

Unclassified



# Drinking Water Quality Assurance Rules Reporting

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# Te Whakatauākī a Taumata Arowai

Ko te wai ahau, ko ahau te wai.  
He whakaaturanga tātou nō te wai.  
Ko te ora te wai ko te ora o te  
tangata.  
He taonga te wai me tiaki.  
Ko wai tātou.  
Ko wai tātou.

I am water, water is me.  
We are reflections of our water.  
The health of the water is the health of  
the people.  
Water is a treasure that must be  
protected.  
We are water.  
Water is us.



# What we will cover

1. Introduction
2. Overview of the Drinking Water Quality Assurance (the Rules) reporting
3. Diving into the detail of the Rules reporting
4. Questions / Pātai:
  - Use the webinar chat function for general questions on reporting
  - Email specific questions and feedback through to [info@taumataarowai.govt.nz](mailto:info@taumataarowai.govt.nz)

This webinar will be recorded and made available on our website

# Introduction

# About this webinar

## Our aim

- Introduce reporting requirements to suppliers, including changes to reporting

## Who is this webinar for?

- People who are reporting on the Rules

## Basic understanding of requirements

- Compliance with the Rules
- Mechanisms of reporting: Excel spreadsheet vs Application Programming Interface (API)
- Drinking Water Quality Assurance Rules – Guidance for Reporting (2023)



# About this webinar

## This session will not cover

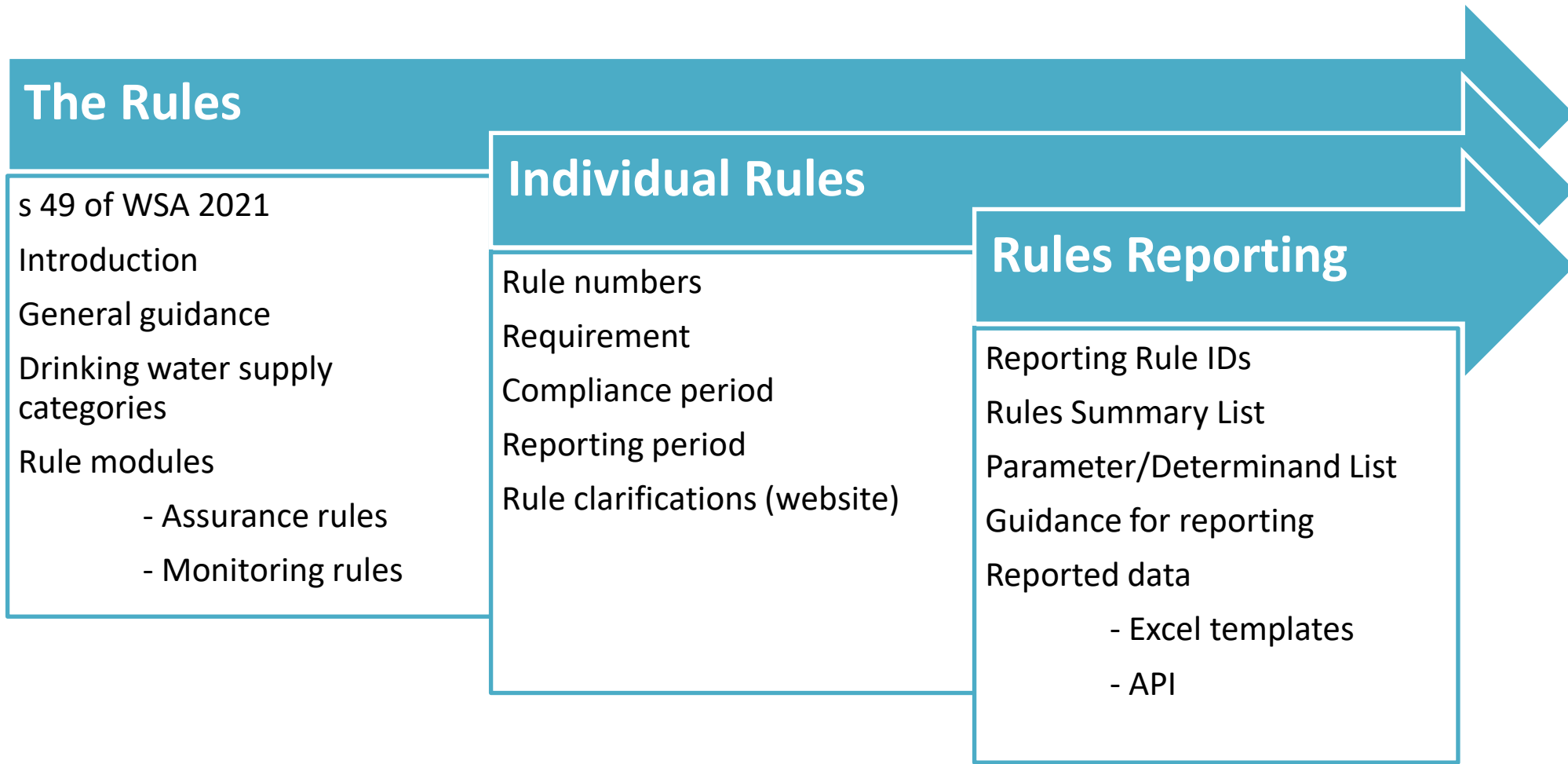
- Discussion on how a rule specifically applies to your supply/supplies
- What to report for your supply/supplies

## More information

- Refer to the guidance on our website:  
[taumataarowai.govt.nz/for-water-suppliers/monitoring-water-quality](https://taumataarowai.govt.nz/for-water-suppliers/monitoring-water-quality)



# The Rules: a brief overview



# Key concepts

- **Monitoring Rules** – to demonstrate compliance with Drinking Water Standards (sampling and continuous monitoring). Different compliance periods for different rules (day, month, quarter or year)
- **Assurance Rules** – water supplier activities e.g. backflow prevention programme, distribution zone sampling plan. Indicative of good practice and provision of safe drinking water
- **Rule Numbers** – the alphanumeric rule identifier in the Rules (e.g., T3.8)
- **Reporting Rule IDs** – an alphanumeric identifier that may or may not be different from the Rule Number (e.g., D2.1-ecol)



# Who reports what?

Rule Module/s	Assurance Rule Reporting Required	Monitoring Rules Reporting Required
VSC (Very Small Communities)	No	No
WC (Water Carrier Services)	No	Not applicable
TDWS (Temporary Drinking Water Supplies)	No	No
VP (Varying Population)	Not applicable	No
G, S1, T1, D1 (Level 1 Modules)	No	Yes: <ul style="list-style-type: none"> <li>• Biannual reporting (Rule G1)</li> <li>• Annual reporting (Rule G4)</li> </ul>
G, S2, T2, D2 (Level 2 Modules)	Yes, annually (Rule G5)  Note: All applicable assurance rules for a supply using G, S2, T2, and D2 rule modules.	Yes: <ul style="list-style-type: none"> <li>• Quarterly Reporting (Rule G2)</li> <li>• Annual reporting (Rule G4)</li> </ul>
G, S3, T3, D3 (Level 3 Modules)	Yes, annually (Rule G5)  Note: All applicable assurance rules for a supply using G, S3, T3, and D3 rule modules	Yes: <ul style="list-style-type: none"> <li>• Monthly Reporting (Rule G3)</li> <li>• Annual Reporting (Rule G4)</li> </ul>

# Timeframe and use of the data

## Annual reports

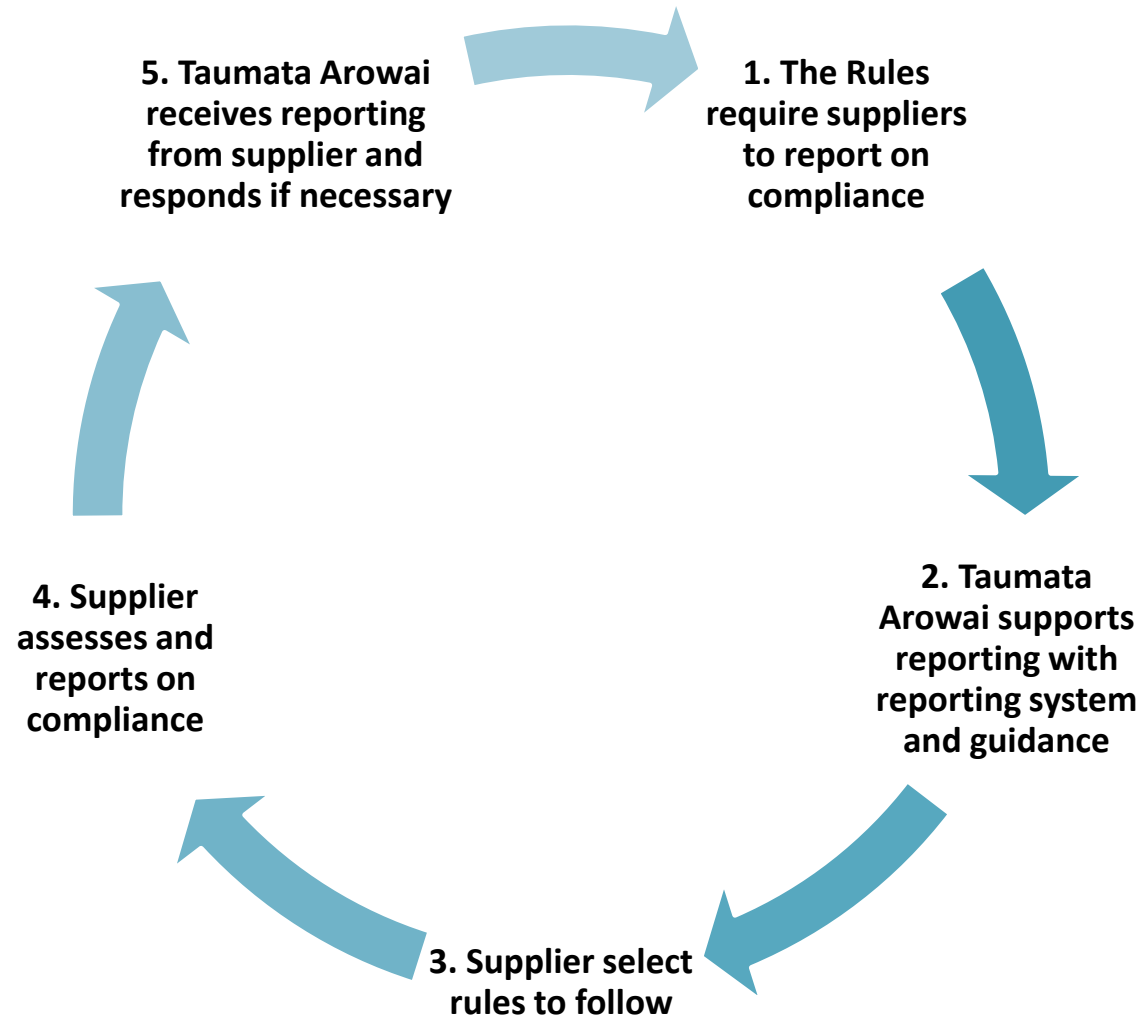
- Due within 40 working days of the end of each calendar year
- Issues? Contact the regulatory team based in your region

## Use of the data by Taumata Arowai

- Draw information from Hinekōrako for our reports
- Inform our understanding of drinking water safety and risk
- Help prioritise our regulatory activities
- Future plans

Water suppliers are responsible for ensuring data submitted to Taumata Arowai is correct, as well as any other information in Hinekōrako

# The bigger picture



# Overview of the Rules reporting



# What do I report on?

- Many rules have multiple sampling and/or assurance requirements.
  - Example: Rule Number T1.8 has three main requirements
    - Each of these requirements is split into their own Reporting Rule ID
      - T1.8-ecol – *E. coli* sampling compliance
      - T1.8-coli – Total coliform sampling compliance
      - T1.8-turb – Turbidity sampling compliance

<b>T1.8</b>	Water leaving the treatment plant must be monitored for the determinands and at the frequencies set out in Table 10.
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**Table 10. T1 Treatment plant monitoring determinands.**

Determinands	Sampling frequency
<i>E. coli</i> <sup>18</sup>	Every 3 months
Total coliforms	Every 3 months
Turbidity	Every 3 months



# Reporting Rule IDs

- Some rules have multiple requirements
- Report against each requirement
- Clarity on how to submit samples (essentially lab results)
- Enables a Rules-by-Code approach to reduce ambiguity
- All requirements aren't created equal
- Enables better understanding of compliance / non-compliance



# What is reported?

## Field hierarchy description

Reporting Fields: Reporting period, Supply ID, Date submitted, submission method, and who submitted.

## Example report against Rule T1.8



Reporting and  
Supply Details





# How to report: Excel Reporting Template



	<h2>Drinking Water Quality</h2>
Reporting Template Version:	1

[The Drinking Water Quality Assurance Rules Reporting Guidelines can be downloaded](#)

### Section 1: Supplier/Report Details

External Reporting ID	report_id_1_AHA300	(Optional, your own
Reporting Period Start	1/01/2023	(Required, the start o
Reporting Period End	31/03/2023	(Required, the end d
Supply ID	AHA300	(Required, create se
Date Submitted	12/04/2023	(Required, the date)
Name	Your name	(Required, person su
Email	me@example.com	(Required, email of

Home > My Supplies

### My Supplies

Nau mai, welcome to Hinekōrako

Hinekōrako is used to collect and manage information on drinking water supplies including registration details. It allows suppliers and laboratories to share information with us. Hinekōrako holds information about registered drinking water supplies and supports the [Public Register of Drinking Water Supplies](#).

Your supplies are listed below. Depending on your level of access to Hinekōrako you can:

- verify supplies by confirming the registration information
- edit registrations already submitted
- apply to register new supplies.

There are [guidance and resources](#) available about registering your supply and maintaining supply information. Contact your Supply Group Administrator or Taumata Arowai if you have any issues with Hinekōrako access or viewing your supply information.

To notify us of any changes or issues with your supplies, choose 'View Supply Details' from the drop-down menu for the supply and then 'View/Add Notifications'.

Helpful guidance videos can be found here: [Confirm Migrated Supply Details \(All Supplies except Water Carriers\)](#) and [Confirm Migrated Supply Details \(Water Carriers\)](#).

#### In Progress Supply Registrations

Below are the migrated supplies not yet confirmed and submitted, and any new supply registrations not yet completed and submitted.

Supply ID	Supply Group	Supply Name	Supply Type	Origin	Registration Renewal Date
MAL001	SG for Aqua Lagoon	Malcolm Networked Supply June 14	Networked supply	Back Office	

#### Registered Supplies

Below are the supplies that have been registered, confirmed and submitted to Taumata Arowai.

To review your supply details, select the 'Supply ID'. From here you can choose to 'Edit Supply' information relating to your supply. If no changes are necessary, simply return to the Home page.

Supply ID	Supply Group	Supply Name	Supply Type	Registration Renewal Date
There are no records to display.				

#### Other Supplies

Below are the supplies that have been submitted for registration but need further processing or those that have been deregistered. Refer to the quick reference guides for further information. Please note these supply details cannot be edited. If you wish to re-register a deregistered supply, please contact Taumata Arowai for assistance.

Supply ID	Supply Group	Supply Name	Supply Type	Supply Status	Date Last Modified
There are no records to display.					

# What is reported?

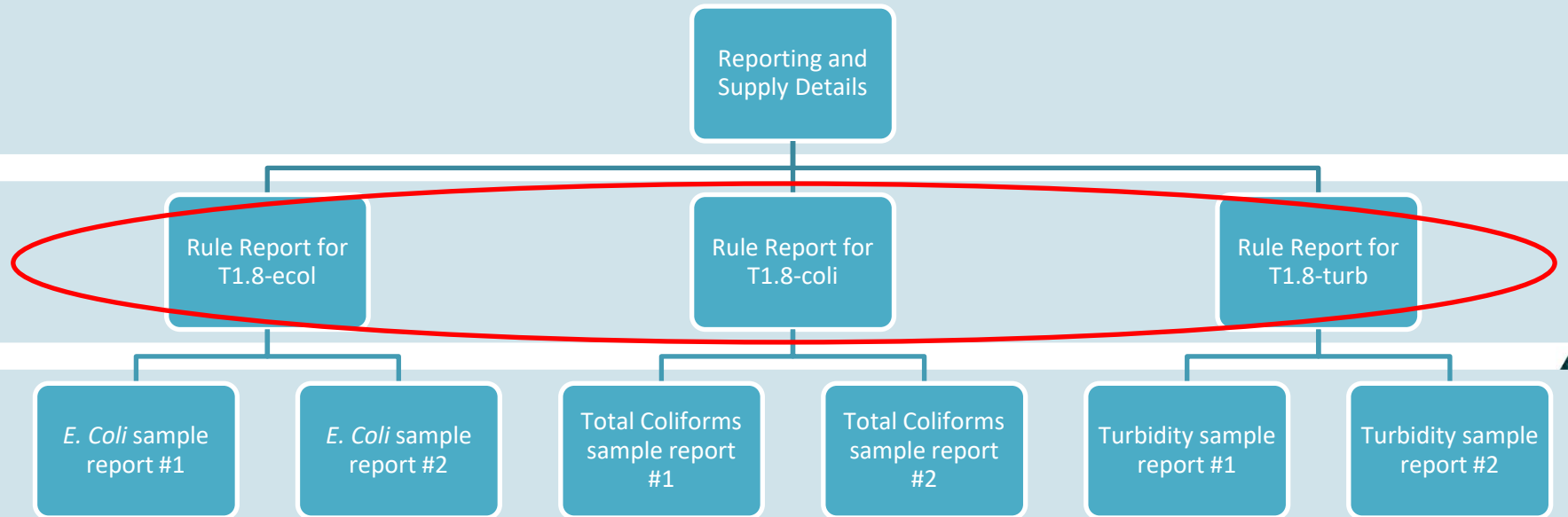
## Field hierarchy description

Reporting Fields: Reporting period, Supply ID, Date submitted, submission method, and who submitted.

Rule Fields: Reporting Rule ID, supply component ID, compliance for the reporting period

Sample Fields: Information about the monitoring results undertaken to achieve compliance.

## Example report against Rule T1.8





# What is reported?

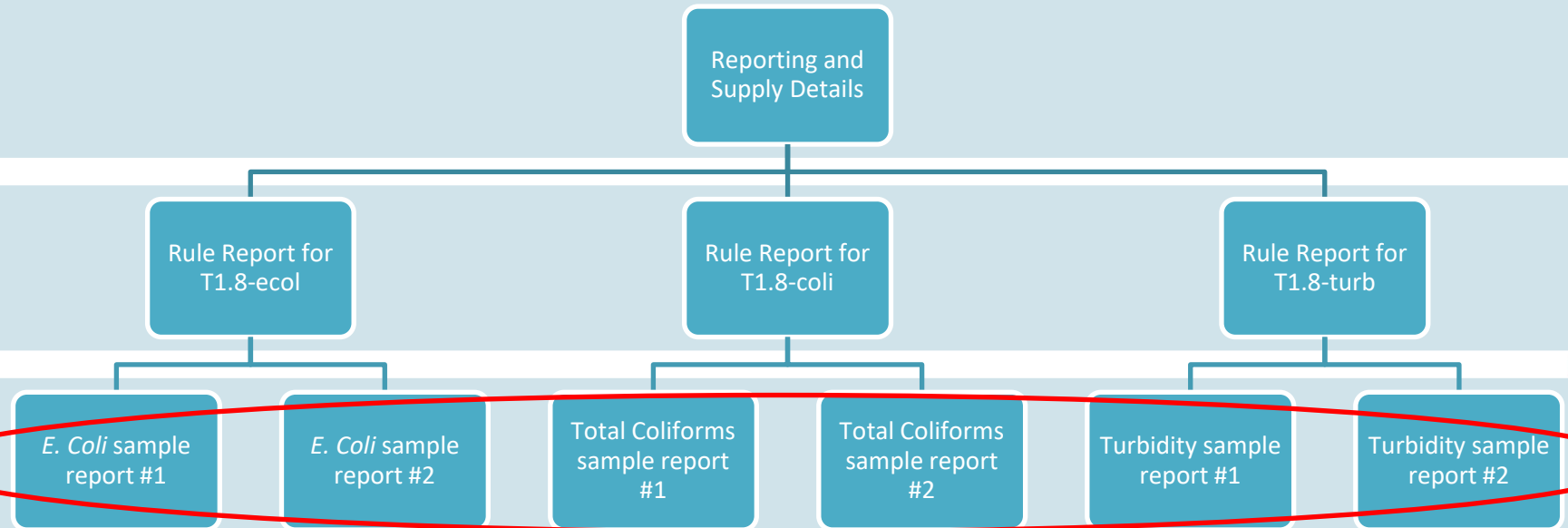
## Field hierarchy description

Reporting Fields: Reporting period, Supply ID, Date submitted, submission method, and who submitted.

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Sample Fields: Information about the monitoring results undertaken to achieve compliance.

## Example report against Rule T1.8





# Example: 6-monthly report by Level 1 Supply

## Section 2: Rule Reports

Rule ID	Supply Component ID	Complies With Rule	Non-Compliant Periods	Notes
T1.8-coli	TP0001	TRUE	0	
T1.8-ecol	TP0001	TRUE	0	
T1.8-turb	TP0001	FALSE		1 Sample missed in first compliance period (Jan-March 2023)
D1.1-coli	TP0001	TRUE	0	
D1.1-ecol	TP0001	TRUE	0	

## Samples

Rule ID	Supply Component ID	External Sample ID	Sample Date	Parameter/Determinand	Value Prefix	Value Unit	Complies With Rule	Source Class	Notes
T1.8-coli	TP0001	Test0001	5/01/2023		<	1 MPN/100mL	TRUE		
T1.8-ecol	TP0001	Test0002	5/01/2023		<	1 MPN/100mL	TRUE		
D1.1-coli	TP0001	Test0003	10/03/2023		<	1 MPN/100mL	TRUE		
D1.1-ecol	TP0001	Test0004	10/03/2023		<	1 MPN/100mL	TRUE		
T1.8-coli	TP0001	Test0005	11/04/2023		<	1 MPN/100mL	TRUE		
T1.8-ecol	TP0001	Test0006	11/04/2023		<	1 MPN/100mL	TRUE		
T1.8-turb	TP0001	Test0007	11/04/2023		=	0.5 NTU	TRUE		
D1.1-coli	TP0001	Test0008	5/05/2023			50 MPN/100mL	TRUE		see NOT-00000001
D1.1-ecol	TP0001	Test0009	5/05/2023		=	10 MPN/100mL	FALSE		see NOT-00000001
D1.1-coli	TP0001	Test0010	7/05/2023		<	1 MPN/100mL	TRUE		see NOT-00000001
D1.1-ecol	TP0001	Test0011	7/05/2023		<	1 MPN/100mL	TRUE		see NOT-00000001
D1.1-coli	TP0001	Test0012	8/05/2023		<	1 MPN/100mL	TRUE		see NOT-00000001
D1.1-ecol	TP0001	Test0013	8/05/2023		<	1 MPN/100mL	TRUE		see NOT-00000001
D1.1-coli	TP0001	Test0012	9/05/2023		<	1 MPN/100mL	TRUE		see NOT-00000001
D1.1-ecol	TP0001	Test0013	9/05/2023		<	1 MPN/100mL	TRUE		see NOT-00000001

# Other ways to report (via API)

- [Hinekōrako Reporting \(lutra.com\)](https://lutra.com)
- [TaumataArowaiExport.pdf \(wateroutlook.com\)](https://wateroutlook.com)
- Others?





# Report Outputs



## Report Outputs - Taumata Arowai Demo

The list below shows all outputs that have been added to this report. Use the button at the bottom of the page to add a new output.

Sheet Name Suffix	Type	Status		
T3 - Monthly	Taumata Arowai	✔ OK	Run	Results
			Exports	Failures

[Add Output](#) [Back](#)





VIEW REPORT PERIOD: 12:00 AM on January 1, 2023 -to- 11:59 PM on January 31, 2023

This report is displayed in your time zone

Report passed

Sent to Taumata Arowai

Review Report

Home

Alarms

Dashboards

Bulk Flow Meters

Consent Demo

Distribution Zone Bream Bay

Distribution Zone Hikurangi & Whan...

Distribution Zone Mangapai

Distribution Zone Maungakaramea

Distribution Zone Whangarei Central

Northport Flow

Overview

WTP Ahuroa

WTP Mangapai

WTP Maungakaramea

WTP Poroti

WTP Ruakaka

WTP Ruddells

WTP Whau Valley

Devices & Sensors

Forms

## Taumata Arowai Report

For the period Jan 1, 2023 to Feb 1, 2023

**REPORT WAS COMPLIANT**

**Component: TP00395**

**COMPLIANT**

**RULE: T3.2 COMPLIANT**

There are no non-compliant periods :

[Add Non-Compliant Period](#)

### Report sent

This report was sent on Feb 16, 2023 by Michelle Earsman

[Download raw report data](#)

	Missing Minutes (NMT 5%)	Missing Minutes Events (NMT one 15 minute event)
22 Jan	0.0%	0
23 Jan	0.0%	0
24 Jan	0.0%	0
25 Jan	0.0%	0
26 Jan	0.0%	0
27 Jan	0.0%	0
28 Jan	0.0%	0

For details regarding the pilot, training webinars, API specification, or for any other queries please contact [info@taumataarowai.govt.nz](mailto:info@taumataarowai.govt.nz).

## Report via API

Suppliers who use monitoring and assurance software may be able to automatically report to Taumata Arowai via a web-based API (Application Programming Interface), using an API Key. Instructions for reporting via API are available for:

- [Infrastructure Data](#)
- [WaterOutlook](#)

If you use different software which you would like to report from, please contact [info@taumataarowai.govt.nz](mailto:info@taumataarowai.govt.nz).

[Click to generate API Key](#)

**Warning:** Generating a new key will invalidate the existing key (if any). You need to copy the generated key immediately. Once you navigate away from this page, you will not be able to retrieve it again, and will only be able to generate a new key.

## Report via Excel File

You can report to Taumata Arowai in accordance with the Drinking Water Quality Assurance Rules by filling out this [Excel Template](#).

The Excel template can be uploaded below.

[Report via Excel File](#)

## Reporting Log

ID	Date Submitted ▼	Supply	Source System	Report Author	Submitted By	Message	Status Reason
ROS-00001100	08/03/2023 12:12	PIV03			Vignesh Makkada		Processing
ROS-00001099	08/03/2023 11:56	PIV03	API	Mark Homenuke	Vignesh Makkada		Submitted Successfully
ROS-00001098	08/03/2023 11:08	PIV03	API	Mark Homenuke	Vignesh Makkada		Submitted Successfully
ROS-00001092	08/03/2023 09:30	PIV03	API	Mark Homenuke	Vignesh Makkada		Submitted Successfully
ROS-00001091	08/03/2023 09:19	PIV03	API	Mark Homenuke	Vignesh Makkada		Submitted



**Diving into the detail**

# Rule Summary List

- Essentially a summary of requirements for reporting on each Reporting Rule ID
- ID** – Reporting Rule ID
  - Example*
- Rule Module**
  - Example*
- Rule Number**
  - Example*
- Level**

## Rule Summary List

The [Rule Summary List](#) (.csv) contains the following detail for each Reporting Rule ID:

Column	Definition
<b>ID</b>	The Reporting Rule ID (e.g. T1.8-ecol), referred to in API and Excel error messages as the 'Rule ID'. Note these may differ from the Rule Number where there is more than one reporting requirement for a rule.
<b>Rule Module</b>	The Rule Module for this Reporting Rule ID (e.g. T1)

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S
1	ID	Rule Modu	Rule Num	Level	Parameter	Type	Log	Complianc	Reporting	Report Tin	Sampling F	Duration E	Determina	Unit Check	Sample Re	Report Su	Minimum	Rule Applies	
2	G1	G	G1	0		Assurance	N/A	Annually	Annually	40 Workin	N/A	N/A	0	0	1	1		S1,T1,D1	
3	G2	G	G2	0		Assurance	N/A	Annually	Annually	40 Workin	N/A	N/A	0	0	1	1		S2,T2,D2	
4	G3	G	G3	0		Assurance	N/A	Annually	Annually	40 Workin	N/A	N/A	0	0	1	1		S3,T3,D3	
5	G4	G	G4	0		Assurance	N/A	Annually	Annually	40 Workin	N/A	N/A	0	0	1	1		S1,S2,S3,T1,T2,T3,D	
6	G5	G	G5	0		Assurance	N/A	Annually	Annually	40 Workin	N/A	N/A	0	0	1	1		S2,T2,D2,S3,T3,D3	

- Example: monitoring, continuous monitoring, or assurance*
- Log** – The log removal credits associated with level 3 protozoal rules
  - Examples: 0, 2, 2.5, 3, etc. (Blank if not applicable)*

# Rule Summary List (cont.)

- **Compliance Period** – period against which a Reporting Rule ID must be assessed by a supplier
  - *Example: 1 Day, 1 Month, 3 Months, 1 Year, Event Based, N/A if not applicable*
- **Reporting Period** – the frequency at which a Reporting Rule ID must be reported at
  - *Example: Monthly, 3 Months, 6 Months, 1 Year, Not reported*
- **Report Timeframe** – a supplier must report within this many working days from a reporting period ending
  - *Example: 10 Working Days, 20 Working Days, 40 Working Days, N/A if not applicable*
- **Sampling Frequency** – the minimum number of samples required by the Rules
- **Duration Between Samples** – see Rule Clarification web page for explanation,
  - *Example: 12 hours, At least 5 Months, etc.*

# Rule Summary List – sample checking

- **Recall: ID** – Reporting Rule ID
  - Example: T1.8-ecol
- **Recall: Parameter Determinand ID**
  - Example: “ecol” for *E. coli* (See official list; blank if not applicable)
- **Determinand Check**
  - “0” means no check will be implemented
  - “1” means the parameter\_determinand field of any samples reported under this Reporting Rule ID must be blank (because the Parameter Determinand ID already dictates what should be reported)
  - “2” means the parameter\_determinand field of any samples reported under this Reporting Rule ID must be filled in (Example: D1.1-chem)
- **Unit Check**
  - “0” means no check will be implemented
  - “1” means the unit submitted must match an acceptable unit for the parameter/determinand this Reporting Rule ID represents



# Rule Summary List – Report/Sample Checking

- **Recall: ID** – Reporting Rule ID
  - Example: T1.8-ecol
- **Sample Reporting**
  - “1” means no samples expected
  - “2” means samples expected
  - “3” means samples may be submitted
  - “Rule Number”, for example, if field is equal to “T2.1” means samples should not be reported against the Reporting Rule ID, but rather against the given Rule Number and relevant Reporting Rule ID under that Rule Number
  - Blank if not reported AND no samples expected
- **Report Supply Level**
  - “0” means must be reported against applicable supply components
  - “1” means report against the whole supply
- **Minimum Buildings** – See footnote 23 and 42
- **Rule Applies** – The rule modules which the Reporting Rule ID applies too. This is **VERY** useful field.



# Summary

- Read the reporting guidelines
- Data quality and checks
- Constructive feedback encouraged, welcomed, and expected



# Pātai?

*i*



Use the webinar chat function for general questions on reporting

Email specific questions and feedback through to [info@taumataarowai.govt.nz](mailto:info@taumataarowai.govt.nz)