Proposed changes to Level 3 Chemical Monitoring 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	N/A	N/A	T3.CH.1	Any chemical dosed into the drinking water supply must be demonstrated to be safe for use in drinking water by either— (a) a certificate of analysis for each batch used including the following information: (i) an analysis of all chemicals and potential impurities in the product: (ii) the purity of each chemical by mass or volume (ppm, concentration or percentage); or (b) a certificate of compliance to the agreed chemical standard.	Assurance CP: 1 Year RP: 1 Year	We propose adding a new rule that would require suppliers to demonstrate that any chemical dosed into drinking water is safe for use. This rule is intended to ensure that suppliers know the quality of the chemicals they are using.	Do you agree with the proposed requirements for suppliers to demonstrate that chemicals dosed into drinking water are safe for use? Will meeting the requirements of this proposed rule create challenges for your organisation?	Small costs possible for some supplies.
Section 4.10.3	In the first 12 months of monitoring, 59 15 samples must be taken over a 12-month period (with no more than two samples collected in any calendar month) to determine the range of values for determinands in water leaving a treatment plant. Values must be identified for determinands in the water leaving the treatment plant if: 1. the determinand has a MAV; and 2. the determinand is: a) present in the source water at a concentration more than 50% of its MAV (as determined by the supply source water risk management plan); and/or b) a chemical added during treatment, or a possible contaminant in a treatment chemical; and/or	N/A	T3.CH.2	 (a) A schedule of all chemicals that are used for treatment in the drinking water supply must be prepared. (b) The schedule must identify which of those chemicals have a MAV. 	Assurance CP: 1 Year RP: 1 Year	Currently, suppliers must carry out testing in the first twelve months of sampling to determine whether specified chemicals used in treatment have standard or elevated values. This testing is carried out to determine a supplier's monitoring regime. We propose: • consolidating a rule and related material into a single rule • removing the requirement to carry out testing for twelve months to determine typical or elevated values of chemicals • requiring suppliers to create a schedule of all chemicals	Do you agree with this proposed rule requiring preparation of a schedule of chemicals used in treatment?	Small costs for suppliers to prepare the required schedule. We do not anticipate this will require external expertise.

	c) formed as the result of a treatment process and is not expected to change in concentration beyond the treatment plant. Following collection of the first 15 samples to establish the typical range of a determinand, the determinand must be monitored at the frequencies set out in Table 33 Some of the determinands that may arise from treatment chemicals are listed in Table 34. Drinking water suppliers must test for determinands resulting from any other treatment chemicals that they use.					used for treatment and specify which of those chemicals have a MAV.		
Section 4.10.3 Footnote 59	 Values for determinands in treated water that: exceed 50% of their MAV in the source water, or are added or formed in the treatment process (as well as impurities in treatment chemicals), must be identified by the collection and analyses of 15 samples over a 12-month period (with no more than two samples collected in any calendar month). Where coagulants are used intermittently, the water supplier must undertake an appropriate sampling programme to determine the range of values for determinands in water leaving the treatment plant. 	Assurance CP: 1 Year RP: 1 Year						
T3.92	See above	See above	T3.CH.3	Water must be monitored (excluding chlorine and fluoride) at a point after the treatment processes (including	Monitoring CP: 1 Month	Currently, suppliers must monitor specified chemicals with a standard value at least annually, and	Do you agree with the increase in monitoring frequency to monthly for chemicals that were	There may be an increase in costs for some supplier
Т3.93	Determinands identified by the sampling programme outlined in rule T3.92 must be categorised as either standard typical range or elevated typical range and must be sampled at the frequency set out in Table 33.	Monitoring CP: 1 Month RP: 1 Year		contact tanks) each month for— (a) chemicals on the schedule prepared in rule T3.CH.2 that have a MAV; and (b) chemicals that may be formed in the treatment process.	RP: 1 Month (Combination of multiple rules)	chemicals with elevated values at least monthly. Some determinands (i.e. chlorate, FAC, fluoride) must be monitored more frequently. This proposed change: • consolidates several rules	previously determined to have standard values?	suppliers in shifting from monitoring prescribed chemicals to monitoring chemicals they have identified under T3.CH.2 and
T3.94	Samples must be taken from a point directly after the final treatment process (including chlorine contact tanks as they are part of the treatment process).	Assurance CP: 1 Year RP: 1 Year				 and other material into a single rule would require suppliers to monitor monthly all the 		chemicals that may form in the treatment process.

T3.93	T3 Treatment Chemical Determinand Minimum	Monitoring		chemicals they use in the	There may be an
	Sampling Frequencies			treatment process that have	increase in costs for
Table 33		CP: 1		a MAV, and any chemicals	some suppliers from
	Minimum Sampling frequency:	Month		that may be formed in the	the requirement to
	Standard typical range determinands (typical	RP: 1 Year		treatment process (except for chlorine and fluoride).	monitor monthly all chemicals used for
	value <50% MAV)				water treatment an
	Annually			We are proposing this change as the concentration of a treatment	chemicals that form
	Elevated typical range determinands			chemical can change depending on	in the treatment
	(Value range 50% - 100% MAV)			the quality of the source water or	process.
				changes in the treatment process.	There will be a
	Monthly			Annual monitoring would not	decrease in annual
Table 34	T3 Possible Treatment Chemical Determinand	N/A		identify these changes.	reporting
	Monitoring	.,,.		We also propose:	requirements.
	Treatment chemical: Aluminium based			 changing this rule from an 	
	coagulants/flocculants			assurance rule to a	
	Determinand to monitor: Aluminium, antimony,			monitoring rule	
	cadmium, copper, chromium, lead, mercury,			 increasing reporting 	
	nickel			frequency from annually to	
	Treatment chemical: Iron based			monthly.	
	coagulants/flocculants			This responds to feedback we have	
	Determinand to monitor: Antimony, cadmium,			received from some suppliers that	
	copper, chromium, lead, mercury, nickel			reporting more frequently would reduce the burden of annual	
	Treatment chemical: Polyacrylamide			reporting by spreading analysis and	
	(polyelectrolyte)			reporting throughout the year.	
	Determinand to monitor: Acrylamide				
	Treatment chemical: EP-DMA (polyelectrolyte)				
	Determinand to monitor: Epichlorohydrin				
	Treatment chemical: Ozone				
	Determinand to monitor: Bromate				
	Treatment chemical: Permanganate				
	Determinand to monitor: Manganese				
Table 34	Monitoring is only required for treatment				
Footnote	chemicals that are used or formed in a				
63	treatment process.				
4.10.3	Typical Value Range				
	A drinking water supplier must sample the				
	water leaving a treatment plant to determine				
	the typical value range for specified chemical				
	determinands to identify if any values exceed				
	the MAV in the Drinking Water Standards and to determine the on-going monitoring frequency				
	determine the on-going monitoring frequency				

	for those determinands. Standard typical range refers to a determined for which sample results are always less than 50% of the MAV. Elevated typical range refers to a determinand for which any sample exceeds 50% of the MAV but does not exceed 100% of the MAV. Some of the determinands that may arise from treatment chemicals are listed in Table 34. Drinking water suppliers must test for determinands resulting from any other treatment chemicals that they use.							
T3.92	See above.	Assurance CP: 1 Year RP: 1 Year	T3.CH.4	Water leaving the treatment plant must be monitored monthly at a point directly after the final treatment process (including contact tanks) for determinands identified in source water monitoring that exceed 50% of their MAV in source water or are at a level considered to present a health risk if they do not have a MAV.	Monitoring CP: 1 Month RP: 1 Month	The proposed rule clarifies that suppliers must monitor monthly for any chemicals identified in source water that exceed 50% of their MAV in source water, or are at a level considered to present a health risk if they do not have a MAV. We also propose changing this rule from an assurance rule to a monitoring rule, as this rule sets out prescribed monitoring requirements.	N/A	Neutral
Section 4.10.3 Table 34 T3.93 Table 33	T3 Possible Treatment Chemical Determinand Monitoring Treatment Chemical: Sodium hypochlorite Determinand to Monitor: Chlorate T3 Treatment Chemical Determinand Minimum Sampling Frequencies Minimum sampling frequency: Chlorate Weekly	Monitoring CP: 1 Month RP: 1 Year	T3.CH.5	Where sodium hypochlorite solution is used for disinfection, water leaving the treatment plant must be monitored for chlorate at least every week.	Monitoring CP: 1 Month RP: 1 Month	To make the Rules easier to understand and compliance more straightforward, this proposed rule consolidates two tables and two footnotes into a rule. We also propose increasing reporting frequency from annually to monthly. This responds to feedback we have received from some suppliers that reporting more frequently would reduce the burden of annual reporting by spreading	N/A	There will be a decrease in annual reporting requirements.
Table 33 Footnote 60 Table 33 Footnote 62	If sodium hypochlorite is used for disinfection. Sampling may reduce to monthly if 12 consecutive samples are below 50% of the MAV. If a sample exceeds 50% of the MAV, sampling must return to weekly.	N/A N/A				analysis and reporting throughout the year.		

Table 33 Footnote 61	T3 Treatment Chemical Determinand Minimum Sampling Frequencies Minimum Sampling frequency: Fluoride Continuous If fluoride is added as part of the treatment process.	Monitoring CP: 1 Day RP: 1 Year	T3.CH.6	If fluoride is added as part of the treatment process, it must be monitored continuously after the fluoride chemical is fully mixed.	Monitoring CP: 1 Day RP: 1 Month	This proposed rule consolidates a rule and a footnote into a single rule.	N/A	N/A
T3.96	Event based monitoring (determined by the water supplier) must be undertaken for any event that may rapidly introduce high concentrations of health-significant chemical determinands into the water at the source or at the treatment plant.	Monitoring CP: 1 Year RP: 1 Year (Sampling frequency is event based)	N/A	Removed	N/A	We propose removing this rule as event-based monitoring should be part of a response to an event and set out in the supply Drinking Water Safety Plan. Events that could adversely affect the supply need to be managed by a supplier and any professional advice they engage but the nature and extent of monitoring needs to be determined at the time and in relation to the event.	Do you agree that the requirement for event-based monitoring should be removed from the Rules and managed by the supplier on a case-by-case basis?	Neutral
T3.95	Containers used for collecting samples must be obtained from a laboratory and appropriate for the target determinand.	Assurance CP: 1 Year RP: 1 Year	N/A	Removed	N/A	We propose removing this rule as laboratories will advise water suppliers on correct sample containers. We note that G.SM.3 sets out requirements for analysis and collection of water samples.	N/A	N/A