

Fact Sheet
Senate Bill 375 – Land-Spreading of Oil & Gas Drilling Waste
Prepared by the Kansas Department of Health and Environment
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Need for New Drilling Waste Disposal Method – Projected increases in horizontal drilling activity will result in significantly more drilling waste (drill cuttings and drill mud) than generated by conventional vertical drilling practices. Each drilled well could generate 500,000 gallons of these semi-liquid wastes, more than what can be reasonably managed using traditional on-site disposal methods in earthen pits permitted by the Kansas Corporation Commission (KCC). Four or five wells may be drilled directionally from a single location.

KDHE/KCC Cooperative Efforts – Recognizing the need to develop alternative disposal methods for drilling waste, KDHE and KCC have worked together to develop a controlled land-spreading program that would be authorized in new state law through the passage of Senate Bill 375. This program was developed considering important input from Kansas State agronomists, industry representatives, and officials from other states who have already evaluated and implemented land-spreading practices.

Key Provisions of Senate Bill 375 – SB 375 will modify K.S.A. 65-3407c to establish a new solid waste disposal activity that may occur without a solid waste permit, but in accordance with specific approvals granted by the state agency that administers the program, in this case KCC. As passed by the Senate, SB 375 contains the following key provisions:

- Approvable land-spreading shall only apply to solid waste generated by drilling oil and gas wells. Hydraulic fracturing fluids are generated after the drilling is completed and are not approved for land-spreading.
- KDHE shall develop best management practices and loading rates for land-spreading of these wastes.
- Each land-spreading area requires a separate application containing information on the selected land and soil, waste characteristics and amounts, and drilling mud additives.
- KCC shall enter a memorandum of agreement with KDHE to administer the land-spreading program.
- No land-spreading may occur unless the groundwater is at least 10 feet below the ground surface.
- Any waste that is land-spread east of the 25-inch precipitation line must be incorporated into the soil.
- Land-spreading cannot reoccur in a location unless at least three years have passed.
- A post land-spreading report shall be submitted to KCC by the driller for every location.
- A fee of \$250 must be paid with each land-spreading application.

The Land-Spreading Application and Best Management Practices (BMPs) – The draft application includes BMPs, which every applicant agrees to follow. Some of those practices and loading limitations follow:

- ✓ The initial chloride concentration in the receiving soil must be less than 500 parts per million (ppm).
- ✓ The maximum chloride concentration in land-spread drilling waste must be less than 10,000 ppm.
- ✓ The waste loading rate is calculated to ensure that the final chloride concentration in the top 12 inches of soil does not exceed 900 ppm.
- ✓ No land-spreading may occur if the area is being irrigated with water containing chlorides above 350 ppm.
- ✓ Adequate buffer zones must be established with respect to property lines, various water bodies, residences or businesses, water wells, and drainage channels.
- ✓ Only certain soil types are acceptable as listed in the application and determined by a qualified soil scientist.
- ✓ The depth to bedrock must be at least 24 inches below the ground surface.
- ✓ A waste sampling analysis plan must establish procedures to test every tank or tanker truck in order to calculate acceptable soil loading rates. Field testing methods are permissible.
- ✓ Drilling waste must be collected at the drilling site in tanks or pits prior to transfer for land-spreading.
- ✓ Land-spreading may not occur during precipitation events or when precipitation is likely, nor when the ground is frozen. A contingency plan must be submitted to address waste management during such times.
- ✓ No ponding or runoff of drilling waste is permitted. This is a “no discharge” practice.
- ✓ The maximum land-spreading loading rate is a thickness of two-inches regardless of chloride content.