## Manure Spreading FAQ FACTSHEET



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## Manure Spreading Frequently Asked Questions: Interior Region

Why do I see manure being moved on roads?

Manure may be moved for legitimate reasons:

- 1. Land Application. Manure should be applied to cropland that will benefit most from manure application, and sometimes this requires tankers to move manure on roads. Many farmers rent land, because they need more land than is available on their home farm.
- 2. Storage. Sometimes manure is moved temporarily to other storage facilities to avoid potential overflowing of individual manure storage facilities.
- 3. Processing. Manure may be exported from a farm for processing (e.g. to a compost facility or anaerobic digester)

Is there a regulation that governs manure spreading?

Among other requirements, the Code of Practice for Agricultural Environmental Management (AEM Code) regulates the storage and use of manure, including the spreading of manure and other agricultural by-products on all agricultural operations.

Are there seasonal restrictions on when a farmer can spread manure?

In all areas of B.C, it is prohibited to spread manure on snow-covered or frozen ground effectively restricting spreading during the winter months. In "High Precipitation Areas", areas that receive 600 mm of precipitation or more from Oct. 1 to Apr. 30, there are additional calendar-based restrictions (see Manure Spreading Frequently Asked Questions: South Coast Region).

What is a high precipitation area?

In areas that are not considered "High Precipitation Areas" under the AEM Code, there are no calendar-based restrictions on spreading manure. With a few exceptions, most of the farmland in the interior is outside of High Precipitation Areas. The High Precipitation Areas Map Tool can determine if a specific location is in a high precipitation area.

Can a farmer spread manure on snow or frozen soil?

The spreading of manure on frozen soil or a "snow-covered" field is prohibited by the AEM Code, however, note that "frozen soil" does not include soil with a thin surface layer of morning frost that will melt during the daytime. In addition, snow must cover at least half of the field for it to be considered "snow-covered". However, in most cases, spreading when the soil is snow-covered or frozen is **very** likely to result in surface runoff of manure.

Farmers are encouraged to plan for adequate manure storage (including contingency storage which might be on a neighbouring farm) or planning for

Factsheet 380.700-2 Page 1 of 4

more application of manure (up to appropriate application rates) during times when the soil is not frozen or snow-covered.

How close to surface water can a farmer spread manure?

Under provincial regulations, farmers must maintain a minimum 3 m distance between a watercourse and the area where manure is applied to the soil surface. If the manure is injected (an application method where the manure is applied below the soil surface) a minimum 1.5 m setback must be maintained.

During shoulder seasons, when there is greater potential for runoff, farmers are encouraged to evaluate if greater setbacks are needed to protect surface water. The B.C. Application Risk Management (ARM) Tool can be used to determine the risk of manure or fertilizer loss in surface runoff following an application by using weather forecasts and individual field conditions.

How close to a drinking water source can a farmer spread manure?

Under the AEM Code, farmers must maintain a minimum 30 m distance between a drinking water source and the area where manure is applied to the surface, regardless of how the manure is applied. A drinking water source may be a well or the diversion point where drinking water is withdrawn from surface water. The 30m distance applies to all types of manure application methods.

Why is manure spread repeatedly on the same field in the same year?

Manure or other sources of nutrients should be applied at the right time. For a forage grass field, this means multiple applications. Expect manure to be applied before the first cut (harvest) and after subsequent cuts (Fig. 1), because these are the times the grass crop needs the nutrients. Other crops have different requirements. For example, a farmer would only want to apply manure once per year for corn, but if that corn field will have a cover crop (to reduce soil erosion and provide other benefits) after harvest, or if the field is determined by a fall soil test to be nutrient deficient, then the field could benefit from more manure in the fall. Applying manure at the right time sometimes means applying at multiple times.

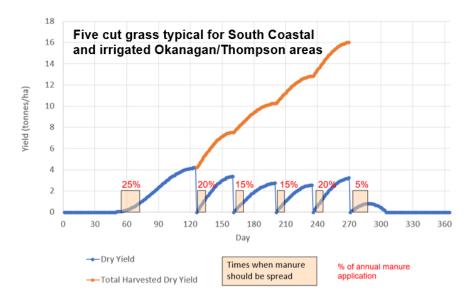


Figure 1. Typical grass growth curve and manure spreading opportunities with approximate percent of annual manure application. The times and percentages presented here should vary with environmental conditions and farm needs.

Factsheet 380.700-2 Page 2 of 4

Why do farmers use an 'aerial spray' method to spread manure?

There is no one right method for all cases of liquid manure application. Each method has its own advantages and disadvantages. The conventional method of liquid manure application in the Interior region is the 'splash plate,' which puts manure into the air at a lower height than an irrigation gun resulting in reduced ammonia emissions. Over the last decade or two, some custom applicators have further reduced ammonia emissions during manure spreading by simply lowering the height of the splash plate or by using a boom with nozzles.

More information is available in factsheet 631500-6 *Choosing and Calibrating Manure Application Equipment* available online.

Should a farmer spread manure when it is raining?

It depends on soil, weather, and crop conditions. On a dry soil with a crop that will take up soil nutrients before they are leached, a light rain can be beneficial. Under such conditions, a light rain can help incorporate the manure nutrients slowly into the soil for plant uptake. Farmers should and do consider their own soil, weather, and crop conditions when they make decisions about manure spreading.

Why would one farm be spreading manure and their neighbour not be spreading? It depends on soil, weather, and crop conditions. Weather conditions will likely be similar for two neighbouring farms. However, soil types, field conditions, and crop growth can vary significantly, sometimes even within a field that looks to be the same from a distance. Even with the same soil type, management can differ (e.g. some fields may be less compacted than others) leading to a lower chance of runoff on some fields compared to others during rain events. Farmers generally 'walk their fields' leading up to the first manure applications of the year. They would be looking for signs such as ponding, amount of vegetation cover, and soil moisture.

Why does manure spreading sometimes happen at odd hours?

It is possible that the manure applicator is trying to take advantage of a brief window of opportunity to apply manure while conditions for spreading are suitable. Farmers may try to spread when neighbours are less likely to be disturbed. Spreading during cooler hours and avoiding windy conditions can not only reduce annoying odours and drift but also reduce the amount and cost of fertilizer required for crop growth.

What can be done about dust from manures?

This is primarily an issue with poultry manure. Among the affordable and easy methods to address dust issues is for either the farmer or neighbour to start a conversation. All that may be needed is decent neighbourly relations and a willingness to find the best schedule for those involved. While a certain amount of dust is unavoidable, the farmer can minimize dust from manures by avoiding spreading during windy conditions and by working the manure into the soil after spreading if feasible. Alternatively, the farmer might moisten the manure before application, which might require an alternative spreading method. As with liquid manure, solid manure application methods each have their own advantages and disadvantages (economic and environmental). See the "Choosing and Calibrating Manure Application Equipment" factsheet for more information.

If a manure spill occurs, what should happen?

It is the custom applicator and producer/ farmer's responsibility to have a contingency plan. The plan should outline a timely and effective response to any emergencies involving the release of manure products into the environment from accidental spills, equipment failures or other causes. Under the Spill Reporting Regulation, manure spills greater than 200 kg or 200 litres must be

Factsheet 380.700-2 Page 3 of 4

reported immediately to the Provincial Emergency Program at 1-800-663-3456 (24 hr service).

If I see manure draining into ditches or creeks, who should I inform? The toll free number to report as a spill is 1-800-663-3456 or to report pollution 1-877-952-7277 (RAPP).

There may be multiple reasons why surface water may be brown or yellow. Reasons for colour or cloudiness in water, unrelated to manure, include mud and humus, peat or decaying plant matter. If you think the reason is manure draining into ditches or creeks, then call one of the numbers below.

## FOR FURTHER INFORMATION CONTACT

MINISTRY OF AGRICULTURE, FOOD AND FISHERIES

Phone: 1-888-221-7141 Email: AgriService@gov.bc.ca 1767 Angus Campbell Road Abbotsford, B.C. V3G 2M3

Factsheet 380.700-2 Page 4 of 4