for contamination to enter the groundwater. In addition, open wells are a safety threat to small children and animals. A record of the plugging should be filed with KDHE. For more information, consult the general water section of this document or call 785-296-3565.

The Small Business Environmental Assistance Program, SBEAP, is a confidential non-regulatory program funded by the state in an effort to assist small businesses with environmental concerns. Contact the SBEAP at 800-578-8898 or www.sbeap.org if you have questions.

- Kansas regulations require a minimum separation distance from wells of 100 feet for all livestock facilities, but larger distances are strongly recommended. For temporary manure stacks and earthen storage facilities, the minimum separation distance should be at least 250 feet. Results of a farmstead well study indicate that this separation distance must be at least 400 feet in order to assure protection from high nitrates in well water.
- Design animal lots such that rainwater runoff does not carry wastes to surface water.
- Abandoned wells should be plugged and reported in accordance with KDHE regulations (see Water section).

Disposal of any wastes other than domestic wastes to an on-site septic system or lagoon is prohibited. Never dump wastes onto the ground or into a storm drain. This practice can result in the contamination of streams, lakes, or groundwater.

POLLUTION PREVENTION AND WASTE MINIMIZATION OPPORTUNITIES

- Wells should be located in an elevated area upslope of animal facilities so runoff will not drain into the vicinity of the well.

WHERE TO GET MORE INFORMATION

- Local health or environmental office
- KDHE District Office
- KDHE Non-point Source Section at 785-296-4195, Web site: www.kdhe.state.ks.us/nps or e-mail: NPS@kdhe.state.ks.us
- Your county K-State Research and Extension office.
- Farm *A*Syst at K-State Research and Extension at 785-532-5813.
- The Kansas SBEAP has several publications that address these issues of regulatory compliance and pollution prevention. See the list of SBEAP publications listed at the end of this manual or go to www.sbeap.org to view or download.
- For questions, call 800-578-8898. All services are free and confidential.
- A summary of environmental laws is found in the introduction/preface. The following laws may be applicable to this business:
 - wastewater regulations
 - solid waste regulations
 - storm water regulations
- Regulatory compliance information can be viewed or downloaded from the KDHE Web site at www.kdhe.state.ks.us.
- See Resources section at the back of this document.

ACTION STEPS

What can you do to reduce wastes or environmental risks?	Set target dates for action.