



**FERTILIZER CANADA**

**FERTILISANTS CANADA**

907 – 350 Sparks, Ottawa ON K1R 7S8

T (613) 230-2600 | F (613) 230-5142

[info@fertilizercanada.ca](mailto:info@fertilizercanada.ca)

[fertilizercanada.ca](http://fertilizercanada.ca) | [fertilisantscanada.ca](http://fertilisantscanada.ca)

February 26, 2021

Nicole Armstrong

Director, Water Science and Watershed Management Branch  
Manitoba Agriculture and Resource Development

[Nicole.Armstrong@gov.mb.ca](mailto:Nicole.Armstrong@gov.mb.ca)

**Re: The Nutrient Targets Regulation Regulatory Project**

Dear Nicole:

On behalf of our members, Fertilizer Canada appreciates the opportunity to comment on the development of *The Nutrient Targets Regulations Regulatory Project*.

Fertilizer Canada represents manufacturers, wholesale and retail distributors of nitrogen, phosphate, potash and sulphur fertilizers – the backbone of Canada’s agri-food economy. Responsible for half of the world’s current food production, fertilizer is fundamental to the future of agriculture and farmers’ ability to feed a growing global population.

Fertilizers play an essential role in replenishing nutrients in the soil that are used by plants each growing season, raising soil productivity, and improving soil health; but incorrect nutrient use may lead to negative impacts on a grower’s return on investment and risks increased impacts on the environment. In order to have this downstream assurance of responsible farming, growers will require a framework for understanding and implementing the principles and practices of sustainable agriculture.

As the world seeks to sustainably grow food from a decreasing land base, farmers will rely on fertilizer to increase production efficiency while conserving our soil, water, and air. To meet the challenge, farmers will require more than just new and innovative technologies; they will require a framework for understanding and implementing the core principles and practices of sustainable agriculture.

4R Nutrient Stewardship has been designed for this purpose. For more than a decade, Fertilizer Canada has worked with Canadian farmers and the fertilizer industry to promote 4R Nutrient Stewardship - a science-based approach to fertilizer management that involves applying the Right Source @ Right Rate, Right Time, Right Place®. Use of the 4Rs optimizes plant nutrient uptake, maximizes yield and increases profitability, while also minimizing fertilizer runoff, leaching and nitrous oxide emissions.

4R Nutrient Stewardship offers agri-retailers in Manitoba credibility and provides a strategic opportunity for farmers to help meet provincial objectives to improve the water quality of Lake Winnipeg and contributing watersheds while increasing agricultural productivity. Findings suggest significant benefits when compared to traditional practices. This will continue to ensure the effective protection and conservation of Manitoba’s agricultural



**FERTILIZER CANADA**

**FERTILISANTS CANADA**

907 – 350 Sparks, Ottawa ON K1R 7S8

T (613) 230-2600 | F (613) 230-5142

[info@fertilizercanada.ca](mailto:info@fertilizercanada.ca)

[fertilizercanada.ca](http://fertilizercanada.ca) | [fertilisantscanada.ca](http://fertilisantscanada.ca)

soils, water quality, and ecosystem health as they relate to nutrients. Every farm is different, meaning that the implementation of 4R Nutrient Stewardship practices are being adapted to Manitoba's agricultural production and unique conditions in order to maximize these results.

In 2020, our 4R Designation program counted approximately one million acres under 4R management in Manitoba; these acres under 4R management account for approximately 10% of Manitoba's total crop acres. 4R Nutrient Stewardship Research has shown that implementation of 4R Best Management Practices (BMPs) can reduce phosphorus loss up to 60% which ultimately reduces the amount of nutrient run-off and helps improve the long-term water quality of Lake Winnipeg.

Fertilizer Canada is proud of its partnerships with the Government of Manitoba and the Keystone Agricultural Producers. As one of Canada's first adopters of the 4R Nutrient Stewardship program, Manitoba continues to demonstrate its leadership and commitment to reducing environmental impacts through the implementation of sustainable agriculture practices.

Fertilizer Canada recognizes how valuable water is to communities and that sustainable, environmentally-conscious practices need to be adopted to protect this irreplaceable resource. To accomplish this goal, Fertilizer Canada provided \$150,000 over three years to help fund e-learning, workshops, interactive learning tools and 4R Designation in Manitoba.

### **Recommendations**

#### **Benefit for 4R Nutrient Stewardship**

Fertilizer Canada would like to thank the Government of Manitoba for referencing 4R Nutrient Stewardship within The Nutrient Targets Regulation Regulatory Project as an existing program that would benefit from the nutrient load reduction targets. 4R Nutrient Stewardship is a holistic, science-based approach to sustainable nutrient management that can be adapted to fit crop specific factors. Our grower Fertilizer Use Survey shows that approximately 50% of growers are implementing 4R practices, however only 10% of 4R acres recorded through our 4R Designation program. Recognition of current sustainable efforts is key to building trust within the agricultural community and to encourage further adoption or validation of more advanced 4R practices. *Fertilizer Canada asks that the proposed nutrient target regulation endorse 4R Nutrient Stewardship as the standard for sustainable nutrient management and recognize the positive, proactive efforts of Manitoba's agricultural community towards improved water quality.*

#### **Incentive Manitoba Growers for Sustainable Efforts**

Canada's fertilizer industry believes that voluntary, industry-led initiatives are the best approach towards reducing nutrient runoff and environmental impacts. Our Fertilizer Use Survey showed that cost was the number one barrier to adoption of 4R practices. We believe that incentives could help offset the cost of soil testing, variable rate technologies



**FERTILIZER CANADA**

**FERTILISANTS CANADA**

907 – 350 Sparks, Ottawa ON K1R 7S8

T (613) 230-2600 | F (613) 230-5142

[info@fertilizercanada.ca](mailto:info@fertilizercanada.ca)

[fertilizercanada.ca](http://fertilizercanada.ca) | [fertilisantscanada.ca](http://fertilisantscanada.ca)

and new equipment and encourage continued uptake of 4R practices on Manitoba cropland. *Fertilizer Canada recommends that the proposed nutrient target regulation focus on the benefits of incentives and education efforts already underway, and not set additional prescriptive limits or activities that would penalize proactive efforts or negatively impact crop productivity.*

#### **4R Research – Red River Watershed**

In 2018, the North American fertilizer industry pledged an additional \$6 million to fund research on ways that farmers can strengthen fertilizer BMPs to reduce nutrient loss to the environment. Following the renewal of the North American 4R Research Fund in 2018, our industry has contributed to the more than \$11.8 million invested in 4R research to date. One project currently underdevelopment will expand on current agronomic knowledge by incorporating edge-of-field monitoring of phosphorus loss to assess the benefits of 4R BMPs and provide growers with the most up-to-date science-based practices to optimize nutrient for crop production and reduce nutrient losses to water. The proposed project is cross-jurisdictional in Manitoba and Ontario, but also aligns with a 4R Research project already underway in Minnesota. *Fertilizer Canada encourages the Government of Manitoba to work with our industry and academic partners to include or promote the innovative findings of this new study as it directly pertains to nutrient load reduction in Lake Winnipeg through implementation of 4R practices.*

#### **Cross-Jurisdictional Alignment**

We are pleased to see that the Government of Manitoba has committed to not only providing science-based benchmarks for Manitoba, but upstream jurisdiction as well. Water knows no borders and improved water quality depends on collaborative actions, often from multiple provinces or countries. 4R Nutrient Stewardship can be tailored to fit a specific crop rotation, and adoption of these practices in different conditions can collectively provide positive improvements in water quality. *Fertilizer Canada supports your leadership to promote communication and alignment amongst multiple jurisdictions aimed at reducing nutrient loads in lakes with multiple watersheds.*

Fertilizer Canada stands ready to work with the Government of Manitoba as the province finalizes its nutrient load reduction targets for Lake Winnipeg and its surrounding watersheds. We welcome any questions or further discussions as it relates to this written submission or our ongoing partnership in the province of Manitoba.

Sincerely,

McKenzie Smith, Director of Stewardship & Regulatory Affairs

CC: