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Department of Industry,
Science and Resources

National
Measurement
Institute

Compliance with measurement regulation in 2023–24

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The purpose of this publication is to provide an overview of the National Measurement Institute's (NMI) legal metrology activities undertaken in the 2023–2024 financial year.

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About this report

This report outlines the National Measurement Institute's (the NMI's) 2023–24 measurement compliance and regulatory activities.

It includes:

- the NMI's performance as the Commonwealth's measurement regulator
- NMI compliance audit and enforcement undertakings
- compliance rates by industry area and program.

2023–24 highlights

During the 2023–24 financial year, the NMI:

- completed 5,161 trader audits
 - 68.4% (3,531) of the 5,161 traders audited were found to comply with trade measurement regulations
 - 71.6% of 1,096 businesses inspected were found to comply with the law after follow-up audits were undertaken. This was up from 67.1% of 3,634 businesses found to be compliant after an initial audit
 - 65.7% of the traders involved in 1,276 trial purchases were compliant.
- completed 1,455 audits of business premises as part of the 3 concentrated audit programs that ran in 2023–24
 - 67.3% (431) of the 640 audited business premises selling seasonal goods (in the lead up to Christmas) were compliant
 - 62.2% (248) of the 399 audited business premises selling international foods were compliant
 - 56.5% (235) of the 416 audited business premises selling wholefoods were compliant.
- completed 722 retail fuel quality audits, which showed that 96.8% (699) of traders were compliant
- obtained 903 fuel quality samples from service stations to assess against Fuel Quality Standards legislation, of which 98.6% (890) were compliant
- conducted 553 verified instruments audits, which showed that 80.0% (442) of verified instruments were compliant
- audited 969 instruments, of which 86.9% (842) were compliant
- calibrated more than 7000 reference standards across 3 measurement standards laboratories
- provided pattern approval for 108 new measuring instruments for the Australian marketplace
- trained, assessed, and appointed 10 new trade measurement inspectors across New South Wales, Queensland, South Australia, Victoria, Tasmania and Western Australia
- recruited 8 new assistant trade measurement officers nationally, who will undertake the training program in 2024–25
- continued to develop new training materials and deliver specialist training to national and Asia-Pacific stakeholders.
- participated in 19 International Organization of Legal Metrology (OIML) committees.



What is legal metrology

Legal metrology is the application of legal requirements to measurements and measuring instruments. It underpins confidence in measurements and ensures measuring instruments are accurate.

Australians rely on legal metrology every day. For example, fuel purchases are determined by volume, and we rely on the petrol bowser (a measuring instrument) to deliver the amount of fuel we have paid for. When purchasing fruit and vegetables at the supermarket checkout, we rely on self-service or employee-operated shop scales to ensure we are charged the correct amount. This is legal metrology in practice.

The OIML develops global standards for use in national measurement legislation. Australia is a member state of the OIML via ratification of the [OIML Convention](#). The convention ensures Australian interests are represented internationally (see Legal metrology on the international stage) and that Australia remains consistent with global legal metrology frameworks.

What is trade measurement

Trade measurement laws apply to all retail and wholesale transactions that use measurement to determine price.

You must comply with Australia's trade measurement laws if you:

- buy or sell goods or services using measurement (for example, selling meat, buying gold, transporting freight by weight)
- manufacture, pack, import or sell pre-packaged goods (for example, meat, dry goods, drinks or snacks that are packaged and claim a weight or volume)

- supply or maintain measuring instruments used for trade (for example, shop scales).

Consistency and certainty in measurement supports fair and open competition. It makes all businesses, regardless of their size or financial strength, follow the same rules.

Regulation of trade measurement

The NMI is a division within the Department of Industry, Science and Resources. As the national authority on measurement, the NMI plays a fundamental role in underpinning the Australian economy by:

- maintaining and regulating Australia's measurement system
- developing and maintaining national measurement standards
- delivering world-class measurement products and client services
- ensuring that Australian consumers and industry can rely on trusted measurements for fair trade in goods and services.

Trade measurement inspectors ensure that traders comply with the law and adopt correct measurement trading practices by checking that:

- measuring instruments (for example, weighing instruments, fuel dispensers, weighbridges) are accurate
- pre-packaged goods contain the correct amount of product
- trader practices do not disadvantage consumers (for example, allowing for the weight of packaging when using a measuring instrument to sell products).

Our trade measurement inspectors also provide advice and guidance to businesses on better measurement practice and enforce legislative requirements.

Measuring instruments

The *National Measurement Act 1960* (the Act) regulates measuring instruments that are used for trade purposes. This regulatory framework is consistent with international best practice.

Pattern approval

Measuring instruments must be manufactured according to an approved pattern (design). The pattern approval process determines whether a measuring instrument is suitable for its intended use. It also ensures the instruments will operate within allowable limits of error under various environmental and usage conditions.

More than 10,000 current measuring instrument designs have been approved for trade use. This continues to grow by around 100 measuring instruments each year (110 in 2023–24).

Instrument verification

The pattern-approved instrument must be tested (verified) before first use by a licensed third-party organisation (service licensee). The NMI licenses 300 external third-party organisations that employ more than 1,200 verifiers. These verifiers assess between 85,000 and 110,000 measuring instruments per year.

During 2023–24 our measurement standard laboratories calibrated more than 7,000 reference standards of measurement. Reference standards of measurement are used by trade measurement inspectors and verifiers to check and verify measuring instruments. Reference standards of measurement are generally calibrated or certified at our NATA-accredited laboratories in Brisbane, Adelaide and Perth.

Legal metrology on the international stage

The Australian Government is a signatory to 2 intergovernmental measurement treaties:

- the Metre Convention, for measurement science
- the OIML Convention, for measurement regulation.

The NMI ensures international recognition and acceptance of Australia's measurement system by acting as the interface between the Australian and international measurement systems. In 2023–24, our experts participated in 19 OIML committees to:

- establish model draft laws and regulations for measuring instruments and their use
- promote closer relations between the departments responsible for measurement regulation in each of the OIML member states
- play an important leadership role in establishing a sustainable international system for measurement regulation that supports Australian businesses and manufacturers
- develop and guide the strategic direction of the OIML Certification System and related programs to ensure Australian businesses have access to global supply chains for trusted measuring instruments
- actively build and nurture relationships with critical trading partners and marshal global expertise during times of technological change
- reduce barriers to trade and build opportunities for Australian businesses to invest and compete in global markets.

In addition to this, the International Committee of Legal Metrology elected the NMI's Legal Metrology General Manager as Second Vice-President for a term of 6 years from October 2023. This appointment recognises Australia's leadership and expertise in the legal metrology space.

Modernising Australia's measurement legislation

Following a comprehensive review, the NMI is in the process of reforming Australia's measurement legislation.

The reforms are expected to commence in 2026. They will streamline, modernise and simplify Australia's measurement legislation to be more principles-based and flexible. The legislation will continue to ensure Australia has a strong, efficient and effective measurement system that:

- facilitates trade
- supports ongoing economic prosperity
- builds business and consumer confidence
- meets safety and security objectives.

In the 2023–24 Budget, the government announced \$12.7 million of funding over 4 years to implement these reforms.

The new legislative framework will reduce regulatory burden on businesses and better align Australia's measurement standards with international best practice. The Regulation Impact Statement can be viewed on the Measurement Law Review section on the Office of Impact Analysis [website](#).

The NMI has endorsed a suite of priority projects to support and implement the transition to the new laws and support traders to understand their obligations.

Developing measurement capability for industry

The NMI provides training courses in biological, chemical, physical and legal measurement. These courses help build national and international capability and expertise in measurement to meet industry demands. In 2023–24 the NMI:

- delivered 43 training courses and 22 consultancies
- enrolled 120 people in e-learning modules.
- issued 217 certificates in our role as a registered training organisation.

Trade measurement inspectors

To help businesses comply with their legal obligations, the NMI's trade measurement inspectors:

- test measuring instruments
- inspect pre-packaged goods and review business practices
- give advice on meeting compliance obligations
- take enforcement action when necessary.

Trade measurement inspectors work with traders to provide education and guidance on measurement legislation requirements. Trade measurement inspectors show an identification card to the business owner/operator before starting an audit. They also make trial purchases where trade measurement inspectors may purchase a product before identifying themselves to the trader. These are used to assess whether businesses are correctly operating their scales and not charging for the weight of the packaging during over-the-counter transactions. After the transaction is completed, the trade measurement inspector identifies themselves and discusses their findings with the owner or controller of the business.

During 2023–24 the NMI trained, assessed, and appointed 10 new trade measurement inspectors. Following the appointment of these inspectors, 8 additional assistant trade measurement officers were recruited. They will complete their training program and future appointments as trade measurement inspectors in 2024–25.

Case study: Working with industry to overcome operational challenges

It is essential that the NMI's trade measurement inspectors perform their regulatory duties without operational challenges. In 2023–24 there was a trend of trade measurement inspectors being denied entry to a particular service provider's site, despite the inspectors wearing a branded uniform and providing their photo identification. To address this issue, the NMI worked with that service provider to produce a communication kit that was distributed to all employees and sites. The kit outlined the:

- protocol for engaging with trade measurement inspectors
- importance of allowing trade measurement inspectors to carry out their regulatory functions and duties on site.

Trade measurement inspectors also presented the communication kit at sites if required. As a result, trade measurement inspectors are now able to successfully perform their regulatory functions at the service provider's sites.



A risk-based approach

The NMI takes a risk-based approach when targeting compliance activities and determining the appropriate and proportionate regulatory response when non-compliance is found.

We measure risk in terms of the harm and likelihood of regulatory non-compliance. Some of the factors used to determine harm include:

- impact on confidence in the measurement system
- extent of financial detriment to consumers or industry
- impact on maintaining a level playing field for business competition
- ability of consumers to make informed purchasing decisions.

The NMI is committed to continuous improvement and is reviewing its risk assessment framework to ensure it is fit for purpose and transparent.

A note about compliance and non-compliance

Compliance is when business activities audited by us meet the requirements of measurement legislation.

Non-compliance can take many forms, including:

- inappropriate measurement practices (for example, not zeroing a shop scale before weighing a product)
- package labels that do not meet regulatory requirements
- short measures in pre-packaged goods
- using measuring instruments that are unapproved or inaccurate.

Not all instances of non-compliance affect the integrity of measurement-based transactions. Measurement errors are usually relatively minor and large errors are rare. However, even minor measurement errors can have a significant impact on competition and consumer disadvantage.

When selling over-the-counter products by weight, a common non-compliance is failure to remove the weight of the container. For example, if the plastic container used by a delicatessen to sell products to consumers is not tared off at the point of sale, this will add 10–20 g to each transaction. If this happened over 12 months, it could result in customers losing thousands of dollars.

When non-compliance is assessed as having a low level of harm with minimal likelihood of continued non-compliance, the trade measurement inspector will issue a non-compliance notice and may give advice if appropriate. A follow-up visit will check that any issues identified have been fixed. This is the most common course of action.

Regulator performance – Legal metrology priorities 2023–24

In 2023–24, the NMI published compliance priorities that indicated target trader types for the forward year and other regulator activities we intended to undertake. These included committing to performance measures that align with our 4 objectives, which support our vision of trusted measurement for Australia:

- measuring instruments are fit for purpose
- measurements are made correctly
- measurements used in trade are accurate
- we have the people and capabilities to deliver.

As a Commonwealth regulatory entity, the NMI observes the 3 best-practice principles outlined in the Department of Finance [Resource Management Guide for Regulator Performance](#) (RMG 128). By developing and publishing objectives and associated performance measures, and subsequently reporting on the performance measures, we demonstrate RMG 128 Principle 1: Continuous improvement and building trust.

Performance against each measure informs how we can improve our regulatory services in the future. Depending on the measure, the outcome will either be met, partially met or not met. Some measures are for reporting only as an indicator of work undertaken.

Legal metrology regulator performance in 2023–24

Objective: Measuring instruments are fit for purpose

Performance measure	Outcome (met / partially met / not met / reporting only)	Outcome rationale
70% of all pattern approval certificates are issued within 90 days of receiving an application using ‘stop the clock’ methodology	Met	78% of all pattern approval certificates were issued within 90 days of receiving an application using ‘stop the clock’ methodology
90% of reported licensing non-compliances are considered, actioned or reported in accordance with internal procedures	Met	96% of reported licensing non-compliances were actioned in accordance with internal procedures
Complete verifier assessments within 3 months of receipt	Met	100% of verifier assessments were completed within 3 months of receipt
Instrument compliance levels increase following NMI intervention	Met	The initial instrument compliance rate was 84%. The follow-up instrument compliance rate was 86%

Objective: Measurements are made correctly

Performance measure	Outcome (met / partially met / not met / reporting only)	Outcome rationale
90% of reference standards of measure are calibrated within 21 days	Not met	86% of reference standards of measure were calibrated within 21 days ^a
Number of training courses delivered	Reporting only	Delivered 65 training courses (43 courses and 22 consultancies)
95% of authorised third-party applications are resolved within 90 days of receipt	Met	100% of authorised third-party applications were resolved within 90 days of receipt
95% of licences are issued within 28 days of receiving an application (servicing or public weighbridge licence)	Met	96% of licences were issued within 28 days of receiving an application
Number of international engagements (RMG 128)	Reporting only	Completed 21 international engagements
Number of completed formal stakeholder engagement sessions (RMG 128)	Reporting only	Completed 28 formal stakeholder engagement sessions (Case study: Stakeholder engagement – Consumer and Industry Liaison Committee)
Trade measurement enquiries are acknowledged within 5 business days and aimed to be resolved within 3 weeks (RMG 128)	Met	95.5% of trade measurement enquires were resolved within 3 weeks ^b

- a There has been a significant increase in requests for laboratory glassware calibration. These artefacts are by far the most resource and time intensive requests received. This directly impacted turnaround times and the ability to issue calibration reports within the 21-day period.
- b For the 2023–24 financial year, the timeframe for acknowledging enquiries was not tracked.

Case study: Stakeholder engagement – Consumer and Industry Liaison Committee

In 2010 the NMI established the Consumer and Industry Liaison Committee (CILC). The CILC is comprised of representatives from industry associations and consumer groups. The CILC convened twice in 2023–24, with meetings held in November 2023 and April 2024. These meetings allowed members to:

- exchange views about legal metrology regulatory matters
- formulate advice to the NMI aimed at improving the efficiency and effectiveness of the legal metrology regulatory framework and service levels.

The CILC membership is reviewed annually to ensure it includes appropriate representation from consumer organisations and the regulated community. This relationship strengthens our engagement with stakeholders and supports the evolution of the national trade measurement system.

Objective: Measurements used in trade are accurate

Performance measure	Outcome (met / partially met / not met / reporting only)	Outcome rationale
We take proportionate regulatory action within internal timeframes in response to non-compliance (RMG 128)	Met	Infringements: 92% issued within internal timeframes Warning letters: 95% undertaken within internal timeframes
Follow-up audits are completed within 28 days. The time can be extended if the trader is in a remote or regional area	Not met	On average, follow-up trader audits took 71 days to complete ^a
Follow-up audits show increased compliance levels	Met	The initial trader audit compliance rate was 67.1%. The follow up trader audit compliance rate was 79.1%
Review and publish an updated National Measurement Institute National Compliance Policy (RMG 128)	Not met	The review and update of the National Measurement Institute National Compliance Policy was carried forward to 2024–25 due to changes in operational priorities
Complaints are acknowledged within 5 business days (RMG 128) ^b	Partially met	97% of complaints were acknowledged within 5 business days

a The 28-day target was updated in October 2023. The new target for a follow up trader audit is within 60 days for non-compliance with consumer detriment and 120 days for non-compliance with no consumer detriment.

b This performance measure originally read 'Complaints are acknowledged within 5 business days and aimed to be resolved within 3 weeks'. This was published in error. Complaints are individually assessed and have varying timeframes for resolution that may be longer than 3 weeks. The reporting reflects the NMI customer service standards for complaint acknowledgement.

Objective: We have the people and capabilities to deliver

Performance measure	Outcome (met / partially met / not met / reporting only)	Outcome rationale
Deliver work programs under interdepartmental memorandums of understanding (MOUs)	Not met	Tobacco Plain Packaging Inspection Program: ^a 837 proactive site visits (against a target of 1,000) and 224 reactive site visits ^b
	Met	Fuel Quality Monitoring Program: 722 fuel quality audits and 903 liquid fuel samples submitted for analysis (against a target of 863 samples) ^c
Attract and retain the right people for our roles	Reporting only	The NMI's regulatory branch, Legal Metrology, employed 17 new people
Build staff capability through internal and external training opportunities (RMG 128)	Met	10 Assistant trade measurement officers (ATMOs) were trained in 2023–24, boosting the number of trade measurement inspectors to 35 with an additional 8 ATMOs onboarded in 2024. ^d Foundational training was also delivered for our people on topics such as driver safety, fire extinguisher training and manual handling. Complex measuring instrument training was also delivered to key personnel
Laboratory quality systems are maintained to a standard that enables measurement standards and pattern approval services	Met	The NMI maintained NATA accreditation for each of its measurement standards and pattern approval laboratories

a MOU with the Department of Health and Aged Care.

b Under the MOU, the NMI had a target of 1,000 proactive site visits in 2023–24. This target was not met due to administrative changes when the new *Public Health (Tobacco and Other Products) Act 2023* commenced on 1 April 2024, replacing the *Tobacco Plain Packaging Act 2011*.

c Operational agreement with the Department of Climate Change, Energy, the Environment and Water.

d ATMOs are trained over a 12–18-month period and complete a Certificate IV in Trade Measurement and a Certificate IV in Government (Investigations).

Summary of 2023–24 compliance activities and outcomes

National audit activities 2023–24

The NMI published its planned program of activities for the 2023–24 financial year as part of its publicly available [Legal metrology priorities 2023–24](#).

National audit activity	Outcome
Provide broad coverage across industry sectors in metropolitan and regional areas	5,161 trader audits, including: <ul style="list-style-type: none"> • 3,611 in major cities • 820 in inner regional Australia • 519 in outer regional Australia • 122 in remote Australia • 89 in very remote Australia
Test a variety of instruments in use for trade	8,526 measuring instruments assessed
Test a variety of pre-packaged articles	61,263 lines of pre-packaged goods tested, including 236,163 individual packages
Monitor trading practices	1,276 trial purchases undertaken
Monitor liquid fuel quality ^a	722 fuel quality audits undertaken 903 fuel samples analysed
Tobacco plain packaging ^b	837 proactive tobacco plain packaging site visits undertaken 224 reactive tobacco plain packaging site visits undertaken

a On behalf of the Department of Climate Change, Energy, the Environment and Water, as per our operational agreement.

b On behalf of the Department of Health and Aged Care, as per our MOU.

Trader audits

Year	Trader audits	Measuring instruments	Weighbridges	Pre-packaged lines	Individual packages
2019–20	7,600	13,588	479	78,290	203,320
2020–21	4,842	14,049	594	25,990	100,139
2021–22	3,131	7,118	473	17,360	59,862
2022–23	4,410	7,651	130	29,966	107,065
2023–24	5,161	8,526	222	61,263	236,163

The most common enforcement response is for trade measurement inspectors to give advice and conduct follow-up inspections to ensure compliance. Most businesses want to do the right thing and promptly rectify trade measurement breaches once they are made aware of them.

This approach has proven successful:

- 67.1% of traders were compliant after an initial audit
- 71.6% of traders were compliant after follow-up audits.

Year	Initial audits	Initial compliance	Follow-up audits	Follow-up compliance	Estimated final compliance (%) ^a
2019–20	5,736	3,804 (66.3%)	1,864	1,394 (74.8%)	91.5
2020–21	3,587	2,365 (65.9%)	1,255	918 (73.1%)	90.8
2021–22	2,529	1,738 (68.7%)	602	481 (79.9%)	93.7
2022–23	3,183	2,124 (66.7%)	1,227	945 (77.0%)	92.3
2023–24	3,634	2,437 (67.1%)	1,527	1,094 (71.6%)	90.7

a Estimated final compliance assumes that failed initial non-compliant audits will have the same non-compliance rate as the follow-up audit. Not all traders that failed the initial audit have received a follow-up, we can only estimate the final compliance rate with the assumption that all the initial non-compliant traders will fail again in the follow-up audits, with a rate equivalent to the follow-up non-compliance rate.

Measuring instruments

Australia’s trade measurement laws require that measuring instruments used for trade are:

- of an approved type
- verified by a licensed technician before use
- accurate.

Accurate means that when a measuring instrument is tested by NMI’s trade measurement inspectors, it is operating within legal tolerances or ‘maximum permissible errors’. It is worth noting that when an instrument is incorrect by more than the permitted error, even to the consumers advantage, it is defined as a non-compliance within the legislation.

The NMI’s trade measurement inspectors tested 8,526 measuring instruments in 2023–24, with 199 (2.3%) found to be inaccurate to consumer disadvantage.

For example, if a consumer bought 60.0 L of petrol and the dispenser had an error of 1% to consumer disadvantage, the consumer would receive 59.4 L of petrol.

During the year, NMI trade measurement inspectors found 376 (4.4%) of the instruments tested to be inaccurate to consumer advantage. In this case, if a consumer bought 60.0 L of petrol and the dispenser had an error of 1% to consumer advantage, the consumer would receive 60.6 L of petrol.

When testing measuring instruments, trade measurement inspectors found more instances of consumer advantage than consumer disadvantage during the 2023–24 financial year.

The following table lists the instrument categories with the greatest proportions of instruments found to be inaccurate to consumer disadvantage in 2023–24.

Instrument category	Examples	Number tested	Proportion with consumer disadvantage error (%)	Proportion with consumer advantage error (%)
Retail fuel dispensers	Petrol and diesel pumps used at retail sites to refuel vehicles	2,484	4.9%	6.1%
Weighing instruments (30 kg to 3 tonnes)	Scales used for measuring bulk items such as scrap metal, fruit and vegetables	77	0.0%	1.3%
Weighing instruments (30 kg or less)	Scales used in supermarkets, butchers and fruit and vegetable stores	5,229	1.1%	4.2%

Pre-packaged goods

A pre-packaged good is a single item comprising a product and packaging that is prepared and offered for sale. The NMI's trade measurement inspectors check pre-packaged goods in the Australian marketplace to ensure they contain the correct amount of product and are correctly marked.

Of the 61,263 lines of pre-packaged goods tested in 2023–24, 1,928 (3.2%) were found to

contain less product than what was stated on the package. Most of the discrepancies were relatively small, with a shortfall of less than 5%. For example, if a 1 kg packet of flour had a shortfall of 5%, the customer would receive 950 g (50 g less).

The following table lists the top 5 categories of pre-packaged goods with the greatest proportions of incorrect measurement in 2023–24.

Pre-packaged goods category	Examples	Lines tested	Proportion with incorrect measurement (%)
Seafood (fresh)	Fresh seafood such as whole fish, fish fillets and prawns	536	9.89
Ready-to-eat/cook meals	Fresh or frozen ready-to-cook meals	838	6.32
Meat (processed)	Processed meat such as ham, salami and pepperoni	2,107	6.26
Meat (fresh, excluding seafood)	Meat products such as beef, lamb and pork	8,683	5.92
Dairy (cheese)	Hard or soft cheese types such as cheddar and brie	3,138	5.61

The results outlined in this report were considered when setting the NMI inspection priorities for trade measurement compliance activity in 2024–25.

Further detail about our inspection priorities for trade measurement compliance activity is available in the [Legal metrology priorities 2024–25](#).¹

¹ <https://www.industry.gov.au/data-and-publications/national-measurement-institute-national-compliance-plan>

Concentrated national audit programs

Correct measurement plays a significant role in ensuring consumers ‘get what they pay for’ at the checkout. In 2023–24, the NMI undertook 3 concentrated one-week programs focused on measurement compliance in the following areas:

- seasonal products in the lead-up to Christmas (high demand/turnover products)
- international foods
- wholefoods.

We used all available trade measurement inspectors across the country to complete audits of these trade groups during the nominated weeks.

Christmas goods (high demand/turnover products)

Between 20 and 24 November 2023, trade measurement inspectors visited supermarkets, department stores, meat and seafood retailers and other traders who sell seasonal Christmas products. This included high turnover products that are unique to the Christmas season including Christmas cakes, puddings and biscuits and products that see a significant increase in demand due to the Christmas season. For example, seafood, leg ham, turkey, and seasonal poultry products. Christmas goods were targeted as part of the 2023–24 concentrated national audit program in response to cost-of-living pressures and to inform the industry risk profile.

During this audit, NMI trade measurement inspectors:

- visited 640 business premises
- tested 578 measuring instruments
- checked 12,350 pre-packaged article lines
- conducted 255 trial purchases.

Identified non-compliances included:

- 32 measuring instruments that were not verified
- 19 measuring instruments that were inaccurate to the consumer advantage
- 9 measuring instruments that were inaccurate to the consumer disadvantage
- 311 pre-packaged goods with short measure (goods contained less product than what was represented on the package)
- 420 lines of pre-packaged goods with non-compliant labelling
- 81 failed trial purchases.

Most non-compliance was corrected by traders following advice from trade measurement inspectors. The NMI issued 268 non-compliance notices for the following breaches:

- 39 related to measuring instruments
- 134 related to pre-packaged goods
- 95 for failure of trading practice (for example, shortfall offences from trial purchases).

Some traders received more than one non-compliance notice or received a non-compliance notice covering more than one breach.

Inspectors issued 7 warning letters and 4 infringement notices.

International foods

Between 18 and 22 March 2024, trade measurement inspectors visited international food products traders and importers. International foods were targeted as part of the 2024–25 concentrated national audit program due to compliance history and stakeholder feedback.

During this audit, NMI trade measurement inspectors:

- visited 399 business premises
- tested 239 measuring instruments
- checked 10,736 packaged article lines
- conducted 43 trial purchases.

Identified non-compliances included:

- 39 measuring instruments that were not verified
- 17 measuring instruments that were inaccurate to the consumer advantage
- 10 measuring instruments that were inaccurate to the consumer disadvantage

- 192 pre-packaged article lines with short measure (goods contained less product than what was represented on the package)
- 303 lines of pre-packaged goods with non-compliant labelling
- 24 failed trial purchases.

Most non-compliance was corrected by traders following advice from trade measurement inspectors. The NMI issued 168 non-compliance notices for the following breaches:

- 36 related to measuring instruments
- 96 related to pre-packaged goods
- 36 for failure of trading practice (for example, shortfall offences from trial purchases).

Some traders received more than one non-compliance notice or received a non-compliance notice covering more than one breach.

Inspectors issued 3 warning letters and one infringement notice.





Wholefoods

Between 13 and 17 May 2024, trade measurement inspectors visited wholefoods traders. The program focused on auditing and educating traders, wholesalers and manufacturers whose primary business was selling pre-packaged goods in over-the-counter transactions, such as flour, nuts, confectionary, dried fruits, grains and cereals. Wholefoods were targeted as part of the 2023–24 concentrated national audit program due to compliance history and stakeholder feedback.

During this audit, NMI trade measurement inspectors:

- visited 416 business premises
- tested 520 measuring instruments
- checked 7,670 pre-packaged article lines
- conducted 251 trial purchases.

Identified non-compliances included:

- 70 measuring instruments that were not verified
- 37 measuring instruments that were inaccurate to the consumer advantage

- 4 measuring instruments that were inaccurate to the consumer disadvantage
- 152 pre-packaged article lines with short measure (goods contained less product than what was represented on the package)
- 342 lined of pre-packaged goods with non-compliant labelling
- 100 failed trial purchases.

Most non-compliance was corrected by traders following advice from trade measurement inspectors. The NMI issued 263 non-compliance notices for the following breaches:

- 73 related to measuring instruments
- 72 related to pre-packaged goods
- 118 for failure of trading practice (for example, shortfall offences from trial purchases).

Some traders received more than one non-compliance notice or received a non-compliance notice covering more than one breach.

No infringement notices or warning letters were issued.

Enforcement actions

NMI inspectors issue non-compliance notices when they identify breaches of trade measurement law during trader audits.

The NMI considers all enforcement actions in line with our [National Compliance Policy](#).

We consider escalating our response when:

- we identify continued non-compliance
- a breach detected during an initial audit is severe (such as significant shortfall in multiple product lines)
- contraventions are of high public interest or impact.

Available enforcement actions include:

- warning letters
- infringement notices with associated fines
- administrative agreements
- enforceable undertakings
- referral to the Commonwealth Director of Public Prosecutions (CDPP) for injunction or potential prosecution.

Any enforcement action, such as a warning letter or infringement notice, may cover more than one breach of trade measurement law.

The NMI issued 24 infringement notices with \$91,970 in associated fines in 2023–24.

The CDPP decides whether to take forward a referral for prosecution. Prosecutions may also conclude in the year after any referral.

No convictions were recorded in 2023–24.

Year	Non-compliance notices	Warning letters	Infringement notices	Enforceable undertakings	Referrals to the CDPP	Convictions
2019–20	2,234	188	100 (\$123,900)	2	1	1
2020–21	1,787	40	12 (\$18,510)	2	1	0
2021–22	926	35	18 (\$28,860)	0	0	0
2022–23	1,687	47	18 (\$27,700)	1	1	0
2023–24	1,971	59	24 (\$91,970)	1	0	0

In 2023–24 the most common breaches resulting in a warning letter were short measure in pre-packaged goods and breaches to trading practices. The most common breaches resulting in an infringement notice were:

- short measure in pre-packaged goods
- breaches of trading practices (incorrect operation of scales and not allowing for the weight of packaging during over-the-counter transactions).

Breaches by enforcement action in 2023–24

Enforcement action	Inaccurate measuring instrument	Pre-packaged goods with short measure	Pre-packaged goods with non-compliant labelling	Breach of trading practices
Warning letter	21	112	24	70
Infringement notice	4	26	1	16

Case study: Short weight frozen yoghurt

Frozen yoghurt is a popular treat in Australia. The NMI received a complaint that a trader was including the weight of the disposable bowls in its transactions, resulting in consumers not getting what they paid for. Trade measurement inspectors visited 7 of the traders' stores and conducted trial purchases, which detected multiple short weight offences. The trader received a \$6,260 infringement notice.

Follow-up visits of the trader found that:

- the point-of-sale system had been updated to automatically remove the bowl weights
- staff had been trained in the correct weighing procedure.



Achieving regulatory compliance

The NMI plans forward compliance activities in line with the financial year and publishes planned industry focus areas in our annual legal metrology priorities report. Compliance activities are organised into programs that run throughout the financial year. The program duration varies – it may run throughout the whole year, for 6 months or be a week-long concentrated audit. During concentrated audit programs, all trade measurement inspectors focus on a target industry for one week.

Compliance program outcomes for the 2023–24 financial year are detailed in the following sections.

Regional, remote and First Nations communities

During this annual program, trade measurement inspectors visit traders in regional, remote and First Nations community areas. During these visits in 2023–24, inspectors:

- visited 541 business premises
- tested 1,100 measuring instruments
- checked 4,825 pre-packaged article lines
- conducted 73 trial purchases.

Identified non-compliances included:

- 64 measuring instruments that were not verified
- 65 measuring instruments that were inaccurate to the consumer advantage
- 19 measuring instruments that were inaccurate to the consumer disadvantage
- 98 lines of pre-packaged goods with short measure
- 108 lines of pre-packaged goods with non-compliant labelling
- 18 failed trial purchases.

The NMI issued 196 non-compliance notices for the following breaches:

- 94 related to measuring instruments
- 55 related to pre-packaged goods
- 47 for failure of trading practice (for example, shortfall offences from trial purchases).

Some stores were issued with more than one non-compliance notice or were issued with a non-compliance notice covering more than one breach.

Two warning letters were sent.

Compliance confidence – ‘Tare It’ program

This program aims to ensure the ongoing compliance of retailers of meat, fish, poultry, fruit and vegetable, deli and small goods products. During the 2023–24 program, which ran from January to June 2024, NMI trade measurement inspectors re-visited non-compliant traders that were identified during the 2022–23 ‘Tare It’ program. Inspectors:

- visited 918 business premises
- tested 648 measuring instruments
- checked 4,979 lines of pre-packaged goods
- conducted 219 trial purchases.

Identified non-compliances included:

- 34 measuring instruments that were not verified or tested before first use
- 21 measuring instruments that were inaccurate to the consumer advantage
- 7 measuring instruments that were inaccurate to the consumer disadvantage
- 245 pre-packaged goods with short measure (goods contained less product than what was represented on the package)
- 406 packaged article lines with non-compliant labelling
- 58 failed trial purchases.

The NMI issued 191 non-compliance notices for the following breaches:

- 49 related to measuring instruments
- 76 related to pre-packaged goods
- 66 for failure of trading practice (for example, shortfall offences from trial purchases).

Some stores were issued with more than one non-compliance notice or were issued with a non-compliance notice covering more than one breach.

The NMI issued 3 warning letters and one infringement notice.

Marketplace intelligence

During this annual program, NMI trade measurement inspectors focused on products sold by length, and agricultural supply goods (stockfeed, seeds and animal nutritional products). The intelligence gathered during this program informs the NMI's industry risk assessments and future compliance programs. In 2023–24, inspectors:

- visited 383 business premises
- tested 907 measuring instruments
- checked 7,078 pre-packaged article lines
- conducted 109 trial purchases.

Identified non-compliances included:

- 74 measuring instruments that were not verified
- 30 measuring instruments that were inaccurate to the consumer advantage
- 36 measuring instruments that were inaccurate to the consumer disadvantage
- 309 pre-packaged goods with short measure (goods contained less product than what was represented on the package)
- 206 lines of pre-packaged goods with non-compliant labelling
- 39 failed trial purchases.

The NMI issued 210 non-compliance notices for the following breaches:

- 70 related to measuring instruments
- 87 related to pre-packaged goods
- 53 for failure of trading practice (for example, shortfall offences from trial purchases).

Some stores were issued with more than one non-compliance notice or were issued with a non-compliance notice covering more than one breach.

The NMI issued 4 warning letters and 7 infringement notices.



Complex measuring instruments

For this program, NMI's trade measurement inspectors target traders who own complex measuring instruments such as weighbridges, truck-mounted flow meters and wheeled loader weighers. These high-capacity measuring instruments are used in various industries to trade large quantities of commodities such as coal, wheat, fuel and waste. In 2023–24, NMI's trade measurement inspectors conducted 66 audits, of which 12 (18.2%) were found to be non-compliant. Ninety-six instruments were tested, with:

- 3 found to be not verified
- 5 found to be inaccurate to consumer disadvantage
- 2 found to be inaccurate to consumer advantage.

Complaints

The NMI responds to complaints received from consumers and businesses on our website and through our helpline. The helpline received 2,959 calls during the 2023–24 financial year. In response to complaints we:

- visited 492 business premises
- tested 951 measuring instruments
- checked 707 lines of pre-packaged goods
- conducted 36 trial purchases.

Identified non-compliances included:

- 38 measuring instruments that were not verified
- 48 measuring instruments that were inaccurate to the consumer advantage
- 33 measuring instruments that were inaccurate to the consumer disadvantage
- 24 lines of pre-packaged goods with short measure (goods contained less product than what was represented on the package)
- 39 lines of pre-packaged goods with non-compliant labelling
- 14 failed trial purchases.

The NMI issued 135 non-compliance notices for the following breaches:

- 90 related to measuring instruments
- 20 related to packaged goods
- 25 for failure of trading practice (for example, shortfall offences from trial purchases).

Some stores were issued with more than one non-compliance notice or were issued with a non-compliance notice covering more than one breach.

The NMI issued one infringement notice.

Servicing licensee, public weighbridge and verifier audits

In 2023–24, the NMI conducted 553 verifier audits, of which 442 (79.9%) were compliant. The NMI also checked 969 verifier instruments, of which 842 (86.9%) were compliant.

In 2023–24, the NMI conducted 34 service licensee audits, of which 23 (67.6%) were compliant and 11 (32.4%) were non-compliant.

In 2023–24, the NMI conducted 43 public weighbridge audits, of which 36 (83.7%) were compliant and 7 (16.3%) were non-compliant.

Compliance and enforcement by trader type

Serious enforcement actions are considered when severe and/or continued non-compliance is identified. Certain trader types continued to have higher rates of serious non-compliance during 2023–24 than other trader types, reflecting ongoing issues in those sectors.

Higher rates of serious non-compliance detected among some trader types in

2022–23 resulted in these traders being investigated further during the 2023–24 audit programs.

The data in this section aggregate results from all inspections conducted throughout 2023–24, including those from concentrated audit programs.

Meat retail

Year	Initial audits	Non-compliance cases	Follow-up audits	Non-compliance cases	Warning letters	Infringement notices
2019–20	610	309 (50.7%)	193	47 (24.4%)	74	14 (\$15,750)
2020–21	176	68 (38.6%)	187	65 (34.8%)	9	2 (\$2,220)
2021–22	78	36 (46.2%)	35	6 (17.1%)	4	1 (\$2,220)
2022–23	409	190 (46.5%)	170	44 (25.9%)	4	4 (\$4,705)
2023–24	289	120 (41.5%)	194	55 (28.4%)	11	4 (\$18,065)

Breaches by enforcement action in 2023–24 meat retail

Enforcement action	Inaccurate measuring instrument	Pre-packaged goods with short measure	Pre-packaged goods with non-compliant labelling	Breach of trading practices
Warning letter	1	38	3	11
Infringement notice	0	11	0	2

Note: Breach numbers may not have resulted in the same number of enforcement actions. For example, 3 breaches may result in one warning letter.



Case study: Short weight butcher

Routine visits to several premises of a butchery chain found that around 5% of all pre-packaged meat lines were short weight. The trader received a \$6,875 infringement notice.

Subsequent follow-up inspections found similar short weight pre-packaged items. The trader had reported that new quality assurance processes had been introduced; however, we found these processes were not effective. The trader received a further \$6,875 infringement notice.

Trade measurement inspectors worked with the trader to help them improve their quality assurance processes. Further follow-up inspections found that all pre-packaged items in the butchery chain displayed the correct weight.

Supermarkets

Year	Initial audits	Non-compliance cases	Follow-up audits	Non-compliance cases	Warning letters	Infringement notices
2019–20	1,186	304 (25.6%)	317	74 (23.3%)	10	10 (\$10,050)
2020–21	757	152 (20.1%)	305	72 (23.6%)	8	3 (\$3,330)
2021–22	493	179 (36.3%)	93	21 (22.6%)	5	4 (\$4,440)
2022–23	597	123 (20.6%)	266	46 (17.3%)	11	5 (\$12,740)
2023–24	749	207 (27.6%)	268	75 (28.0%)	6	2 (\$4,695)

Note: Supermarkets audit data above includes visits to major supermarkets, independent supermarkets and co-operatives, and smaller retail supermarkets.

Breaches by enforcement action in 2023–24 supermarkets

Enforcement action	Inaccurate measuring instrument	Pre-packaged goods with short measure	Pre-packaged goods with non-compliant labelling	Breach of trading practices
Warning letter	3	39	6	7
Infringement notice	0	0	0	2

Note: Breach numbers may not have resulted in the same number of enforcement actions. For example, 3 breaches may result in one warning letter.

Licensed premises

Year	Initial audits	Non-compliance cases	Follow-up audits	Non-compliance cases	Warning letters	Infringement notices
2019–20	1,060	311 (29.3%)	196	13 (6.6%)	25	23 (\$29,400)
2020–21	83	21 (25.3%)	26	2 (7.7%)	0	0 (\$0)
2021–22	354	103 (29.1%)	102	12 (11.8%)	5	0 (\$0)
2022–23	158	20 (12.7%)	98	16 (16.3%)	4	1 (\$1,110)
2023–24	88	21 (23.9%)	70	9 (12.9%)	1	3 (\$4,695)

Breaches by enforcement action in 2023–24 licensed premises

Enforcement action	Inaccurate measuring instrument	Pre-packaged goods with short measure	Pre-packaged goods with non-compliant labelling	Breach of trading practices
Warning letter	0	0	0	3
Infringement notice	1	0	0	2

Note: Breach numbers may not have resulted in the same number of enforcement actions. For example, 3 breaches may result in one warning letter.

Seafood – retail

Year	Initial audits	Non-compliance cases	Follow-up audits	Non-compliance cases	Warning letters	Infringement notices
2019–20	167	82 (49.1%)	54	21 (38.9%)	23	4 (\$5,250)
2020–21	32	13 (40.6%)	54	20 (37.0%)	6	1 (\$1,110)
2021–22	17	5 (29.4%)	2	0 (0.0%)	0	0 (\$0)
2022–23	90	50 (55.6%)	42	9 (21.4%)	1	0 (\$0)
2023–24	99	47 (47.5%)	70	23 (32.9%)	7	2 (\$4,240)

Breaches by enforcement action in 2023–24 seafood retail

Enforcement action	Inaccurate measuring instrument	Pre-packaged goods with short measure	Pre-packaged goods with non-compliant labelling	Breach of trading practices
Warning letter	3	0	1	13
Infringement notice	1	1	0	1

Note: Breach numbers may not have resulted in the same number of enforcement actions. For example, 3 breaches may result in one warning letter.

Delicatessen

Year	Initial audits	Non-compliance cases	Follow-up audits	Non-compliance cases	Warning letters	Infringement notices
2019–20	39	13 (33.3%)	21	10 (47.6%)	2	2 (\$2,100)
2020–21	21	15 (71.4%)	6	1 (16.7%)	0	0 (\$0)
2021–22	5	0 (0.0%)	2	0 (0.0%)	0	0 (\$0)
2022–23	179	111 (62.0%)	42	12 (28.6%)	0	1 (\$1,110)
2023–24	38	14 (36.8%)	78	16 (20.5%)	2	1 (\$6,260)

Breaches by enforcement action in 2023–24 delicatessen

Enforcement action	Inaccurate measuring instrument	Pre-packaged goods with short measure	Pre-packaged goods with non-compliant labelling	Breach of trading practices
Warning letter	0	5	0	5
Infringement notice	1	1	0	2

Note: Breach numbers may not have resulted in the same number of enforcement actions. For example, 3 breaches may result in one warning letter.

Fruit and vegetables – retail

Year	Initial audits	Non-compliance cases	Follow-up audits	Non-compliance cases	Warning letters	Infringement notices
2019–20	136	72 (52.9%)	102	34 (33.3%)	9	4 (\$4,200)
2020–21	376	248 (66.0%)	142	43 (30.3%)	11	1 (\$1,110)
2021–22	46	22 (47.8%)	54	25 (46.3%)	9	4 (\$6,660)
2022–23	293	185 (63.1%)	238	82 (34.5%)	22	3 (\$3,595)
2023–24	172	81 (47.1%)	172	69 (40.1%)	7	2 (\$9,390)

Breaches by enforcement action in 2023–24 fruit and vegetable retail

Enforcement action	Inaccurate measuring instrument	Pre-packaged goods with short measure	Pre-packaged goods with non-compliant labelling	Breach of trading practices
Warning letter	4	6	1	5
Infringement notice	1	4	0	1

Note: Breach numbers may not have resulted in the same number of enforcement actions. For example, 3 breaches may result in one warning letter.

Compliance by instrument type

An accurate measuring instrument is the basis of any trade measurement transaction.

In 2023–24, 83.7% of the instruments tested were compliant with legislative requirements. Our tests showed that:

- 2.3% of measuring instruments were inaccurate to consumer disadvantage
- 4.4% of measuring instruments were inaccurate to consumer advantage.

Measuring instruments are non-compliant if one or more of the following is identified:

- not verified by an authorised servicing licensee (or without a verification mark)
- failed to measure accurately, regardless of whether the inaccuracy was to consumer disadvantage or consumer advantage
- did not meet other necessary standards to comply with legislation, such as display issues, eccentricity, inadequate sealing and data plate irregularities.

Year	Instruments tested	Compliant	Not verified	Inaccurate (consumer advantage)	Inaccurate (consumer disadvantage)	Other non-compliance
2019–20	13,588	11,753 (86.5%)	415 (3.1%)	505 (3.7%)	342 (2.5%)	573 (4.2%)
2020–21	14,049	12,104 (86.2%)	413 (2.9%)	473 (3.4%)	341 (2.4%)	718 (5.1%)
2021–22	7,118	6,054 (85.1%)	305 (4.3%)	186 (2.6%)	258 (3.6%)	315 (4.4%)
2022–23	7,651	6,639 (86.8%)	298 (3.9%)	369 (4.8%)	161 (2.1%)	184 (2.4%)
2023–24	8,526	7,142 (83.7%)	536 (6.3%)	376 (4.4%)	199 (2.3%)	273 (3.2%)



Case study: Checking the checker

The servicing licensee system is vital for ensuring the accuracy of measuring equipment used for trade. Servicing licensees must use properly calibrated equipment when testing a trader's measuring equipment. One licensee voluntarily informed us that, due to an error, it had been using equipment that was no longer within its calibration period.

The licensee entered an enforceable undertaking with the NMI where it:

- committed to re-testing all affected measuring instruments
- introduced new quality assurance processes
- trained staff to thoroughly check equipment before use.

These processes should help to ensure that the licensee only uses accurate test equipment in the future.

Instrument types found to be inaccurate to consumer disadvantage

Instrument type	Year	Instruments tested	Inaccurate to consumer disadvantage	Inaccurate to consumer advantage
Fuel dispensers (petrol and diesel)	2019–20	3,699	193 (5.2%)	191 (5.2%)
	2020–21	6,258	245 (3.9%)	221 (3.5%)
	2021–22	3,970	227 (5.7%)	87 (2.2%)
	2022–23	1,956	95 (4.9%)	65 (3.3%)
	2023–24	2,484	122 (4.9%)	152 (6.1%)
Weighing instruments (30 kg to 3 tonnes)	2019–20	179	5 (2.8%)	2 (1.1%)
	2020–21	54	4 (7.4%)	2 (3.7%)
	2021–22	50	2 (4.0%)	3 (6.0%)
	2022–23	131	6 (4.6%)	4 (3.1%)
	2023–24	77	0 (0%)	1 (1.3%)
Beverage dispensers	2019–20	1,486	61 (4.1%)	5 (0.3%)
	2020–21	152	6 (4.0%)	2 (1.3%)
	2021–22	326	7 (2.1%)	8 (2.5%)
	2022–23	130	0 (0.0%)	1 (0.8%)
	2023–24	185	15 (8.1%)	1 (0.5%)

Compliance of retail fuel dispensers

Of the 2,484 fuel dispensers tested in 2023–24:

- 152 (6.1%) had an error resulting in consumer advantage (the consumer received more fuel than what was indicated on the display)
- 122 (4.9%) had an error resulting in consumer disadvantage (the consumer received less fuel than what was indicated on the display).

Most dispensers found to be inaccurate to consumer disadvantage were in the range of 1–3 times the maximum permissible error of 0.3%. This equates to between 30c and 90c for every \$100.00 of fuel delivered. Although this is a relatively small sum for an individual consumer, if applied to 4.9% of all fuel sales in the year it amounts to between \$12 million and \$36 million in total detriment for the Australian community.

Year	Petrol and diesel dispensers tested	Inaccurate to consumer advantage	Inaccurate to consumer disadvantage
2019–20	3,699	191 (5.2%)	193 (5.2%)
2020–21	6,258	221 (3.5%)	245 (3.9%)
2021–22	3,970	87 (2.2%)	227 (5.7%)
2022–23	1,956	65 (3.3%)	95 (4.9%)
2023–24	2,484	152 (6.1%)	122 (4.9%)

Consumer complaints

Consumer concern about inaccurate fuel dispensers is reflected in the complaints to the NMI about potential breaches of trade measurement law, of which almost two-thirds

relate to allegations of short measure from fuel dispensers (liquid and gas). Only 34 (11.3%) of the 300 fuel-related complaints received in 2023–24 were justified when investigated, consistent with results in previous years.

Year	Total complaints received	Fuel (liquid and gas) complaints	Fuel complaints justified (consumer disadvantage)
2019–20	651	403 (62%)	14 (3.5%)
2020–21	449	260 (58%)	17 (6.5%)
2021–22	536	372 (69%)	16 (3.0%)
2022–23	507	349 (69%)	14 (2.8%)
2023–24	428	300 (70%)	17 (3.9%)

Public weighbridge and servicing licensee compliance

Public weighbridge operators and servicing licensees help build trust and confidence in the accuracy of measurements used to determine the trade value of goods. The NMI appoints:

- servicing licensees to verify the accuracy of trade measuring instruments
- public weighbridge licensees to ensure weighbridges available to the public operate within regulatory requirements.

Compliance and monitoring activities that help ensure the integrity of the licensing system include:

- audits of the quality systems of servicing and public weighbridge licensees
- audits of recently verified measuring instruments to confirm they were properly verified.

We also monitor servicing licensee compliance through:

- auditing test reports submitted for complex instrument verifications
- requiring licensees to report their measuring instrument verifications
- ensuring licensees have the relevant licence subclass to verify measuring instruments
- confirming verifications are performed by verifiers who hold appropriate competency for specific instrument types.

Licensing enforcement actions in 2023-24

Enforcement action	Number issued
Non-compliance advice email	48
Warning letter	5
Enforceable undertaking	1



Compliance of pre-packaged goods

In 2023–24, trade measurement inspectors examined 61,263 lines of pre-packaged goods (236,163 individual packages) to determine whether they:

- contained the correct amount (weight, volume or units) of product as displayed on the label
- displayed sufficient measurement marking (for example, weight, price per kilogram, total price for the product) in the correct format and position

- included correct packer identification (name and street address of packer if packed in Australia).

Most discrepancies detected in pre-packaged goods are typically small and are often quickly resolved following advice from the trade measurement inspector.

Year	Pre-packaged lines inspected	Individual packages inspected	Lines with short measure	Lines with non-compliant labelling
2019–20	78,290	203,320	1,269 (1.6%)	2,243 (2.9%)
2020–21	25,990	100,139	1,194 (4.6%)	1,125 (4.3%)
2021–22	17,360	59,862	678 (3.9%)	851 (4.9%)
2022–23	29,966	107,065	1,848 (6.2%)	1,844 (6.2%)
2023–24	61,263	236,163	1,928 (3.2%)	2,815 (4.6%)

Among the categories of pre-packaged goods, meat and seafood consistently have the greatest proportions of products with

short measure. However, in recent years there has been considerable variation among the other categories.

Most common pre-packaged goods with short measure, 2023–24

Product type	Pre-packaged lines inspected	Individual packages inspected	Lines with short measure
Seafood (fresh)	536	1,605	53 (9.9%)
Ready-to-eat/cook meals	838	3,501	53 (6.3%)
Meat (processed)	2,107	7,709	132 (6.3%)
Meat (fresh, excluding seafood)	8,683	26,376	514 (5.9%)
Dairy (cheese)	3,138	10,424	176 (5.6%)

Working with government agencies to support the efficient delivery of programs

The NMI uses its national footprint of trained and skilled trade measurement inspectors to deliver efficient marketplace audit programs for the Australian Government. In 2023–24, the NMI worked with:

- the Department of Health and Aged Care (DoHAC) to deliver a Tobacco Plain Packaging (TPP) Inspection Program
- the Department of Climate Change, Energy, the Environment and Water (DCCEEW) to support the delivery of the National Fuel Quality Monitoring Program.

Tobacco Plain Packaging

The NMI supports DoHAC in the administration and enforcement of the *Public Health (Tobacco and Other Products) Act 2023*, and the now repealed *Tobacco Plain Packaging Act 2011* through a Memorandum of Understanding (MOU). Under the MOU, NMI Inspectors undertake monitoring, compliance, and enforcement activities, including information visits and complaint investigations. During the 2023–24 financial year, NMI officers carried out a total of 1,061 proactive and reactive site visits.

Fuel Quality Monitoring Program

The NMI supports the delivery of the National Fuel Quality Monitoring Program on behalf of the Liquid Fuel Operation and Analysis Branch, a section of DCCEEW. The program is administered under the *Fuel Quality Standards Act 2000* through an operational agreement. Under the agreement, NMI trade measurement inspectors were appointed as fuel quality standards inspectors. They completed fuel site inspections and sampling activities to assess the quality of liquid fuels throughout the Australian supply chain.

During the 2023–24 financial year, NMI fuel quality inspectors completed 722 fuel quality site audits and submitted 903 liquid fuel samples for analysis.

Of the 722 suppliers audited:

- 699 (96.8%) were compliant
- 23 (3.2%) were non-compliant.

Of the 23 suppliers that were non-compliant:

- 13 failed due to the fuel samples not conforming with the fuel quality standards
- 10 did not have adequate ethanol labelling information.

Of the 903 liquid fuel samples analysed during the 2023–24 financial year, 13 (1.4%) were non-compliant. Non-compliant suppliers were advised of the audit outcome and measures to ensure they comply with the fuel quality standards and fuel quality information standards.



Terminology

- **Audit** – to check that businesses are complying with the *National Measurement Act 1960* and its regulations.
- **Compliance** – when non-compliance with the measurement legislation is neither identified nor detected.
- **Consumer advantage** – the error has resulted in the consumer getting more than what they paid for.
- **Consumer disadvantage** – the error has resulted in the consumer getting less than what they paid for.
- **Fit for purpose** – the measuring instrument is suitable to complete the task that it has been assigned. For example, a counter scale in a supermarket has the correct instrument class, type approval and scale increment to accurately measure deli products.
- **Maximum permissible error** – the value of the largest allowable error.
- **Measuring instrument** – a device used to measure a physical quantity. This could be a shop scale used to determine the weight of sausages at a deli, or a petrol pump used to determine the number of litres of fuel sold.
- **Pre-packaged goods** – a single item made up of a product and packaging that has been prepared and offered for sale.
- **Represented** – the way something is shown or described on a package
- **Risk-based approach** – the NMI prioritises its compliance activities to focus on issues that have the greatest potential to cause harm to consumers or industry.
- **‘Stop the clock’** – the statutory timeframe stops in certain instances, for example, when the NMI is waiting for information from an applicant.
- **Trial purchase** – when auditing a business that sells products over the counter using a scale, NMI trade measurement inspectors may purchase a product before identifying themselves to the trader. This allows the inspectors to determine if the businesses are, for example, correctly operating scales and allowing for the weight of packaging.
- **Verify** – reference standards of measurement are used by trade measurement inspectors and verifiers to check and verify measuring instruments.



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