Questions & Answers on licence application DIR 194 – field trial of genetically modified (GM) perennial ryegrass

What is this application for?

Grasslanz Technology Australia Pty Limited is requesting a licence to grow GM perennial ryegrass modified for increased metabolisable energy content. Up to 7 trial sites per year would be selected from 119 possible local government areas in New South Wales, Victoria, Western Australia, and Queensland. The trial would run from April 2023 until December 2028, with a maximum total area of 12.5 hectares planted.

How has the GM perennial ryegrass been modified?

The GM perennial ryegrass contains introduced genes to increase the metabolisable energy content for livestock. The genes come from garden nasturtium and sesame. The genes are expected to increase the amount of lipids in the green tissue of the plants.

The GM perennial ryegrass also contains a selectable marker gene from a common gut bacterium. This gene confers antibiotic resistance. It was used to select plants during laboratory development of the GM perennial ryegrass and does not have any function when plants are grown in the field.

What is the purpose of the trial?

The trial is to assess the performance of the GM perennial ryegrass under field conditions. The GM perennial ryegrass grown in this field trial would not be used in human food or commercial animal feed. Animal feeding studies may be conducted with silage (a type of preserved fermented animal feed) made from the GM perennial ryegrass.

What controls are proposed for this release?

The consultation Risk Assessment and Risk Management Plan (RARMP) prepared for this application concluded that the field trial poses low risk to people and negligible risk to the environment. Specific measures have been proposed to manage the risk of harm to people posed by the potential allergenicity of the GM ryegrass.

As this is a field trial under limited and controlled conditions, a number of licence conditions have been drafted to restrict when and where the trial can take place, limit the size of the trial, and stop the GM perennial ryegrass from spreading outside the trial sites. For example, there are conditions to isolate trial sites from other perennial ryegrass or sexually compatible species, to securely transport and store the GMOs, and to inspect the sites at the end of the trial to check that all GM plants are destroyed. Full details of the draft licence conditions are available in the consultation RARMP.

How can I comment on this application?

The full consultation RARMP and a summary of the RARMP for application DIR 194 are available on the OGTR website or via the contacts listed below. You are invited to submit your written comments (including email) on the consultation version of the RARMP, related to any risks to the health and safety of people or to the environment from the proposed release. Comments must be received by the close of the consultation period on **17 January 2023**.

What are the next steps in the evaluation process?

The RARMP will be finalised, taking into account submissions related to the protection of people or the environment. A de-identified summary of all comments received and consideration of those comments is included in the Appendices to the final RARMP. The finalised RARMP will inform the Regulator's decision on whether or not to issue a licence.

The Office of the Gene Technology Regulator

OGTR Website

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