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Kansas environmental regulations

Abstract
The Kansas Department of Health and Environment (KDHE) enforces two different regulations in the state of Kansas. One set of regulations is from the Federal Environmental Protection Agency (EPA) and applies to larger operations. The other is a set of Kansas regulations created by our state legislature for smaller operations. EPA regulations pertain to confined feeding operations in excess of 1,000 animal units and require an EPA National Pollution Discharge Elimination System (NPDES) permit. Because an animal unit for the NPDES permit is defined as one beef animal, a feedlot with a capacity of 1,000 or more will need to apply to KDHE for a NPDES permit. The main criterion of the permit is to contain the runoff volume from a 24-hour, 25-year frequency rainfall event.

Keywords
Cattlemen's Day, 1995; Kansas Agricultural Experiment Station contribution; no. 95-357-S; Report of progress (Kansas State University. Agricultural Experiment Station and Cooperative Extension Service); 727; Beef; Operations; Environmental regulations

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KANSAS ENVIRONMENTAL REGULATIONS

J. P. Murphy\textsuperscript{1}, J. P. Harner\textsuperscript{1}, and L. Hess\textsuperscript{2}

The Kansas Department of Health and Environment (KDHE) enforces two different regulations in the state of Kansas. One set of regulations is from the Federal Environmental Protection Agency (EPA) and applies to larger operations. The other is a set of Kansas regulations created by our state legislature for smaller operations.

EPA regulations pertain to confined feeding operations in excess of 1,000 animal units and require an EPA National Pollution Discharge Elimination System (NPDES) permit. Because an animal unit for the NPDES permit is defined as one beef animal, a feedlot with a capacity of 1,000 or more will need to apply to KDHE for a NPDES permit. The main criterion of the permit is to contain the runoff volume from a 24-hour, 25-year frequency rainfall event.

Operations below 1,000 animal units come under a regular KDHE permit. In cases where questions arise as to which type of permit is needed, KDHE can make the determination because they administer both types of permits.

The regular KDHE permit was modified by the Kansas legislature in Senate Bill (SB) 800, which took effect July 1, 1994. Its provisions modify Kansas water-pollution control statutes and regulations involving water-pollution control practices, but make no changes to the Federal EPA permits administered by KDHE.

The program modifications resulting from SB 800 center around operation size, separation distances from neighbors, waiver and exemption of provisions, and changes in the permit fee structure. The following information is a review of SB 800 contained in a KDHE document \textit{New Legislation Impacts, Kansas Livestock Operations}, and is not intended to be a comprehensive summary of regulatory requirements that pertain to livestock waste management practices in Kansas.

**Operation Size Required for Permit:** SB 800 changed the size threshold of facilities required to register for a permit. Before SB 800, the required size was from 300 head to 999 head. After SB 800, size requirements were based on animal units, with the lower limit of the permit defined as 300 animal units.

**How Is an Animal Unit Calculated?** The total number of animal units is calculated by multiplying the number of confined animals by the following factors and adding the result for each livestock category:

\textsuperscript{1}Department of Biological and Agricultural Engineering.
\textsuperscript{2}Kansas Department of Health and Environment, Agricultural Permit Administer.
<table>
<thead>
<tr>
<th>Livestock Category</th>
<th>Number of Head</th>
<th>X Factor</th>
<th>= Animal Unit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Beef cattle &gt; 700 lbs.</td>
<td></td>
<td>1.0</td>
<td></td>
</tr>
<tr>
<td>Beef cattle &lt; 700 lbs.</td>
<td></td>
<td>0.5*</td>
<td></td>
</tr>
<tr>
<td>Mature dairy cattle</td>
<td></td>
<td>1.4</td>
<td></td>
</tr>
<tr>
<td>Swine &gt; 55 lbs.</td>
<td></td>
<td>0.4</td>
<td></td>
</tr>
<tr>
<td>Sheep or lambs</td>
<td></td>
<td>0.1</td>
<td></td>
</tr>
<tr>
<td>Horses</td>
<td></td>
<td>2.0</td>
<td></td>
</tr>
<tr>
<td>Turkeys</td>
<td></td>
<td>0.018</td>
<td></td>
</tr>
<tr>
<td>Laying hens/broilers (facility with continuous overflow watering; nipple/cup watering)</td>
<td></td>
<td>0.01</td>
<td></td>
</tr>
<tr>
<td>Laying hens/broilers (facility with liquid manure system)</td>
<td></td>
<td>0.033</td>
<td></td>
</tr>
<tr>
<td>Ducks</td>
<td></td>
<td>0.2</td>
<td></td>
</tr>
<tr>
<td><strong>TOTAL ANIMAL UNITS</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Note: When determining registration/permitting requirements in regard to Federal NPDES permits, only the 1.0 factor should be used when calculating facility capacity for beef cattle.

**Pollution Potential:** Both size of operation and pollution potential are now considered in determining permit necessity. As well as the size threshold of 300 animal units, a pollution potential must exist before facilities are required to have a permit.

**Separation Distance Requirements:** SB 800 identifies separation distance criteria that provide a buffer between livestock facilities and dwellings, public buildings, and certain types of commercial establishments. These separation distances apply to any new construction or expansion of an existing facility. A separation distance is measured as the shortest distance between a habitable structure and any confined building, pens, manure storage or compost area, or pollution control utilized at the confined feeding facility. Separation distance criteria do not apply to property boundaries or land application sites used for waste disposal.

The new separation distances are:
- Facilities with a capacity of 300-999 animal units - 1,320 feet.
- Facilities with a capacity of 1,000 animal units or more - 4,000 feet.

**Separation Distance Reduction Waivers:** SB 800 allows KDHE to reduce the above separation distances if:

1. A written agreement (waiver) is obtained from the owners of all habitable structures located within the separation distance and is filed with the Register of Deeds Office in the county where the habitable structure is located, or
2. No objection to separation distance is received from an owner of habitable
structure as a result of a public notice of the proposed permit, or

3. The board of county commissioners requests that the separation distance be reduced.

**Separation Distance Exemptions:** SB 800 allows existing facilities to be exempted from the above separation distance requirements in the following situations:

1. Facilities permitted or certified by KDHE prior to July 1, 1994.

2. Facilities in existence prior to July 1, 1994 and registered with KDHE prior to July 1, 1996.

3. Facilities with 1,000 animal unit capacities or more and in existence prior to July 1, 1994 may expand, regardless of the separation distance criterion, as long as the expansion does not encroach closer to any habitable structure located within the separation distance.

4. Facilities with fewer than 1,000 animal unit capacities and in existence prior to July 1, 1994 may expand, regardless of the separation distance criterion, as long as the expansion does not encroach closer to any habitable structure located within the separation distance, and the expansion does not exceed 2,000 animal units.

5. The waiver provisions, addressed above, are met.

**Note:** Facilities that fail to register prior to July 1, 1996, will be considered new facilities in regard to the separation distance requirements of SB 800.

**Fee Structure:** SB 800 establishes the following fees:

- Submission of a registration - $25.00

**Annual Permit Fees**

<table>
<thead>
<tr>
<th>Animal Unit Capacity</th>
<th>Fee</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less than 300</td>
<td>$25.00</td>
</tr>
<tr>
<td>300-999</td>
<td>$25.00</td>
</tr>
<tr>
<td>1,000-4,999</td>
<td>$100.00</td>
</tr>
<tr>
<td>5,000-9,999</td>
<td>$200.00</td>
</tr>
<tr>
<td>Over 10,000</td>
<td>$400.00</td>
</tr>
</tbody>
</table>

**Who Needs a Water Pollution Control Permit?**

- Any facility, regardless of size, determined by KDHE to present a significant water pollution potential, including but not limited to the following:
  1. All livestock operations that utilize wastewater control facilities (manure pits, ponds, lagoons, or other devices).
  2. Open lots located across or adjacent to creeks, streams, intermittent waterways, or other conveying channels or devices.
  3. Any operation that cannot retain or control wastewater or wastewater solids upon the operator’s property.
  4. Any operation observed to practice improper disposal of livestock wastes (liquid and solids) that has the potential to degrade or impair the quality of any waters of the State (surface and groundwater).
  5. Any facility that generates wastewater and releases it on a daily or more frequent basis (dairy parlors, uncontrolled releases from watering systems, etc.).

- Any confined animal-feeding facility with a designed animal-unit capacity of 300 or more and a significant water-pollution potential.

- All facilities with designed animal-unit capacities of 1,000 or more, regardless of pollution potential.

- Sale barns and collection centers with an average capacity greater than 300 animal units or utilized more than once a week.

- All wash facilities for livestock trucks.
Any other animal-feeding operation whose operator elects to come under these statutes and regulations.

Steps Required to Obtain a Permit or Modify a Facility:

1. Contact KDHE for information (telephone numbers below).
2. Request a site appraisal from KDHE.
3. Submit a registration application along with $25.00 to KDHE.
4. Obtain releases from adjacent residents, if required, or address separation distance requirement and submit information to KDHE.
5. Submit a general information and operational plan to KDHE.
6. Submit permit application, fees (if applicable), construction plans and waste management plan to KDHE for review and approval.
7. KDHE places draft permit on 30 day public notice (if applicable).
8. KDHE issues permit and approval to start construction.
10. Notify KDHE at the completion of construction for postconstruction inspection.
11. The facility is placed into service.
12. An annual permit fee will be billed to the operator.
13. The permit is renewed every 5 years.

Who to Contact? For more information, please contact an agricultural environmental technician or the district engineer in the KDHE district offices in Hays at (913) 625-5664; Salina at (913) 827-9639; Lawrence at (913) 842-4600; Dodge City at (316) 255-0596; Wichita at (316) 337-6020; Chanute at (316) 431-2390; or the KDHE Bureau of Water central office in Topeka at (913) 296-5570 or (913) 296-5532.