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Ministry of the Environment, Conservation and Parks
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Re: Director's Directions for O. Reg 535/05 (Greener Gasoline) and O, Reg 97/14 (Greener Diesel)

Biofuels Consulting Canada applauds the Government of Ontario's implementation of 10% renewable content in gasoline. This is an important first step as the province moves towards implementing its commitment to have 15% renewable content as soon as 2025. We are therefore pleased to provide our feedback on the Director's Directions of the Greener Gasoline and Greener Diesel regulations.

## Overview

Benefits – Increasing the renewable content in gasoline produces the tangible benefits our environment needs, all without changing driving habits and imposing additional costs on drivers. Ethanol reduces GHGs by up to 62% compared to gasoline and also replaces other high-octane components in the gasoline blend such as carcinogenic aromatics.

**Cost** – Ethanol is also affordable and averages 20 cents less per litre than gasoline. These savings have historically not been passed along to Ontario consumers although they are in the USA.

**Blending** – Today, over 90% of the volume of ethanol blended in Ontario is made in the province. Increasing ethanol blending requirements ensures that a local, Made-in-Ontario product is used to reduce GHG emissions from fossil fuels. As noted in prior Biofuels Consulting Canada comments, there are a number of different blender pump options at the retail level for meeting the 15% renewable content as soon as 2025.

Against this backdrop, it is important that the new regulation, as well as the forthcoming 15% content regulation, are well explained, and that the right tools are being used by the government to evaluate its success.

There are some suggested improvements that Biofuels Consulting Canada believe would provide further clarification and benefit. Biofuels Consulting Canada therefore puts forward the following recommendations:

LCA modelling. Biofuels Consulting Canada recognizes that the Greener Gasoline Regulation and Greener diesel Regulations both cite GHGenius version 4.03a. There are a number of new pathways in GHGenius version 5.0 and also some more up to date data as compared to GHGenius version 4.03a. That is why the BC Government has already signalled that they intend to use GHGenius version 5.0. It is Biofuels Consulting Canada's strong recommendation that the MECP include GHGenius version 5.0 as an alternate GHG model and LCA tool in the body of the Greener Gasoline and Greener Diesel Directors Directions and actively work towards updating the regulations to include GHGenius version 5.0 as the preferred tool. This ensures both accuracy, and that all plants are treated consistently. GHGenius 5.0 has more pathways and will minimize the need to rely on other tools to fill in any gaps, thereby reducing the workload of the Ministry and ensuring consistency for the program.

New processes. Section 7 Determining GHG Intensity of Bio-based content that is not in GHGenius 4.03a states that at a minimum "an explanation of the fuel production technology and how the technology differs from the existing technology in GHGenius version 4.03a" may be open to interpretation. GHGenius version 5.0 already includes co-processing pathways. That is another reason why it is the Biofuels Consulting Canada's strong recommendation that the MECP include GHGenius version 5.0 as an alternate GHG model and LCA tool in the body of the Greener Gasoline and Greener Diesel Directors Directions and actively work towards updating the regulations to include GHGenius version 5.0 as the preferred tool.

With respect to new processes and pathways such as co-processing, it is important that renewable content is tracked using carbon dating via ASTM D6866 to validate the level of renewable content in the finished product. Not only will this help to avoid misunderstandings and ensure that investments are made on the basis of the best information available, it will also ensure that CI is calculated as accurately as possible. This is consistent with prior comments submitted by Biofuels Consulting Canada. Biofuels Consulting Canada Inc. has conducted studies for the Canadian government on co-processing that clearly demonstrated that the amount of the bio-crude or co-processed feed that actually makes it into the gasoline or diesel products is dependent upon a number of factors that include where it is introduced into the refiner, at what blend level and other operation conditions factors.

## Conclusion

Ontario has successfully developed a strong domestic biofuels industry and the fact that the average blend level of Ontario has been at just below 8% the past few years shows that this modest increase to 10% is easily achievable and that the further increase to 15% as early as 2025 is attainable. It is, however, critically important that the Director's Directions are as clear as possible and rely upon the most up to date tools to ensure that stakeholders have the necessary clarity.

As always, Biofuels Consulting Canada is grateful for the opportunity to submit its recommendations to the MECP.

Sincerely,

Stu Porter President

Biofuels Consulting Canada Inc.