Ministry for Primary Industries
Manatū Ahu Matua

RECOGNISED PESTICIDE ANALYTICAL LABORATORIES AND RESIDUE TEST METHODS (PLANTS)

Performance standards and operational specifications for pesticide residue analytical laboratories wishing to become recognised by MPI for the residue testing of plant products.

REVIEW	This MPI standard is subject to periodic review.
ENDORSEMENT	This MPI standard is hereby endorsed.
Director Plant, Food, and Environment MPI	
Date	01 July 2013
Version	2.0

Growing and Protecting New Zealand

Contents

Amendment Record and Implementation Schedule

Version No:	Date:	Specification:	Implementation Date:
1.0	29/03/2005	Issued by NZFSA	29/03/2005
2.0	01/07/2013	Update of New Zealand Food Safety Authority (NZFSA) to Ministry for Primary Industries (MPI)	01/07/2013

RECOGNISED PESTICIDE ANALYTICAL LABORATORIES AND RESIDUE TEST METHODS (PLANT PRODUCTS)

1 Background

MPI has already established a number of laboratory recognition systems to support the various official assurance programmes in order to meet legislative or market access requirements for animal products, dairy products and more recently wine exports.

This pesticide analytical laboratory recognition scheme for plant products, while modelled on these existing programmes, is not linked to any NZ legislation and has been developed solely in response to a request from the New Zealand horticultural export industry for a list of government-recognised pesticide laboratories that the industry could use to analyse plant products intended for export.

The purpose of the scheme is to identify those analytical laboratories (and test methods) that are considered by MPI to meet acceptable criteria for competence (laboratories) and fitness-for-purpose (test methods) in the analysis of plant products for pesticide residues.

Food commodities covered under the scheme include mostly fresh fruit and vegetables (these being the major plant commodities managed by the Plant Exports Team) but other (minimally processed) foods of plant origin can also be accommodated under the scheme if the recognised test methods have been validated for these commodities.

2 Summary

In order to become recognised by MPI under this scheme, pesticide analytical laboratories must have suitable premises, equipment, procedures and staff to ensure that testing of plant products for pesticide residues is carried out properly and competently at all times.

In addition, the analytical methods used in testing for pesticide residues must be suitably validated to show that the methods can be performed properly, and that the associated measurement uncertainty (e.g. method selectivity, repeatability and reproducibility) and the method sensitivity (e.g. limits of detection and quantification) can be demonstrated.

The key principle behind this MPI laboratory recognition system is that both the laboratory systems/procedures and the test methods used for determining pesticide residues in plant products must comply with ISO Standard 17025, ‘General Requirements for the Competence of Testing and Calibration Laboratories’.

3 Definitions

Unless the context otherwise requires—

Accreditation body means an internationally recognised, independent, not for profit organisation which is authorised to accredit organisations to certain ISO standards

ISO 17025 refers to the most current edition of standard AS/NZS ISO/IEC 17025 (The Australian/New Zealand Standard on "General Requirements for the Competence of Testing and Calibration Laboratories").

Key Technical Personnel are staff members who are competent and experienced in the technical aspects of the recognised test methods and who have been formally appointed by the senior management of the laboratory to oversee the operation and performance of each test method and to cope with any problems that might arise in the use of each method.

Limit of Detection (LoD) is the lowest concentration of a pesticide residue that can be identified and quantitatively measured in a specified food with an acceptable degree of certainty by a regulatory method of analysis.

Limit of Quantification (LoQ) is the smallest concentration of the analyte in the test sample that can be determined with acceptable precision (repeatability) and accuracy under the stated conditions of the test.

MPI means the New Zealand Ministry for Primary Industries.

Pesticide means any substance intended for preventing, destroying, attracting, repelling or controlling any pest (including any unwanted species of plants or animals) during the production, storage, transport, distribution and processing of food, agricultural commodities or animal feed. Included in this definition are substances intended for use as a plant growth regulator, defoliant, desiccant, fruit-thinning agent or sprouting inhibitor and substances applied to crops either before or after harvest to protect the commodity from deterioration during storage and transport. The term normally excludes fertilisers, plant and animal nutrients, food additives and animal drugs. In addition, for the purposes of this scheme, the term ‘pesticide’ also includes environmental contaminants that may have been used historically as pesticides (e.g. organochlorine insecticides).

Recognised laboratory means a laboratory recognised by MPI as being competent in the use of one or more recognised test methods for the pesticide residue analysis of fresh plant products.

Recognised test method means an analytical test method that is recognised by MPI as being suitable for the pesticide residue detection, identification and quantification of one or more pesticides in samples of fresh plant products.

4 Laboratory requirements

(1) Every recognised laboratory must be accredited by an accreditation body in accordance with ISO 17025.

(2) Every recognised laboratory must operate in accordance with any conditions that may be specified from time to time by MPI.

(3) To maintain recognition, the recognised laboratory must—

(a) ensure that it is assessed by an accreditation body annually from the anniversary date of the recognition to determine that it still meets the requirements of ISO 17025; and
(b) forward a summary of the accreditation body assessment report (including their assessment of proficiency testing activities) to MPI, as soon as practicable; and
(c) use MPI recognised test methods (see Section 5 below); and
(d) meet all relevant MPI requirements that may be established from time to time.

(4) If a recognised laboratory fails to comply with the requirements of sub clause (3), MPI may withdraw recognition.

5 Test method requirements

(1) Every recognised test method must be accredited by an accreditation body in accordance with ISO 17025.
(2) Every recognised test method must be conducted in accordance with any conditions that may be specified from time-to-time by MPI.
(3) To maintain recognition, the recognised test method must—
(a) be assessed by an accreditation body annually from the anniversary date of the recognition to determine that it still meets the requirements of ISO 17025; and a copy of the method assessment report from the accreditation body must be available for inspection by MPI on request.
(b) meet all relevant MPI requirements that may be established from time to time.
(4) If a recognised test method fails to comply with the requirements of sub clause (3), MPI may withdraw recognition of that method.
(5) Significant modifications to a recognised test method (e.g. changes in the validated range of analytes able to be measured, changes in the analytical equipment used, changes on the method sensitivity) must be reported to MPI as soon as practicable.

6 Change in key technical personnel

Any change in key technical personnel responsible for overseeing operation and performance of the recognised test method (and the validity of the results) must be notified to MPI as soon as practicable.

7 Systems and processes

Every recognised laboratory must establish, document and maintain systems and processes to ensure that—
(a) any relevant directions given by MPI are implemented; and
(b) key technical personnel to be able to perform or direct effective and timely actions when non-compliance is identified; and
(c) MPI is notified of any non-compliance events without delay.

8 Application forms and supporting information

A laboratory wishing to become an MPI-recognised pesticide analytical laboratory must—

(a) complete the required application form (attached as Annex 1) and send it, together with the other information listed below, to the Principal Adviser (Residues), Plant Exports Team, Ministry for Primary Industries, PO Box 2526, Wellington 6140, and

(b) attach evidence of ISO 17025 accreditation for both the laboratory and for each analytical method for which recognition is being requested, and

(d) provide a detailed summary of each analytical method (but not a full operational description), outlining the methods used in sample preparation, extraction, clean-up and analysis, together with an indication of the measurement uncertainty and limits of determination/quantification for each of the analytes for which the method has been validated. In the case of multi-residue methods, a list of these analytes must also be provided. The information required under this section will be considered confidential if it is clearly marked as being 'confidential business information'.

9 Fees

Each laboratory applying for recognition or applying to maintain their recognition will be charged an administration fee based on the time required by MPI to process each application (one hour minimum), this fee being calculated using the current MPI hourly rate.

Application Form PAL1: Recognised Pesticide Analytical Laboratory

- Please use this application form when first applying to MPI for recognition, when applying to maintain recognition and also when advising MPI of any subsequent changes to any of the applicant details, key technical personnel, new or revised analytical methods.
- Send the completed application form with the required supporting evidence and information to the Principal Adviser (Residues), Plant Exports Team, Ministry for Primary Industries, PO Box 2526, Wellington 6140.
- Refer Privacy Act notice at the end of the form regarding the collection of personal information on individuals.

1. Identification : A unique identification will be assigned to each recognised laboratory.

MPI PAL No: (If a new application, please leave blank)	Accreditation Body Registration No:

2. Applicant Name:

Full legal name and address of laboratory:

3. Address and Contact Details of Applicant:

Address: Contact person:	Phone No: Fax no: E-mail:

4. Analytical Methods for recognition:

Method Title (descriptor or unique identifier):	Key Technical Person:

Method Title (descriptor or unique identifier):	Key Technical Person:
Method Title (descriptor or unique identifier):	Key Technical Person:
Method Title (descriptor or unique identifier):	Key Technical Person:

5. Minimum Documentation Required Attached [☐] :

[ ] Evidence of ISO 17025 accreditation by IANZ (laboratory).

[ ] Evidence of ISO 17025 accreditation by IANZ (each listed analytical method).

[ ] Summary description of each analytical method

[ ] Information on measurement uncertainty for each analytical method

[ ] Information on limits of detection/quantification for each analyte

[ ] Consent for Disclosure of Information forms for each individual listed in section 4.

6. Applicant declaration : To be completed by a person with appropriate authority within the laboratory.

I declare that:
a) the information supplied in this application is truthful and accurate to the best of my knowledge; and
b) I, the directors of the laboratory, and those responsible for its management or control are of good character and reputation; and
c) there is no other information that I am aware of that affects the ability of this laboratory to perform the above listed pesticide residue analyses in accordance with the requirements ISO Standard 17025.

Name : Date :

Designation : Signature :

MPI Administration:

Date:	Fee:	Invoice No:
Name:		Signature:
Web-site listing (Y/N)	Date listed:	

Collection of Personal Information on Individuals

In regard to any information being collected on this application for recognition of a pesticide analytical laboratory, that is personal information identifying or being capable of identifying an individual person, notification is hereby provided in accordance with principle 3 of the Privacy Act 1993, to individuals of the following matters:

1. This information is being collected for purposes relating to MPI recognition of a pesticide analytical laboratory.

2. The recipient of this information, which is also the agency that will collect and hold the information, is the Ministry for Primary Industries, P O Box 2526, Wellington 6140. Necessary details of the recognised laboratory will be displayed on a public register.

3. You are reminded that under Principles 6 and 7 of the Privacy Act 1993, you have the right of access to, and correction of, any personal information, which has been provided.