GRAIN TRADE AUSTRALIA MemberUpdate

UPDATE 13 of 2019 • 14 May 2019

TOPIC: National Residue Survey Testing Methodology Changes DISTRIBUTION: GTA Members – primary contact list. Please circulate to all appropriate internal parties.

1. Purpose

- To provide GTA Members with updated information on changes applying to the method used by the National Residue Survey (NRS) to determine chemical residues on grains under the NRS program.
- To ensure Members consider the full range of potential commercial implications due to the change which will apply as of 01 July 2019.

2. Background

• As outlined in the Australian Grain Industry Code of Practice for the management of grain along the supply chain:

"Under this Code, the following industry sectors are required to actively participate on a continuous basis in the NRS grains residue monitoring program, and to comply with any NRS directions applying to that program:

- a) All grain organisations out-turning on the domestic market to an end-processor (who is not defined as a primary producer);
- b) All bulk grain exporters;
- c) All container exporters; and
- d) Where relevant, operators of facilities who provide grain as part of the above services".
- In addition, the Code states:

"As required by legislation industry will not trade (i.e., supply) in grain on the domestic or export market that contains a chemical in violation of relevant legislation".

- As flagged to industry at the National Working Party on Grain Protection conference in 2018 and subsequently confirmed to a range of industry companies and organisations in early 2019, the NRS have indicated their intention to change the analytical method for chemical residue analysis. The method of sample preparation will change from whole grain extraction to ground grain extraction.
- This change to the analytical method will implement modern and better practice techniques and will take effect from 01 July 2019.

3. Commercial Implications

• GTA Members have an obligation under the Australian Grain Industry Code of Practice to ensure that the chemical residue status of all grain is known prior to outturn and that all grain exported meets the importing country regulatory requirements, including chemical residue limits.

- Given the change in method of analysis, there is the potential for different chemical residue results to arise on samples from those currently assessed. Specifically:
 - For systemic chemicals, residues detected may increase from those currently assessed using whole grain sample preparation.
 - For other chemicals there is the potential for residues detected to decrease.
- Industry should liaise with their commercial analytical laboratory providing residue testing to ensure equivalent methods are being used.
- Industry should be aware of the potential ramifications following the revised method as of 01 July 2019 on any grain traded domestically or exported.

4. Further Details

- There are no internationally agreed testing methods for chemical residue testing.
- There are various instruments and thus methods that individual laboratories use to test for specific chemicals.
- Methods by each laboratory are developed based on a range of factors including instrument type, method availability, resources, timeframe for analysis, cost and client requirements.
- In Australia and overseas various commercial laboratories generally develop their own methods based on their equipment and other commercial issues (i.e., multi-residue chemical screens are preferred over individual chemical analysis given the cost of the latter versus the former).
- Some overseas countries (Governments) do publish their methods for testing particular chemicals when they release their revised MRLs but many do not.
- Under the Codex system, the Codex Committee on Pesticide Residues (CCPR) via their expert group (JMPR) assess the method of analysis (and other aspects such as metabolites termed Residue Definition) when reviewing submitted data for review/development of an MRL. There is no one accepted method they require.
- One aspect of market compliance relating to chemical residue testing is to ensure a chosen laboratory can assess each chemical at an appropriate level of detection:
 - The MRL that applies in the market; or
 - Preferably, at a level lower than the MRL. Results should be reported at this lower level to indicate if any residues are present.
- It is recommended that the chosen laboratory is accredited to the international standard ISO/IEC 17025, that the method used is appropriately validated and that the laboratory participates in relevant ring tests (proficiency tests).
- Industry is encouraged to ensure the laboratory they choose considers the residue definition as applied in the market, as each market (Codex, importing country, Australia) may have a different residue definition.