



March 2005

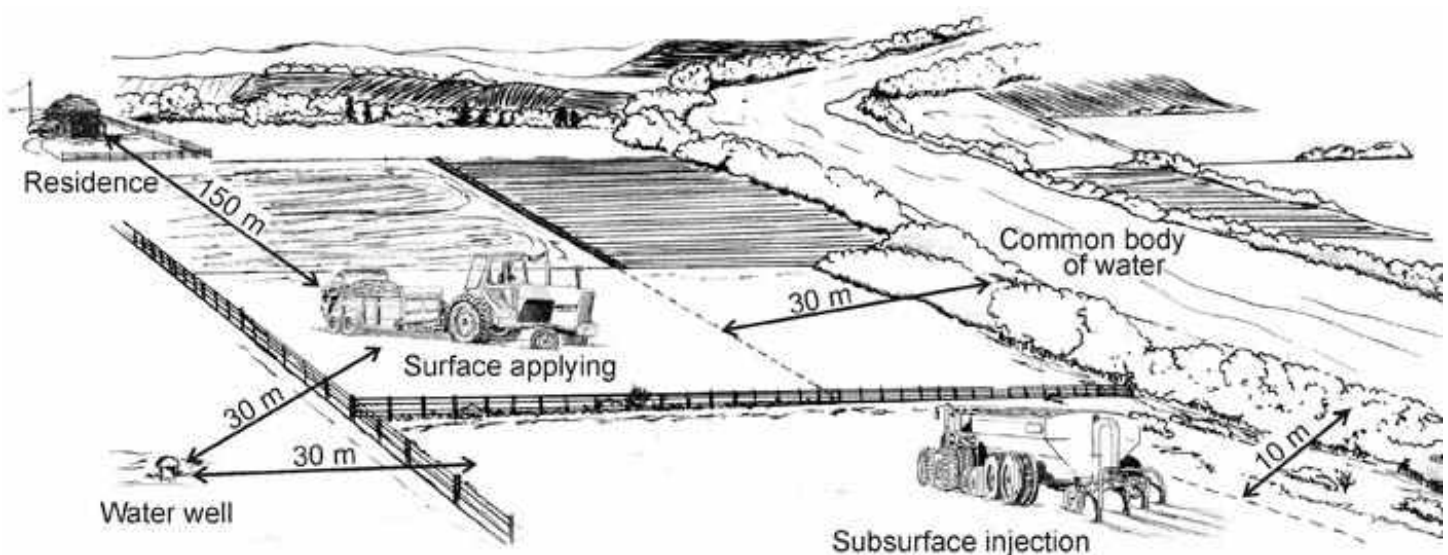
Manure Spreading Setback Distances: What is required by the Agricultural Operation Practices Act (AOPA)

The Agricultural Operation Practices Act (AOPA) includes regulations for spreading manure or compost (or composting materials) for all livestock operations in Alberta. Everyone who applies manure or compost to land is required to abide by the manure spreading setback distances. Grazing livestock activities are not subject to the setback requirements. Setback distances only apply to mechanical application of manure or compost.

Minimum Setback Distances for Manure Application

Setback distances are required to reduce nuisance impacts on neighbours and minimize the risk of manure or compost leaving the land on which it is applied and entering a common body of water. A person must not apply manure or compost:

- Within 30 metres (m) of a water well
- Within 10 (m) of a common body of water if subsurface injection is used
- Within 30 m of a common body of water if manure is surface-applied and incorporated within 48 hours
- Within 150 m (at least) of a residence or other occupied building or structure occupied by people if it will not be incorporated when spreading manure or compost on forage or direct-seeded crops



Minimum Setback Distance to a Residence

A person can spread manure or compost on forage or direct-seeded crops without incorporation if the manure or compost is spread at

least 150 m from any residence, other occupied building, or other structure occupied by people (including residences, churches, and

schools). Buildings or structures not occupied by people include granaries and hay storage sheds.

Common Body of Water

The term “common body of water” in the legislation includes the bed and shore of a water body that is surrounded by (common to) more than one landowner. The following table summarizes what is, and is not, considered a common body of water.



A Common Body of Water Includes

The bed and shore of a:

River	Stream
Creek	Reservoir
Lake	Marsh
Slough	

A Common Body of Water Does Not Include

A reservoir, lake, marsh or slough that is completely surrounded by private land controlled by the owner or operator and has no outflow going directly beyond the private land to a drainage canal, reservoir, river, permanent stream or creek, lake or potable water source that is being used for human or livestock consumption

The bed and shore of:

An irrigation canal
A drainage canal

An irrigation canal or a drainage canal that is completely surrounded by private land controlled by the owner or operator and has no outflow going beyond the private land

A roadside ditch

A wastewater system as defined in the Environmental Protection and Enhancement Act (EPEA)

A storm drainage system as defined in the EPEA that has no outflow going beyond the storm drainage system directly to a drainage canal, reservoir, river, permanent stream or creek, lake or potable water source that is being used for human or livestock consumption

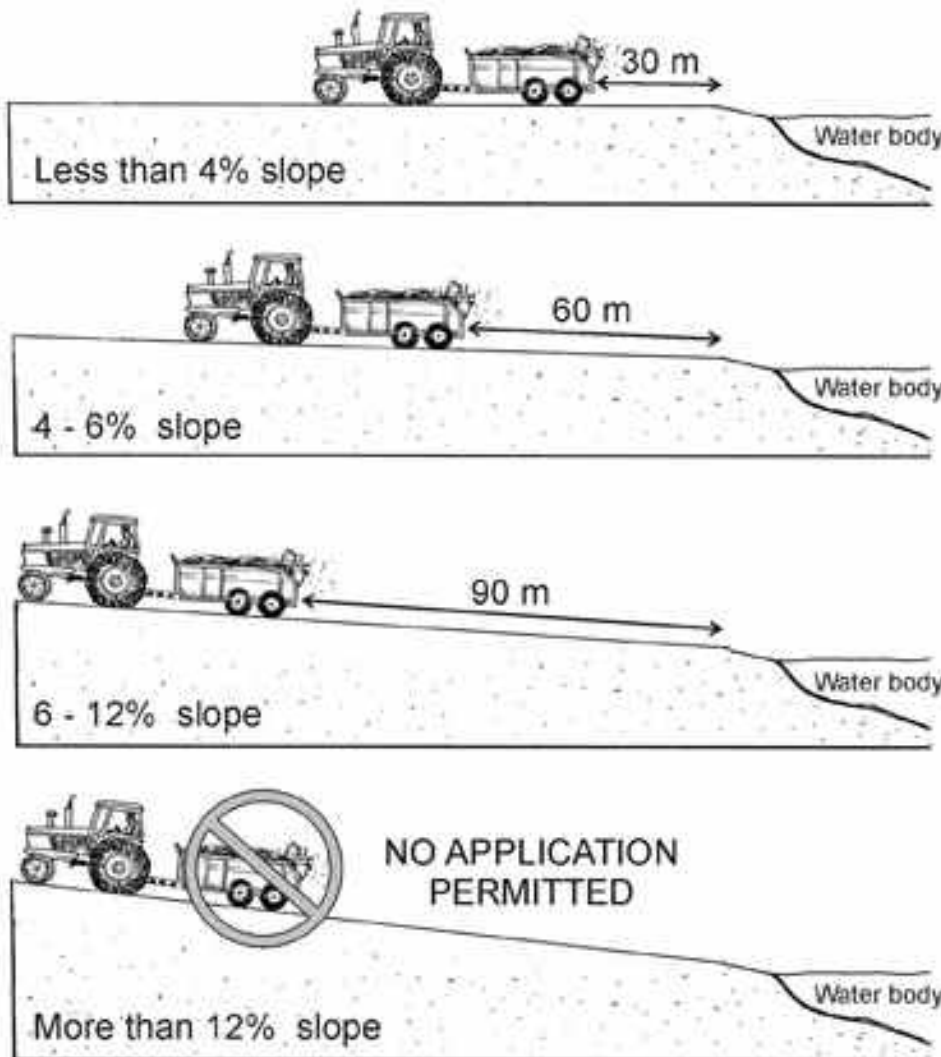
A temporary stream on private land controlled by the owner or operator that has no outflow going beyond the private land directly to a drainage canal, reservoir, river, permanent stream or creek, lake or potable water source that is being used for human or livestock consumption

Minimum Setback Distances for Application on Forage, Direct-Seeded Crops, Frozen or Snow-Covered Land

A person whose confined feeding operation or manure storage has at least nine months of manure storage must not spread manure or compost on land that is frozen or snow-covered unless the Natural Resource Conservation Board (NRCB) approves a manure handling plan submitted by the owner or operator.

A person who applies manure or compost on forage, direct-seeded

crops, frozen or snow-covered land must meet the minimum setback distances for manure application, keeping in mind the mean slope of the terrain near the common body of water. Even if setbacks are met, reasonable care must be taken to ensure manure does not enter a common body of water from snow melt runoff. The distances vs. slope are shown in the following figure:



Determining Mean Slope

To determine mean slope, use the bed and shore of the common body of water as the starting reference. To calculate the slope, divide the vertical rise from the shore to the field location by the horizontal distance from the top of the shore or coulee bank to the field location. The following formula shows the calculation.

Slope (%) =

$$\frac{\text{vertical rise from shore to field location (m)}}{\text{horizontal distance from shore to field location (m)}} \times 100$$

horizontal distance from shore to field location (m)

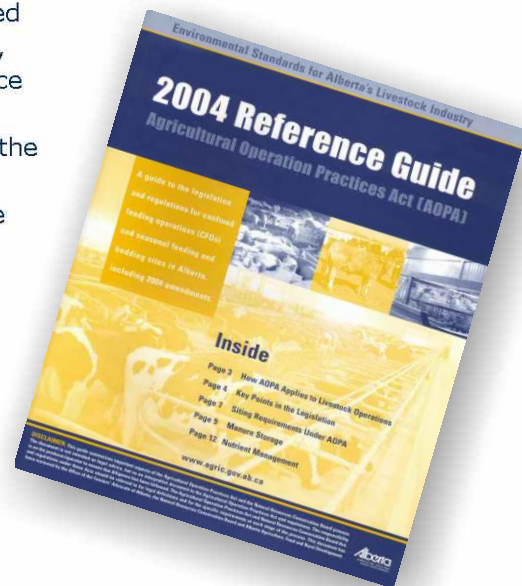
Record Keeping and Soil Testing

Each person who handles more than 500 tonnes per year of manure or compost must keep records for 5 years, conduct soil tests and apply manure according to the soil nitrogen and salinity limits in the legislation. Soil tests must be conducted prior to applying manure or compost to land. The soil test results must not be older than three years except for soil texture, which is a one-time analysis. The record keeping requirements do not apply to manure produced by livestock when they are grazing.

Records required are: soil test results, amount of manure or compost produced or handled, date, name and address of each person who receives or applies manure or compost, and the application rates of manure or compost and fertilizer. Further details and examples of record keeping forms are available (see the list of publications).

Compliance and Enforcement

Producers are expected to comply with the regulations of AOPA. The Natural Resources Conservation board (NRCB) is responsible for administering the legislation. An inspection of manure spreading practices can be triggered if the NRCB receives a complaint. NRCB inspectors will first determine if the manure spreading setback distances have been followed. If the required distances have not been followed, inspectors consider the significance of any non-compliance and the operator's willingness to address the issues voluntarily prior to any actions being implemented by the NRCB.



For More Information

Alberta Agriculture, Food and Rural Development (AAFRD)

Alberta Ag-Info Centre

Toll Free: 1.866.882.7677

Web site: www.agric.gov.ab.ca
(Search for "AOPA Manure Spreading")

AAFRD Publications

Call toll-free 1.800.292.5697 for:

- Agricultural Operation Practices Act (AOPA): 2004 Reference Guide (Agdex 096-1)
- Manure Management Record Keeping: What is required by AOPA (Agdex 096-3)
- Existing Operations: How they are affected by AOPA (Agdex 096-2)
- Wintering Sites and Livestock Corrals: What is required by AOPA (Agdex 096-4)

Natural Resources Conservation Board (NRCB)

Toll-free 24 hour response line

1.866.383.6722

Dial 310.000 first for toll-free connection

Lethbridge 403.381.5166

Red Deer 403.340.5241

Morinville 780.939.1212

Fairview 780.835.7111

Web site: www.nrcb.gov.ab.ca

Queen's Printer Bookstore

For copies of the AOPA legislation dial 310.0000 for a toll-free connection

Phone: 780.427.4952

Web site: www.gov.ab.ca/qp