Sept. 21, 2007

Reducing Nutrients
Manitoba Water Stewardship
Water Quality Management Section
Suite 160, 123 Main Street
Winnipeg, Manitoba
R3C 1A5

Re: Proposed approaches to Reducing Nutrient Contributions from urban and rural residential sources: Fertilizer Application/Household Cleaning Products

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Introduction

The Canadian Fertilizer Institute (CFI) welcomes the opportunity to comment on the proposals regarding phosphorus fertilizer.

CFI is an industry association representing manufacturers, wholesale and retail distributors of nitrogen, phosphate and potash fertilizers. Our industry employs 12,000 Canadians and contributes $7 billion annually to Canada's economy. Our products contribute to the supply of safe, nutritious food in Canada and around the world. Fertilizer also helps keep our cities green.

Manitoba Water Stewardship Proposal

Manitoba Water Stewardship is proposing to restrict the application of "cosmetic" fertilizers to lawns in urban and rural residential areas. Fertilizers containing phosphorus could only be applied to lawns for cosmetic purposes within the first two years of establishment.

Restrictions would come into effect in January 2009. Manitoba would work closely with the local retail sector to ensure that a range of phosphorus-free fertilizers are offered for sale in urban and rural residential areas.

Golf courses and driving ranges that apply nutrients would also be required to submit a nutrient management plan explaining how nutrients would be managed at the facility to ensure water quality protection.

Specific Comments on the Proposal Text

- *"Fertilizers are applied to lawns, golf courses and parks for cosmetic purposes to maintain a thick growth of rich, green grass."*

The use of the term "cosmetic" implies that the application of fertilizer serves no purpose other than

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appearance. Nutrients are essential for plant life, including grass. Healthy lawns around homes stabilize the soil, prevent erosion, keep yards cool in the summer and provide safe play areas for children. A well-fertilized lawn discourages weed growth, reducing the need for pesticides.

Fertilizer plays a critical role in maintaining the turf on golf courses, sports fields, playgrounds and urban parks and providing safe areas for recreation.

- *"Many of Manitoba's soils have an abundant supply of natural phosphorus."*

While many Prairie soils are often high in fixed phosphates – calcareous soils – they are not high in available phosphorus that can be utilized by plants.

- *"Many fertilizers are applied for cosmetic purposes in larger amounts than can be used by growing grass and plants."*

While some homeowners may over-use fertilizers, many lawns have been depleted of nutrients leading to bare patches and weed growth. New York Sate completed a turfgrass management survey recently. Amounts spent on fertilizer indicate that on average, residential lawns are fertilized at rates far below recommended levels. http://www.nass.usda.gov/Statistics_by_State/New_York/Publications/Special_Surveys/Turfgrass2003/Turfbook04.pdf).

- *"Manitoba Water Stewardship is proposing to follow a similar approach to Minnesota for restricting the application of cosmetic fertilizers to lawns in urban and rural residential areas."*

The text makes no mention of manure, compost and other sources of fertilizer that are applied in urban areas. There is no difference between the phosphorus from these sources and the phosphorus in mineral phosphorus fertilizer. Some manures are high in phosphorus content.

- "With rain and snowmelt, excess nutrients can wash away into ditches and storm drains that lead directly to rivers and lakes."

It is well established that phosphorus quickly binds to soil and does not generally "runoff". Erosion of soil containing phosphorus from natural and fertilizer sources, however, is a contributor to phosphorus loading in lakes and rivers. Research by Cornell University indicates that fertilization of turf can in some cases reduce losses of phosphorus in runoff by preventing erosion. http://www.ipni.net/ppiweb/bcrops.nsf/$webindex/B76058DCABCAEA7585257276007999 89/$file/07-1p26.pdf).

Stewardship Approach

The Canadian Fertilizer Institute believes that the nutrients contained in fertilizer, compost and manure have to be used with care to protect our water and air.

All nutrients used in agriculture, horticulture and home gardening need to be applied responsibly. That's why the Canadian Fertilizer Institute has developed the Right Product@Right Rate, Right Time, Right Place™ system. http://www.cfi.ca/files/publications/CFI_Path_to_Sustainability_broch_ver10_071905_single_page.pdf

Although the Right Product@Right Rate, Right Time, Right Place™ system was designed for use in agriculture, the basic principles apply to anyone using fertilizer, manure or compost. For a homeowner, getting it right can be made simple.

Right Product

Manure or compost might be the best choice for a garden that needs added organic matter. A new lawn that needs a quick start might benefit from a commercial fertilizer.

Rate Right
Ideally, a homeowner would send soil samples to a laboratory to determine that the exact nutrient needs, but that generally isn't practical. Homeowners can use a trained lawn care professional to apply the right fertilizer mix. For do-it-yourselfers, following the science-based, government approved directions of the fertilizer package will provide good results for the lawn and the environment.

Right Time
There are some simple guidelines for timing application. Fertilizer shouldn't be applied when the ground is frozen or just before a heavy rain is expected, for example.

Right Place
Keeping fertilizer on the grass and cleaning up spills on driveways or sidewalks is important. Homeowners may want to leave a small strip unfertilized on the edge of the lawn. Special care needs to be taken when fertilizing slopes or gullies.

Basic Principles

CFI believes that voluntary Nutrient Management programs based on sound science, expert advice and public education are the best approach.

Applying too much fertilizer is simply wasteful and can harm the soil or be lost to the environment. At the same time, too little fertilizer can leave plants and crops stunted for a lack of nutrients. But used in the right way, fertilizers keep lawns, parks, sports, fields and golf courses green and healthy.

The Canadian Fertilizer Institute is working with companies that supply lawn and garden fertilizers to communicate the importance of responsible nutrient use. The fertilizer industry can do more to get its message out.

The effective use of fertilizers for lawn and garden care needs to be proactively communicated to the media and urban consumers. Municipal politicians and officials need the facts about fertilizers and ways that homeowners can use fertilizer while protecting our lakes and rivers. Simple tips such as getting gardeners to carefully follow the directions on fertilizer bags will reduce the impact on the environment.

CFI Recommendations

- The proposed exemption for golf courses and driving ranges should be extended to sports fields, public parks, cemeteries, playgrounds and other areas that are normally fertilized by trained professionals. In addition, homeowners using trained lawn care applicators should be exempt.

- Manitoba Water Stewardship should work in partnership with the fertilizer/lawn care industry and other stakeholders to improve homeowner education and communication about fertilizer and its application.

- CFI is proposing that homeowners applying fertilizer on established lawns should only be restricted to the use of "low" phosphorus fertilizers. The current proposal would restrict homeowners to the use of "zero" phosphate fertilizers for lawns that have been established for more than two years. CFI believes that a zero phosphate restriction is not based on science and would not be sustainable over time.

- Establish a technical working group including government and industry to establish a science-based standard for a low phosphate fertilizer.

Low Phosphorus Fertilizer

In the United States, the Association of American Plant Food Control Officials, which regulates fertilizer in U.S. states, is developing a standard for low phosphorus lawn fertilizer. Under the proposal, a low phosphorus fertilizer would have directions for use that would mean a maximum application rate of 0.25 lbs. of phosphorus (P2O5) per 1,000 square feet of grass.

Others believe this level may in fact be too high for established lawns and a "low phosphorus" standard more in the range of 0.12 to 0.20 pounds of phosphorus (P2O5) per 1,000 square feet of lawn. This would equate to 24-4-16 fertilizer.

CFI is willing to work with Manitoba Water Stewardship to establish the appropriate standard for low phosphorus fertilizer. We would also be willing to work with the lawn care industry and the Canadian Food Inspection Agency (Fertilizer Section) to establish this as a national standard.

The Manitoba government has recognized that phosphorus is required during the first two years of planting a lawn and application of phosphorus on new lawns is exempt. A typical "starter" fertilizer recommended for a new lawn would have an application rate of 1.0 lbs per 1,000 square feet, or label of 16-32-6. Setting a low-phosphate standard would assist in preventing starter fertilizers from being used on established lawns.

Conclusion

CFI supports voluntary stewardship programs for its products. The Manitoba Water Stewardship proposal regarding phosphorus in fertilizer need to be practical and science based. We believe that our recommendations would result in a workable regulatory system that would benefit the environment and ensure that the Manitoba's cities and towns maintain healthy green spaces.