

QUESTIONS & ANSWERS ON LICENCE DECISION DIR 092 FOR LIMITED & CONTROLLED RELEASE OF GENETICALLY MODIFIED WHEAT

What is this licence for?

The Commonwealth Scientific and Industrial Research Organisation (CSIRO) has received approval to trial, under limited and controlled conditions, 16 wheat lines genetically modified for altered grain composition. The field trial will take place on up to 1 ha from 2009-12, at one site in the Australian Capital Territory.

What is the purpose of the trial?

CSIRO has generated GM wheat lines in which the protein or carbohydrate composition of the grain is altered. These characteristics influence baking qualities and nutritional characteristics, such as glycemic index and metabolic health. In order to fully analyse how these properties have changed, CSIRO first needs to generate a sufficient quantity of grain. This is the purpose of the field trial.

The GM wheat will not enter the commercial human food or animal feed supply chain. However, CSIRO will conduct rat and pig nutritional experiments, under controlled conditions, to evaluate the potential health benefits of some of the GM wheat lines. Some seed may be collected and retained for analysis and possible future trials, subject to further approval(s).

How have the GM wheat lines been modified?

The GM wheat lines contain partial sequences from a variety of wheat genes. These sequences are designed to reduce or eliminate expression of wheat genes which control protein or carbohydrate composition in grains. The GM wheat lines have been shown to contain altered amounts of grain proteins or altered carbohydrate composition. An antibiotic resistance gene was also used to identify transformed plants during initial development of the GM plant in the laboratory. This gene was derived from a common gut bacterium.

What controls have been imposed on this release?

The Risk Assessment and Risk Management Plan (RARMP) for this application concluded that the release poses negligible risks to people and the environment. However, licence conditions have been imposed to restrict the release to the size, location and duration requested by the applicant as these were important considerations in the assessment process. As well as limits on the scale of the release, control measures have been imposed to restrict the spread and persistence of the GMO and the introduced genetic material. These include ensuring that the GM wheat plants in the field are isolated from non-GM wheat plants; that transport and storage of the GM plant materials are in accordance with OGTR guidelines; and monitoring for, and destroying, any wheat plants on the release site for at least two years after harvest and until no volunteers are detected for at least six continuous months.

Want more information?

A number of documents relating to this decision are available on the OGTR website (<<http://www.ogtr.gov.au>> under "What's New") or via Freecall 1800 181 030. These documents include the finalised RARMP, an Executive Summary, a Technical Summary and a copy of the full licence.