New Zealand Food Safety
Haumaru Kai Aotearoa

National Programme for the Monitoring of Chemical Residues and Contaminants in Milk

Plan for 1 July 2025 to 30 June 2026

New Zealand Food Safety Technical Paper No: 2025/15

Prepared by New Zealand Food Safety

ISBN No: 978-1-991380-86-9 (online)
ISSN No: 2624-022X (online)

September 2025

Te Kāwanatanga o Aotearoa
New Zealand Government

Ministry for Primary Industries
Manatū Ahu Matua

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1 Preamble

Dairy monitoring and surveillance programmes for substances of interest have been in operation in New Zealand for many years and a national programme for the monitoring of raw milk was introduced in the 1996/97 dairy season.

New Zealand's dairy monitoring programme is better known as the National Chemical Contaminants Programme (NCCP) and is designed to confirm the effectiveness of the regulatory controls in place for ensuring residues and contaminants in milk, colostrum and manufactured dairy products do not pose a threat to human health; that Good Agricultural Practices (GAP) are being followed; and that relevant importing country requirements will be met. In addition, surveys are undertaken as necessary to identify new or emerging risk factors or enhance the understanding of potential issues and natural background levels for minor components that naturally occur in milk.

The National Chemical Contaminants Programme (NCCP) is an official programme under the Animal Products Act and supported by various regulations and notices, including the Animal Products Regulations 2021 and the Animal Products Notice: Sampling Regimes for Monitoring. The NCCP is administered by New Zealand Food Safety. New Zealand Food Safety is a business unit of the Ministry for Primary Industries.

The monitoring programme is regarded as confirmation that controls are working effectively and as such it serves as a verification measure and not a primary control measure. The programme is designed to identify where controls may not be working and enable an appropriate investigation to be undertaken to determine the root cause and establish options to correct the situation.

Regulatory response to identified 'control failures' is aimed at motivating not just the individual farmer or dairy processor directly concerned, but the whole sector responsible for the particular control so that the required adjustments can be applied on a national basis if necessary.

The substances monitored, the number of samples to be analysed and the sampling pattern have been determined following consideration of factors relevant to New Zealand dairy production practices. Due consideration has been given to previous monitoring results which have so far indicated that the current controls have been effective in ensuring residues and contaminants in dairy products conform to regulatory limits.

The level of monitoring to some extent also reflects the severity of sanctions currently applied. In New Zealand, dairy risk management programme (RMP) operators apply severe penalties when milk supplies are found to contain residues and contaminants above regulatory limits and New Zealand Food Safety applies strict rules concerning traceback and corrective actions. Additionally, New Zealand Food Safety has a strict process for managing any dairy material or product that is determined to contain unacceptable residues or contaminants.

The substantial analysis undertaken per sample enables New Zealand to provide assurances that GAP is being followed and that regulatory limits are met under the New Zealand regulatory framework.

2 Sampling plan

Consistent with Codex Alimentarius guidelines, New Zealand applies a scientifically and statistically justified, risk-based approach to monitoring residues and contaminants in raw milk.

The programme consists of random monitoring and surveys. The monitoring programme is a non-biased sampling programme. It is designed to provide profile information on the occurrence of residues and contaminants in raw milk on a national basis.

Unless otherwise stated, sampling under the raw milk random monitoring component is directly from the farm bulk milk tank prior to consolidation or dilution through the collection and manufacturing processes. This ensures that GAP is monitored as well as conformance of each farm to residue and contaminant regulatory limits. This also enables action to be taken should a non-conformance be identified. The collection of raw milk samples is unforeseen. The farm dairy operator is notified by the sampler immediately before entering the farm to sample.

When taking survey samples of raw milk, colostrum or other dairy material within the scope of the programme, the samples are collected from the most relevant point, taking into consideration the purpose of the survey activity.

2.1 Statistical confidence

New Zealand uses statistically based sample sizes. In the raw milk monitoring component of the NCCP, the number of samples taken is generally aligned with that required to provide 95% confidence of being able to detect an incidence of non-compliance in the sampled population of 1% or greater. This means that a minimum of 300 official random monitoring samples will be taken each year for analysis of the core substances monitored. This minimum covers all cow herds producing milk eligible for export (over 99% of New Zealand dairy farms).

For substances with a proven history of conformance fewer samples may be collected each season, with ongoing conformance assessed over multiple seasons. For surveys, a smaller number of samples will typically be taken.

2.2 Sample numbers

Samples will be collected from 307 dairy farms randomly selected by the Ministry for Primary Industries under the NCCP during the 2025/26 dairy season. This will comprise 300 samples of bovine raw milk in which export is within scope, as well as 6 samples of milk from other species and 1 sample of bovine domestic milk. In total, more than 160,000 individual test results will be reported and reviewed. There will also additionally be 7 colostrum samples.

Monitoring under the New Zealand programme is equivalent to 1 sample per 35 bovine herds.

These figures do not take into account the additional samples of processed dairy products that are collected and tested. These are reported separately.

These figures also do not take into account the additional samples of milk and dairy products that are collected and tested for radionuclides and dioxins. These are reported separately.

Table 1: Farm production 2023-24 (source: New Zealand Dairy Statistics 2023-24[1])

Activity	Production figures
Cow numbers	4.70 million
Annual milk production	20.5 billion litres
Number of dairy herds	10,485
Average litres/herd	1,959,051
Average milking animals/farm	448
Average farm size (effective ha)	162

For 2025/26 the core programme consists of more than 500 compounds screened on each routine sample collected. Additional compounds are tested at a lower frequency due to the nature of the compound, its use, and potential for contamination of milk. Section 2.6 sets out the rationale for the compounds and frequency selected.

2.3 Random monitoring & seasonal distribution

All random raw milk sampling occurs at the farm bulk milk tank unless otherwise stated and as such monitors the conformance of individual milk producers.

Dairy farming in New Zealand is pasture-based and the milk production pattern is seasonal, following a similar curve to that of pasture production. Accordingly, the NCCP operates on a July 1st to June 30th production year.

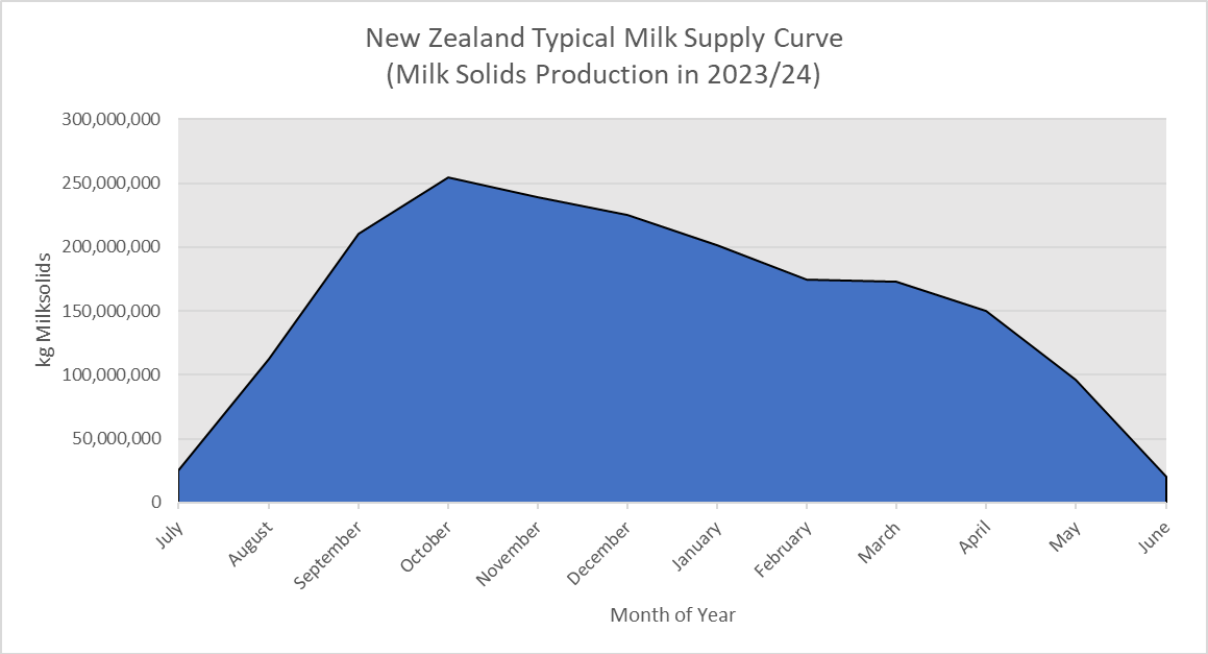
Figure 1 illustrates the typical milk supply curve across the dairy season, with approximately 93% of milk produced between August 20th and April 30th each season. A significant proportion of the milk supplied in the period May to August is intended for domestic consumption (as liquid milk and chilled

[1] dairy-statistics-2023-24.pdf

dairy products). None-the-less a small number of NCCP raw milk samples will be obtained over this period.

Raw milk intended for the commercial production of dairy products is derived predominantly from the approximately 4.7 million lactating cows, as well as a small number from other species. Under the NCCP all species are included for sampling on a proportional basis.

Figure 1: New Zealand Typical Milk Supply Curve (Milk Solids Production in 2023/24)



2.4 Other monitoring

The NCCP includes monitoring of colostrum. Sampling continues to be undertaken based on the risk associated with the compound, the existing level of management control and the likelihood of non-conformance based on information available to New Zealand Food Safety through reports, non-conformance, audits, and investigations.

For 2025/26, at least 7 randomly allocated bovine farms will have colostrum samples taken as this continues to be seen as an indicator for residue carryover from treatments and exposures that may have occurred at drying off and/or over the dry period.

2.5 Surveys

These are undertaken as necessary to identify new or emerging risk factors or enhance the understanding of potential issues and natural background levels for minor components that naturally occur in milk.

In 2025/26, a survey for chlorhexidine in milk will be undertaken.

2.6 Determination of compounds to be screened

As NCCP is risk-based, the compounds to be analysed in the monitoring programme are dependent upon the risk profile for the particular compound and the most appropriate target compound, marker, or metabolite for screening purposes. The compounds to be screened are confirmed following annual review but may be amended during the season in response to findings, emerging trends, or international concerns.

Factors considered for any one compound include:

- good agricultural and veterinary practices, including animal husbandry;
- extent and pattern of use of the agricultural compound or veterinary medicine (including risk prone times);

- programmes or controls in place to mitigate the risk of milk becoming affected by chemical hazards;
- toxicological significance of the substance;
- potential for misuse or abuse;
- exposure routes, including feed, environment and evolving farming practices;
- persistence in the environment (including risk prone areas);
- previous monitoring frequencies and findings (across New Zealand Food Safety, industry programmes and international monitoring);
- availability of a practical, validated analytical method and under a laboratory scope of accreditation;
- changing or emerging risk profile;
- international concern for residues of the compound, and;
- regulatory requirements of international markets.

Substances which are of interest to importing countries may be included where appropriate, irrespective of whether there is any evidence or likelihood of use in New Zealand.

2.7 Action limits

Action limits are established for all residues of primary interest in the programme. Where MRLs have been set for residues of agricultural compounds and veterinary medicines, or maximum limits (MLs) have been set for other contaminants, the action limit is typically set at the lowest value applied under New Zealand, Codex, and importing country MRLs. Where a compound is not authorised or not permitted for use on milking animals, the action limit is typically set at either the minimum limit of reporting, or the limit of detection. Some compounds are included even though the method reporting limit may not detect down to the lowest MRL or ML applied by Codex or an importing country. The result is used to alert New Zealand Food Safety to the non-conformance at farm level and/or below action limits, as it will still enable the conformance of milk at delivery to the processing premises to be assessed.

For compounds or chemical elements naturally occurring in raw milk, the action limits are set to identify unexpected levels that may warrant further investigation. While unexpected levels will often be due to natural influences, the investigation aids New Zealand Food Safety's understanding of the issue and establishes that no form of adulteration or inappropriate farming practice is occurring.

2.8 The ACVM Act

Agricultural compounds, which include agricultural chemicals and veterinary medicines, require authorisation under the Agricultural Compounds and Veterinary Medicines Act 1997 (the ACVM Act). The two main authorisation mechanisms are a) registration or b) exemption from registration through compliance with the Agricultural Compounds and Veterinary Medicines (Exemptions and Prohibited Substances) Regulations 2011[2] (the ACVM Regulations). Agricultural compound products intended for registration undergo a robust risk assessment and approval process where chemistry and manufacturing, efficacy, target animal safety, and residues data are assessed to confirm the risk profile. Registration conditions and regulatory controls are assigned to these products according to the level of identified risk, and may include restrictions on importation, distribution and use, such as a restriction for use only under and in accordance with an authorisation from a veterinarian. Exemption from registration requires conformance to the regulatory requirements in the ACVM Regulations, but do not require registration prior to import, manufacture, sale, or use.

2.9 Maximum residue levels

Agricultural compounds authorised for use in or on food-producing animals or on feed crops intended for consumption by food-producing animals require consideration of GAP and the setting of residue controls. For most compounds, residues in food are managed through compliance with MRLs, which are set under the Food Act 2014 in the Food Notice: Maximum Residue Levels for Agricultural Compounds[3]. MRLs are set to ensure the GAP use of agricultural compounds in or on animals and on crops intended as food, while the risks associated with dietary exposure and trade are

[2] https://www.legislation.govt.nz/regulation/public/2011/0327/latest/DLM3982848.html
[3] Maximum residue levels (MRLs) for agricultural compounds (ACVM) | NZ Government

considered. Ensuring GAP compliance is enforced through regulatory controls and monitoring. MRLs are set to align with international MRLs where possible, while still supporting New Zealand GAP.

2.10 Integrity testing

All milk samples are tested for a range of integrity indicators including compositional characteristics, minerals or other naturally occurring compounds expected in raw milk. The purpose of this testing is to confirm that the levels for each component are within the expected range and that no form of adulteration or inappropriate farming practice is occurring.

2.11 Laboratory capability

The samples will be tested for residues, contaminants, and integrity indicators at MPI Recognised Laboratory's, using ISO/IEC 17025 accredited test methods or validated in-house methods.

3 Inclusion of compounds in the 2025/26 NCCP

The following sets out the rationale used when giving consideration for the inclusion of compounds in the 2025/26 NCCP. Additional compounds of interest to New Zealand will be included based on the rationale set out under section 2.6. Lastly, further compounds of lower direct interest are included when multi-residue screening methods are employed. As this last category includes a large number of compounds it serves to provide further confidence that GAP is being applied under New Zealand dairy farming conditions.

The multi-residue pesticide screen uses a range of analytical instrumentation. For some compounds there will be an overlap with both methods measuring the same compound, but by including both methods, the range of compounds being monitored has increased significantly.

The full list of compounds to be included in the NCCP is provided in section 3.6.

3.1 Substances having an anabolic effect & unauthorised use

The New Zealand National Chemical Residues Programme (NCRP) for live and slaughtered animals includes screening for **stilbenes, steroids, resorcylic acid lactones, thyrostats and β-agonists**.

Chloramphenicol: There are no veterinary medicines containing chloramphenicol authorised for use in New Zealand. Its use on, or in food-producing animals is not permitted, with this enforced by the application of a NZ MRL in 'any food' set at the limit of analytical quantification (0.00015 mg/kg).

Use on dairy animals in New Zealand is therefore considered highly unlikely. None-the-less, due to concerns of illegal use of the compound in other countries, chloramphenicol has been included in the NCCP since its inception. For 2025/26, at least 300 samples will be tested for phenicols.

Chloroform: There are no veterinary medicines authorised in New Zealand that contain chloroform as an active ingredient. It is not anticipated that chloroform will be monitored by the NCCP for 2025/26 but it may be considered in future production years.

Nitrofurans: Nitrofurans (furazolidone, furaltadone, nitrofurantoin, nitrofurazone and nifursol), are synthetic broad-spectrum antimicrobial agents which are rapidly absorbed. In meat products, they are rapidly bio transformed, giving rise to protein-bound residues retaining the side chains: 3-amino-2-oxazolidinone (AOZ) from furazolidone, 3-amino-5-methylmorpholino-2-oxazolidinone (AMOZ) from furaltadone, 1-aminohydantoin (ADH) from nitrofurantoin, semicarbazide (SEM) from nitrofurazone, and 3,5-dinitrosalicyclic acid hydrazide (DNSH) from nifursol.

There are no New Zealand registered products containing nitrofurazone, nitrofurantoin, furazolidone, furaltadone or nifursol. The last registered product containing nitrofurazone was one used for treatment of ornamental fish and this was deregistered in February 2022.

Monitoring of the parent compounds; nitrofurazone, nitrofurantoin, furazolidone and furaltadone was included in the NCCP until 2005. However, due to international interest, methods for the analysis of the nitrofuran metabolites semicarbazide (SEM), 3-amino-2-oxazolidinone (AOZ), 5-methylmorpholino-3-amino-2-oxazolidinone (AMOZ) and 1-aminohydantoin (AHD) were developed and validated for meat products, and subsequently for milk. The analysis of nitrofuran metabolites has been included in

the programme since 2004/2005. For 2025/26, at least 300 random samples will be tested for nitrofuran metabolites.

Routine testing – Nifursol: Inclusion of 3,5-dinitrosalicyclic acid hydrazide (DNSH) will be included once the method is fully validated and available at the testing laboratory.

Confirmation testing – Nitrofurazone: While the testing for AOZ, AMOZ, AHD, and DNSH metabolites is reliable as a means of determining unauthorised use of the parent drugs, semicarbazide (SEM) has been shown to be present from sources other than nitrofurazone. Therefore, whilst testing for semicarbazide as part of the same analysis as AOZ, AMOZ, AHD, and DNSH, functions as a practical screening approach, any presumptive detections from SEM will trigger further confirmatory testing for the parent nitrofurazone. A published international standard method for the determination of nitrofurazone in milk and dairy products has been fully validated and is available at the testing laboratory.

Because of the status of the nitrofurans (no registered uses in New Zealand), any detection of a metabolite in the absence of the parent drug will initiate immediate action**,** and this may include confirmation testing and traceback procedures to determine whether abuse has occurred. Again, it is specifically noted that semicarbazide will only be used as a trigger for further investigation and**,** on its own**,** is not a conclusive indicator of non-conformance.

Nitroimidazoles: There are no nitroimidazoles authorised for use in cattle.

One dimetridazole product is currently authorised for veterinary use and is restricted to on-label use only in turkeys, chickens, and pigs under veterinary authorisation. This means it is illegal to use in species other than poultry and pigs. Also, New Zealand's extensive pasture-based husbandry practices would make its use in dairy cattle highly improbable, and exposure is unlikely.

Metronidazole is currently authorised exclusively for the treatment of bacterial infections in cats and dogs and only available in tablet form suitable for those species. Its use in dairy cattle would also be highly improbable given the impracticality of dosing with companion animal products.

Ronidazole is authorised for use in New Zealand in cage birds and is only available as a water-soluble formulation in drinking water. Its concentration and form would not be a practical treatment option in dairy cattle.

Due to the outdoor pastoral farming system in New Zealand dairy production, nitroimidazole compounds are not indicated for use and are not usually included in the NCCP. Dimetridazole, metronidazole and ronidazole are not included in the NCCP for 2025/26 but may be considered for inclusion in future production years.

Chlorpromazine, colchicine and **dapsone** are not authorised for use in New Zealand, and there are no indications for their use. Consequently chlorpromazine, colchicine and dapsone are not included in the NCCP for 2025/26 but may be considered for inclusion under directed surveillance in future production years.

Aristolochia species and preparations containing these botanicals have no intentional use on milking animals and as such will not be monitored by the NCCP in 2025/26, but a small number of organic milk samples may be considered for inclusion under directed surveillance in future production years.

Sodium Monofluoroacetate (1080): In response to a criminal blackmail threat in November 2014, New Zealand Food Safety and New Zealand dairy manufacturers undertook significant testing of raw milk, intermediate products and ingredients and final products for 1080 to confirm with certainty that 1080 was not present in New Zealand raw milk, milk products or formulated milk products for infants and young children. This provided assurance to other Competent Authorities that control measures for the chemical 1080 in New Zealand were, and are, appropriate and effective. For 2025/26, 63 milk samples will be tested for 1080.

3.2 Veterinary medicines

Antibacterial substances: The typical dairy farming profile for New Zealand features cows grazed outdoors on pasture all year round, and not permanently housed or held off pasture during lactation, and generally not fed concentrates at levels of significance. They are therefore not exposed to the

same level or types of veterinary medicines that are associated with these more intensive husbandry practices. It is noted that that there has been a trend toward increased use of supplementary feed, especially imported feed, and these will be assessed as a potential source for residues, contaminants, and fungal toxins.

The New Zealand national dairy herd has a relatively low level of mastitis and when it occurs, treatment with antibiotics during lactation is only one of the control methods advocated in the 'SmartSAMM' programme'[4] (Smart Approach to Managing Mastitis, published by DairyNZ). Mastitis treatments in New Zealand are typically restricted veterinary medicines and are under the control of a veterinary professional.

Dairy manufacturers maintain an intensive level of acceptance testing of raw milk, with both screening of tankers and post acceptance testing of individual farm supplies. The Animal Products Notice: Production, Supply and Processing requires that RMP operators test milk from each farm at least three times per month using an approved Inhibitory Substances (antimicrobial) method. The action level for farm bulk milk supplies is set at the limit of detection of the test, 0.003 IU sodium (or potassium) benzyl penicillin or equivalent per ml, a very stringent standard in comparison with other international authorities.

Should a non-conformance be identified, RMP operators are required to apply rigorous follow-up procedures including farm traceback and financial penalties, and these have been shown to achieve a very high level of conformance based on the extensive testing nationally. All manufactured product is also required to be traced in the event of a raw milk non-conformance.

Over the 2025/26 season the dairy industry is expected to undertake more than 1.25 million raw milk residue tests, including approximately 520,000 antimicrobial (inhibitory substance) tests on individual farm milk supplies, and approximately 730,000 β-lactam tests on tanker milk prior to unloading at the receiving factory.

In addition to this dairy industry routine monitoring, the NCCP will continue to screen individual farm milk supplies for evidence of a range of antimicrobial compounds including penicillins, cephalosporins, aminoglycosides, macrolides, tetracyclines and sulphonamides.

Testing under the NCCP for inhibitory substances has previously been via a four-plate microbial inhibition test (coded as MIT) and Delvotest T.

The Delvotest T method has been verified in New Zealand milk for ampicillin, cephalonium, cloxacillin, gentamicin, oxytetracycline, sulfadiazine and tylosin. Tetracyclines are also tested using a SNAP test.

The MIT (Microbial Inhibition Test) has been in use in the NCCP as a qualitative screening method for antibiotics for a number of years. For 2025/26, the MIT method will be replaced for screening samples, to the Biochip Multiplex Array. This technology is more robust and includes a wider range of analytes and classes including veterinary medicines authorised for use in dairy cattle in NZ.

We are continuing to work with testing laboratories on the confirmatory quantitative testing options which are available for 2025/26.

For 2025/26, at least 300 samples will be tested using each of these qualitative methods.

Confirmation testing is undertaken for any presumptive positive results.

Anthelmintics: The NCCP will continue to screen milk samples for benzimidazoles, levamisole and macrocyclic lactones and other compounds included in this test. For 2025/26, at least 300 samples will be tested for anthelmintics.

Organophosphates: Organophosphates are authorised for use as veterinary medicines primarily for ectoparasite control in food-producing animals. The NCCP will continue to screen milk samples for organophosphates used as ectoparasiticides in New Zealand. For 2025/26, at least 300 samples will be tested for organophosphate ectoparasiticides.

Sedatives: The potential for these compounds to be present in milk is very low. Xylazine is authorised

[4] About SmartSAMM - DairyNZ

for use in dairy cattle as a sedative. It is a restricted veterinary medicine that requires a veterinarian to authorise and oversee use. Sedatives are not included in the NCCP for 2025/26.

Anticoccidials: The NCCP will continue to screen a proportion of milk samples for anticoccidials. For 2025/26, 63 samples will be tested for a range of anticoccidials.

Dexamethasone is a corticosteroid authorised for use as a veterinary medicine in dairy cows. There are strict conditions that apply to the use of dexamethasone under veterinary authorisation. For 2025/26, 63 samples targeted to the expected time of use will be tested for corticosteroids.

Non-steroidal anti-inflammatory drugs (NSAIDs): The extensive nature of the farming systems in New Zealand and the expense of non-steroidal anti-inflammatory drugs relative to the value of the animals and their restricted veterinary medicine status does not justify extensive use of these products. None-the-less, NSAIDs have been included in the NCCP for several years. For 2025/26, 63 samples will be tested for a range of NSAIDs.

3.3 Pesticides

Carbamates and pyrethroids: The risk of contamination by synthetic pyrethroids in New Zealand milk is low due to the extensive pastoral grazing-based animal husbandry system. Carbamates have been superseded by other veterinary medicines in New Zealand and are currently only authorised for topical use in food-producing animals. However, New Zealand's screening methodology for organophosphates is sensitive to these carbamate compounds and any non-conforming results will be actively followed up. For 2025/26, at least 300 samples will be tested for synthetic pyrethroids and carbamates.

Organochlorine compounds: Consistent with previous years, organochlorines will be included in the 2025/26 programme with at least 300 samples tested. This is primarily to continue monitoring the slow environmental decay of these compounds.

None of the original 12 organochlorines listed under the Stockholm Convention on Persistent Organic Pollutants have been authorised or used in New Zealand for several years. The sale of dieldrin for use on food-producing animals and or pasture was banned in 1967. In 1970, New Zealand became one of the first countries in the world to ban the use of DDT on pastoral land. However, the metabolites of DDT continue to be periodically identified in milk and milk products from livestock grazing land where DDT was historically applied to control "grass grub" (*Costelytra zealandica*). Residues of DDE, rather than the parent compound DDT, predominate confirming historic rather than recent use of this pesticide in New Zealand.

NCCP's ongoing monitoring includes milk from animals in areas where this compound was historically used. In addition, farm dairy RMP operators are required to manage the risks under their programmes and where necessary, to provide practical information on management techniques to minimise the uptake of the metabolites by milking animals.

Organophosphate compounds: Organophosphates are used as insecticides in animal feed crops and pasture. For 2025/26, at least 300 samples will be tested for organophosphate compounds.

Acid Herbicides: Due to changing feeding patterns with a move to utilising crops for animal feed, for 2025/26, 63 samples will be tested.

Anticoagulant Rodenticides: Anticoagulant rodenticides are used worldwide in pest control. They have been monitored as part of the National Chemical Residues Programme (NCRP) since 1999. They were introduced to the NCCP in the 2020/21 as a validated method for these compounds in milk became available. For 2025/26, 63 milk samples will be tested for anticoagulant rodenticides.

3.4 Contaminants and other compounds

Chemical elements: Given the relatively low level of industrialisation in New Zealand there is little heavy metal contamination within the environment. As milking cows graze pasture and receive relatively small quantities of feed from external sources, it has been unlikely for contamination to occur through the feed supply. However, feeding patterns have been changing with a move to utilising crops and various imported feeds. Accordingly, the NCCP monitors trends for chemical elements as part of

the consideration to the potential hazards that might carry through into the milk from various possible farming activities including feed.

For 2025/26, at least 300 samples will be tested for arsenic, cadmium, lead, and mercury as well as a range of other elements.

Mycotoxins: Aflatoxin M1 in milk is a consequence of milking animals consuming feed that is contaminated with aflatoxin B1. New Zealand pasture, conserved feed, grains, and concentrates are very unlikely to contain aflatoxin B1. Year-round climatic conditions ensure that pasture grazing will continue to be the predominant feed supply for New Zealand dairy cows in the medium term. Conserved pasture, hay and silage are traditionally the most common supplementary animal feeds. These are harvested on each farm from surplus grass growth during the high growth periods in the spring and early summer (November to January).

Imported plant material such as palm kernel expeller, and to a lesser extent distiller's dried grains with solubles, soybean meal and other high carbohydrate feed, has become more significant over recent years.

Because of the growth in use of imported feeds the 2025/26 NCCP will test at least 300 samples for aflatoxins.

Dyes: As these substances are of low risk, they are not included in the NCCP for 2025/26.

Melamine: The NCCP sampling plan was reviewed and updated in response to the 2008 melamine adulteration situation reported by authorities in China, the subsequent review of toxicological data by various authorities internationally, and the acceptance thresholds established by New Zealand Food Safety, Codex, and other competent authorities. The sampling plan incorporates melamine solely in response to the current global interest in melamine.

The likelihood of milk in New Zealand being adulterated with melamine for financial gain is extremely low as there is no local source of melamine or melamine waste, and advances in routine milk composition testing would identify an anomaly. Adulteration of raw milk in New Zealand is prohibited and severe penalties apply. Testing under the NCCP has been introduced to confirm the safety and suitability of the national raw milk supply and the dairy products manufactured in New Zealand. A number of additional controls also exist within the regulatory framework to ensure that adulteration or contamination of any kind does not occur.

These controls include:

- Independent assessment (audit) of every farm dairy at least once per season, a proportion of unannounced farm dairy assessments, and verification audits of processing activities from farm through to sale or export. This includes milk factories, stores, transport of milk or product, and milk transfer facilities;
- A direct and exclusive contractual relationship between the dairy farm and the processor with the processor typically responsible for the collection of milk from each individual farm. Rejected consignments and/or farms under any form of sanction have no other disposal option so all farmers have a very strong commercial incentive to meet the stringent milk integrity parameters set by processors and New Zealand Food Safety;
- Minimum raw milk monitoring criteria set by New Zealand Food Safety, and raw milk acceptance criteria set by both New Zealand Food Safety and processors that cover residues and contaminants, microbial parameters, abnormalities and wholesomeness;
- The existence of severe economic disincentives. In the event of any non-conforming level of any contaminant or misrepresentation of raw milk, severe penalties are applied by the milk recipients;
- Enforcement action such as prosecution procedures or other sanctions may be initiated by New Zealand Food Safety for any illegal activity and New Zealand Food Safety has the legal power to direct that any milk or dairy product suspected to be affected be withdrawn or recalled from trade.

Analysis for melamine will be included, but at a reduced frequency for 2025/26 due to the favourable results obtained since testing was introduced in 2008, and the absence of risk factors within the New Zealand milk production environment. For 2025/26, 64 samples will be tested for melamine.

Phthalates: Testing of raw milk and dairy products for phthalates was introduced in the 2011/12 dairy season following reports of deliberate adulteration of food ingredients in Asia. No New Zealand milk or dairy product was affected.

The phthalate Di(2-ethylhexyl) phthalate (DEHP) was known to have been included in the formulation of milk liners, a rubber ware item used during milking to provide the required flexing of the component. However, DEHP was found to migrate into milk products at low levels and was consequently removed from use in the formulation of rubber components for the milking plant.

For 2025/26, 63 samples will be tested for phthalates.

Quaternary Ammonium Compounds: Quaternary Ammonium Compounds (QACs) are widely used as surfactants and disinfectants in food processing and several products have been approved for sanitising dairy equipment. More recently QACs have become compounds of interest in some markets, with studies suggesting that residues may carry over in many food products exposed to QACs. This presents an added complication for trade as many dairy products are highly concentrated ingredients, and these concentrated forms usually only represent a minor portion of the final food. For a number of years dairy maintenance compounds containing QACs have been approved in New Zealand with the condition that milk contact surfaces are to be rinsed after use. As such, elevated residue levels in milk are not expected, and New Zealand Food Safety reviews to date suggest that milk and dairy products never contain QAC residues at levels that might pose a public health risk. For 2025/26, 64 samples will be tested for QACs.

Dicyandiamide: Dicyandiamide (DCD) is a nitrification inhibitor that has the potential to greatly assist pastoral farming by reducing nitrogen loss to the environment and reducing the production of greenhouse gases when applied to pastoral land. However, in late 2012, as the use of DCD increased, New Zealand Food Safety became aware that minor traces of the compound were becoming detectable in concentrated dairy products.

While the levels identified were of no risk to any consumers of dairy products, there is no agreed international position on residues from the use of DCD. Consequently, the use of DCD on land for pastoral farming has ceased and will not be permitted until such time as a maximum residue limit has been agreed internationally. For 2025/26, 63 samples will be tested for DCD.

Chlorate: Chlorine-based products are widely used in both dairy farming and dairy processing as effective cleaners, sanitizers and teat disinfectants. Entry of chlorate into the dairy production chain will depend on multiple factors, such as the level of chlorate formed in the stored hypochlorite solutions, and on the efficiency of removal of chlorate residues during equipment rising cycles.

Perchlorate is a ubiquitous environmental contaminant, with both natural and industrial sources. Industrial sources of perchlorate include fertilizers and chlorine-based sanitizers.[5]

Chlorate is included to monitor the action limit set in the Animal Products Notice: Production, Supply, and Processing, and in doing so, adherence to GAP at a farm level. For 2025/26, 63 milk samples will be tested.

Detergents: Actives such as nonylphenol and nonylphenol ethoxylates and linear alkylbenzene sulphonates are typically used as detergents as part of the cleaning process in milking areas. New Zealand Food Safety will continue to assess the risk to public health or trade that these compounds might pose. These actives are currently not included in the NCCP for 2025/26.

Bismuth: Bismuth is an inert compound used in teat sealants when cows are dried off at the end of lactation. Teat sealant products have been shown to be highly effective in minimising the incidence of mastitis during the dry period which, in turn, means that there is less reliance on antibiotic treatments during the early stages of lactation. The action limit has been set to verify GAP and is based on the expected bismuth residue profile. If there was the presence of bismuth above the current action limit, this would not be a food safety concern, as the oral bioavailability and absorption of bismuth is negligible after consumption. For 2025/26, at least 300 milk samples will be tested for bismuth.

Radionuclides: New Zealand dairy products are routinely monitored for radionuclide contamination in conjunction with the national survey undertaken by the National Centre for Radiation Science.

[5] Factsheet of the IDF N°45/2025: Control of Chlorine and Hypochlorite Residues in the Dairy Chain

Monitoring includes Iodine-131, Caesium-134 and Caesium-137, Plutonium-239+240, Americium-241+Plutonium-238 and Strontium-90. Additional radionuclide testing may also be undertaken according to the requirements of particular markets. Radionuclides are not included in Table 2: NCCP Raw Milk Monitoring – List of Compounds 2025/26. Information on the monitoring of radionuclides is available in the National Chemical Contaminants Programme – Milk and milk powder Radionuclide results report[6].

Dioxins and dioxin-like PCBs: New Zealand is not heavily industrialised and so the risk of dioxin or dioxin-like PCBs entering the milk supply is very low. This has been confirmed in historic surveys. None-the-less on-going monitoring targeting either high fat dairy products or milk from farms deemed most likely to be at risk are undertaken each production year. Dioxins and dioxin-like PCBs are not included in Table 2: NCCP Raw Milk Monitoring – List of Compounds 2025/26. Information on the monitoring of dioxins is available in the National Chemical Contaminants Programme – Dairy products and raw milk Dioxin, dioxin-like PCB and indicator PCB results report[6].

3.5 Raw milk integrity

Raw milk integrity: In addition to the sampling undertaken for residues and contaminants, testing is also undertaken for compositional characteristics, minerals or other naturally occurring compounds such as thiocyanate, expected in raw milk. The purpose of this testing is to confirm that the levels for each component are within the expected range and that no form of adulteration or inappropriate farming practice is occurring.

3.6 Compounds to be monitored in 2025/26

The following table set out the full list of compounds and chemical elements intended to be monitored under the programme in 2025/26 for raw milk.

Table 2: NCCP Raw Milk Monitoring – List of Compounds 2025/26

Compound	Matrix	Samples to test	Action limit mg/kg	LoR# mg/kg	Method	Code*
1-Naphthylacetic acid (NAA)	Milk	63	0.06	0.01	GC-MS/MS	AH
2-Phenylphenol	Milk	307	0.01	0.002	GC-MS/MS	P
2,4-Dichlorophenoxyacetic acid (24D)	Milk	63	0.01	0.01	GC-MS/MS	AH
2,4-Dichlorophenoxyacetic acid (24D) 2-ethylhexyl ester	Milk	63	0.01	0.01	GC-MS/MS	AH
2,4,5-Trichlorophenoxyacetic acid (245T)	Milk	63	0.01	0.01	GC-MS/MS	AH
4-Chlorophenoxyacetic acid (4-CPA)	Milk	63	0.01	0.01	GC-MS/MS	AH
5-Hydroxyflunixin	Milk	63	0.04	0.002	LC-MS/MS	NS
Abamectin*	Milk	307	0.0032	0.0032	LC-MS/MS	AN
Abamectin	Milk	307	0.01	0.01	LC-MS/MS	P
Acephate	Milk	307	0.01	0.002	LC-MS/MS	P
Acetamiprid	Milk	307	0.02	0.002	LC-MS/MS	P
Acetamiprid-N-desmethyl	Milk	307	0.01	0.002	LC-MS/MS	P
Acetochlor	Milk	307	0.01	0.002	GC-MS/MS	P
Acibenzolar-S-methyl	Milk	307	0.01	0.005	LC-MS/MS	P
Acrinathrin	Milk	307	0.01	0.002	GC-MS/MS-LC-MS/MS	P
Aflatoxin-M1	Milk	306	0.05 (µg/kg)	0.01 (µg/kg))	UHPLC	AF
Aflatoxin-M2	Milk	306	0.05 (µg/kg)	0.01 (µg/kg))	UHPLC	AF

[6] Documents for the National Chemical Contaminants Programme | NZ Government

Compound	Matrix	Samples to test	Action limit mg/kg	LoR# mg/kg	Method	Code*
Alachlor	Milk	307	0.01	0.002	GC-MS/MS	P
Alanycarb	Milk	307	0.01	0.002	LC-MS/MS	P
Albendazole^	Milk	307	0.1	0.001	LC-MS/MS	AN
Albendazole sulfone^	Milk	307	0.1	0.001	LC-MS/MS	AN
Albendazole-2-aminosulfone^	Milk	307	0.1	0.004	LC-MS/MS	AN
Albendazole sulfoxide^	Milk	307	0.1	0.001	LC-MS/MS	AN
Aldicarb	Milk	307	0.01	0.01	LC-MS/MS	P
Aldoxycarb	Milk	307	0.01	0.002	LC-MS/MS	P
Aldicarb sulfoxide	Milk	307	0.01	0.002	LC-MS/MS	P
Aldrin	Milk	307	0.006	0.002	GC-MS/MS	P
Allidochlor	Milk	307	0.01	0.005	GC-MS/MS	P
alpha-Endosulfan	Milk	307	0.01	0.002	GC-MS/MS	P
alpha-HCH	Milk	307	0.01	0.002	GC-MS/MS	P
Ametoctradin	Milk	307	0.03	0.002	LC-MS/MS	P
Ametryn	Milk	307	0.01	0.002	GC-MS/MS	P
Aminomethylphosphonic acid (AMPA)	Milk	63	0.05	0.05	LC-MS/MS	O
Amoxicillin	Milk	306	0.004	0.0024	Biochip Multiplex Array	IS
Ampicillin	Milk	306	0.004	0.002	Biochip Multiplex Array	IS
Ampicillin	Milk	307	0.004	0.002	Delvotest T*	IS
Anilofos	Milk	307	0.01	0.002	GC-MS/MS	P
Anthraquinone	Milk	307	0.01	0.002	LC-MS/MS	P
Arsenic (total)	Milk	307	0.1	0.001	ICP-MS	EL
Atrazine	Milk	307	0.01	0.002	GC-MS/MS	P
Azaconazole	Milk	307	0.01	0.002	GC-MS/MS	P
Azamethiphos	Milk	307	0.01	0.002	LC-MS/MS	P
Azinphos-methyl	Milk	307	0.01	0.002	GC-MS/MS	P
Azoxystrobin	Milk	307	0.005	0.002	GC-MS/MS	P
Benalaxyl	Milk	307	0.02	0.002	GC-MS/MS	P
Bendiocarb	Milk	307	0.01	0.002	GC-MS/MS	P
Benfluralin	Milk	307	0.02	0.002	GC-MS/MS	P
Benodanil	Milk	307	0.01	0.002	GC-MS/MS	P
Benoxacor	Milk	307	0.01	0.002	GC-MS/MS	P
Bentazone	Milk	63	0.01	0.01	GC-MS/MS	AH
Bensulfuron-methyl	Milk	307	0.01	0.002	LC-MS/MS	P
Bensulide	Milk	307	0.01	0.002	LC-MS/MS	P
Benzyl butyl phthalate (BBP)	Milk	63	1	0.01	GC-MS/MS	Pht
Benzyldimethyldecylammonium chloride (BDM-C10)#	Milk	64	0.1	0.01	LC-MS/MS	QAC
Benzyldimethyldodecylammonium chloride (BDM-C12)#	Milk	64	0.1	0.01	LC-MS/MS	QAC

Compound	Matrix	Samples to test	Action limit mg/kg	LoR# mg/kg	Method	Code*
Benzyldimethylhexadecylammonium chloride (BDM-C16)#	Milk	64	0.1	0.01	LC-MS/MS	QAC
Benzyldimethyloctadecylammonium chloride (BDM-C18)#	Milk	64	0.1	0.01	LC-MS/MS	QAC
Benzyldimethyloctylammonium chloride (BDM-C8)#	Milk	64	0.1	0.01	LC-MS/MS	QAC
Benzyldimethyltetradecylammonium chloride (BDM-C14)#	Milk	64	0.1	0.01	LC-MS/MS	QAC
Benzylpenicillin	Milk	306	0.004	0.00088	Biochip Multiplex Array	IS
Benzylpenicillin	Milk	307	0.004	0.002	Delvotest T*	IS
beta-Endosulfan	Milk	307	0.01	0.002	GC-MS/MS	P
beta-HCH	Milk	307	0.01	0.002	GC-MS/MS	P
Betamethasone	Milk	63	0.0003	0.0003	LC-MS/MS	D
Bifenox	Milk	307	0.01	0.002	GC-MS/MS	P
Bifenthrin	Milk	307	0.1	0.002	GC-MS/MS	P
Bioresmethrin	Milk	307	0.01	0.002	GC-MS/MS	P
Bismuth	Milk	307	0.5	0.001	ICP-MS	EL
Bitertanol	Milk	307	0.01	0.002	GC-MS/MS	P
Boscalid	Milk	307	0.02	0.002	LC-MS/MS	P
Brodifacoum	Milk	63	0.001	0.001	LC-MS/MS	AC
Bromacil	Milk	307	0.01	0.002	GC-MS/MS	P
Bromadiolone	Milk	63	0.001	0.001	LC-MS/MS	AC
Bromobutide	Milk	307	0.01	0.002	GC-MS/MS	P
Bromophos	Milk	307	0.01	0.002	GC-MS/MS	P
Bromophos-ethyl	Milk	307	0.01	0.002	GC-MS/MS	P
Bromopropylate	Milk	307	0.01	0.002	GC-MS/MS	P
Bromoxynil	Milk	63	0.01	0.01	GC-MS/MS	AH
Bupirimate	Milk	307	0.01	0.002	GC-MS/MS	P
Buprofezin	Milk	307	0.01	0.002	GC-MS/MS	P
Butachlor	Milk	307	0.01	0.002	GC-MS/MS	P
Butafenacil	Milk	307	0.01	0.002	GC-MS/MS	P
Butamifos	Milk	307	0.01	0.002	GC-MS/MS	P
Cadmium (total)	Milk	307	0.1	0.0004	ICP-MS	EL
Cadusafos	Milk	307	0.01	0.002	GC-MS/MS	P
Cafenstrole	Milk	307	0.01	0.002	LC-MS/MS	P
Carbaryl	Milk	307	0.05	0.002	GC-MS/MS	P
Carbendazim	Milk	307	0.05	0.002	LC-MS/MS	P
Carbetamide	Milk	307	0.01	0.002	LC-MS/MS	P
Carbofuran*	Milk	307	0.001	0.002	GC-MS/MS	P
Carboxin	Milk	307	0.03	0.002	GC-MS/MS	P
Carfentrazone-ethyl	Milk	307	0.01	0.002	GC-MS/MS	P
Carprofen	Milk	63	1	0.005	LC-MS/MS	NS
Carpropamid	Milk	307	0.01	0.002	LC-MS/MS	P

Compound	Matrix	Samples to test	Action limit mg/kg	LoR# mg/kg	Method	Code*
Cefalexin	Milk	306	0.1	0.023	Biochip Multiplex Array	IS
Cefapirin	Milk	306	0.01	0.005	Biochip Multiplex Array	IS
Cefquinome	Milk	306	0.02	0.0063	Biochip Multiplex Array	IS
Ceftiofur	Milk	306	0.1	0.025	Biochip Multiplex Array	IS
Cefuroxime	Milk	306	0.017	0.017	Biochip Multiplex Array	IS
Cephalonium	Milk	306	0.02	0.00035	Biochip Multiplex Array	IS
Cephalonium	Milk	307	0.02	0.02	Delvotest T*	IS
Chloramphenicol	Milk	307	0.000045	0.000045	LC-MS/MS	Phen
Chlorantraniliprole	Milk	307	0.05	0.002	LC-MS/MS	P
Chlorate	Milk	63	0.1	0.01	LC-MS/MS	Ch/P
Chlorfenapyr	Milk	307	0.01	0.005	GC-MS/MS	P
Chlorfenvinphos	Milk	307	0.01	0.002	GC-MS/MS	P
Chloridazon	Milk	307	0.1	0.002	LC-MS/MS	P
Chlorimuron-ethyl	Milk	307	0.01	0.002	LC-MS/MS	P
Chlorobenzilate	Milk	307	0.1	0.002	GC-MS/MS	P
Chlorotoluron	Milk	307	0.01	0.002	LC-MS/MS	P
Chloroxuron	Milk	307	0.02	0.002	LC-MS/MS	P
Chlorpropham	Milk	307	0.01	0.002	GC-MS/MS	P
Chlorpyrifos	Milk	307	0.002	0.002	GC-MS/MS	P
Chlorpyrifos-methyl	Milk	307	0.01	0.002	GC-MS/MS	P
Chlorsulfuron	Milk	307	0.01	0.005	LC-MS/MS	P
Chlortetracycline	Milk	306	0.01	0.0025	Biochip Multiplex Array	IS
Chlorthal-dimethyl	Milk	307	0.01	0.002	GC-MS/MS	P
Chlorthiophos	Milk	307	0.01	0.002	GC-MS/MS	P
Chlozolinate	Milk	307	0.01	0.002	GC-MS/MS	P
Chromafenozide	Milk	307	0.01	0.002	LC-MS/MS	P
Cinidon-Ethyl	Milk	307	0.05	0.005	LC-MS/MS	P
cis-Chlordane	Milk	307	0.002	0.002	GC-MS/MS	P
Clethodim	Milk	307	0.05	0.002	LC-MS/MS	P
Clodinafop-propargyl	Milk	307	0.02	0.002	GC-MS/MS	P
Clofentezine	Milk	307	0.05	0.005	LC-MS/MS	P
Clomazone	Milk	307	0.01	0.002	GC-MS/MS	P
Clopyralid	Milk	63	0.05	0.02	GC-MS/MS	AH
Cloquintocet-mexyl	Milk	307	0.01	0.002	GC-MS/MS	P
Clorsulon	Milk	307	0.016	0.016	LC-MS/MS	AN
Closantel	Milk	307	0.045	0.02	LC-MS/MS	AN
Clothianidin	Milk	307	0.01	0.005	LC-MS/MS	P

Compound	Matrix	Samples to test	Action limit mg/kg	LoR# mg/kg	Method	Code*
Cloxacillin	Milk	306	0.03	0.0013	Biochip Multiplex Array	IS
Cloxacillin	Milk	307	0.03	0.015	Delvotest T*	IS
Coumaphos	Milk	307	0.01	0.002	GC-MS/MS	P
Coumaphos-Oxon	Milk	307	0.01	0.002	GC-MS/MS	P
Coumatetralyl	Milk	63	0.001	0.001	LC-MS/MS	AC
Crufomate	Milk	307	0.01	0.002	GC-MS/MS	P
Cyanazine	Milk	307	0.01	0.002	GC-MS/MS	P
Cyanophos	Milk	307	0.01	0.002	GC-MS/MS	P
Cyantraniliprole	Milk	307	0.02	0.002	LC-MS/MS	P
Cyanuric acid	Milk	64	0.1	0.1	LC-MS/MS	O
Cyazofamid	Milk	307	0.01	0.002	LC-MS/MS	P
Cycloate	Milk	307	0.01	0.005	LC-MS/MS	P
Cyclosulfamuron	Milk	307	0.01	0.002	LC-MS/MS	P
Cyflufenamid	Milk	307	0.02	0.005	GC-MS/MS	P
Cyfluthrin (sum of isomers)	Milk	307	0.01	0.002	GC-MS/MS	P
Cyhalofop-butyl	Milk	307	0.01	0.002	GC-MS/MS	P
Cyhalothrin (sum of isomers)	Milk	307	0.02	0.002	GC-MS/MS	P
Cymoxanil	Milk	307	0.01	0.005	LC-MS/MS	P
Cypermethrin (sum of isomers)	Milk	307	0.02	0.002	GC-MS/MS	P
Cyproconazole (sum of isomers)	Milk	307	0.01	0.002	GC-MS/MS	P
Cyprodinil	Milk	307	0.002	0.002	GC-MS/MS	P
Cyromazine	Milk	307	0.002	0.002	LC-MS/MS	P
Daimuron	Milk	307	0.01	0.002	LC-MS/MS	P
DDD (o,p')**	Milk	307	0.02	0.002	GC-MS/MS	P
DDD (p,p')**	Milk	307	0.02	0.002	GC-MS/MS	P
DDE (o,p')**	Milk	307	0.02	0.002	GC-MS/MS	P
DDE (p,p')**	Milk	307	0.02	0.002	GC-MS/MS	P
DDT (o,p')**	Milk	307	0.02	0.002	GC-MS/MS	P
DDT (p,p')**	Milk	307	0.02	0.002	GC-MS/MS	P
delta-HCH	Milk	307	0.01	0.002	GC-MS/MS	P
Deltamethrin	Milk	307	0.02	0.002	GC-MS/MS	P
Demeton-S-methyl	Milk	307	0.01	0.002	GC-MS/MS	P
Demeton-S-Methyl-Sulfoxide	Milk	307	0.01	0.002	LC-MS/MS	P
Desmedipham	Milk	307	0.01	0.005	LC-MS/MS	P
Dexamethasone	Milk	63	0.0003	0.0003	LC-MS/MS	D
di(2-ethoxyethyl) phthalate (DEEP)	Milk	63	1	0.1	GC-MS/MS	Pht
di(2-ethylhexyl) adipate (DEHA)	Milk	63	1	0.2	GC-MS/MS	Pht
di(2-ethylhexyl) phthalate (DEHP)	Milk	63	1	0.2	GC-MS/MS	Pht
di(2-ethylhexyl) terephthalate (DEHT)	Milk	63	1	0.5	GC-MS/MS	Pht
di(2-methoxyethyl) phthalate (DMEP)	Milk	63	1	0.1	GC-MS/MS	Pht

Compound	Matrix	Samples to test	Action limit mg/kg	LoR# mg/kg	Method	Code*
di(2-n-butoxyethyl) phthalate (DBEP)	Milk	63	1	0.1	GC-MS/MS	Pht
di(4-methyl-2-pentyl) phthalate (BMPP)	Milk	63	1	0.01	GC-MS/MS	Pht
Diallyl phthalate (DAP)	Milk	63	1	0.01	GC-MS/MS	Pht
Diazinon	Milk	307	0.02	0.002	GC-MS/MS	P
Dicamba	Milk	63	0.1	0.01	GC-MS/MS	AH
Dichlobenil	Milk	307	0.01	0.002	GC-MS/MS	P
Dichlofenthion	Milk	307	0.01	0.002	GC-MS/MS	P
Dichlofluanid	Milk	307	0.01	0.01	GC-MS/MS-LC-MS/MS	P
Dichlorobenzophenone	Milk	307	0.01	0.002	LC-MS/MS	P
Dichlorprop	Milk	63	0.01	0.01	GC-MS/MS	AH
Dichlorprop-2-ethylhexyl ester	Milk	63	0.01	0.01	GC-MS/MS	AH
Dichlorvos	Milk	307	0.01	0.002	GC-MS/MS	P
Diclobutrazol	Milk	307	0.01	0.002	GC-MS/MS	P
Diclocymet	Milk	307	0.01	0.002	LC-MS/MS	P
Diclofop	Milk	63	0.01	0.01	GC-MS/MS	AH
Diclofop-methyl	Milk	307	0.01	0.002	GC-MS/MS	P
Dicloran	Milk	307	0.01	0.002	GC-MS/MS	P
Diclosulam	Milk	307	0.01	0.002	LC-MS/MS	P
Dicrotophos	Milk	307	0.01	0.002	GC-MS/MS-LC-MS/MS	P
Dicyandiamide (DCD)	Milk	63	0.03	0.03	LC-MS/MS	C
Dicyclanil	Milk	307	0.005	0.005	LC-MS/MS	P
Dicyclohexyl phthalate (DCHP)	Milk	63	1	0.01	GC-MS/MS	Pht
Didecyldimethylammonium chloride (DMD-C10)#	Milk	63	0.1	0.01	LC-MS/MS	QAC
Didodecyldimethylammonium chloride (DMD-C12)#	Milk	63	0.1	0.01	LC-MS/MS	QAC
Dieldrin	Milk	307	0.006	0.002	GC-MS/MS	P
Diethofencarb	Milk	307	0.01	0.002	GC-MS/MS	P
Diethyl phthalate (DEP)	Milk	63	1	0.2	GC-MS/MS	Pht
Difenoconazole	Milk	307	0.005	0.002	GC-MS/MS	P
Difethialone	Milk	63	0.001	0.001	LC-MS/MS	AC
Diflubenzuron	Milk	307	0.01	0.002	LC-MS/MS	P
Diflufenican	Milk	307	0.01	0.002	GC-MS/MS	P
Dihydrostreptomycin	Milk	306	0.1	0.02	Biochip Multiplex Array	IS
Diisobutyl phthalate (DIBP)	Milk	63	1	0.01	GC-MS/MS	Pht
Diisodecyl phthalate (DIDP)	Milk	63	1	0.5	GC-MS/MS	Pht
Diisononyl phthalate (DINP)	Milk	63	1	0.5	GC-MS/MS	Pht
Diisooctyl phthalate (DIOP)	Milk	63	1	0.1	GC-MS/MS	Pht
Diisopropyl phthalate (DIPP)	Milk	63	1	0.01	GC-MS/MS	Pht
Dimepiperate	Milk	307	0.01	0.002	GC-MS/MS	P

Compound	Matrix	Samples to test	Action limit mg/kg	LoR# mg/kg	Method	Code*
Dimethenamid	Milk	307	0.01	0.002	GC-MS/MS	P
Dimethoate*	Milk	307	0.002	0.002	GC-MS/MS	P
Dimethomorph	Milk	307	0.01	0.002	LC-MS/MS	P
Dimethyl isophthalate (DMIP)	Milk	63	1	0.01	GC-MS/MS	Pht
Dimethyl phthalate (DMP)	Milk	63	1	0.02	GC-MS/MS	Pht
Dimethyldioctylammonium chloride (DMD-C8)#	Milk	64	0.1	0.01	LC-MS/MS	QAC
Dimethylditetradecylammonium chloride (DMD-C14)	Milk	64	0.1	0.01	LC-MS/MS	QAC
Dimethylvinphos	Milk	307	0.01	0.002	GC-MS/MS	P
Di-n-butyl phthalate (DBP)	Milk	63	0.3	0.05	GC-MS/MS	Pht
Di-n-decyl phthalate (DDP)	Milk	63	1	0.01	GC-MS/MS	Pht
Di-n-heptyl phthalate (DHP)	Milk	63	1	0.01	GC-MS/MS	Pht
Di-n-hexyl phthalate (DHXP)	Milk	63	1	0.01	GC-MS/MS	Pht
Di-n-nonyl phthalate (DNP)	Milk	63	1	0.01	GC-MS/MS	Pht
Di-n-octyl phthalate (DNOP)	Milk	63	1	0.01	GC-MS/MS	Pht
Di-n-pentyl phthalate (DNPP)	Milk	63	1	0.1	GC-MS/MS	Pht
Di-n-undecyl phthalate (DUP)	Milk	63	1	0.5	GC-MS/MS	Pht
Dioxabenzofos	Milk	307	0.01	0.002	GC-MS/MS	P
Dioxathion	Milk	307	0.01	0.005	LC-MS/MS	P
Diphacinone	Milk	63	0.001	0.001	LC-MS/MS	AC
Diphenamid	Milk	307	0.01	0.002	GC-MS/MS	P
Diphenyl phthalate (DPP)	Milk	63	1	0.01	GC-MS/MS	Pht
Diphenylamine	Milk	307	0.01	0.002	GC-MS/MS	P
Disulfoton	Milk	307	0.01	0.002	GC-MS/MS	P
Dithiopyr	Milk	307	0.01	0.002	GC-MS/MS	P
Diuron	Milk	307	0.01	0.002	LC-MS/MS	P
Doramectin	Milk	307	0.003	0.003	LC-MS/MS	AN
Edifenphos	Milk	307	0.01	0.002	GC-MS/MS	P
Emamectin Benzoate	Milk	307	0.002	0.002	LC-MS/MS	P
Endosulfan sulfate	Milk	307	0.01	0.002	GC-MS/MS	P
Endrin	Milk	307	0.002	0.002	GC-MS/MS	P
Endrin ketone	Milk	307	0.005	0.005	GC-MS/MS	P
EPN	Milk	307	0.01	0.002	GC-MS/MS	P
Epoxiconazole	Milk	307	0.002	0.002	GC-MS/MS	P
Eprinomectin	Milk	307	0.02	0.003	LC-MS/MS	AN
EPTC	Milk	307	0.02	0.002	GC-MS/MS	P
Esprocarb	Milk	307	0.01	0.002	GC-MS/MS	P
Ethalfluralin	Milk	307	0.01	0.002	GC-MS/MS	P
Ethametsulfuron-methyl	Milk	307	0.01	0.002	LC-MS/MS	P
Ethiofencarb	Milk	307	0.01	0.002	GC-MS/MS	P
Ethion	Milk	307	0.01	0.002	GC-MS/MS	P

Compound	Matrix	Samples to test	Action limit mg/kg	LoR# mg/kg	Method	Code*
Ethiprole	Milk	307	0.01	0.002	LC-MS/MS	P
Ethofumesate	Milk	307	0.03	0.002	GC-MS/MS	P
Ethoprophos	Milk	307	0.01	0.002	GC-MS/MS	P
Ethoxyquin	Milk	307	0.05	0.002	GC-MS/MS	P
Ethoxysulfuron	Milk	307	0.01	0.002	LC-MS/MS	P
Ethychlozate	Milk	307	0.01	0.002	LC-MS/MS	P
Etobenzanid	Milk	307	0.01	0.002	LC-MS/MS	P
Etoxazole	Milk	307	0.01	0.002	GC-MS/MS	P
Etridiazole	Milk	307	0.01	0.002	GC-MS/MS	P
Etrimfos	Milk	307	0.01	0.002	GC-MS/MS	P
Famoxadone	Milk	307	0.03	0.01	LC-MS/MS	P
Famphur	Milk	307	0.01	0.002	GC-MS/MS	P
Fenamidone	Milk	307	0.01	0.002	LC-MS/MS	P
Fenamiphos	Milk	307	0.005	0.002	LC-MS/MS	P
Fenarimol	Milk	307	0.02	0.002	GC-MS/MS	P
Fenbendazole^	Milk	307	0.01	0.001	LC-MS/MS	AN
Fenbendazole sulfone^	Milk	307	0.01	0.001	LC-MS/MS	AN
Fenbendazole sulfoxide^	Milk	307	0.01	0.001	LC-MS/MS	AN
Fenbuconazole	Milk	307	0.01	0.002	LC-MS/MS	P
Fenchlorphos	Milk	307	0.01	0.002	GC-MS/MS	P
Fenhexamid	Milk	307	0.01	0.002	LC-MS/MS	P
Fenitrothion	Milk	307	0.01	0.002	GC-MS/MS	P
Fenobucarb	Milk	307	0.01	0.002	GC-MS/MS	P
Fenoprop	Milk	63	0.01	0.01	GC-MS/MS	AH
Fenothiocarb	Milk	307	0.01	0.002	LC-MS/MS	P
Fenoxanil	Milk	307	0.01	0.002	GC-MS/MS	P
Fenoxaprop	Milk	307	0.05	0.002	LC-MS/MS	P
Fenoxaprop	Milk	63	0.05	0.02	GC-MS/MS	AH
Fenoxaprop-ethyl	Milk	307	0.05	0.002	GC-MS/MS	P
Fenoxycarb	Milk	307	0.01	0.002	GC-MS/MS	P
Fenpiclonil	Milk	307	0.01	0.002	GC-MS/MS	P
Fenpropidin	Milk	307	0.005	0.002	LC-MS/MS	P
Fenpropathrin	Milk	307	0.01	0.002	GC-MS/MS	P
Fenpropimorph	Milk	307	0.01	0.002	GC-MS/MS	P
Fenpyroximate	Milk	307	0.01	0.002	LC-MS/MS	P
Fensulfothion	Milk	307	0.01	0.002	GC-MS/MS	P
Fenthion	Milk	307	0.01	0.002	GC-MS/MS	P
Fenthion-Ethyl	Milk	307	0.01	0.002	GC-MS/MS	P
Fenthion oxon	Milk	307	0.01	0.002	LC-MS/MS	P
Fenthion oxon sulfone	Milk	307	0.01	0.005	LC-MS/MS	P
Fenthion oxon sulfoxide	Milk	307	0.01	0.002	LC-MS/MS	P

Compound	Matrix	Samples to test	Action limit mg/kg	LoR# mg/kg	Method	Code*
Fenthion sulfone	Milk	307	0.01	0.002	LC-MS/MS	P
Fenthion sulfoxide	Milk	307	0.01	0.002	GC-MS/MS	P
Fentrazamide	Milk	307	0.01	0.01	LC-MS/MS	P
Fenvalerate	Milk	307	0.02	0.002	GC-MS/MS	P
Ferimzone	Milk	307	0.01	0.002	LC-MS/MS	P
Fipronil	Milk	307	0.005	0.002	GC-MS/MS	P
Fipronil sulfide	Milk	307	0.01	0.002	LC-MS/MS	P
Fipronil sulfone	Milk	307	0.005	0.002	LC-MS/MS	P
Flamprop	Milk	307	0.01	0.002	LC-MS/MS	P
Flamprop-methyl	Milk	307	0.01	0.002	GC-MS/MS	P
Flazasulfuron	Milk	307	0.01	0.002	LC-MS/MS	P
Flocoumafen	Milk	63	0.001	0.001	LC-MS/MS	AC
Florfenicol	Milk	306	0.000015	0.000015	LC-MS/MS	Phen
Florfenicol amine	Milk	306	0.0023	0.0023	LC-MS/MS	Phen
Fluacrypyrim	Milk	307	0.01	0.002	GC-MS/MS	P
Fluazifop	Milk	63	0.08	0.01	GC-MS/MS	AH
Fluazifop-butyl	Milk	63	0.08	0.01	GC-MS/MS	AH
Fluazifop-P-butyl	Milk	307	0.08	0.002	GC-MS/MS	P
Fluazinam	Milk	307	0.01	0.002	LC-MS/MS	P
Flubendazole^	Milk	307	0.001	0.001	LC-MS/MS	AN
Flubendazole	Milk	307	0.002	0.002	LC-MS/MS	P
Flubendazole amine^	Milk	307	0.002	0.002	LC-MS/MS	AN
Flubendiamide	Milk	307	0.1	0.02	LC-MS/MS	P
Flucythrinate	Milk	307	0.01	0.002	GC-MS/MS	P
Fludioxonil	Milk	307	0.01	0.005	LC-MS/MS	P
Flufenacet	Milk	307	0.01	0.002	LC-MS/MS	P
Flumethrin	Milk	307	0.005	0.005	LC-MS/MS	P
Flumiclorac-pentyl	Milk	307	0.01	0.002	GC-MS/MS	P
Flumioxazin	Milk	307	0.02	0.005	GC-MS/MS	P
Flunixin	Milk	63	0.04	0.002	LC-MS/MS	NS
Fluometuron	Milk	307	0.005	0.002	LC-MS/MS	P
Fluopicolide	Milk	307	0.02	0.002	LC-MS/MS	P
Fluopyram	Milk	307	0.06	0.002	LC-MS/MS	P
Fluquinconazole	Milk	307	0.01	0.002	GC-MS/MS	P
Fluridone	Milk	307	0.01	0.002	LC-MS/MS	P
Fluroxypyr	Milk	63	0.06	0.01	GC-MS/MS	AH
Flusilazole	Milk	307	0.01	0.002	GC-MS/MS	P
Fluthiacet-Methyl	Milk	307	0.01	0.002	LC-MS/MS	P
Flutolanil	Milk	307	0.05	0.002	GC-MS/MS	P
Flutriafol	Milk	307	0.01	0.002	GC-MS/MS	P
Fluvalinate	Milk	307	0.01	0.002	GC-MS/MS	P

Compound	Matrix	Samples to test	Action limit mg/kg	LoR# mg/kg	Method	Code*
Fonofos	Milk	307	0.01	0.002	GC-MS/MS	P
Forchlorfenuron	Milk	307	0.01	0.002	LC-MS/MS	P
Fosthiazate	Milk	307	0.01	0.002	GC-MS/MS	P
Fuberidazole	Milk	307	0.01	0.002	LC-MS/MS	P
Furalaxyl	Milk	307	0.01	0.002	GC-MS/MS	P
Furaltadone (AMOZ)	Milk	306	0.00002	0.00002	LC-MS/MS	N
Furametpyr	Milk	307	0.01	0.002	LC-MS/MS	P
Furathiocarb	Milk	307	0.002	0.002	LC-MS/MS	P
Furazolidone (AOZ)	Milk	306	0.00002	0.00002	LC-MS/MS	N
Gentamicin	Milk	306	0.1	0.022	Biochip Multiplex Array	IS
Gentamicin*	Milk	307	0.1	0.3	Delvotest T*	IS
Glyphosate	Milk	63	0.05	0.05	LC-MS/MS	O
Halosulfuron-methyl	Milk	307	0.01	0.002	LC-MS/MS	P
Haloxyfop	Milk	63	0.01	0.01	GC-MS/MS	AH
Haloxyfop-etotyl	Milk	63	0.01	0.01	GC-MS/MS	AH
Haloxyfop-etotyl	Milk	307	0.002	0.002	GC-MS/MS	P
Haloxyfop-methyl	Milk	307	0.002	0.002	GC-MS/MS	P
Heptachlor	Milk	307	0.004	0.002	GC-MS/MS	P
Heptachlor-endo-epoxide*	Milk	307	0.004	0.005	GC-MS/MS	P
Heptachlor-exo-epoxide	Milk	307	0.004	0.002	GC-MS/MS	P
Heptenophos	Milk	307	0.01	0.002	GC-MS/MS	P
Hexachlorobenzene (HCB)	Milk	307	0.005	0.002	GC-MS/MS	P
Hexaconazole	Milk	307	0.01	0.002	GC-MS/MS	P
Hexadecylpyridiniumammonium chloride (C16-Py)	Milk	64	0.1	0.01	LC-MS/MS	QAC
Hexadecyltrimethylammonium chloride (TM-C16)	Milk	64	0.1	0.01	LC-MS/MS	QAC
Hexaflumuron	Milk	307	0.01	0.002	LC-MS/MS	P
Hexazinone	Milk	307	0.01	0.002	GC-MS/MS	P
Hexyl 2-ethylhexyl phthalate (HEHP)	Milk	63	1	0.01	GC-MS/MS	Pht
Hexythiazox	Milk	307	0.05	0.002	LC-MS/MS	P
Imazalil	Milk	307	0.02	0.002	LC-MS/MS	P
Imazamethabenz-Methyl	Milk	307	0.01	0.002	LC-MS/MS	P
Imazosulfuron	Milk	307	0.02	0.002	LC-MS/MS	P
Imidacloprid	Milk	307	0.005	0.005	LC-MS/MS	P
Imidacloprid-Olefin	Milk	307	0.01	0.01	LC-MS/MS	P
Inabenfide	Milk	307	0.01	0.002	LC-MS/MS	P
Indanofan	Milk	307	0.01	0.005	LC-MS/MS	P
Indoxacarb	Milk	307	0.01	0.002	GC-MS/MS	P
Iodofenphos	Milk	307	0.01	0.002	GC-MS/MS	P
Iodosulfuron-methyl	Milk	307	0.02	0.002	LC-MS/MS	P

Compound	Matrix	Samples to test	Action limit mg/kg	LoR# mg/kg	Method	Code*
Iprobenfos	Milk	307	0.01	0.002	GC-MS/MS	P
Iprodione	Milk	307	0.01	0.002	GC-MS/MS	P
Iprovalicarb	Milk	307	0.01	0.005	GC-MS/MS	P
Isazophos	Milk	307	0.01	0.002	GC-MS/MS	P
Isofenphos	Milk	307	0.01	0.005	GC-MS/MS	P
Isofenphos-methyl	Milk	307	0.01	0.005	LC-MS/MS	P
Isoprocarb	Milk	307	0.01	0.002	GC-MS/MS	P
Isoprothiolane	Milk	307	0.01	0.002	GC-MS/MS	P
Isoproturon	Milk	307	0.01	0.002	LC-MS/MS	P
Isopyrazam	Milk	307	0.01	0.002	LC-MS/MS	P
Isoxathion	Milk	307	0.01	0.002	LC-MS/MS	P
Ivermectin	Milk	307	0.003	0.003	LC-MS/MS	AN
Karbutilate	Milk	307	0.01	0.002	LC-MS/MS	P
Ketoprofen	Milk	63	0.02	0.005	LC-MS/MS	NS
Kresoxim-methyl	Milk	307	0.01	0.002	GC-MS/MS	P
Lactofen	Milk	307	0.01	0.002	GC-MS/MS	P
Lasalocid	Milk	63	0.005	0.005~	LC-MS/MS	PC
Lead (total)	Milk	307	0.02	0.002	ICP-MS	EL
Lenacil	Milk	307	0.1	0.002	LC-MS/MS	P
Leptophos	Milk	307	0.01	0.002	GC-MS/MS	P
Levamisole	Milk	307	0.001	0.001	LC-MS/MS	AN
Lincomycin	Milk	306	0.1	0.0065	Biochip Multiplex Array	IS
Lindane	Milk	307	0.002	0.002	GC-MS/MS	P
Linuron	Milk	307	0.01	0.005	LC-MS/MS	P
Maduramicin	Milk	63	0.022	0.022~	LC-MS/MS	PC
Malathion	Milk	307	0.02	0.005	GC-MS/MS	P
Mandestrobin	Milk	307	0.01	0.002	LC-MS/MS	P
Mandipropamid	Milk	307	0.01	0.002	LC-MS/MS	P
MCPA	Milk	63	0.04	0.01	GC-MS/MS	AH
MCPA 2-ethylhexyl ester	Milk	63	0.04	0.01	GC-MS/MS	AH
Mebendazole	Milk	307	0.002	0.002	LC-MS/MS	AN
Mebendazole 5-hydroxy	Milk	307	0.002	0.002	LC-MS/MS	AN
Mebendazole-amine	Milk	307	0.002	0.002	LC-MS/MS	AN
Mecoprop	Milk	63	0.01	0.01	GC-MS/MS	AH
Mefenacet	Milk	307	0.01	0.002	LC-MS/MS	P
Mefenpyr-diethyl	Milk	63	0.01	0.01	GC-MS/MS	AH
Mefenpyr-diethyl	Milk	307	0.01	0.002	LC-MS/MS	P
Melamine	Milk	64	0.1	0.1	LC-MS/MS	O
Meloxicam	Milk	63	0.015	0.002	LC-MS/MS	NS
Mepanipyrim	Milk	307	0.01	0.002	LC-MS/MS	P

Compound	Matrix	Samples to test	Action limit mg/kg	LoR# mg/kg	Method	Code*
Mepronil	Milk	307	0.01	0.002	GC-MS/MS	P
Mercury (total)	Milk	307	0.01	0.001	ICP-MS	EL
Mesotrione	Milk	307	0.01	0.005	LC-MS/MS	P
Metalaxyl	Milk	307	0.01	0.002	GC-MS/MS	P
Metamitron	Milk	307	0.01	0.002	LC-MS/MS	P
Metconazole	Milk	307	0.02	0.002	LC-MS/MS	P
Methabenzthiazuron	Milk	307	0.05	0.002	LC-MS/MS	P
Methacrifos	Milk	307	0.01	0.002	GC-MS/MS	P
Methamidophos	Milk	307	0.01	0.002	LC-MS/MS	P
Methidathion	Milk	307	0.002	0.002	GC-MS/MS	P
Methiocarb	Milk	307	0.03	0.002	GC-MS/MS	P
Methiocarb sulfone	Milk	307	0.03	0.002	LC-MS/MS	P
Methiocarb sulfoxide	Milk	307	0.03	0.002	LC-MS/MS	P
Methomyl	Milk	307	0.01	0.002	LC-MS/MS	P
Methoxychlor	Milk	307	0.01	0.002	GC-MS/MS	P
Methoxyfenozide	Milk	307	0.05	0.002	LC-MS/MS	P
Metobromuron	Milk	307	0.02	0.005	LC-MS/MS	P
Metolachlor	Milk	307	0.01	0.002	GC-MS/MS	P
Metominostrobin-(E)	Milk	307	0.01	0.002	LC-MS/MS	P
Metominostrobin-(Z)	Milk	307	0.01	0.002	LC-MS/MS	P
Metosulam	Milk	307	0.01	0.002	LC-MS/MS	P
Metrafenone	Milk	307	0.01	0.002	LC-MS/MS	P
Metribuzin	Milk	307	0.1	0.002	GC-MS/MS	P
Metsulfuron-Methyl	Milk	307	0.01	0.005	LC-MS/MS	P
Mevinphos	Milk	307	0.01	0.002	GC-MS/MS	P
Mirex	Milk	307	0.002	0.002	GC-MS/MS	P
Molinate	Milk	307	0.01	0.002	GC-MS/MS	P
Monensin	Milk	63	0.003	0.003~	LC-MS/MS	PC
Monepantel sulfone	Milk	307	0.03	0.03	LC-MS/MS	AN
Monocrotophos	Milk	307	0.01	0.005	LC-MS/MS	P
Monofluoroacetic acid (1080)	Milk	63	0.001	0.001	LC-MS/MS	O
Monolinuron	Milk	307	0.01	0.002	LC-MS/MS	P
Morantel	Milk	307	0.05	0.005	LC-MS/MS	AN
Moxidectin	Milk	307	0.04	0.003	LC-MS/MS	AN
Myclobutanil	Milk	307	0.01	0.002	GC-MS/MS	P
Napropamide	Milk	307	0.01	0.002	GC-MS/MS	P
Narasin	Milk	63	0.006	0.006~	LC-MS/MS	PC
Neomycin	Milk	306	0.1	0.009	Biochip Multiplex Array	IS
Nitrofen	Milk	307	0.01	0.002	GC-MS/MS	P
Nitrofurantoin (AHD)	Milk	307	0.0001	0.0001	LC-MS/MS	N

Compound	Matrix	Samples to test	Action limit mg/kg	LoR# mg/kg	Method	Code*
Nitrofurazone (SEM)	Milk	307	0.00015	0.00015	LC-MS/MS	N
Nitrothal-isopropyl	Milk	307	0.01	0.002	GC-MS/MS	P
Nitroxynil	Milk	307	0.02	0.02	LC-MS/MS	AN
Norflurazon	Milk	307	0.01	0.002	GC-MS/MS	P
Novaluron	Milk	307	0.02	0.005	LC-MS/MS	P
Octhilinone	Milk	307	0.01	0.002	LC-MS/MS	P
Omethoate*	Milk	307	0.002	0.002	LC-MS/MS	P
Oryzalin	Milk	307	0.01	0.01	LC-MS/MS	P
Oxabetrinil	Milk	307	0.01	0.01	LC-MS/MS	P
Oxadiazon	Milk	307	0.01	0.002	GC-MS/MS	P
Oxadixyl	Milk	307	0.01	0.002	GC-MS/MS	P
Oxamyl*	Milk	307	0.002	0.002	LC-MS/MS	P
Oxycarboxin	Milk	307	0.01	0.002	LC-MS/MS	P
Oxychlordane	Milk	307	0.005	0.005	GC-MS/MS	P
Oxyfluorfen	Milk	307	0.01	0.005	GC-MS/MS	P
Oxyphenbutazone	Milk	63	0.005	0.005	LC-MS/MS	NS
Oxytetracycline	Milk	306	0.01	0.00125	Biochip Multiplex Array	IS
Oxytetracycline dihydrate	Milk	307	0.01	0.085	Delvotest T*	IS
Paclobutrazol	Milk	307	0.01	0.002	GC-MS/MS	P
Parathion	Milk	307	0.05	0.002	GC-MS/MS	P
Parathion-methyl	Milk	307	0.01	0.002	GC-MS/MS	P
Penconazole	Milk	307	0.01	0.002	GC-MS/MS	P
Pencycuron	Milk	307	0.01	0.002	LC-MS/MS	P
Pendimethalin	Milk	307	0.02	0.005	GC-MS/MS	P
Pentachlorobenzene	Milk	307	0.002	0.002	GC-MS/MS	P
Penthiopyrad	Milk	307	0.01	0.002	LC-MS/MS	P
Perchlorate	Milk	63	0.1	0.01	LC-MS/MS	Ch/P
Permethrin	Milk	307	0.05	0.002	GC-MS/MS	P
Perthane	Milk	307	0.01	0.002	GC-MS/MS	P
Phenmedipham	Milk	307	0.05	0.002	LC-MS/MS	P
Phenthoate	Milk	307	0.01	0.002	GC-MS/MS	P
Phenylbutazone	Milk	63	0.002	0.002	LC-MS/MS	NS
Phorate	Milk	307	0.01	0.002	GC-MS/MS	P
Phorate sulfone	Milk	307	0.01	0.002	GC-MS/MS	P
Phorate sulfoxide	Milk	307	0.01	0.002	GC-MS/MS	P
Phosalone	Milk	307	0.01	0.002	GC-MS/MS	P
Phosmet	Milk	307	0.005	0.002	GC-MS/MS	P
Phosphamidon	Milk	307	0.01	0.002	LC-MS/MS	P
Phoxim	Milk	307	0.005	0.005	LC-MS/MS	P
Picloram	Milk	63	0.05	0.01	GC-MS/MS	AH

Compound	Matrix	Samples to test	Action limit mg/kg	LoR# mg/kg	Method	Code*
Picolinafen	Milk	307	0.01	0.002	GC-MS/MS	P
Pindone	Milk	63	0.001	0.001	LC-MS/MS	AC
Piperonyl butoxide	Milk	307	0.05	0.002	GC-MS/MS	P
Piperophos	Milk	307	0.01	0.002	GC-MS/MS	P
Pirimicarb	Milk	307	0.01	0.002	GC-MS/MS	P
Pirimiphos-methyl	Milk	307	0.01	0.002	GC-MS/MS	P
Pretilachlor	Milk	307	0.01	0.002	GC-MS/MS	P
Prochloraz	Milk	307	0.03	0.002	GC-MS/MS	P
Procymidone	Milk	307	0.01	0.002	GC-MS/MS	P
Profenofos	Milk	307	0.01	0.002	LC-MS/MS	P
Promecarb	Milk	307	0.01	0.002	GC-MS/MS	P
Prometryn	Milk	307	0.01	0.002	GC-MS/MS	P
Propachlor	Milk	307	0.02	0.002	GC-MS/MS	P
Propamocarb	Milk	307	0.01	0.01	LC-MS/MS	P
Propanil	Milk	307	0.01	0.01	LC-MS/MS	P
Propaphos	Milk	307	0.01	0.002	LC-MS/MS	P
Propaquizafop	Milk	307	0.015	0.002	LC-MS/MS	P
Propargite	Milk	307	0.01	0.002	GC-MS/MS	P
Propazine	Milk	307	0.01	0.002	GC-MS/MS	P
Propetamphos	Milk	307	0.01	0.002	GC-MS/MS	P
Propham	Milk	307	0.01	0.002	GC-MS/MS	P
Propiconazole	Milk	307	0.01	0.002	GC-MS/MS	P
Propoxur	Milk	307	0.01	0.002	GC-MS/MS	P
Propyzamide	Milk	307	0.01	0.002	GC-MS/MS	P
Proquinazid	Milk	307	0.02	0.002	LC-MS/MS	P
Prosulfocarb	Milk	307	0.01	0.002	LC-MS/MS	P
Prothiofos	Milk	307	0.01	0.002	GC-MS/MS	P
Pymetrozine	Milk	307	0.01	0.002	LC-MS/MS	P
Pyraclofos	Milk	307	0.01	0.002	GC-MS/MS-LC-MS/MS	P
Pyraclostrobin	Milk	307	0.01	0.002	GC-MS/MS	P
Pyraflufen-ethyl	Milk	307	0.02	0.002	GC-MS/MS	P
Pyrasulfotole	Milk	307	0.01	0.005	LC-MS/MS	P
Pyrazophos	Milk	307	0.01	0.002	GC-MS/MS	P
Pyrethrin	Milk	307	0.05	0.005	LC-MS/MS	P
Pyributicarb	Milk	307	0.01	0.002	GC-MS/MS	P
Pyridaben	Milk	307	0.01	0.002	GC-MS/MS	P
Pyridaphenthion	Milk	307	0.01	0.002	GC-MS/MS	P
Pyrifenox	Milk	307	0.01	0.002	LC-MS/MS	P
Pyriftalid	Milk	307	0.01	0.002	LC-MS/MS	P
Pyrimethanil	Milk	307	0.01	0.002	GC-MS/MS	P

Compound	Matrix	Samples to test	Action limit mg/kg	LoR# mg/kg	Method	Code*
Pyrimidifen	Milk	307	0.01	0.002	GC-MS/MS	P
Pyriminobac-methyl (E)	Milk	307	0.01	0.002	GC-MS/MS	P
Pyriminobac-methyl (Z)	Milk	307	0.01	0.002	GC-MS/MS	P
Pyriproxyfen	Milk	307	0.01	0.002	GC-MS/MS	P
Pyroquilon	Milk	307	0.01	0.002	LC-MS/MS	P
Pyroxsulam	Milk	307	0.01	0.002	LC-MS/MS	P
Quinalphos	Milk	307	0.01	0.002	GC-MS/MS	P
Quinclorac	Milk	63	0.01	0.01	GC-MS/MS	AH
Quinoclamine	Milk	307	0.02	0.005	LC-MS/MS	P
Quinoxyfen	Milk	307	0.01	0.002	GC-MS/MS	P
Quintozene	Milk	307	0.01	0.002	GC-MS/MS	P
Quizalofop	Milk	63	0.015	0.01	GC-MS/MS	AH
Quizalofop-ethyl	Milk	63	0.015	0.01	GC-MS/MS	AH
Quizalofop-ethyl	Milk	307	0.015	0.002	GC-MS/MS	P
Rafoxanide	Milk	307	0.01	0.01	LC-MS/MS	AN
Rimsulfuron	Milk	307	0.02	0.002	LC-MS/MS	P
Saflufenacil	Milk	307	0.01	0.002	GC-MS/MS-LC-MS/MS	P
Salinomycin	Milk	63	0.003	0.003~	LC-MS/MS	PC
Sebuthylazine	Milk	307	0.01	0.002	GC-MS/MS	P
Semduramycin	Milk	63	0.02	0.02~	LC-MS/MS	PC
Sethoxydim	Milk	307	0.05	0.002	LC-MS/MS	P
Simazine	Milk	307	0.01	0.002	GC-MS/MS	P
Simeconazole	Milk	307	0.01	0.002	GC-MS/MS	P
Simetryn	Milk	307	0.01	0.002	GC-MS/MS	P
Spinetoram^	Milk	307	0.01	0.002	LC-MS/MS	P
Spinetoram J^	Milk	307	0.01	0.001	LC-MS/MS	AN
Spinetoram L^	Milk	307	0.01	0.001	LC-MS/MS	AN
Spinosad^	Milk	307	0.1	0.002	LC-MS/MS	P
Spinosyn A^	Milk	307	0.1	0.001	LC-MS/MS	AN
Spinosyn D^	Milk	307	0.1	0.001	LC-MS/MS	AN
Spiromesifen	Milk	307	0.01	0.005	LC-MS/MS	P
Spiromesifen-enol	Milk	307	0.01	0.002	LC-MS/MS	P
Spirotetramat	Milk	307	0.005	0.002	LC-MS/MS	P
Spirotetramat-enol	Milk	307	0.005	0.005	LC-MS/MS	P
Spirotetramat-enol-glucoside	Milk	307	0.005	0.005	LC-MS/MS	P
Spirotetramat-keto-hydroxy	Milk	307	0.002	0.002	LC-MS/MS	P
Spirotetramat-mono-hydroxy	Milk	307	0.002	0.002	LC-MS/MS	P
Spiroxamine	Milk	307	0.015	0.002	LC-MS/MS	P
Streptomycin	Milk	306	0.1	0.032	Biochip Multiplex Array	IS

Compound	Matrix	Samples to test	Action limit mg/kg	LoR# mg/kg	Method	Code*
Sulphaguanidine	Milk	306	0.1	0.05	Biochip Multiplex Array	IS
Sulfadiazine	Milk	306	0.1	0.0095	Biochip Multiplex Array	IS
Sulfadiazine	Milk	307	0.1	0.1	Delvotest T*	IS
Sulphamethazine (Sulfadimidine)	Milk	306	0.025	0.0012	Biochip Multiplex Array	IS
Sulphamerazine	Milk	306	0.1	0.0220	Biochip Multiplex Array	IS
Sulphapyridine	Milk	306	0.1	0.0009	Biochip Multiplex Array	IS
Sulfentrazone	Milk	307	0.01	0.005	LC-MS/MS	P
Sulprofos	Milk	307	0.01	0.002	LC-MS/MS	P
Tebuconazole	Milk	307	0.01	0.002	GC-MS/MS	P
Tebufenozide	Milk	307	0.01	0.01	LC-MS/MS	P
Tebufenpyrad	Milk	307	0.01	0.002	GC-MS/MS	P
Tebuthiuron	Milk	307	0.01	0.002	LC-MS/MS	P
Tecnazene	Milk	307	0.01	0.002	GC-MS/MS	P
Tefluthrin	Milk	307	0.01	0.002	GC-MS/MS	P
Temephos	Milk	307	0.005	0.005	LC-MS/MS	P
Tepraloxydim	Milk	307	0.02	0.002	LC-MS/MS	P
Terbacil	Milk	307	0.01	0.002	GC-MS/MS	P
Terbufos	Milk	307	0.01	0.002	GC-MS/MS	P
Terbumeton	Milk	307	0.01	0.002	LC-MS/MS	P
Terbuthylazine	Milk	307	0.02	0.002	GC-MS/MS	P
Terbutryn	Milk	307	0.01	0.002	GC-MS/MS	P
Tetrachlorvinphos	Milk	307	0.01	0.002	GC-MS/MS	P
Tetraconazole	Milk	307	0.01	0.002	GC-MS/MS	P
Tetracycline	Milk	307	0.01	0.05	SNAP (tetracycline)	IS
Tetracycline	Milk	306	0.01	0.00125	Biochip Multiplex Array	IS
Tetradifon	Milk	307	0.05	0.002	GC-MS/MS	P
Tetrahydrophthalimide	Milk	307	0.03	0.002	GC-MS/MS	P
Thenylchlor	Milk	307	0.01	0.002	GC-MS/MS	P
Thiabendazole^	Milk	307	0.01	0.001	LC-MS/MS	AN
Thiabendazole	Milk	307	0.01	0.002	LC-MS/MS	P
Thiabendazole 5-hydroxy^	Milk	307	0.1	0.002	LC-MS/MS	AN
Thiacloprid	Milk	307	0.05	0.002	LC-MS/MS	P
Thiamethoxam	Milk	307	0.05	0.005	LC-MS/MS	P
Thiamphenicol	Milk	307	0.05	0.00017	LC-MS/MS	Phen
Thiazopyr	Milk	307	0.01	0.002	LC-MS/MS	P
Thidiazuron	Milk	307	0.01	0.002	LC-MS/MS	P
Thiobencarb	Milk	307	0.01	0.002	GC-MS/MS	P
Thiocyanate	Milk	63	20	1	HPLC-UV	O

Compound	Matrix	Samples to test	Action limit mg/kg	LoR# mg/kg	Method	Code*
Thiometon	Milk	307	0.01	0.002	GC-MS/MS	P
Tiadinil	Milk	307	0.01	0.002	LC-MS/MS	P
Tilmicosin	Milk	306	0.05	0.0125	Biochip Multiplex Array	IS
Tolclofos-methyl	Milk	307	0.01	0.002	GC-MS/MS	P
Tolfenamic acid	Milk	63	0.05	0.002	LC-MS/MS	NS
Tolylfluanid	Milk	307	0.01	0.01	LC-MS/MS	P
Tralkoxydim	Milk	307	0.01	0.002	LC-MS/MS	P
trans-Chlordane	Milk	307	0.002	0.002	GC-MS/MS	P
Transfluthrin	Milk	307	0.01	0.005	GC-MS/MS	P
Triadimefon	Milk	307	0.01	0.005	GC-MS/MS	P
Triadimenol	Milk	307	0.01	0.005	GC-MS/MS	P
Tri-allate	Milk	307	0.05	0.002	GC-MS/MS	P
Triasulfuron	Milk	307	0.01	0.002	LC-MS/MS	P
Triazophos	Milk	307	0.01	0.002	GC-MS/MS	P
Tribenuron-methyl	Milk	307	0.01	0.005	LC-MS/MS	P
Tribufos	Milk	307	0.01	0.002	GC-MS/MS	P
Trichlorfon	Milk	307	0.01	0.005	LC-MS/MS	P
Triclabendazole^	Milk	307	0.005	0.005	LC-MS/MS	AN
Triclabendazole sulfone^	Milk	307	0.005	0.005	LC-MS/MS	AN
Triclabendazole sulfoxide^*	Milk	307	0.005	0.01	LC-MS/MS	AN
Triclopyr	Milk	63	0.01	0.01	GC-MS/MS	AH
Tricyclazole	Milk	307	0.01	0.002	LC-MS/MS	P
Trifloxystrobin	Milk	307	0.02	0.002	GC-MS/MS	P
Trifloxysulfuron-sodium	Milk	307	0.01	0.002	LC-MS/MS	P
Triflumizole	Milk	307	0.01	0.002	LC-MS/MS	P
Triflumuron	Milk	307	0.01	0.002	LC-MS/MS	P
Trifluralin	Milk	307	0.01	0.002	GC-MS/MS	P
Triflusulfuron-methyl	Milk	307	0.01	0.002	LC-MS/MS	P
Triforine	Milk	307	0.01	0.005	LC-MS/MS	P
Trimethroprim	Milk	307	0.05	0.005	LC-MS/MS	AN
Triticonazole	Milk	307	0.01	0.002	GC-MS/MS	P
Tylosin	Milk	306	0.05	0.0075	Biochip Multiplex Array	IS
Tylosin	Milk	307	0.05	0.05	Delvotest T*	IS
Uniconazole-P	Milk	307	0.01	0.002	GC-MS/MS	P
Vamidothion	Milk	307	0.01	0.002	LC-MS/MS	P
Vinclozolin	Milk	307	0.01	0.002	GC-MS/MS	P
Warfarin	Milk	63	0.01	0.001	LC-MS/MS	AC
XMC	Milk	307	0.01	0.002	GC-MS/MS	P
Zoxamide	Milk	307	0.01	0.002	LC-MS/MS	P

Note:

- Some compounds may be tested with more than one test, for example, the acidic herbicide method and multi-residue pesticides method.

- Delvotest T* Verified in milk by the testing laboratory. In addition, the validation of the test method by the manufacturer includes a wide range of antibiotic compounds that have not been verified in New Zealand milk.
- [compound]* Compounds are included even though the method may not detect down to action limits as it will still enable the conformance of milk at delivery to the processing premises to be assessed.

Table key:

* Refer to Appendix 1 (Table 5) for code

** Action limit applies corrected to milk with 4% milkfat
Some residues are fat soluble and the NCCP action limits take into account that MRLs for these are expressed on a whole milk sample basis

^ Final result takes into account the residue definition.

~ Results between the Limit of Detection and indicative Limit of Reporting can be reported as 'trace'.

The sum of alkylbenzyldimethylammonium chlorides with alkyl chain lengths of C8, C10, C12, C14, C16 and C18 is not included in the table.
The sum Dialkyldimethyl quaternary ammonium chlorides (C8-C12) which includes Dimethyldioctylammonium chloride, Dimethyldidecylammonium chloride, and Dimethyldidodecylammonium chloride is not included in the table.

LOR# For some compounds, this column is referring to the method Limit of Detection. Limit of Detection means the lowest concentration of a compound at which positive identification can be achieved with reasonable and/or previously determined confidence in a defined matrix using a specific analytical method.

3.7 Integrity indicators to be monitored in 2025/26

Table 3: Table of Integrity Indicators

Compound or characteristic	Matrix	Expected range	Method	Code*
Aluminium	Milk	max. 1.0 mg/l	Acid digest/ICP-MS	EL
Boron	Milk	max. 1.0 mg/l	Acid digest/ICP-MS	EL
Chromium	Milk	max. 0.3 mg/l	Acid digest/ICP-MS	EL
Cobalt	Milk	max. 0.1 mg/l	Acid digest/ICP-MS	EL
Copper	Milk	max. 0.15 mg/l	Acid digest/ICP-MS	EL
Iodine	Milk	max. 1.0 mg/l	TMAH digestion/ICP-MS	EL
Iron	Milk	max. 5.0 mg/l	Acid digest/ICP-OES	EL
Selenium	Milk	max. 2.0 mg/l	Acid digest/ICP-MS	EL
Urea	Milk	Min 7.0 and max 70 mg/dL	FTIR	MC
Zinc	Milk	max. 10 mg/l	Acid digest/ICP-MS	EL
Thiocyanate	Milk	max. 20 mg/l	HPLC-UV	O

Notes

* Refer to Appendix 1 for code

In addition, pH, fat, protein, somatic cell count and lactose will be tested in each milk sample.

4 Appendix 1: Method, code and other information

4.1 Method information

Table 4: Test method descriptions

Method	Description
Delvotest T	Bacterial inhibition assay
FTIR	Fourier Transform Infrared Spectroscopy
GC-MS/MS	Gas chromatography tandem mass spectrometry
HPLC-UV	High-performance liquid chromatography with ultraviolet detection
ICP-MS	Inductively coupled plasma mass spectrometry
LC-MS/MS	Liquid chromatography tandem mass spectrometry
Biochip Multiplex Array	Screen test using Biochip Multiplex Array
SNAP (tetracycline)	Enzyme-linked receptor-binding assay which binds tetracycline
UHPLC	Ultra high performance liquid chromatography

4.2 Code information

Table 5: Compound and compound group codes

Code	Compound or compound group
Phen	Phenicols including chloramphenicol
AC	Anticoagulant rodenticides
AF	Aflatoxins
AH	Acidic herbicides
AN	Anthelmintics
C	Dicyandiamide (DCD)
Ch/P	Chlorate, perchlorate
D	Dexamethasone
EL	Chemical elements
IS	Inhibitory substances
N	Nitrofurans
NS	Nonsteroidal anti-inflammatory drug (NSAIDs)
O	Other - cyanuric acid, melamine, glyphosate, 1080, thiocyanate
P	Pesticides
PC	Polyether coccidiostats
Pht	Phthalates
QAC	Quaternary ammonium compounds