Notification and Assessment under the Canadian Environmental Protection Act, 1999 (CEPA 1999) of Rhynchosporium secalis (Q&A summary)

What is it?

- *Rhynchosporium secalis* is a naturally-occurring fungus that is commonly found in the environment.
- It causes leaf spotting disease in plants, specifically cereal crops (barley, rye and triticale) and grasses. The foliar lesions are commonly referred to as 'scald'.

How is it used?

- R. secalis spores may be artificially produced and applied to plants in field trials for crop disease studies, or to determine plant resistance or pesticide effectiveness.
- *R. secalis* is only known to be produced for research purposes; it is not known to be manufactured in or imported into Canada for any other use.

Why did the Government of Canada assess it?

- A micro-organism that is not on the <u>Domestic Substances List</u> (DSL) is considered "new" and the Government of Canada must assess its potential to harm human health and the environment before it is manufactured in or imported into Canada. *R. secalis* is not on the DSL.
- The Government of Canada conducted an assessment of *R. secalis* because Agriculture and Agri-Food Canada (AAFC) submitted a notification of its intention to manufacture (grow) this new micro-organism for use in field trials to screen different varieties of barley for disease resistance.
- This assessment was done under the <u>New Substances Notifications Regulations</u>
 (<u>Organisms</u>), as required by Section 106 of the <u>Canadian Environmental</u>
 <u>Protection Act, 1999</u> (CEPA 1999).

How is it released to the environment?

- R. secalis occurs naturally; it is present in agricultural fields where barley or other grasses are infected with this fungus.
- *R. secalis* will be isolated from infected barley at AAFC's plant research facility and will be 'manufactured' (produced in quantity) and used to deliberately ensure infection of different varieties of barley at this facility.

How are Canadians exposed to it?

• The general population in Canada is not expected to be exposed to *R. secalis* as a result of this specific experiment. However, Canadians working or living near agricultural fields with barley, rye, triticale and certain grasses will be exposed to background levels of spores of this fungus.

What are the results of the assessment?

- The Government of Canada has conducted a science-based risk assessment of the activity described in the notification, which will be the use of *R. secalis* for research purposes.
- Risk assessments address potential for harm to the general population in Canada (not including workplace exposures) and the environment.
- R. secalis is not known to harm humans or animals, but it does cause disease in certain plants.
- Adequate containment measures are in place at the AAFC research facility to prevent the unintentional spread of *R. secalis* from the laboratory and adequate confinement measures are in place to restrict dispersal from field sites into the immediate environment.
- The intended research use of *R. secalis* is not considered to be harmful to human health or the environment, and the Government of Canada has concluded that *R. secalis* is not entering the environment in a quantity or under conditions that constitute a danger to the environment or humans.

What is the Government of Canada doing?

• Based on the conclusion of the risk assessment, the Government of Canada will take no further action on the research use of *R. secalis* in field trials.