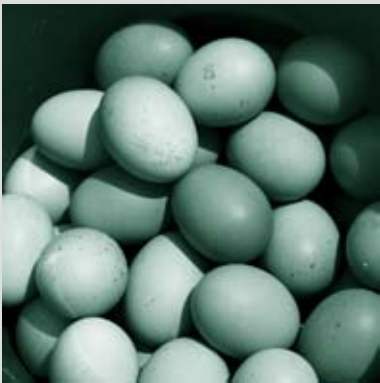


National Residue Survey

Annual Report 2008–2009



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Information on National Residue Survey publications is available on our website at www.daff.gov.au/agriculture-food/nrs.

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Reporting requirements

Section 10 of the *National Residue Survey Administration Act 1992* states that:

As soon as practicable after the end of each financial year, the Minister is to cause a report to be laid before each House of the Parliament setting out details of the operation of the National Residue Survey (NRS) Special Account including:

- (a) money paid into the NRS Special Account during that financial year; and
- (b) money paid out of the NRS Special Account during that financial year; and
- (c) financial statements relating to the NRS Special Account for that financial year; and
- (d) a description of activities undertaken in relation to the National Residue Survey during that financial year.

Responsible Minister

The Australian Government Minister for Agriculture, Fisheries and Forestry is responsible for the National Residue Survey.



Australian Government

Department of Agriculture, Fisheries and Forestry

The Hon. Tony Burke MP
Minister for Agriculture, Fisheries and Forestry
Parliament House
CANBERRA ACT 2600

Dear Minister

I am pleased to submit for tabling in Parliament the *National Residue Survey Annual Report 2008–2009* in accordance with Section 10 of the *National Residue Survey Administration Act 1992*.

During 2008–2009, the National Residue Survey (NRS) continued to support participating industries in maintaining their international and domestic market access requirements through technically sound, risk-based residue testing services. Samples of 22 animal and 26 plant commodities from participating industries were tested in NRS random monitoring programs (21 142 samples), and 588 samples were tested in targeted monitoring projects.

NRS continued to confirm the validity of laboratory analyses through its laboratory proficiency-testing activities, ensuring Australia maintained its international reputation as a credible supplier of residue and contaminant data for Australian primary products.

NRS officers contributed to the setting and review of international residue standards and analytical methods, and evaluated and reviewed international maximum residue limits for pesticides and veterinary medicines.

On behalf of the cattle industry, NRS engaged AUSMEAT Ltd (a subsidiary of Meat & Livestock Australia) in a three-year contract to conduct cattle property management audits throughout Australia as part of a comprehensive industry residue management program. The audits assess cattle producer compliance with elements of Meat & Livestock Australia's Livestock Production Assurance scheme. The contract, valued at \$7 million, began on 1 January 2009, and will allow for up to 4000 property audits per annum for three years, in the first instance. Results from the audits will enable the cattle industry to detect and respond to any areas of weakness in current residue management practices.

NRS also began a project to redevelop its database and associated information management system. This will align it with departmental standards and help implement web-based information management from sampling locations throughout Australia.

Yours sincerely

A handwritten signature in black ink, appearing to read 'R Delane', written over a vertical line.

Robert Delane
Deputy Secretary
Biosecurity Services Group
15 October 2009

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2008–2009 IN BRIEF

Total expenses for the National Residue Survey (NRS) in 2008–2009 were \$11.950 million. The Australian Government provided \$0.473 million to fund community service obligation activities, while participating industries provided \$11.477 million through levies and contributions for the management and operation of NRS programs.

NRS carried out random residue monitoring programs for 48 animal and plant products as summarised on the following page. The largest sample numbers were collected from cattle, sheep, pigs and wheat (grain). All animal and plant residue monitoring plans were reviewed and accepted through close consultation with the relevant industries and the Australian Quarantine and Inspection Service.

On behalf of the cattle industry, NRS engaged AUSMEAT Ltd (a subsidiary of Meat & Livestock Australia) in a three-year contract to conduct cattle property residue management audits throughout Australia. The contract, with a value of \$7 million, commenced on 1 January 2009, and will allow for up to 4000 property audits per annum for three years in the first instance. These audits will be based on the elements of the Meat & Livestock Australia's largest livestock production assurance quality assurance scheme.

The coordination of sampling (588 samples) and results (18 044 analyses) of six targeted monitoring projects were undertaken on behalf of the beef and sheep industries (see pages 96–98).

NRS has commenced a project to redevelop the NRS database and its associated information management system. This will bring the ageing NRS system into line with current technology, align it with departmental standards and facilitate the implementation of web-based information management from sampling locations throughout Australia.

Community service obligation funding supported the work of three NRS officers who each undertook the responsibility of acting as Australian delegation leader to three Codex committees: the Codex Committee on Pesticides Residues, the Codex Committee on Residues of Veterinary Drugs in Food and the Codex Committee on Methods of Analysis and Sampling. NRS officers contributed to the setting and review of international residue standards concerning the selection of analytical methods and the evaluation and review of international maximum residue limits for pesticides and veterinary chemicals.

NRS continues to confirm the validity of laboratory analyses through laboratory proficiency testing of contracted laboratories.

Proficiency testing services provided by NRS to the dairy industry's Australian Milk Residue Analysis (AMRA) survey continued this year, and NRS conducted a melamine in milk proficiency testing program. NRS is an accredited provider of proficiency testing schemes.

Effective from 1 July 2009, NRS was transferred into the Food Division, Biosecurity Services Group of the Australian Government Department of Agriculture, Fisheries and Forestry.

Summary of results for all random monitoring projects

NRS conducted random residue monitoring projects for 22 animal products and 26 plant products. The table below summarises the results for 2008–2009.

Commodity	Number of samples tested	Number of analyses ^a	Compliance with relevant Australian Standards (%)
ANIMAL PRODUCTS			
Meat	15 426	195 930	99.86
Egg	115	1 120	98.26
Honey	213	2 095	100.00
Aquaculture	15	112	100.00
Fish (wild-caught)	213	991	100.00
<i>Total animal products</i>	<i>15 982</i>	<i>200 248</i>	
PLANT PRODUCTS			
Grains	4 162	389 547	99.20
Horticulture	998	37 607	100.00
<i>Total plant products</i>	<i>5 160</i>	<i>427 154</i>	
TOTAL ALL PRODUCTS	21 142	627 402	

^a Most samples are analysed for more than one chemical. This is the total number of chemical–commodity combinations that were specifically tested on each product type.

Detailed comments and results tables for these commodities are shown later in the report: meat on pages 35–74; egg on pages 75–78; honey on pages 79–82; aquaculture on pages 83–88; wild-caught fish on pages 89–95; grains on pages 110–189, and horticulture on pages 190–203.



Introduction and overview

National Residue Survey 2008–2009

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ABOUT THE NATIONAL RESIDUE SURVEY

The core work of the National Residue Survey (NRS) is to facilitate the testing of animal and plant products for pesticide and veterinary medicine residues and environmental contaminants. Product testing is done through either random or specifically designed sampling protocols. Other programs within NRS, such as laboratory evaluation and business activities, support the core work of residue testing.

Australian primary industries are able to participate in NRS by providing funds through levies. Although legislation does not require any industries to participate in NRS residue testing programs, several need to do so in order to meet requirements for market access or export certification, or to satisfy obligations under national standards.

Goals

The goals of the National Residue Survey are:

- to assist participating industries gain and maintain access to international markets
- to support domestic marketing of Australian produce
- to assist in reducing the risk of non-compliance with Australian and international residue standards.

The Australian Government initially established NRS in the early 1960s, following concerns about pesticide residues in exported meat. Since then, NRS has expanded to test other animal, grain, horticulture, and fish products for residues of pesticides and veterinary medicines, as well as for other contaminants. Relevant legislation was established in 1992 (see page 16 for details).

Residue monitoring is part of an overall strategy of the Australian Government Department of Agriculture, Fisheries and Forestry to minimise chemical residues in agricultural produce. Monitoring can also identify potential problems including failure to use chemicals appropriately, and can indicate where follow-up action by regulators is required in order to maintain Australia's reputation as a supplier of produce that meets the access requirements of both international and domestic markets.

NRS activities contribute to the overall activities of the department, in particular those concerned with managing residues in foods (described in Output 3 of the *Department of Agriculture, Fisheries and Forestry Annual Report 2008–2009*).

The general purposes of residue monitoring are to:

- provide an estimate of the occurrence of residues in products (using systems based on sampling and statistical probability)
- confirm (or otherwise) that residues in products are below set limits
- alert responsible government authorities and industry if, and when, limits are exceeded, so that corrective action can be taken.

This annual report describes the NRS residue testing programs, summarises their results and provides the annual financial statements.

Outputs

NRS delivers services to clients within the policy, legislative and administrative framework of the Australian Government and the department. These services include:

- random residue monitoring projects, covering residues of pesticides and veterinary medicines and environmental contaminants in agricultural commodities
- targeted monitoring projects that support the identification of sources of residues, and minimisation of those particular residues or contaminants
- support for projects that underpin market access and industry quality assurance programs.

NRS provides consultative, efficient and cost-effective services to its clients by working cooperatively with other government agencies with complementary responsibilities. NRS management responds to the needs of industry and government through maintaining awareness of developments in its operating environment, undertaking risk assessments, and engaging in strategic business planning and operations. During 2008–2009, NRS was an operational unit of the Food and Product Safety and Integrity Branch of the Product Integrity, Animal and Plant Health Division of the department. From 1 July 2009, NRS became part of the Biosecurity Services Group within the department.

The overall structure of NRS during 2008–2009 is shown in the organisational chart below.



Residue testing programs

NRS residue testing programs involve random and targeted monitoring of animal and plant commodities. Laboratory performance evaluation and proficiency testing ensure the reliability of the analytical results upon which the residue testing programs depend.

Random monitoring

Projects are designed to estimate the occurrence of a residue (or residues) in animal and plant products by using randomised sampling processes. The likelihood of residues from pesticides and veterinary medicines or contaminants (for example, metals and persistent halogenated organic chemicals) guides the choice of chemicals that are measured in the samples. The chemicals and contaminants include those used commonly in agricultural and veterinary practice, as well as those necessary to fulfil export and domestic marketing requirements.

NRS random residue monitoring data facilitate and underpin the setting or review of Australian Standards, the certification of commodities for export (where this is required), and compliance with requirements for domestic consumption. This underpinning helps participating industries to maintain long-term access to, and competitive advantage in, important export markets, and to conduct promotions in new and potential markets. Data from NRS results also serve as a yardstick against which industry-operated quality assurance schemes can be assessed. These results may also assist in the resolution of residue-related trade incidents.

Targeted monitoring

Projects within this program are designed to obtain more focused information concerning known or potential residue problems for particular industry sectors by using targeted (non-random) sampling processes.

Background to residue testing programs

Industry participation

Industries participate in NRS residue monitoring programs to meet market access expectations, export certification or national standards, or to assure customers of the quality of their product. NRS provides participating industries with results on the level of compliance of their products with the appropriate Australian Standards.

Data from the NRS residue monitoring projects are used by the department's Australian Quarantine and Inspection Service (AQIS) to certify the residue and contaminant status of certain commodities for export. From time to time, trading partners audit the operation and results of NRS residue monitoring plans. Some countries require a government-managed residue monitoring plan as a condition of market access.

In the Australian domestic meat market, participation in residue monitoring is a general requirement of the Australian Standard for hygienic production of meat for human consumption. Industries that do not export a large percentage of their production may also use NRS monitoring results to support domestic quality assurance programs and other marketing initiatives, or to provide assurances to domestic consumers.

Project planning

NRS designs residue monitoring projects in consultation with industry and AQIS. This includes determining sampling rates, and selecting chemical–commodity combinations based on a range of factors, including assessed risk.

In addition, NRS:

- designs and manages sampling procedures, including sample collection, identification and dispatch to laboratories
- procures appropriate analytical services from contract laboratories, and monitors their proficiency
- manages and analyses data
- initiates tracebacks
- manages financial information.

Sampling, data storage and analytical arrangements

The NRS database is used for data storage, processing and retrieval, sample requests, data receipts, and payments to service providers.

For example, for random residue monitoring projects, a sample request that specifies the details of the samples to be collected is generated through the database. The request is then sent to sample collection points. Collected samples are then sent directly to specified laboratories (or, for the meat projects, to the NRS central receipt and dispatch facility) for aggregation, repacking and forwarding to laboratories. The laboratories analyse the samples and report the analytical results to NRS electronically.

NRS validates all results before they are entered on the NRS database. Residue levels above relevant limits are reported to the appropriate regulatory authorities so that prompt traceback action may be taken.

In coordination with departmental information management services, NRS has commenced a project to redevelop the NRS database and its associated information management system to bring the ageing NRS system into line with current technology, to align with departmental standards and facilitate the implementation of web-based information management from sampling locations throughout Australia.

Analysis of samples

NRS does not itself undertake chemical analyses. Instead, laboratories are contracted by NRS for specified terms. Contracts for laboratory services are established by NRS through a competitive tender process (in keeping with Australian Government procurement guidelines) that also affirms the capabilities of the selected laboratories. Commercial, international, and Australian and state/territory government laboratories hold contracts with NRS.

NRS conducts performance evaluation and proficiency testing of laboratories to determine their relative performance and their competence to undertake specific chemical analyses. Such proficiency testing underpins NRS activities and promotes a high level of confidence in analytical results.

Reporting

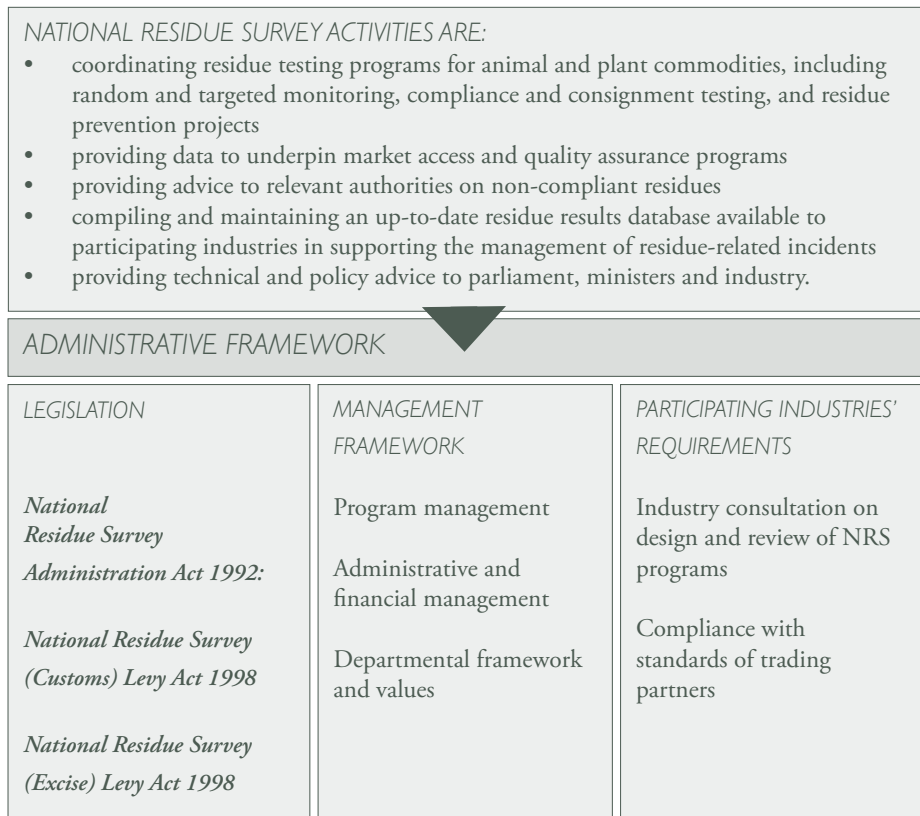
An operational and expenditure plan is prepared for each financial year, in accordance with the legislative requirement that payments made from the NRS Special Account be consistent with an expenditure plan approved by the Minister.

Each year, in compliance with the legislation, NRS prepares an annual report for tabling in Parliament. This annual report gives details of the completed NRS projects outlined in the *National Residue Survey Operational and Expenditure Plan 2008–2009*, as well as the results of the random residue monitoring projects. An abridged version of the annual report, the NRS brochure, is prepared each year and distributed to industry and other clients. The brochure summarises the compliance ratings of participating industries. In addition, summary brochures are prepared for those industries that require them.

The annual report, the NRS brochure and the industry brochures are also published on the NRS website, where further information is readily available¹.

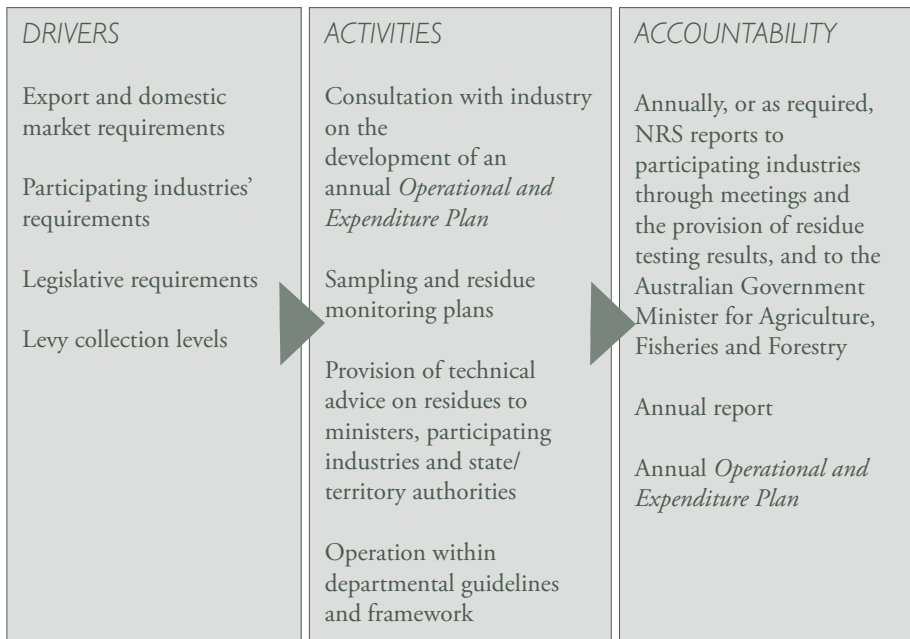
National Residue Survey administration and funding

The following diagram summarises the activities of NRS, and the policy, legislative and administrative frameworks within which these activities occur.



¹ www.daff.gov.au/agriculture-food/nrs

The sampling and residue testing programs designed and managed by NRS respond to the requirements of export and domestic markets for participating industries, according to the model below.



Legislation

The *National Residue Survey Administration Act 1992* (the Act) established the NRS Special Account that funds NRS projects. The Act permits, with industry and ministerial approval, expenditure from the NRS Special Account for the prevention of contamination in food, inputs to production and/or the environment. Other legislation, including the *National Residue Survey (Customs) Levy Act 1998*, the *National Residue Survey (Excise) Act 1998* and related levy imposition, levy collection, financial management and associated legislation, also relate to the management and governance of NRS programs.

NRS holds the Special Account according to the *Financial Management and Accountability Act 1997*, Section 6(2) of the *National Residue Survey Administration Act 1992* and subsection 5(3) of the *Financial Legislation Amendment Act 1999*. Payments from this Special Account may be spent on monitoring and reporting the levels of residues and contaminants in applicable products or from the environment, tracing and determining the sources and causes of the contaminants, and in investigating and preventing such residues and contaminants. Programs for applicable products can be implemented only if the relevant industry body (as determined by the minister) agrees to the program.

These general principles must be met before a new statutory levy, including a NRS levy on an industry sector, can be introduced, or an existing levy rate adjusted. These levy general principles ensure that there is comprehensive consultation with potential levy payers before a change is made to levy arrangements. Following discussions during 2008–2009, the NRS component of the honey levy was reduced from 1 October 2009.

NRS is accountable to parliament as well as to participating industries because of the legislative base for its funding and operation.

Industry levies

Those industries that participate in NRS residue testing programs raise levies to pay for the sampling, analysis and reporting of the results from their products. Levy rates are established through consultation with participating industries in accordance with the principles outlined in the Australian Government's *Levies Principles and Guidelines: Policies for the Management of new and amended Levies within Australia*. (See www.daff.gov.au/agriculture-food/levies).

Industry levies are the primary source of funding for NRS's residue testing programs. Also some industry groups fund NRS directly under contract to undertake random residue monitoring or laboratory performance and evaluation.

To ensure equity, levies held in the NRS Special Account are accounted for on an industry-by-industry basis through industry equalisation accounts (IEAs). IEAs are reviewed annually in consultation with industry, and NRS advises industry concerning the any possible needs for levy adjustments to ensure sufficient funds for future NRS-based activities.

Seasonal variations in production can have a marked effect on NRS income from levies. Target funds in IEAs are between 60% and 200% of program costs, depending on the size of the program.

The department's Levies Revenue Service coordinates the collection of all levies across the department on a fee-for-service basis. This arrangement minimises levy collection costs.

Community service obligation funding

NRS receives funding from the Australian Government for community service obligations (CSOs) that contribute to broader government and community objectives concerning residues, and international commitments. Such activities deliver technical and policy advice to ministers and relevant government agencies, and contribute to the work of residue-related committees, for example, the international Codex Alimentarius Commission (Codex) of the joint Food and Agriculture Organization of the United Nations/World Health Organization (WHO). NRS officers contribute to the setting and review of international residue standards concerning the selection of analytical methods and the evaluation and review of international maximum residue limits for pesticides and veterinary chemicals. During 2008–2009, the CSO appropriation provided 4% of NRS total revenue for such activities (see pp. 223–225).

Outlook

On behalf of the cattle industry, NRS has engaged AUSMEAT Ltd (a subsidiary of Meat and Livestock Australia) in a three-year contract to conduct cattle property management audits throughout Australia. The contract, with a value of \$7 million, commenced on 1 January 2009 will allow for up to 4000 property audits per annum for, in the first instance, three years. The audits will be undertaken throughout Australia as part of a comprehensive cattle industry residue management program covering both monitoring and auditing. These audits will be based on the elements of the livestock production assurance quality assurance (QA) scheme, which is the largest Australian QA scheme for livestock producers. NRS expects this program to continue beyond 2011.

During 2008–2009, NRS recruited a quality assurance officer to manage the NRS quality management system. The key objective is to maintain and improve, where practical, the effectiveness and efficiency of all NRS operations, including procedures and protocols for the development of monitoring plans, the support of export certification and the domestic trade of animal products.

NRS expects to attain *ISO 9001* accreditation for its quality management system during the next financial year, 2009–2010.

Residue testing in agricultural commodities

In agriculture, the term residue is generally used to describe the small amounts of agricultural and veterinary chemicals or their breakdown products that remain in or on an agricultural product. In the broader context of food concerns, the term contaminant not only includes residues but also environmental metals or naturally occurring chemicals such as mycotoxins. All of these may be present in food either through natural circumstances, or as a consequence of industrial or agricultural activities. The term 'residue' is used in this report to apply to both residues and contaminants unless otherwise specified.

The results of NRS residue monitoring reflect the patterns of use for currently registered pesticides and veterinary medicines in Australia. At present, chemicals that may be detected as residues include:

- antibiotics used to control microbial diseases in animals
- anthelmintics used to control internal parasites in animals
- hormonal growth promotants used as veterinary medicines or to improve growth in livestock
- fungicides used to control fungal diseases in plants and plant products
- insecticides and acaricides used to control insect and mite pests in crops, to protect grain, and to control external parasites on animals
- fumigants used as grain protectants, and also used to sterilise soil, sheds and bee hives
- herbicides used to control weeds in crops.

Other sources of residues include those from the unintended exposure of plants and animals to chemicals that are no longer registered for use in Australia. Such chemicals include some organochlorine (OC) pesticides and polychlorinated biphenyl (PCB) compounds. These can remain in the soil for long periods, and livestock can accidentally ingest or come into contact with them and become contaminated.

Environmental contaminants are those chemicals present in the natural environment that may contaminate agricultural produce. Such chemicals include some metals (e.g. cadmium and lead), some naturally occurring mycotoxins (toxins produced by certain fungi) and some persistent organic pollutants such as OCs. In this report, the results for OCs are included with the pesticide results, as, although they can be considered environmental contaminants, their presence in the environment is the result of past use as a pesticide.

Australian Standards for residues

Conventional agricultural systems depend extensively on the use of a wide range of pesticides and veterinary medicines. Current analytical technology can detect such chemicals at extremely low concentrations. It is therefore to be expected that, if a chemical has been used on an agricultural product, it may be detected, albeit at levels consistent with the chemical use pattern and good agricultural practice. This means that an occasional detection at, or just above, the relevant residue standard is not likely to cause any adverse health effects when the product is consumed.

Residue standards are set by Food Standards Australia New Zealand (FSANZ)¹ and the Australia New Zealand Food Regulation Ministerial Council (ANZFRMC). Food standards are published in the Australia New Zealand Food Standards Code (the Code). They take into account the residue level that should not be exceeded if good agricultural practices have been followed (pesticides and veterinary medicines), and residue levels that are normally likely to occur (environmental contaminants).

Climate, geography, pests, diseases and products vary from country to country and therefore the residue limits for particular products in countries other than Australia may differ.

Maximum residue limits (MRLs) are set for all pesticides and veterinary medicines registered for use in Australia. The Australian Pesticides and Veterinary Medicines Authority (APVMA) has a major role in this process. MRLs are proposed by APVMA at levels not likely to be exceeded if pesticides and veterinary medicines are used in accordance with on-label directions, and have been shown by dietary exposure assessment to not pose a risk to human health.

All MRLs proposed by APVMA for food, agricultural commodities and animal feed are published in the APVMA MRL Standard. MRLs for food commodities are then considered by FSANZ and, if endorsed by ANZFRMC, are adopted into the Code.

Maximum levels (MLs) are set only where they serve an effective risk management function and only for foods that provide a significant contribution to dietary exposure to a particular contaminant. MLs are set at levels that are consistent with the protection of public health and safety, and are reasonably achievable through sound production and natural resource management practices.

Extraneous residue limits (ERLs) concern residues originating from environmental sources.

NRS checks the results of sample analysis for compliance with Australian and international residue and contaminant standards. A residue is classified as being present in a sample if its concentration is greater than the limit of reporting (LOR) established for NRS purposes. NRS typically sets the LOR at 10% to 20% of the relevant Australian Standard (MRL, ERL or ML)².

NRS monitors residue levels against MRLs listed in the Code. However, where APVMA has established an MRL that has not yet been adopted into the Code, this fact is taken into consideration by NRS when interpreting the significance of any results that fall between existing and proposed MRLs.

¹ www.foodstandards.gov.au

² For definitions of technical terms see pages 274-275.

Interpreting the presence of residues in the absence of an Australian Standard

The Code specifies that where no MRL or ERL has been set for a particular residue of a pesticide or veterinary medicine in a particular food, there must be no detectable level of that residue or its metabolites present, and therefore any detectable residue is unacceptable.

By contrast, where no ML has been set for a particular environmental contaminant in a food, producers are expected to keep the level of contaminants as low as reasonably achievable, but it is accepted that a low level of contamination may be unavoidable.

In the results tables on pages 35–95 (animal products) and 111–203 (plant products), the following terms are used to indicate residue standards that have not been established for a specific chemical–matrix combination:

- *'Not set'* (for residues of pesticides and veterinary medicines in an edible matrix): this means that no standard has been set for the chemical in the particular edible matrix, and any detection is a contravention of the Australia New Zealand Food Standards Code.
- *'Not defined'* (for residues of pesticides and veterinary medicines in a non-edible matrix): this means that, due to the inedible nature of the matrix, no standard has been set. Inedible matrices such as urine and faeces may be tested as indicators.
- *'No limit'* (for an environmental contaminant in an edible matrix): no standard has been set for the contaminant. The 'as low as reasonably achievable' principle applies, and detections at low levels are allowable.

Chemical–commodity selection for residue testing

Chemical–commodity combinations are selected on the basis of risk profiles. Those combinations of highest risk are identified for inclusion in NRS residue monitoring projects.

In developing risk profiles, the main factors considered are:

- international and/or domestic perceptions of the chemical–commodity combination as a possible public health hazard
- the likelihood of residues occurring in the product (potential for misuse; persistence in the crop, animal or environment; extent of use, and use patterns)
- the extent and results of previous monitoring for the chemical–commodity combination
- the Australian Standards for residues, and market access requirements of trading partners
- the availability of suitable sampling and analytical methods.

Importing countries sometimes require analyses for particular chemicals of concern in their country. Consequently, in its residue monitoring projects NRS may test for chemicals not registered for use in Australia.

Choice of matrix for analysis

The matrix (tissue or material) expected to contain the highest concentration of a residue is usually selected for analysis. The matrix may be inedible, and does not necessarily represent the part most likely to be eaten (e.g. fat is analysed for pesticides; kidney is analysed for antibiotics; liver is analysed for metals; and, for some hormonal growth promotants, the matrix chosen for testing is urine or faeces). The levels of chemicals detected in such material are usually much higher than in edible portions.

Traceback of non-compliant samples

When a sample is detected with a residue that is above an Australian Standard or defined residue action level³, the laboratory immediately notifies NRS, which then informs the state or territory government authority under whose jurisdiction the sample originated. State or territory government authorities are responsible for tracing the sample back to its property of origin to prevent further contraventions. Subsequent actions depend on both the chemical detected and the commodity in which it is found, and are specified by state or territory government authority legislation. Action varies from simple advice in the case of a minor problem, to quarantining the property concerned, or prosecution where serious contamination has occurred.

3 See page 275.

