Australian Government
Department of Agriculture, Fisheries and Forestry

Microbiological sampling and testing policy:

Requirements for export registered dairy manufacturing establishments

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Acknowledgement of Country

We acknowledge the continuous connection of First Nations Traditional Owners and Custodians to the lands, seas and waters of Australia. We recognise their care for and cultivation of Country. We pay respect to Elders past and present, and recognise their knowledge and contribution to the productivity, innovation and sustainability of Australia's agriculture, fisheries and forestry industries.

Contents

Background

The Department of Agriculture, Forestry and Fisheries (the department) is Australia's competent authority for the regulation of prescribed dairy products intended for export under the following legislation:

- The Export Control Act 2020 (the Act), and
- The Export Control (Milk and Milk Products) Rules 2021 (the Rules)

In implementing the export legislation, the department has developed this policy to clearly define the requirements and expectations for sampling and testing that apply consistently to all export registered dairy manufacturers. This includes finished product pathogen testing, environmental monitoring and water sampling.

The policy requirements are based in general on the Australia New Zealand Foods Standards Code (the Code), in particular:

- Standard 4.2.4 (Primary production and processing standard for dairy products),
- Standard 1.6.1 and Schedule 27 (Microbiological limits in food), and
- The Compendium of Microbiological Criteria for Food (the Compendium).

Australian manufacturers of dairy products need to comply with domestic sampling and testing requirements enforced by their applicable jurisdiction regulator. Domestic testing requirements are also based on the Code and are therefore mostly similar across jurisdictions and recognised as applicable to both domestic and export manufacturers. Manufacturers of dairy products intended for export have a responsibility to demonstrate that the sampling and testing programs in place are sufficiently robust, clearly documented and show that importing country requirements have been met where applicable (noting that some importing countries may have different sampling and testing requirements compared to Australia). Product contamination events and deficiencies in sampling and testing programs can have extreme and damaging consequences to both consumer health and safety as well as market access opportunities for Australian dairy products. All export registered dairy manufacturing establishments are therefore required to have a sampling and testing program included within their documented Approved Arrangement (AA) with the department that meets the expectations outlined in this policy.

Scope

This policy covers the following aspects of export sampling and testing requirements:

- Finished product pathogen testing – this is a mandatory requirement that applies to all types of prescribed dairy products (excluding commercially sterile products) that an export registered establishment is approved to manufacture for export.
- Environmental monitoring – this is a mandatory requirement that applies to all export registered dairy manufacturing establishments.
- Water sampling – this is a mandatory requirement that applies to all export registered dairy manufacturing establishments.

Summary of key requirements

The dot points below provide a summary of some of the key requirements under this policy that you need to be aware of as an export registered dairy manufacturer. It is important that you review the full details of all requirements outlined in this section to ensure that your finished product testing program clearly documents how you will meet export requirements.

- You need to conduct routine finished product pathogen testing of each category of prescribed dairy products that your establishment is export-approved to manufacture. For example, if your establishment is export-approved to manufacture soft cheese, hard cheese and yoghurt, then you would be expected to conduct routine finished product pathogen testing for each of these product categories.
- At minimum, finished product pathogen testing requires 5 samples be collected from a single batch of each export-approved product category at a frequency of once each fortnight. This fortnightly frequency applies when a product category is in regular production and may vary when production is more irregular.
- Samples must be collected from product that has completed the manufacturing process and been packed into its primary packaging (this may vary for products that are packed into bulk containers). It is recommended as good practice to collect samples at intervals across the duration of a batch's production run, as this gives a sample set that is more representative of the full batch.
- Composite testing is only suitable for qualitative tests, not quantitative tests.
- You must test for and report results for the pathogens defined in the Code (or by an importing country), relevant to the products you make. Your manufacturing processes may present a higher risk for certain pathogens, so you must also consider additional testing that may be applicable from your operational risk assessments.
- Failed pathogen results can trigger product withdrawals, recalls and pathogen clearance programs.
- You must notify the relevant state and federal regulators, including the Department of any failed pathogen result from finished product testing as soon as possible. This includes any testing results that show an importing country requirement has not been met.
- You must have a suitable environmental monitoring program in place that has been developed to target the environmental pathogen risks applicable to your establishment by considering its structure, layout and operations.
- Water used within the establishment (including for production purposes such as boilers, steam and ice, as well as cleaning and sanitation purposes) must be potable. You must collect water samples from around your establishment on a monthly basis for testing by a NATA accredited laboratory to confirm the absence of detectable E. Coli in 100 ml of water.

Section 1 – Finished product pathogen testing

Common acronyms and definitions

Table 1. Common acronyms

Acronym	Expansion applicable in this policy
AA	Approved Arrangement (export)
FSANZ	Food Standards Australia New Zealand
HACCP	Hazard Analysis Critical Control Points
IANZ	International Accreditation New Zealand
Micor	Manual of Importing Country Requirements
NATA	National Association of Testing Authorities
NEXDOC	Next Export Documentation system
PGL	Prohibited Goods List
SRA	State Regulatory Authority
Units of Measurement	
mg	Milligrams
g	Grams
kg	Kilograms
ml	Millilitres
L	Litres
cfu	Colony forming units
MPN	Most probable number

Definitions

Finished product:

Finished product refers to the product that is produced at the end of a manufacturing process, where all steps including packaging have been completed. Finished dairy products may be:

- Sold as is to end consumers,
- Used as ingredients for further processing (including bulk dairy products intended for downscale packing into smaller units), or
- Made from other finished dairy products (e.g. cut or shredded cheese made from pre-made cheese blocks, or milk powder sachets filled from pre-made bulk milk powder bags).

Products not for human consumption:

Products not for human consumption are those that are not intended for or not fit for human consumption as food in their current state. This includes but is not limited to manufacturing grade products that require further processing, and products intended for animal consumption (e.g. pet food or stock food). Controls for products not for human consumption must be in place and documented in your AA, including protection/segregation and clear labelling to identify that they are not for human consumption. You are not required to conduct finished product pathogen testing for these products intended for export, unless specified by an importing country.

Product category:

A product category is a type/family of products that share the same general characteristics and are made by the same general processing methods. For example, cheese can be separated into several product categories given the diversity of product characteristics and processing methods. Different flavour varieties of the same product type belong to one product category. You can find more information in the Compendium the grouping of products into categories/types for testing purposes.

Processing line:

Under this policy, a processing line is defined as a distinct manufacturing process that generates a category of finished dairy products. Each processing line will have corresponding hazards that are identified and managed through a HACCP plan. A processing line may be used to manufacture different flavour varieties or pack sizes of the same product category (e.g. flavoured yoghurt or plain yoghurt, packed in 200gm tubs or 1kg tubs).

Batch:

A product batch or lot is defined in Section 1-5 of the Rules as a quantity of dairy products of the same kind processed or packed under essentially the same conditions during a particular time interval (usually not exceeding 24 hours) and usually from a particular processing or packing line.

Under this definition, two products come from the same batch/lot if they are both manufactured on the same processing line within a 24-hour period, without any form of changeover occurring to

separate the batches. It is noted that some continuous processes may extend beyond 24 hours without changeover, such as powder spray drying.

Testing frequency

It is acknowledged that testing frequencies for different product categories are referenced in the Compendium. These frequencies have been adopted partly or in full by most state and territory food regulatory authorities for Australian domestic dairy manufacturers. To determine a default testing frequency for export registered dairy manufacturing establishments, the department has considered these domestic testing frequencies alongside general expectations from importing countries to support food safety assurance and market access. If you are preparing products for export to a certain overseas market that requires testing at a higher or different frequency than the department's default frequency, then you will need to test according to the importing country's required frequency.

The default frequency of finished product pathogen testing for export registered dairy manufacturing establishments is fortnightly – this means that each fortnight, you will be expected to test at least one batch from each of the dairy product categories that your establishment is approved to manufacture for export. It is important to note that "export-approved" product categories are those that the department has approved the establishment to manufacture for export. These products may be intended for export as is or supplied to another export registered manufacturer as export-eligible dairy ingredients. You may or may not be exporting these products directly from your establishment, but these products still have the option of being exported when they remain in the export chain (i.e. when they are only handled/stored by export registered establishments and declarations have been raised to attest that the products meet export requirements).

Under this policy, you are not required to test every batch or every flavour/pack size from a product category made each fortnight. It is expected as good practice to rotate your sampling across your different varieties from a product category over a period of time. When determining your rotational sampling schedule, you should consider sampling from higher-risk varieties more frequently to ensure your testing program is serving its purpose to verify the ongoing effectiveness of your HACCP controls and operational hygiene. Details of your testing frequencies must be clearly captured in your documented finished product testing program.

Irregular production and alternative testing frequencies

If your establishment has a break in the regular manufacturing of a dairy product category, then you will be expected to test the first batch made from that category once production resumes and continue with fortnightly testing of that product category thereafter. Elevated environmental monitoring may be expected during extended breaks in production to verify that hygiene of the processing area is being maintained. If your establishment only manufactures dairy products occasionally, or if those products are not usually made with the intention of being eligible for export purposes, it is acknowledged that the default fortnightly testing frequency may not be practical. In those circumstances, you may propose an alternative testing frequency for the department to consider. To support your proposal, you will need to justify with sufficient evidence that the

alternative approach will still deliver the required assurance that your export approved processing lines are being adequately monitored for relevant microbiological hazards.

Sampling requirements

Sample collection point

All samples collected for finished product pathogen testing must be taken from the end of the processing line (i.e. from finished product that has fully completed its manufacturing process and is packaged in its primary packaging). For products that require incubation or maturation over a period of time before the product is in its final form (e.g. fermented milk products, cheeses), samples for finished product pathogen testing must be taken after these processes are complete and the product has been packed into its final packaging. Additional in-process sampling of products that are undergoing or pending maturation is optional, but can be beneficial to assist in the identification of likely points of contamination for manufacturing processes with extended durations.

In-line sampling, where the sample is collected while production is still occurring, is only permitted in circumstances where the product category is packed in to bulk receptacles (e.g. pallecons or bulky bags). If taking in-line samples, it is essential that samples are collected during the latest possible processing step prior to sealing the bulk receptacles (e.g. filling step), so that the product is in its final processed form with minimal risks of further contamination. Your sample collection points must be clearly explained in your documented finished product testing program.

Sample number and size

The required number of samples and size of each sample is referenced in the Code and Compendium and may vary depending on the product or test type. Common pathogen tests require at least 5 samples of 25g/ml per sample. If an importing country specifies a greater number or size of samples are required for testing your product types, then you must sample in accordance with those requirements for your products to be eligible for export to that market. If a test requires multiple samples, you must take all samples from the same batch to ensure the test result is representative of that batch. It is not permitted to mix samples from different batches to make up the required minimum of samples to perform the test. Your documented finished product testing program needs to clearly describe the number and size of samples you need to collect for the different tests required.

Composite sampling

It should be clear in your documented finished product testing program when you are using composite sampling and non-composite sampling. Composite sampling means to combine smaller samples (from the same batch) to create one larger sample. The composite sample is analysed by the laboratory as a whole, instead of each smaller sample being analysed individually. Composite sampling is suitable only when the testing method and acceptable limit allow for this kind of sampling. Qualitative tests determine the presence or absence of a target microorganism within a sample, so composite sampling is usually acceptable for these types of tests. For example, when testing a batch for Listeria monocytogenes (L. monocytogenes) and Salmonella species where the acceptable limit is “not detected” in 25g, a composite sample made of at least 5 x 25g sub-samples from that batch can be used for this test.

On the other hand, quantitative tests determine the number or concentration of microorganisms in a given sample volume to assess if the acceptable limits have been met. Composite sampling is not appropriate for quantitative tests. A common example is Escherichia coli (E. coli) testing, which has an acceptable limit related to the allowable number of E. coli bacterial cells present in each sample. Samples for these types of tests must be analysed individually to determine how many bacterial cells or colony-forming units are detected in each sample, with results reported against each sample.

Relevant pathogens

Your documented finished product testing program must clearly identify which pathogens you are testing each of your dairy product categories for, and what the acceptable limits are for each pathogen. You should refer to Schedule 27 of the Code for the list of microbiological testing relevant to different dairy products. Standard 1.6.1 of the Code provides context on how to interpret the table in Schedule 27, Microbiological limits for food (Standard 1.6.1 and Schedule 27) | Food Standards Australia New Zealand. The Compendium further expands on applying the testing principles and requirements from the Code to your product range, Compendium of Microbiological Criteria 2025.pdf. Some importing countries and customers may also specify particular pathogens or indicator microorganisms that they require you to test for, which may be additional to the minimum regulatory testing requirements. Even if there are no specific pathogen testing requirements identified in the regulatory materials for your particular product types, you are expected to still undertake finished product testing that may be applicable to your products based on the manufacturing processes, target organisms and associated levels of risk.

Laboratory testing and reporting requirements

You must specify in your documented finished product testing program when product testing will be performed by an accredited laboratory (i.e. NATA, IANZ or an alternative accreditation approved by the department). If the product is intended to be exported with a government certificate that makes a statement on the product being free from microbial contamination, then you must use an accredited laboratory to conduct product testing to justify this statement (as per Section 2-15 of the Rules). Your documented program must also identify the testing methods that will be used. Methods must be consistent with the Australian/New Zealand Standards, the Code and any importing country requirements if applicable (as per Section 11-11 of the Rules).

The test method needs to generate results that demonstrate whether the acceptable limits for that test have been met. The units of measurement when testing and reporting results must also be consistent with those specified in the Code (or importing country requirements). If there are any differences, then your documented program must explain how the different units of measurement have been determined as equivalent or better at demonstrating whether the acceptable limit has been met. An example is E. Coli testing – the Code typically defines the unit of measurement for E. Coli as cfu/g, however there may be other units of measurement that are considered equivalent or more sensitive, such as MPN/g.

You need to maintain robust official records of finished product testing results. You will be expected to show these records on request at audits, or when required for other purposes such as to obtain export certification or in response to requests from importing country authorities. When testing has

occurred at an accredited laboratory, in some circumstances you may be asked to present the test report issued by the laboratory (instead of a certificate of analysis issued by the establishment).

Importing country and customer testing requirements

Some importing countries may specify finished product testing requirements for your dairy products that exceed the Australian minimum regulatory testing requirements. In these cases, you must test in accordance with the more intensive requirements. If you have a more intensive testing program in place that exceeds the minimum regulatory requirements, then your testing program should also satisfy the requirements of importing countries that have testing criteria that is equally or less intensive. If a customer or importing country does not specify any testing requirements for your dairy products, you must still meet the minimum testing requirements under Australia's export legislation and this policy.

If you have specific additional customer requirements that exceed Australian and importing country requirement for finished product testing that is included, then the expectation is that you also meet those requirements as well.

There is an expectation that export establishments that manufacture prescribed goods for exports are aware of and implement finished product testing requirements including those that are specific to a certain country. The department's Manual of Importing Country Requirements (Micor) is a useful resource, but there may be other testing requirements that are described on the importing country's official website or standards. It is also recommended to check with your importer to confirm any additional testing requirements for the products to be successfully imported to the destination country.

It is important to be aware that importing countries may conduct their own testing of imported food products, as part of pre-border clearance, random verification or targeted monitoring. Importing countries may use different testing methods or target different microorganisms or compositional/quality criteria in their testing. If your products are found to not meet the specifications, the importing country may decide to take further actions in response to the findings. This could include requesting evidence of corrective action from the manufacturer, temporary or permanent suspension of imports from that manufacturer, or by extension, from all other Australian manufacturers. Your importer can help you understand any border or in-country testing that may be applicable to your products.

Responding to unacceptable product testing results

Failed pathogen results and notification requirements

If any finished product pathogen test demonstrates that the acceptable limit for that pathogen has been exceeded, this is considered a pathogen failure. If the test result indicates a pathogen failure, re-testing the batch will not change or negate this result. Results may only be considered inconclusive and require re-testing if the laboratory has notified you in writing of a testing error with evidence to support this.

When you receive a failed pathogen result from finished product testing, you must notify your state food regulator as per their notification requirements. You are also required to notify the department in writing as soon as possible, within 24 hours of receiving the failed result. This notification is

required for any product that you manufacture in your export registered establishment, whether intended for export or domestic use. Failing to notify the department of unacceptable pathogen results is considered a critical non-compliance and may attract serious sanctions, including the possible revocation of your approval to manufacture dairy products for export. Your establishment's history of pathogen detections and associated responses and notifications may also be scrutinised by importing country authorities during delegation audits.

Corrective actions and pathogen clearance programs

Your AA must describe in detail how your establishment will implement a pathogen clearance program – this is the sequence of general steps and investigative pathways that will be followed through to completion in the event of a pathogen failure. A pathogen clearance program is designed to assist the manufacturer in preventing the further production and distribution of contaminated product, isolating the source of contamination through comprehensive investigation, taking appropriate corrective and preventative actions, and verifying the effectiveness of those actions through a period of enhanced clearance testing. You can find details on the principles and expectations for implementing an effective pathogen clearance program in the Compendium as well as resources available on SRA websites (e.g. dairy pathogen manual, pathogen management guidelines) -examples include Compendium of Microbiological Criteria 2025.pdf and Pathogen manual final.pdf. Following the FSANZ guidelines, you may also need to initiate your establishment's product recall or withdrawal program depending on the nature of the contamination and the distribution of affected product.

As pathogen failures are notifiable incidents that can have significant consequences to consumer health and market access, your regulator will be actively involved in monitoring your response to the incident. You will be expected to provide documented evidence of your investigation outcomes (including root cause analysis), actions taken and verification to demonstrate effective resolution and prevention of recurrence. The regulator may also conduct additional targeted audits of your establishment during and after the investigation and pathogen clearance program to ensure the corrective actions are effective.

Controls applied to export certification processes following a pathogen detection

To protect the health and safety of overseas consumers as well as market access with Australia's trading partners, the department has a responsibility to take all reasonable precautions to prevent the export of food products that may be unsafe or do not comply with importing country requirements. This includes applying requirements for additional evidence to be submitted to the department for review before export certification can be issued. To manage this, the department uses a tool in the Next Export Documentation (NEXDOC) system called the Prohibited Goods List (PGL).

When notified of a pathogen failure, the department will contact you to gather any additional details required. You will be asked to provide information relating to the identity of confirmed affected products, other products that could be at risk (e.g. from the same processing line or shared processing equipment/areas, generated by-products or products that are intended to be used as ingredients), as well as the status of affected and potentially affected products (including any completed, in-progress or planned exports). It is essential that you provide this information promptly

when requested to ensure the PGL can be set up as specifically as possible to only target the products that need to be controlled (rather than an unnecessarily broad group of products).

Any product batch that has returned test results that fail to meet Australian acceptable limits will be prohibited from being exported to any market and you will not be able to obtain export certification for the product. If a product has failed to meet additional limits specific to an importing country, the product will be prohibited from export to that country. You may still export the product to other markets provided it meets the associated requirements.

Typically, these requirements will also be applied as a precaution through the PGL to products that may be potentially affected, such as batches made on the same processing line since the contamination incident occurred up until the pathogen clearance program is successfully completed. When these precautionary requirements are applied, you will still have the opportunity to export those products provided you can demonstrate the requirements have been met. Common requirements applied for products placed on the PGL include:

- The requirement to test each batch of affected product made during a set period through a NATA accredited laboratory for the pathogens specified. The results must show compliance with the Australian regulatory sampling criteria and acceptable limits (and any applicable importing country requirements). In most cases company-issued certificates of analysis will not satisfy this requirement, and you will need to have the laboratory report issued by the NATA accredited laboratory.
- Other records that demonstrate specific export requirements or process controls are being effectively implemented, such as receival records, production records, dispatch records, transfer documents and manufacturer declarations of compliance.

The department will advise you in writing of what requirements are applicable to your products, and it is your responsibility to inform your exporters of the requirements to minimise potential disappointment and disruptions to planned export consignments. The exporter will need to supply the necessary evidence to satisfy the requirements at the time they request export certification through NEXDOC. The details on those documents must clearly link to the batches that are planned for export (e.g. correct batch details, manufacturing dates etc). When exporting products affected by PGL requirements, exporters should ensure that requests for export certification are lodged at least 3 business days prior to the planned date of departure to allow sufficient time for the request to be assessed by the department. The department will review the documentation and authorise the request for export certification if the requirements have been met. If the requirements are not met, then export certification will not be granted for that consignment, and it will not be eligible for export.

The review of documentation to assess PGL-affected consignments attracts a fee-for-service in accordance with the department's charging guidelines, which is charged to the manufacturing establishment as the registered entity that the requirements have been applied to. The requirements will remain in place until such time the department notifies you in writing that they have ceased. It is therefore in your company's best interests to engage proactively with the regulator while working through your pathogen clearance program to reach a successful resolution as soon as possible.

Section 2 – Environmental monitoring

Benefits of environmental monitoring

Export registered dairy manufacturing establishments are expected to have an environmental monitoring program in place and clearly documented in the AA. An environmental monitoring program is used to verify that an establishment's controls around cleaning, operational hygiene and maintenance are effective at preventing contamination of the food from the environment. Environmental monitoring is intended to facilitate the early identification of potential contamination sources so that establishments can take action before product contamination occurs. While it is acknowledged that environmental monitoring brings additional testing costs to a business, the preventative benefits of a robust monitoring program can significantly outweigh the costs when compared to responding to a product contamination incident.

Designing an environmental monitoring program

You can find useful guidance in the Compendium and other SRA pathogen management resources on the principles of designing an environmental monitoring program that is fit-for-purpose. For an environmental monitoring program to provide the most value, it should be tailored to target microorganisms that are relevant to your establishment and its activities and products. An environmental monitoring program often involves testing for a combination of indicator organisms as well as pathogen species, and you may target different types of organisms at different sampling locations and frequencies based on likely risks and environmental conditions at those locations. The acceptable limits for indicator organisms will be different compared to pathogen species.

Your environmental monitoring program should focus most on the areas of highest risk for product contamination (e.g. surfaces that are hard to clean and provide conditions where microorganisms can grow, and that may come into contact with products directly or indirectly). It is also important to consider the establishment's layout and operational flow, where the movement of people and materials from different locations could create opportunities for contamination to be transferred to processing areas. The Compendium and other SRA pathogen management resources describe the use of zones (e.g. zones A, B, C & D) as a risk-based method to determine where to collect environmental samples from within the establishment. You may identify many feasible sample points within each zone, so conducting rotational sampling can help expand your coverage across the different zones without needing to test every point each time.

The frequency of environmental sampling and the number of samples collected should also be linked to the contamination risk. Higher-risk areas should be sampled more frequently than low-risk areas, however low-risk areas should not be fully ignored or excluded from the program. When determining your environmental sampling frequency, it is important to consider the proposed frequency against the purpose of why you are conducting environmental monitoring. For example, if you are only sampling your high-risk areas once every 6 months, you are only obtaining a single point-in-time result, rather than regular trends that allow you to proactively monitor the hygiene of the environment on an ongoing basis. It can also be more difficult to respond to a pathogen detection in the environment and isolate the likely cause if you are not sampling regularly.

Responding to unacceptable environmental testing results

If your environmental testing returns a result that does not meet your defined acceptable limits, then you will need to investigate for potential risks to products and deficiencies in operational hygiene systems and take corrective and preventative action to address those concerns. Your AA needs to explain the general corrective action steps that your establishment will follow in the event of a failed environmental test result. Expectations on the approach to taking corrective actions are explained in the Compendium and SRA pathogen management resources, including how these actions may differ depending on the sample location and type of organism tested.

When responding to an unacceptable environmental testing result, it is important to investigate as the first step. This allows you to consider the extent of the contamination and potential root causes before taking action. It is therefore not appropriate to proceed immediately to re-cleaning and re-swabbing without conducting any kind of investigation beforehand. For environmental detections of microorganisms that may be pathogenic (e.g. certain species of Listeria or Coliform bacteria), it is essential as part of the investigation to confirm whether the species present are pathogenic.

For failed environmental pathogen results in high-risk areas (i.e. food handling areas), you must notify your SRA and the department in writing within 24 hours of receiving the result. This includes failed presumptive results and confirmation results. Notification is not required for indicator or non-pathogenic failures, or for any result that does not affect high-risk areas, as the establishment is still expected to investigate and take appropriate corrective and preventative actions.

If you believe that a traditional environmental monitoring program is not appropriate for your establishment, you can contact your SRA and the department to propose an alternative approach for verifying your cleaning and operational hygiene. You will need to justify, with sufficient evidence and historical data, that your alternative approach will still deliver the required assurance that your cleaning and operational hygiene practices are being adequately verified as effective to minimise environmental contamination risks. Importing countries may also have expectations and requirements around environmental monitoring, and if you are preparing products for export to those markets, then you will need to meet those requirements.

Section 3 – Water sampling

Water sourcing and potability

As per section 5-4(7-8) of the Rules, water used at your establishment for food processing purposes must be potable. This includes water used as an ingredient or to make steam/ice that may come into contact with food, as well as water used for cleaning and handwashing in food processing areas. You must have evidence to demonstrate that your establishment's water is potable, and you must describe how you will obtain this evidence in your AA. Any use of non-potable water at the establishment must be documented in your AA and risk assessed to ensure that it is used only for purposes that do not present a contamination risk to food.

If you use a town water supply, you are not expected to conduct additional testing to verify the physical/chemical properties of your water, as your water supplier is obligated to provide water that meets potability requirements. If you use water from other sources (e.g. rainwater, bores, rivers) for food processing purposes or for cleaning of food equipment and fixtures, then you will need to do your own treatment and testing of your water to demonstrate potability and acceptable physical/chemical properties in accordance with the Australian Drinking Water Guidelines. You must document this as part of your AA and include a risk assessment that considers relevant factors affecting your water supply, such as location, fluctuating environmental conditions, water hardness and proximity to agricultural or industrial run-off sources to demonstrate that your treatment and testing program is appropriate for your circumstances. It is recommended to consult with an expert from your local water authority to gain a thorough understanding of your water sources, most suitable treatment methods and applicable testing criteria. Your documented program also needs to include activities for verifying that your water treatment activities are working as required, and how you will react if there are any deviations. Common examples include pre-operational checks to confirm that UV sterilisation systems are functioning, or that pH or chlorine levels are within acceptable limits. A heavy rainfall event could dilute chemical treatments, so it is important to consider how you will react to environmental changes as well as structural or operational changes.

Monthly water sampling and testing

To meet export requirements under sections 5-4(9) of the Rules, your establishment's potable water must be routinely tested for E. coli. The purpose of this testing is to verify the hygiene of your water outlets and onsite water supply infrastructure, as well as the effectiveness of any water treatment conducted to remove microbiological contaminants. As part of your documented water testing program, you must identify all potable water outlets that are accessible for sampling (e.g. hoses and taps, sinks including handwashing stations). You are required to submit samples for E. coli testing to a NATA accredited laboratory every month. If you have more than one water outlet, you do not need to sample all of them every month. You can rotate your monthly sampling between water outlets to ensure each water outlet is sampled and tested at least once per year, however it is good practice to sample your highest-risk water outlets more often. As specified under section 5-11 of the Rules, potable water samples must contain no detectable E. coli per 100 ml.

Responding to unacceptable water testing results

Your AA must clearly document how you will meet export water sampling requirements, including any corrective actions that are to be taken in the event of an unacceptable result. Taking another sample from the same location and obtaining an acceptable result does not negate the initial result of concern, which should always be investigated as the first step. The investigation is necessary to determine the likely cause of the contamination and to confirm if any product may be potentially affected. If your investigation suggests that product may be affected, you must notify the department within 24 hours. You may need to initiate your pathogen clearance program in response to a failed water result where product may be affected.