

Re: MANURE SPREADING ADVISORY #4 - 2008: SOUTH COASTAL REGION

Date: September 8, 2008

The following advisory is produced by government, in partnership with industry, to provide guidance to farmers regarding the *Agricultural Waste Control Regulation* and the *ENVIRONMENTAL MANAGEMENT ACT*. If a discrepancy arises between this document and the legislation, the legislation takes precedence. Following this advisory does not relieve anyone from their obligations under the LEGISLATION. The Province of British Columbia does not guarantee the accuracy or completeness of the information referenced here from legislation, and in no event is the Province liable or responsible for damages of any kind arising out of its use.

As we approach the end of a summer shortened by a wet month in June, it is important that farmers who apply manure plan their final applications. The objective is to get the most nutrient value from manure while minimizing the risk of causing pollution. Farmers should be scheduling their manure applications so that storage facilities are adequately emptied before the winter storage period begins. In some cases, additional storage capacity may be necessary.

Perennial forage grass fields are well suited to receive late summer or fall manure application. To conserve nutrients (ammonia), reduce odours and minimize pollution risk, try to time manure application on grassland just before a light to moderate rainfall event, but avoid application before prolonged or heavy precipitation events*. Cover crops planted in the fall or relay crops are also suitable to receive manure if the crop can be planted early enough to support substantial fall growth and become well established.

If you haven't done so yet, completing an Environmental Farm Plan and an associated Nutrient Management Plan is a great way to ensure you are using the best nutrient management practices possible on your farm. Funding is available through the program to assist with implementing many action items identified in the plan. More information is available through the BC Agriculture Council website given below.

The following are some guidelines for specific crop groups. The "Manure Spreading Advisory Committee" (consisting of industry and government representatives) will be monitoring weather and soil conditions and will issue further advisories as considered necessary.

Harvested Annual Crops (including corn and vegetables)

Manure application should only be considered if a fall soil test has shown need for fertilizer and a winter cover crop has been or will be planted that will utilize the nutrients being applied. With each passing day getting shorter and temperatures starting to fall, the capacity of a cover crop to recover soil-applied nutrients diminishes. Also, as fall rains arrive, the risk of nutrient runoff and leaching increases.

For farmers considering manure application this fall on fields with harvested annual crops (including corn), the key message is “the sooner the better”. Manure may be applied as a fertilizer to a harvested or fallow field if the field has been seeded to a cover crop by September 24**. Read the following guidelines to ensure manure is being applied appropriately as a fertilizer or soil conditioner.

Guidelines for applying manure as a fertilizer until September 24**

- A representative soil test should be taken from the top 30 cm (12 inches) of the soil profile and sent to a lab for nitrate-N ($\text{NO}_3\text{-N}$) analysis.
- If soil test nitrate-N is greater than 20 ppm (approx 66 kg $\text{NO}_3\text{-N/ha}$), do not apply manure or other nutrients.
- If soil test nitrate-N is less than 20 ppm, manure can be applied to supply up to 60 kg of total nitrogen per hectare (53 lbs N/acre). With typical dairy slurry, this would be about 2000 gal/ac. If the nutrient content of the farm's manure is not known, a manure nutrient analysis is also required.
- As the rainy season approaches and the risk of runoff increases, buffer distances to watercourses should also increase. Suggested buffer widths range from 3 m in dry conditions to 10 m in higher risk periods or in terrain that presents a high risk.

Guidelines for applying solid manure as a soil conditioner in the fall

A manure test is required to show a carbon to nitrogen ratio of 30:1 or greater. Essentially, this demonstrates that the manure nitrogen will be "tied up" by carbon sources (i.e. sawdust). In this case, manure may be applied as a soil conditioner. If the carbon to nitrogen ratio is less than 30:1, handle manure as a fertilizer and use the guidelines in the previous section.

Perennial Grassland

Manure application to perennial grassland is appropriate if the application rate meets seasonal crop nutrient requirements and is done by the end of October. Appropriate buffer widths should be maintained to minimize the risk of runoff of manure to watercourses. The actual date for final manure applications is somewhat flexible and may be determined based on fall weather conditions.

Berry Crops

Fall manure application for berry crops is neither necessary nor recommended. If fields are being renovated for new plantings and a cover crop will be grown, consider the guidelines for harvested annual crops.

Additional Resources

Canada-BC Environmental Farm Plan Program:

Trained Planning Advisors are available to assist producers with completing an Environmental Farm Plan. Some of the delivery groups for the Coastal Region and their contacts include the following:

- BC Milk Producers' Association <http://www.bcmilkproducers.ca/>, Dave Melnychuk, 604-534-2639
- Mainland Fruit and Vegetables EFP Delivery Group, Jyl Singh 604-807-5659
- Poultry Administration, Allen James, 604-795-7656

A complete contact list is available through the BC Agriculture Council website at the link below: http://www.bcac.bc.ca/EFP_pages/contact_us/index.html

Agricultural Waste Control Regulation

This is the legislation that applies to manure management in British Columbia.

http://www.qp.gov.bc.ca/statreg/reg/E/EnvMgmt/131_92.htm

For further information, please contact:

BC Ministry of Agriculture and Lands

David Poon, AAg 604-556-3098

Orlando Schmidt, PAg 604-556-3101

For questions of a regulatory nature, please contact:

BC Ministry of Environment

Trevor Hamelin, AScT 604-582-5275

George Rushworth, PAg 604-582-5211

*As a general guideline, manure application should be avoided if greater than 10 mm of rain (or its equivalent in snow) is forecast for any day in the five-day forecast.

**Please note that the September 24 date proposed here is a general recommendation. Based on previous research, the potential fall growth from cover crops planted after this date begins to drop off significantly.