## **Proposed changes to Level 3 Distribution System Rules**

Where we propose a change to the rule type and reporting and compliance periods, we have made the text red to signify the change.

Existing Rule number	Existing requirement	Existing parameter	Proposed rule number	Proposed requirement	Proposed parameter	Explanation	Question	Cost implications	
N/A			D3.PM Pre	D3.PM Pressure monitoring rules					
N/A	N/A	N/A	D3.PM.1	Continuous monitoring for pressure must be installed in all supplies (except trickle feed supplies)—  (a) in each distribution zone at a site that is representative of normal distribution zone pressure; and  (b) at a site that is representative of the lowest pressure within the distribution zone.	Assurance CP: 1 Year RP: 1 Year	This proposed rule would require continuous monitoring in distribution zones (excluding trickle feed supplies).  We understand that many suppliers are already monitoring pressure in their distribution zones. This is considered good practice as a drop in pressure is an indicator of potential ingress of contamination. Evidence exists that low pressure events can lead to contamination of water supplies which may cause significant illness outbreaks.  We propose that a supplier must monitor at a site representative of normal distribution zone pressure and at a site representative of the lowest pressure.	Do you agree with the proposal to require continuous monitoring of pressure in distribution zones?  Do you agree with the requirements of the proposed rule?  Do you currently have pressure monitoring in place in any of your distribution zones?  Are there any cost implications for you of this proposed change?	There will be costs for suppliers that have not installed pressure monitoring in their networks.	
N/A	N/A	N/A	D3.PM.2	Supply pressure must be—  (a) at least 150 kPa for 85% of each day; and  (b) no lower than 100 kPa at any time.	Monitoring CP: 1 Month RP: 1 Month	This proposed rule sets out the pressure limits that suppliers would need to achieve in their distribution zones.  These limits have previously been used in New Zealand through the Ministry of Health's Public Health Grading of Drinking Water Supplies and the Fire Service Code of Practise. The limits are also consistent with pressure limits used internationally.	Do you agree with the proposed pressure limits in distribution zones?	Possible small costs for some supplies.	
D3 Backflow	Protection Rules		D3.BF Back	flow protection rules					
D3.1	Drinking water suppliers must prepare and implement a backflow prevention programme to protect their	Assurance CP: 1 Year RP: 1 Year	D3.BF.1	A written backflow prevention programme to protect a distribution system against the risk of backflow must be—  (a) developed; and	Assurance CP: 1 Year RP: 1 Year	This proposed change simplifies the formatting and wording of this rule.  The requirements of this rule have not changed.	N/A	N/A	

	distribution system against the risk of backflow.			<ul><li>(b) implemented; and</li><li>(c) recorded in writing.</li></ul>				
D3.2	Periodic surveys of backflow risks to a distribution system to determine medium and highrisk sites must be undertaken by the drinking water supplier at least once every five years to assess the adequacy of backflow protection across the distribution system.	Assurance CP: 1 Year RP: 1 Year	D3.BF.2	A survey of backflow risks to each distribution zone must be undertaken at least once every five years to—  (a) determine medium and high-risk sites; and  (b) assess the adequacy of backflow protection across the distribution system.	Assurance CP: 1 Year RP: 1 Year	This proposed change simplifies the formatting and wording of this rule.  The requirements of this rule have not changed.	N/A	N/A
D3.3	Where backflow requirements at a point of supply are deemed inadequate, the drinking water supplier must notify the local authority with details of the situation and risk, determine the backflow device that should be installed at the point of supply and ensure that it is installed in a timeframe commensurate with the risk but as soon as reasonably practicable.	Assurance CP: 1 Year RP: 1 Year	D3.BF.3	<ul> <li>Where backflow requirements at a point of supply are deemed inadequate, the drinking water supplier must—</li> <li>(a) notify the local authority with details of the situation and risk; and</li> <li>(b) determine the type of backflow device that should be installed at the point of supply; and</li> <li>(c) ensure the appropriate backflow device is installed in a timeframe commensurate with the risk but as soon as reasonably practicable.</li> </ul>	Non-reporting CP: N/A RP: N/A	This proposed change simplifies the formatting of this rule.  We also propose changing this rule from an assurance rule to a non-reporting rule.  We intend to develop guidance about testing backflow prevention devices.	N/A	N/A
D3.4	Testing of all testable backflow prevention devices installed at a point of supply specifically to protect the network (generally boundary devices) <sup>64</sup> must be undertaken, at least annually.	Assurance CP: 1 Year RP: 1 Year	D3.BF.4	All testable backflow prevention devices installed at a point of supply specifically to protect a distribution system (generally boundary devices) must be tested at least annually.	Assurance CP: 1 Year RP: 1 Year	This proposed change simplifies the wording and formatting of this rule.  The requirements of this rule have not changed.	N/A	N/A
D3.4 Footnote 64	Does not include devices that are installed downstream of the point of supply and/or within buildings that have the primary purpose of protecting building users.							
D3.5	A drinking water supplier must maintain a register of the location of all point of supply testable backflow protection devices, device types, assessed risk level and the results of testing of all devices.	Assurance CP: 1 Year RP: 1 Year	D3.BF.5	A drinking water supplier must maintain a register of all points of supply with testable backflow protection devices for each distribution zone, including at least the following information:  (a) location:  (b) device type:	Assurance CP: 1 Year RP: 1 Year	This proposed change simplifies the wording and formatting of this rule.  The requirements of this rule have not changed.	N/A	N/A

				(c) assessed risk level: (d) test results.				
D3.6	Access to a water network through use of a standpipe is not permitted except by Fire and Emergency New Zealand, other emergency services, the drinking water supplier, or authorised contractors to the drinking water supplier where it is reasonably necessary to access the network for the operation of the drinking water supply.	Assurance CP: 1 Year RP: 1 Year	D3.BF.6	A drinking water supplier must not permit access to a distribution system through use of a standpipe, except by any of the following people:  (a) employees of the supplier:  (b) agents or contractors of the supplier carrying out reasonably necessary work on the supply:  (c) Fire and Emergency New Zealand:  (d) other emergency services.	Assurance CP: 1 Year RP: 1 Year	This proposed change clarifies that a supplier must not permit access to a distribution system by individuals who do not have a genuine reason to access it.	N/A	N/A
D3 New and Rules	Repaired Watermains Hygiene I	Procedures	D3.HP Nev	v and repaired watermains hygiene procedu	re rules			
D3.7	Before carrying out or commissioning repairs to pipes in a water distribution system, a drinking water supplier must undertake and keep records of a risk assessment to determine the risk of contamination of the network and the procedures required to minimise that risk.	Assurance CP: 1 Year RP: 1 Year	D3.HP.1	Before carrying out or commissioning repairs to pipes in a distribution system, a drinking water supplier must—  (a) undertake a risk assessment to determine the risk of contamination of the distribution zone; and  (b) determine procedures required to minimise the risk; and  (c) record (a) and (b) in writing.	Assurance CP: 1 Year RP: 1 Year	This proposed change simplifies the wording and formatting of this rule.  The requirements of this Rule have not changed.	N/A	N/A
D3.8	All materials used in construction and repairs must be free of visible contamination and remain protected from contamination until installation	Assurance CP: 1 Year RP: 1 Year	D3.HP.2	<ul> <li>All materials used in construction and repairs in a distribution system must—</li> <li>(a) be free of visible contamination; and</li> <li>(b) remain protected from contamination until installation.</li> </ul>	Non- reporting CP: N/A RP: N/A	We propose changing this rule from an assurance rule to a non-reporting rule.	N/A	N/A
D3.9	All tools contacting the water supply or its parts, particularly cutting surfaces, must be adequately disinfected prior to commencing work and subsequently as necessary when tools contact soil or backfill material.	Assurance CP: 1 Year RP: 1 Year	D3.HP.3	All tools contacting any part of a distribution system must be adequately disinfected—  (a) prior to commencing work; and  (b) after contact with soil or backfill material.	Non- reporting CP: N/A RP: N/A	We propose changing this rule from an assurance rule to a non-reporting rule.	N/A	N/A
D3.10	Disinfection of mains (when required) must follow best management practices including but not limited to methods such	Assurance CP: 1 Year	D3.HP.4	Disinfection of mains pipes must follow best management practices including but not	Assurance CP: 1 Year	We have proposed minor wording changes.	N/A	N/A

	as tablet, slug, spray chlorination, or equivalent as appropriate.	RP: 1 Year		limited to methods such as tablet, slug, spray chlorination, or equivalent.	RP: 1 Year	The requirements of this rule have not changed.		
D3.11	Drinking water suppliers must develop and document standard operating procedures for planned, unplanned and emergency repairs.	Assurance CP: 1 Year RP: 1 Year	D3.HP.5	Standard operating procedures for planned and unplanned repairs in a distribution system must be—  (a) developed; and  (b) implemented; and  (c) recorded in writing.	Assurance CP: 1 Year RP: 1 Year	This proposed change simplifies the wording and formatting of this rule.  The requirements of this rule have not changed.	N/A	N/A
D3 Facilities (	D3 Facilities Operation, Maintenance and Disinfection Rules			lities operation/ maintenance and disinfecti	on rules			
D3.12	Drinking water suppliers that have storage facilities within a distribution system must prepare a water storage management plan for the operation of storage facilities which includes the minimum and maximum operating levels, target turnover rates, inspection, and cleaning.	Assurance CP: 1 Year RP: 1 Year	D3.FO.1	A drinking water storage management plan for a distribution system that includes storage must—  (a) be developed; and (b) be implemented; and (c) be recorded in writing; and (d) include at least the following—  (i) minimum and maximum operating levels:  (ii) target turnover rates:  (iii) inspection:  (iv) security measures:  (v) protection from contamination:  (vi) cleaning.	Assurance CP: 1 Year RP: 1 Year	This proposed change would require a drinking water storage management plan to cover security measures and protection from contamination, in addition to existing requirements.	N/A	Possible small costs for suppliers.
D3.13	All storage facilities must be subject to an annual security and contamination inspection and assessment by the drinking water supplier.	Assurance CP: 1 Year RP: 1 Year	D3.FO.2	Inspections of drinking water storage facilities in a distribution system must be carried out at least annually, and—  (a) identify of any points of potential ingress by contaminants; and  (b) identify any signs of actual security breaches and contamination incidents; and  (c) be recorded in writing.	Assurance CP: 1 Year RP: 1 Year	This proposed rule specifies what an inspection of drinking water storage facilities needs to cover.	N/A	Neutral
D3.14	Drinking water suppliers must prepare and use written disinfection procedures for storage facilities that are	Assurance CP: 1 Year RP: 1 Year	D3.FO.3	Disinfection procedures for drinking water storage facilities that are consistent with industry best management practices must be—  (a) developed; and	Assurance CP: 1 Year RP: 1 Year	This proposed change simplifies the wording and formatting of this rule.  The requirements of this Rule have not changed.	N/A	N/A

	consistent with industry best management practices.			(b) implemented; and (c) recorded in writing.					
D3.15	All new storage facilities, and existing storage facilities that have been drained for maintenance purposes, must be cleaned and disinfected and tested for <i>E. coli</i> prior to being brought (back) into use.	Assurance CP: 1 Year RP: 1 Year	D3.FO.4	All new drinking water storage facilities, and existing storage facilities that have been drained for maintenance purposes, prior to being brought (back) into use, must be—  (a) cleaned; and  (b) disinfected; and  (c) tested for <i>E. coli</i> .	Assurance CP: 1 Year RP: 1 Year	This proposed change improves the formatting of this rule.  The requirements of this Rule have not changed.	N/A	N/A	
D3.16	Divers' suits, rafts, remotely operated vehicles (ROVs) and other materials used during inspection, maintenance or other activities within storage facility interiors must be made from materials acceptable for contact with drinking water and suitable for disinfection.	Assurance CP: 1 Year RP: 1 Year	D3.FO.5	Divers' suits, rafts, remotely operated vehicles and other materials used during inspection, maintenance or other activities inside drinking water storage facilities must be made from materials acceptable for contact with drinking water and suitable for disinfection.	Non- reporting CP: N/A RP: N/A	We propose changing this rule from an assurance rule to a non-reporting rule.	N/A	N/A	
D3.17	All equipment and materials entering storage facilities must be disinfected immediately prior to entry according to industry best management practices.	Assurance CP: 1 Year RP: 1 Year	D3.FO.6	All equipment and materials entering drinking water storage facilities must be disinfected immediately prior to entry according to industry best management practices.	Non- reporting CP: N/A RP: N/A	We propose changing this rule from an assurance rule to a non-reporting rule.	N/A	N/A	
	Disinfection, Disinfection By-pro ent Metal Rules	duct, and	D3.RD Residual disinfection/ disinfection by-products and plumbosolvent metals rules						
Explanatory note in Section 4.11.4	Alternative FAC Continuous Monitoring Rules for Distribution Systems  Water suppliers may continuously monitor FAC in a distribution zone in accordance with rules D3.25 to D3.27 as an alternative to demonstrating compliance against rules D3.20 and D3.21.	N/A	D3.RD.1	FAC monitoring in a distribution zone must be undertaken in compliance with—  (a) D3.RD.3, D3.RD.4, D3.RD.5 for grab sampling; or  (b) D3.RD.3, D3.RD.6, D3.RD.7, D3.RD.8 for continuous monitoring.	Non- reporting CP: N/A RP: N/A	This rule has been rewritten to clarify the requirements for monitoring FAC in a distribution zone.  We propose retaining the option for suppliers to carry out grab sampling and continuous monitoring for FAC in distribution zones. There is an argument that continuous monitoring should be required for all distribution zones as it can give a real time indication of issues.  We are interested in your feedback on this issue.	Do you agree with the proposed rule on monitoring Free Available Chlorine (FAC) in a distribution zone?  Do you agree with meeting compliance requirements by using either continuous or grab sampling options?  Do you agree that continuous monitoring of FAC should be required for all distribution zones?	N/A	
D3.18	A written sampling plan for determinands to be sampled in relation to disinfection, disinfection by-products and	Assurance CP: 1 Year	D3.RD.2	A sampling plan for disinfection, disinfection by-products and plumbosolvent metals in a distribution system must—	Assurance CP: 1 Year	This proposed change simplifies the wording and formatting of this rule.	N/A	N/A	

	plumbosolvent metals must be prepared including a system map indicating sampling locations and response procedures to be followed when sample results do not meet prescribed levels.	RP: 1 Year		<ul> <li>(a) be prepared; and</li> <li>(b) be implemented; and</li> <li>(c) be recorded in writing; and</li> <li>(d) include— <ul> <li>(i) a system map indicating sampling locations; and</li> <li>(ii) response procedures to be followed when sample test results do not meet prescribed levels.</li> </ul> </li> </ul>	RP: 1 Year	The requirements of this Rule have not changed.				
D3.19	A FAC of at least 0.2 mg/L must be maintained in 85% of samples (or 85% of the time if continuously monitored). Up to 15% of samples (or 15% of the time if continuously monitored) may have a FAC of less than 0.2 mg/L but must be greater than 0.1 mg/L.	Monitoring CP: 1 Month RP: 1 Month	D3.RD.3	FAC must be maintained in each distribution zone to meet the following limits —  (a) FAC is at least 0.2 mg/L in more than 85% of grab samples or  (b) FAC is at least 0.2 mg/L for more than 85% of each day for all continuous monitoring and  (c) FAC is no less than 0.1 mg/L at all times for grab samples or continuous monitoring.	Monitoring RP: 1 Month CP: 1 Month	This proposed change simplifies the wording and formatting of this rule.  The requirements of this Rule have not changed.	N/A	N/A		
Table 35 Footnote 65  D3.20 Table 35	Samples must be collected for FAC at the frequencies outlined in table 35.65  Demonstrating compliance with this rule (D3.20) is not required if FAC is continuously monitored according to rules D3.25 to D3.27.  For Distribution zone population of <25,000, 3 samples per week, with maximum interval between samples of 4 days, with a minimum number of 5 days of the week used.  For Distribution zone population of 25,001-50,000, 4 samples per week, with maximum interval between samples of 3 days, with a minimum number of 6 days of the week used.  For Distribution zone population	Monitoring CP: 1 Month RP: 1 Year	D3.RD.4	Drinking water suppliers using grab sampling must prepare a FAC sampling schedule for each distribution zone to meet the sampling frequencies set out below  (a) for a distribution zone population of <25,000,—  (i) at least 12 samples analysed each month; and  (ii) no more than 96 hours elapsed between consecutive samples; and  (iii) samples collected on at least 5 different days of the week:  (b) for a distribution zone population of 25,001-50,000,—  (i) at least 16 samples analysed each month; and  (ii) no more than 72 hours elapsed between consecutive samples; and  (iii) samples collected on at least 6 different days of the week:  (c) for a distribution zone population of	Assurance CP: 1 Year RP: 1 Year	<ul> <li>Consolidates a rule, table and footnote into a single rule</li> <li>would require suppliers to prepare a FAC sampling schedule for each distribution zone which meets required sampling frequencies (monitoring requirements for FAC are set out in D3.RD.3)</li> <li>would change this rule from a monitoring rule to an assurance rule.</li> </ul>	N/A	Neutral		
	with a minimum number of 6 days of the week used					(iii) samples collected on at least 6 different days of the week:				

	interval between samples of 2 days, with a minimum number of 6 days of the week used (at least two Saturdays and two Sundays sampled each year).  For Distribution zone population of >100,000, 6 samples per week, with maximum interval between samples of 2 days, with a minimum number of 7 days of the week used (at least four Saturdays and four Sundays sampled each year).			<ul> <li>(i) at least 20 samples analysed each month; and</li> <li>(ii) no more than 48 hours elapsed between consecutive samples; and</li> <li>(iii) samples collected on at least 6 different days of the week:</li> <li>(d) for a distribution zone population of &gt;100,000,—</li> <li>(i) 24 samples analysed each month; and</li> <li>(ii) no more than 48 hours elapsed between consecutive samples; and</li> <li>(iii) samples collected on 7 different days of the week.</li> </ul>				
D3.21  Footnote 66	Routine sampling sites must be located to adequately represent the distribution system and areas associated with higher risk of deterioration in drinking water quality and population exposure. 66  Demonstrating compliance with this rule (D3.21) is not required if FAC is continuously monitored according to rules D3.25 to D3.27.	Assurance CP: 1 Year RP: 1 Year	D3.RD.5	Routine sampling sites for monitoring for compliance with D3.RD.3 and D3.RD.4 zone must be located to—  (a) adequately represent water quality across a distribution zone; and  (b) include both peripheral and central locations in the distribution zone; and  (c) include areas with higher risk of deterioration in drinking water quality occurs and population density is highest.	Assurance CP: 1 Year RP: 1 Year	<ul> <li>This proposed change:         <ul> <li>consolidates a rule and footnote into a single rule</li> </ul> </li> <li>sets out more specific requirements for routine samplings sites</li> <li>clarifies that this rule applies to both continuous monitoring and grab sampling.</li> </ul>	N/A	N/A
D3.25	Continuous monitoring analysers for FAC must be installed in each distribution zone at the following locations:  1. At a point where water is provided to a distribution zone, e.g. a reservoir outlet or bulk point of supply.  2. At a supply main within the zone near to the centre or near to the extremity of the distribution zone.	Assurance CP: 1 Year RP: 1 Year	D3.RD.6	Continuous monitoring analysers for FAC must be installed in at least the following places in each distribution zone:  (a) the point where drinking water is provided to a distribution zone, e.g. a reservoir outlet or bulk point of supply; and  (b) a point in the supply main near to—  (i) the centre of the distribution zone; or  (ii) the extremity of the distribution zone.	Assurance CP: 1 Year RP: 1 Year	This proposed change simplifies the wording and formatting of this rule.  The requirements of this Rule have not changed.	N/A	N/A

D3.26  D3.26  Table 36	Continuous monitoring analysers for FAC in each distribution zone must meet the requirements set out in Table 36.  Zone population up to 25,000 – 2 analysers required in each zone  Zone population 25,001 – 100,000 – 3 analysers required in each zone  Zone population up to >100,000 – 4 analysers required in each zone	Assurance CP: 1 Year RP: 1 Year	D3.RD.7	The number of continuous monitoring analysers for FAC installed in each distribution zone must be at least::  (a) 2 analysers per zone for a zone population up to 25,000:  (b) 3 analysers per zone for a zone population of 25,001 – 100,000:  (c) 4 analysers per zone for a population up to >100,000.	Assurance CP: 1 Year RP: 1 Year	This proposed change consolidates a rule and table into a single rule.	N/A	N/A
D3.27 Footnote 67	Confirmation of the representative nature of the continuous monitoring results must be undertaken by the collection and analysis of four FAC and pH grab samples (at least five days between samples) each month from within the distribution zone. Samples should be taken from the outer extent of the distribution zone at times of normal demand.  Results from confirmation sampling do not need to be reported or notified for compliance purposes.	Assurance CP: 1 Year RP: 1 Year	D3.RD.8	The representative nature of the continuous monitoring results in a distribution zone must be confirmed by the following requirements—  (a) at least four FAC and pH samples analysed each month:  (b) samples are taken during at least four different weeks of each month:  (c) all samples are taken from the outer extent of the distribution zone at times of normal demand.	Assurance CP: 1 Year RP: 1 Year	This proposed change simplifies the wording and formatting of this rule.  We propose removing footnote 67 from the rules. We may include information about confirmation sampling in our reporting guidance.	N/A	N/A
D3.22	Analyses must be undertaken in each distribution zone according to the frequencies set out in Table 37 for the following disinfection by-products:  1. trihalomethanes:     chloroform,     bromodichloromethane,     dibromochloromethane,     and bromoform; and  2. haloacetic acids:     dichloroacetic acid and     trichloroacetic acid.	Monitoring CP: 1 Year RP: 1 Year	D3.RD.9	Drinking water in each distribution zone must be monitored at least every three months for the following:  (a) chloroform: (b) bromodichloromethane: (c) dibromochloromethane: (d) bromoform: (e) dichloroacetic acid: (f) trichloroacetic acid.	Monitoring CP: 1 Year RP: 1 Year	This proposed change consolidates a rule and part of a table into a single rule.	N/A	N/A

D3.22 Table 37	Each disinfection zone must be sampled for DBPs 1 per quarter 68 69							
D3.22  D3.22  Table 37  Footnote 68  Table 37  Footnote 69	Analyses must be undertaken in each distribution zone according to the frequencies set out in Table 37  Sample sites for disinfection byproducts must represent both peripheral and central locations in the distribution system.  Each disinfection zone must be sampled for DBPs 1 per quarter. 68 69  Additional targeted sampling should be undertaken in accordance with the sampling programme to understand the conditions and circumstances that lead to DBP formation  After 2 years if consecutive samples are less than 50% of the MAV sampling may reduce to 1 per year. If any annual	Monitoring CP: 1 Year RP: 1 Year  Assurance CP: 1 Year RP: 1 Year	D3.RD.10	Monitoring for disinfection by-products must be undertaken and meet the following requirements for each distribution zone:  (a) sampling sites must represent both peripheral and central locations of the distribution zone:  (b) following a positive result, additional monitoring must be undertaken to understand the conditions and circumstances that lead to DBP formation:  (c) despite (a), if after 2 years consecutive quarterly samples are less than 50% of the MAV, monitoring may reduce to 1 per year:  (d) if any annual sample exceeds 50% of a MAV, monitoring must return to at least quarterly.	Assurance CP: 1 Year RP: 1 Year  (Mixture of multiple Rules including some Monitoring rules)	This proposed change:      consolidates two rules, a table and two footnotes into a single rule      makes this rule an assurance rule.	N/A	N/A
	to 1 per year. If any annual sample exceeds 50% of a MAV, sampling must return to quarterly.							
D3.24	Analyses must be undertaken in each distribution zone for the plumbosolvent metals outlined in Table 38.	Monitoring CP: 1 Year RP: 1 Year	D3.RD.11	The following monitoring must be undertaken for plumbosolvent metals in each distribution zone:  (a) drinking water in each distribution zone must be monitored in the first six months of the year and last 6 months of the year for the following:  (i) antimony:	Monitoring CP: 1 Month RP: 1 Year	This proposed change consolidates a rule, table and footnote into a single rule.  We also propose changing the compliance period for this rule from 1 year to one month.	N/A	N/A

Table 38 Footnote 70	Antimony, cadmium, chromium, copper, lead, mercury, nickel, zinc  Every 6 months <sup>70</sup> Must be sampled monthly if the determinand exceeds 50% of its MAV. Sampling can return to 6 monthly after 12 samples are less than 50% of the MAV.			<ul> <li>(ii) cadmium:</li> <li>(iii) chromium:</li> <li>(iv) copper:</li> <li>(v) lead:</li> <li>(vi) mercury:</li> <li>(vii) nickel:</li> <li>(viii) zinc:</li> <li>(b) despite (a), any determinand that exceeds 50% of its MAV must be monitored monthly:</li> <li>(c) if (b) applies and after 12 consecutive monthly samples are less than 50% of the MAV, monitoring may return to 6 monthly.</li> </ul>				
D3 Microbio	A written sampling plan for monitoring total coliforms, <i>E. coli</i> and any other determinands deemed necessary by the water supplier must be prepared, including a system map indicating sampling locations and a response plan for positive results.	Assurance CP: 1 Year RP: 1 Year	D3.MM M	A sampling plan for microbiological monitoring in a distribution system must—  (a) be developed; and  (b) be implemented; and  (c) be recorded in writing; and  (d) include—  (i) a system map indicating sampling locations; and  (ii) a response plan for positive test results.	Assurance CP: 1 Year RP: 1 Year	This proposed change simplifies the wording and formatting of the rule.  The requirements of this Rule have not changed.	N/A	N/A

E. coli and total coliforms must be monitored in each zone of the distribution system according to the frequencies set out in Table 39.	cone of CP: 1	<ul> <li>Drinking water suppliers must prepare a microbiological determinands sampling schedule for each distribution zone to meet the sampling frequencies set out below: <ul> <li>(a) for a distribution zone population of &lt;25,000,—</li> <li>(i) 4 samples per month; and</li> <li>(ii) with maximum interval between samples of 9 days; and</li> <li>(iii) with a minimum number of 5 days of the week used:</li> </ul> </li> <li>(b) for a distribution zone population of 25,001 – 50,000,— <ul> <li>(i) 4 samples per month; and</li> <li>(ii) with a maximum interval between samples of 9 days; and</li> <li>(iii) a minimum number of 6 days of the week used (including at least two Saturdays and two Sundays sampled each year):</li> </ul> </li> <li>(c) for a distribution zone population of 50,001 - 100,000,— <ul> <li>(i) 8 samples per month; and</li> </ul> </li> </ul>	Assurance CP: 1 Year RP: 1 Year	<ul> <li>consolidates a rule and table into a single rule</li> <li>would require suppliers to prepare a microbiological determinands sampling schedule for each distribution zone which meets required sampling frequencies (monitoring requirements based on this rule are set out in D3.MM.3)</li> <li>would change this rule from a monitoring rule to an assurance rule.</li> </ul>	N/A	N/A
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D3.29 Table 39	For Distribution zone population of <25,000, 1 microbiological sample per week, with maximum interval between samples of 9 days, with a minimum number of 5 days of the week used.			<ul> <li>(ii) with a maximum interval between samples of 5 days; and</li> <li>(iii) with a minimum number of 7 days of the week used (at least three Saturdays and three Sundays sampled each year):</li> <li>(d) for a distribution zone population of &gt;100,000,—</li> </ul>				
	For Distribution zone population of 25,001 – 50,000, 1 microbiological sample per week, with maximum interval between samples of 9 days, with a minimum number of 6 days of the week used (at least two Saturdays and two Sundays sampled each year).			<ul> <li>(i) 12 samples per month; and</li> <li>(ii) with a maximum interval between samples of 3 days; and</li> <li>(iii) a minimum number of 7 days of the week used (including at least four Saturdays and four Sundays sampled each year).</li> </ul>				
	For Distribution zone population of 50,001 - 100,000, 2 microbiological samples per week, with maximum interval between samples of 5 days, with a minimum number of 7 days of the week used (at least three Saturdays and three Sundays sampled each year).							
	For Distribution zone population of >100,000, 3 microbiological samples per week, with maximum interval between samples of 3 days, with a minimum number of 7 days of the week used (at least four Saturdays and four Sundays sampled each year).							
D3.29 Table 39	As above	Monitoring CP: 1 Month RP: 1 Month	D3.MM.3	Drinking water in each distribution zone must be monitored according to the schedule prepared for rule D3.MM.2 for the following microbiological determinands:  (a) E. coli:  (b) total coliforms:	Monitoring CP: 1 Month RP: 1 month	<ul> <li>This proposed change:</li> <li>consolidates a rule and table into a single rule</li> <li>is based on the sampling schedule prepared under D3.MM.2</li> </ul>	N/A	N/A
D3.30	Routine sampling sites must be located to adequately represent water in the distribution system, including water leaving storage facilities, and entry points for	Assurance CP: 1 Year RP: 1 Year	D3.MM.4	Routine sampling sites for microbiological monitoring must be located to adequately represent water in a distribution system, including—	Assurance CP: 1 Year RP: 1 Year	This proposed change simplifies the wording and formatting of the rule.  The requirements of this Rule have not changed.	N/A	N/A

	water from another water supplier.			<ul><li>(a) drinking water leaving storage facilities; and</li><li>(b) entry points for drinking water from other drinking water suppliers.</li></ul>				
D3.31	Samples must be collected according to written sampling protocols prepared by the drinking water supplier or the laboratory undertaking the sample analysis.	Assurance CP: 1 Year RP: 1 Year	D3.MM.5	Samples for microbiological monitoring in a distribution system must be collected according to written sampling protocols prepared by the drinking water supplier or the laboratory undertaking the sample analysis.	Assurance CP: 1 Year RP: 1 Year	This proposed change makes minor wording changes.  The requirements of this Rule have not changed.	N/A	N/A