WATER YOU LOOKING AT

WYLA

USER MANUAL

Version 2.75 · November 2026

Cloud console, compliance records and gateways

Regulations register: checked against Regulatory Fit Rev 1.11 (2026-10-13), last changed 2026-11-10

REMOTE WATER MONITOR

Water YOU Looking At

20.220.219.43.sslip.io

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01 INTRODUCTION

Water YOU Looking At is a remote monitor for domestic, light-commercial and agricultural water delivery systems. It watches your pump, filters, tank, UV disinfection, chlorine dosing, flow and pressures around the clock, and sends you a text message or email the moment something needs attention. It is a monitor only — it never controls or interferes with your water equipment.

The cloud console and this edition

Your gateways send their readings to the **WYLA cloud console**, a web page you open in any browser at **https://wateryoulookingat.com**. The console is where you see every site, keep your compliance records and set up who is called when an alarm goes off.

Version 2.0 of this manual adds the console's newer pages: secure sign-in, compliance recording and data gaps, compliance calculations, the calibration and grab-sample log, record sealing and alarm call-out. Version 2.3 adds regulator reports and notifications, operator certificates and the record of changes made at the panel. Version 2.4 adds the plant class, operators in charge, the shift log, the change record for your engineer, and the privacy notice. Version 2.5 adds the monthly write-once archive. Version 2.6 adds support access (WYLA support reaches a gateway only during a time-limited, recorded support session), who may confirm a change, and WYLA's control suspension. The menu items for these pages are **Compliance**, **Reports**, **Operator certificates**, **Changes**, **Recipients**, **Call-outs** and **My alarms**. Version 2.54 describes the console as it is from 7 November 2026: the menu in five groups, the top bar, the **Today** page it opens on, **All sites** and **Help** (chapters **Finding Your Way in the Console**, **Today**, **All Sites and Per-site Logins** and **Help: the Manual, Training Videos and Asking WYLA**).

> **About the screenshots**
> The cloud console screenshots in this edition come from a test copy of the console with made-up sites, people and readings. Your screens show your own data, and some panels may look slightly different.

What the system does

A compact industrial gateway (the PUSR USR-M300) is wired to the sensors already in your water system. It reads them every second, compares each reading against the setpoints your installer configured, and raises an alert when a rule is broken — for example no flow while the pump is drawing current, a clogging media filter, or a tank running low. Alerts are delivered three ways at once: an SMS or email to your listed contacts, a local stack light (green / yellow / red) at the installation, and a banner in this software.

The three status colours

Everything in the product uses the same colour language. **GREEN — running OK**: all monitored points are normal. **YELLOW — warning**: something needs attention soon (a filter clogging, a maintenance timer expiring, a sensor reading out of its loop range). **RED — fault**: something needs attention now (pump failure, UV lamp out, a fault contact closed). The status pill in the top bar, the stack light, the All sites page and every status chip use these same three colours. In words the console calls the alarm levels **Fault (red)**, **Warning (yellow)** and **Information**. A site WYLA cannot check - no gateway yet, or one that has never reported or cannot be reached - is shown grey as **No data**, never green.

An alert stays active until its condition clears. If you switch an alarm off, or switch off an input it depends on (for example a pressure input that is not fitted), its active alert closes as *switched off* or *no longer monitored*. An input that is switched on but has stopped reading keeps its alert, and raises a sensor fault.

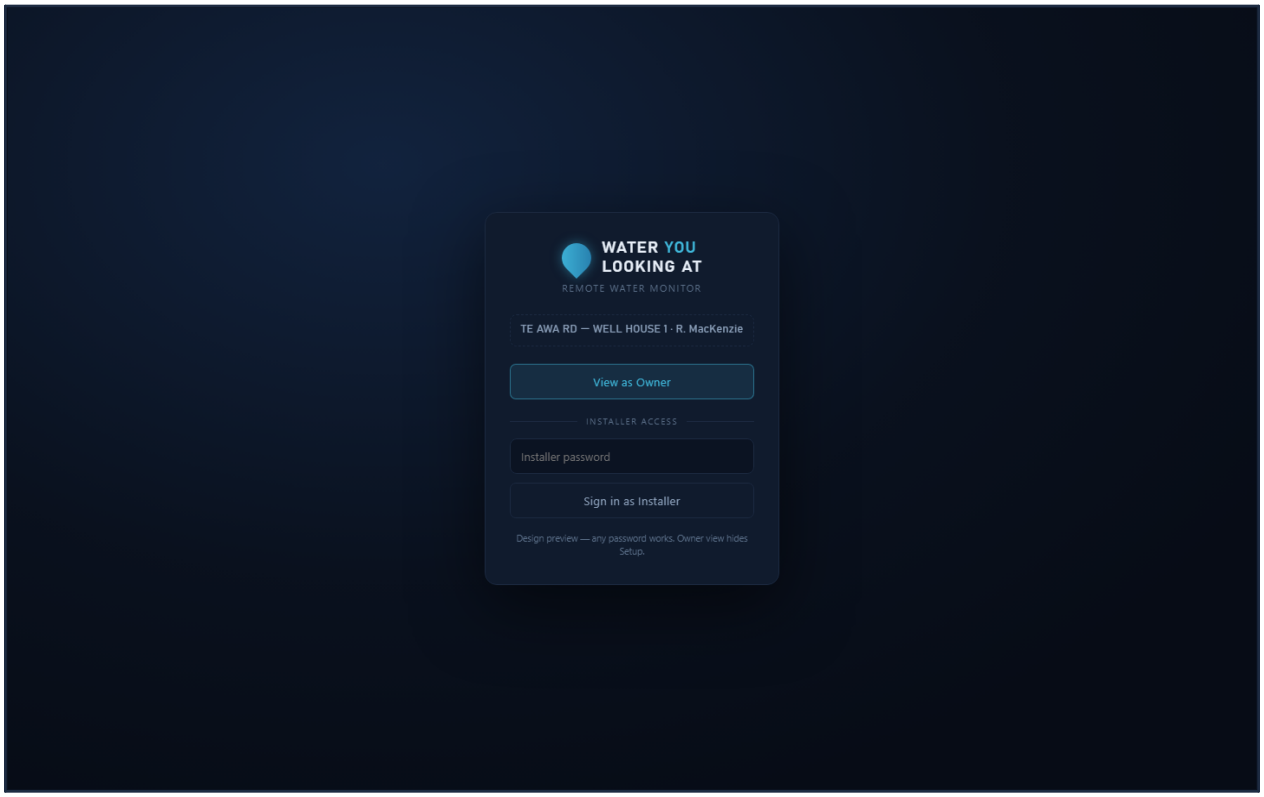
An input that is switched off in the unit's setup shows *Not monitored* on the overview, never an old value. The **Filter differential** tile follows the unit's own setpoints: green below warning 1, yellow from warning 1, and yellow with *replace filters* from warning 2.



The System Overview dashboard. The yellow banner, stack light and filter-differential tile all show the same warning state.

Signing in — two access levels

The software opens at a sign-in screen. **View as Owner** opens the read-only view: live status, trends, maintenance life and the event log, plus the ability to silence alarms for 7 days. **Sign in as Installer** (password required) adds the Setup page, where functions are enabled, sensors are calibrated and alarm setpoints are configured — the owner view never shows Setup. Core monitoring logic is fixed at the factory and cannot be changed in the field. In the cloud console, **Sign out** and a chip with your role are in the top bar (chapter **Finding Your Way in the Console**).



The sign-in screen: one tap for the owner view, password for installer access.

Works on desktop, tablet and phone

The same pages adapt to the screen: on a desktop the menu is a fixed left panel; on a tablet or phone it collapses behind a menu button in the top-left corner (press it again, or press Escape, to close it), panels stack into a single column, and wide tables scroll sideways within their own frame or turn each row into a card. Nothing is desktop-only — an owner can do everything from their phone.



The dashboard on a phone: collapsing menu, stacked status tiles, same live data.

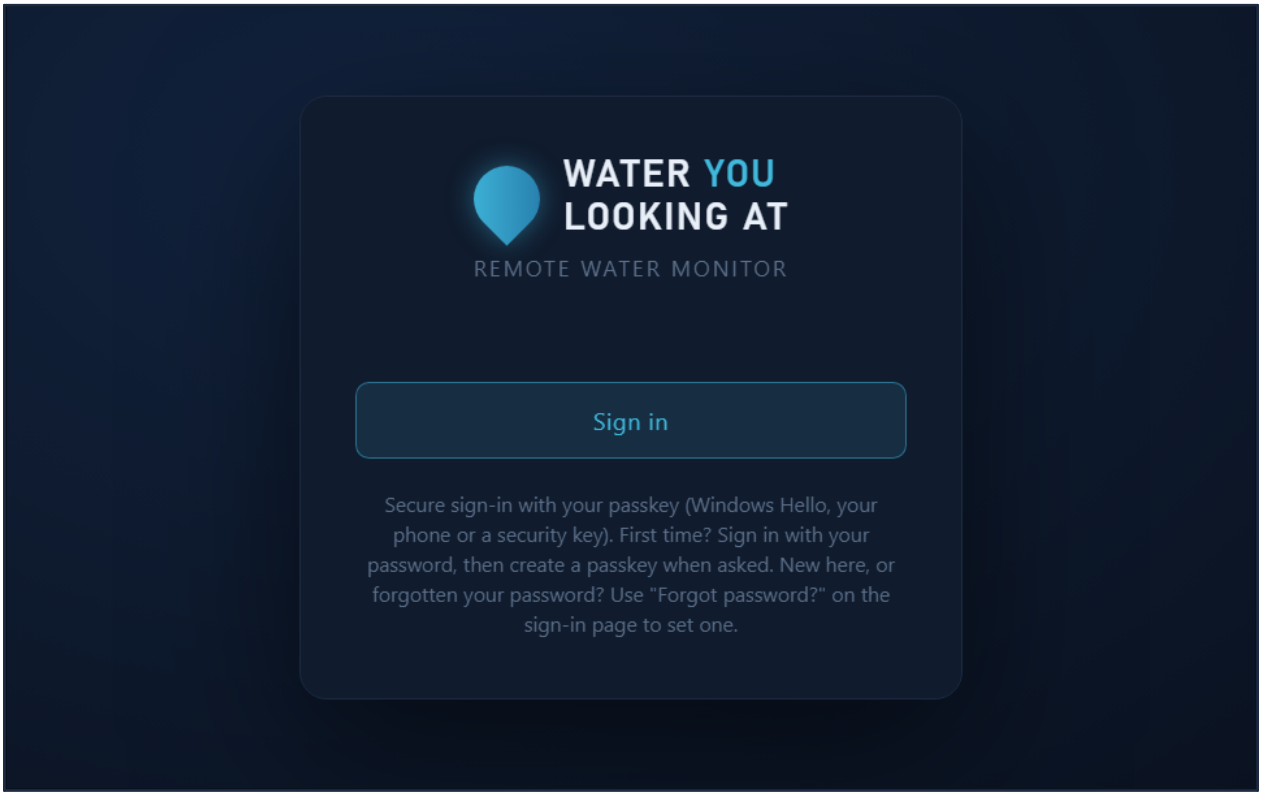
02 SIGNING IN TO THE CLOUD CONSOLE

The console holds your compliance records, so it uses **passkeys**. A passkey is a sign-in key kept on your own device: Windows Hello on your computer (your face, fingerprint or PIN), your phone, or a security key. You sign in by unlocking it, with nothing to type. It only works on WYLA's real sign-in page, so a fake page cannot trick you into handing it over, and nobody can use it without your device. Your password still works, but signing a compliance report needs your passkey.

The sign-in screen

Open the console's address in your browser. The WYLA sign-in box shows the drop logo, the words *Remote water monitor*, and one button: **Sign in**. Under the button is a short reminder: *Secure sign-in with your passkey (Windows Hello, your phone or a security key)*.

Press **Sign in**. You are taken to WYLA's secure sign-in page, where you enter your email address first, then sign in with your passkey or your password. **New here?** The first time, choose **Sign up** on that page, with the email address you were invited with, and pick a password; then click the link in the confirmation email it sends (see **Your first sign-in: confirm your email address** below). Adding you in WYLA does not make this login for you. Forgotten your password later? The password page has **Reset password**, which emails you a link to choose a new one.



The console's sign-in box. Pressing Sign in opens the secure sign-in page for your passkey or password.

First sign-in: creating your passkey

The first time, you sign in with your password. The sign-in page then offers to create a passkey:

1. Press **Sign in**, enter your email address and continue.
2. Enter your password. If you do not have one yet, choose **Sign up** with your invited email address, pick a password and click the link in the confirmation email, then come back.
3. When the page offers to **create a passkey**, accept.
4. Your device asks you to confirm: Windows Hello (face, fingerprint or PIN), your phone's screen lock, or a touch of your security key. To keep the passkey on your phone instead of this computer, choose the phone option and scan the QR code it shows with your phone.
5. The console opens at your sites. Your passkey is ready for next time.

> **Create a passkey now**
> If you skip the offer, you can still sign in with your password, but you cannot sign a compliance report until you have a passkey. The sign-in page offers it again next time.

Every sign-in after that

There is no code to type and nothing to wait for. If your device cannot use a passkey at the moment, you can sign in with your password instead.

1. Press **Sign in** and enter your email address.
2. Choose to continue with your passkey (the browser may offer it straight away).
3. Confirm on your device: Windows Hello, your phone, or your security key.
4. The console opens at your sites.

A new computer or phone

A passkey made with Windows Hello stays on that computer. On a new computer, either use the passkey on your phone (choose the phone option and scan the QR code), or sign in with your password and create a passkey on the new computer when the page offers it. You can have a passkey on each device you use.

Lost or replaced phone

Sign in with your password on another device, and create a new passkey there when the page offers it. Then tell your account owner or WYLA support, so the passkey on the lost phone can be removed.

If you cannot sign in at all, use **Reset password** to set a new password, or contact your account owner or WYLA support. An administrator can reset your passkeys so that you create a new one at your next sign-in. For your security, they will check who you are first.

Signing in with Microsoft or Google

The secure sign-in page also offers **Continue with Google** and, where it has been switched on, **Continue with Microsoft**. Use one if you would rather sign in with an account you already have than keep another password. You still need a WYLA login first: your account owner adds your email address on the Users page.

The first time you use a Microsoft or Google account, WYLA checks that it is yours:

1. Press **Sign in**, choose **Continue with Microsoft** (or Google) and sign in to that account.
2. The console shows **Confirm it is you**. Press **Email me a code**.
3. WYLA emails an eight-digit code to the address of your WYLA login. The email's subject is *Your WYLA sign-in code*. The code works for 15 minutes.
4. Type the code in **One-time code (eight digits)** and press **Confirm**. The console opens at your sites.

> **Why a code?**
> Microsoft does not check the email address on a work or school account, so WYLA does not trust it. The code proves that you read the mailbox of your WYLA login. You are asked once for each Microsoft or Google account. After that it signs you in with no code.

If the code does not arrive

The screen says a code was emailed whether or not the address is a WYLA login, so that nobody can use it to find out who has one. If no email arrives in a few minutes:

1. Check that the address shown is the one your account owner added for you.
2. Look in your junk folder.
3. Press **Email me a new code**. You can ask once a minute and five times a day. Only the newest code works, and five wrong tries cancel it.
4. If it still does not arrive, press **Sign out** and sign in with your email address and your passkey or password instead.

> **A code you did not ask for**
> If an email with a WYLA sign-in code arrives and you were not signing in, do nothing. Nobody can use your login without the code. If it keeps happening, tell your account owner or WYLA support.

Your sign-in methods

At the bottom of the **My alarms** page, **Your sign-in methods** shows how you are signed in now and lists the Microsoft and Google accounts confirmed for your login, each with the date it was confirmed and a **Remove** button. A removed account no longer opens your login until it is confirmed with a new code. If you remove the account you are signed in with, you are signed out.

Account owners see *Signs in with: Microsoft* (or Google) under a person's name on the Users page. Removing a login removes its Microsoft and Google accounts with it. Every confirmation and removal is in the audit log.

If the console says **This way of signing in is not switched on**, press **Sign out** first, then sign in with your email address and your passkey or password.

> **Your passkey is still needed for signing**
> A Microsoft or Google sign-in does not count as your passkey. To sign a compliance report or make a control change, the console still asks you to sign in again with your passkey. If you have never made one, sign in once with your email address and password and accept the offer to create a passkey.

Signing a compliance report needs your passkey

Signing a monthly compliance report (see Regulator Reports) is a statement to a regulator, so the console makes sure it is really you. When you press **Confirm it is you and sign**, a window asks you to **sign in again with your passkey to sign this report**, even if you are already signed in. A password alone is not enough: without a passkey sign-in in the last few minutes (5 by default) the report is not signed. The signed PDF records that you confirmed it was you with a passkey, and when. Allow pop-up windows for the console's address in your browser, or the window cannot open.

> **No passkey yet?**
> Create one first: sign out, sign in with your password and accept the offer to create a passkey. Then sign the report.

Control actions need your passkey too

The same applies on the Changes page (see Operator Certificates and Control Changes). Giving someone control permission, designating an operator in charge, proposing a change and confirming a change made at the panel each need a passkey sign-in within the last 5 minutes. For these, a password or any other second factor is never accepted. Withdrawing a permission or a designation and cancelling a proposal do not ask, and nor do shift-log notes and sign-offs.

Signed in but not set up yet: the demo

Anyone can make a login on the sign-in page. A person whose email has not been given access to any site is shown the **WYLA demo**: the made-up schools of **Demo School (simulated)** on simulated readings, as a viewer. A bar at the top of every page says **You are viewing the WYLA demo**, with **Ask for your own sites** (the Waterwise Technologies website). They can open every page a viewer can, but every change is switched off: pressing a button that would change something says **This is the WYLA demo - changes are switched off**. They never see a real customer, and they cannot set off a text, an email or a signature. Each visit is kept in the sign-in log (role **demo**) with the email they signed in with; no login is added to the demo's Users page.

When the owner or an administrator adds that email to a customer, the person's next sign-in opens their own sites instead: press **Sign out** and sign in again. (A server with no demo customer set shows the older screen, **Your account isn't set up yet**, instead.)

Your first sign-in: confirm your email address

The first time an invited email signs in with a password or a passkey, WYLA checks that the address really belongs to the person signing in: the sign-in service must have it **confirmed**. Until it is, the console shows **Confirm your email address**. Open the email from WYLA sign-in and click its link, then press **Sign out and sign in again**. No email? Check the junk folder, or use **Reset password** on the sign-in page: its email confirms the address too. This stops anyone else making a login with your address before you do. The check is made once; after your first sign-in it is not asked again. A Microsoft or Google account is confirmed by its emailed code instead (above).

> **Could not check your sign-in**
> If the sign-in service does not answer, the screen says **WYLA could not check your sign-in just now**. Wait a minute and reload the page; nobody is let in on a guess.

03 FINDING YOUR WAY IN THE CONSOLE

On 7 November 2026 the console's layout changed. The menu is now in five groups, the top bar always says which customer, site and role you are looking at, one site picker in the menu decides the site for every page, and every date and time is shown in the site's own time zone with its name. This chapter explains the layout; the next one explains **Today**, the page the console now opens on.

The menu, in five groups

The menu on the left is grouped by what you are trying to do. A group heading is a label, not a link. A group with nothing in it that you can open is left out. The page title at the top of the screen is always the same as the menu label you clicked.

GROUP	PAGES
Today	Today, Overview, Schedule, Reminders, Events
Sites	All sites, Site Map, Plant view, Trends, Compare sites
Records	Logbook, Lab samples, Documents, Your rules, Compliance, Reports, Scheduled emails
People and alerts	Recipients, Call-outs, Operator certificates, My alarms, Users
Setup	Setup, Connections, Maintenance, Changes, Audit log, Admin

Searching the console

The **Search** box in the top bar is on every page. Click in it, or press **Ctrl+K** (**Cmd+K** on a Mac), and start typing; **Esc** closes it. On a phone it is a magnifying-glass button that opens across the screen. Results appear as you type, under five headings. Use the up and down arrows and **Enter**, or click or tap a result.

- A rule number can be typed with or without its punctuation: **T2.1**, **t21** and **T2.1-a** all find rule T2.1.
- Capital letters, macrons and one small typo in a longer word do not matter.
- Everyday words work: **boil water** finds the Do Not Drink kit, **e coli** finds Lab samples, **who gets told** finds Recipients, **UV lamp** finds the Logbook and **password** finds the part of this manual about signing in.
- If nothing matches, the search says so and offers the Help page. If this manual cannot be searched just then, the search says that too.

HEADING	WHAT IT FINDS	WHAT OPENING ONE DOES
Pages	The pages in the menu, and pages that are not, such as the Do Not Drink kit	Opens the page

HEADING	WHAT IT FINDS	WHAT OPENING ONE DOES
Things to do	Jobs such as record a lab sample, record an inspection, print paper record sheets, make the monthly report, add a recipient or request a feature	Opens the page with the form open or in view
Rules	The New Zealand Rules that apply to this site, by number or by plain words	Opens Your rules at that rule
Training videos	The training videos, by their name, what they show and everyday words such as **tank level** or **every week**	Opens the Help page and plays the video
Help	The chapters and sections of this manual	Opens this manual at that section

It only offers what you can use
The search follows the same rules as the menu: a page or a job your role cannot use, or a part that is switched off at this site, is not offered. A rule is shown only if it applies at this site; if the site's level is not set yet, every rule can still be found and each says the level is not set. The annual or quarterly report is offered only once the site's level is set and the Rules apply there. What you type stays in your browser: it is not sent to WYLA.

Who sees which page

Most pages are open to everyone who can see the site. A few are kept for some roles, and the others do not see them in the menu:

PAGE	WHO SEES IT
Recipients	Operators, the account owner and WYLA administrators
Setup and Connections	Installers and the account owner
Users, Audit log and Scheduled emails	The account owner
Admin	WYLA administrators only

A page you cannot open
If you follow a link or type an address for a page your role cannot open, the console no longer jumps somewhere else without a word. It shows a short page, for example *Users is not open to you*, which says who the page is for, the role you are signed in as and *ask the account owner if you need it*, with a **Go to Today** button. An address that is not a page at all shows **Page not found** - *The link may be old or mistyped* - with the same button. In a read-only customer view, a page that changes settings says *not available in a customer view*.

Parts that are switched off

A page that belongs to an optional part of WYLA (for example Schedule, Lab samples, Documents or Call-outs) used to disappear from the menu when the part was off. Now it stays in the menu, greyed, with one small line under it saying why:

- **Off at this site - switch it on in Setup > Features** - your organisation has the part; it is only switched off at this site, and you are the account owner.
- **Off at this site - the account owner can switch it on** - the same, for everyone else.
- **Off at every site** - the same, for a part that covers the whole account, such as Compare sites.
- **Part of** a plan **- ask WYLA** - no plan you are on includes it; the line names the plan that does.
- **An add-on - ask WYLA** - it is an add-on your account does not have.

> **Opening a greyed page**
> Clicking a greyed item opens the page with a short note saying it is not switched on and which plan has it, instead of a blank page. The **All sites** page is never greyed: the list of your sites is everyone's. See **Features and Plans** for the plans and parts.

One site picker for every page

Under the logo, the **Site** box shows the site's name and owner and a drop-down to choose another site. **That site is the site for every page.** The pages that used to have their own site box (Compliance, Reports, Schedule, Documents, Reminders, Changes, Call-outs and others) now name the site chosen in the menu instead, so two boxes can never disagree. Where a page has a reason to send you to another site - a **Switch to this site** button on Today, a click on a site on All sites - it switches the menu's site, so the whole console follows.

The console remembers your choice in this browser and comes back to the same site after a reload or the next time you sign in. The first time you sign in on a browser, with more than one site, it opens on the site that needs someone most - a red site first, then a yellow one - rather than the first site in alphabetical order.

> **Pages that are about more than one site**
> **All sites**, **Compare sites**, **Users**, **Audit log**, **My alarms**, **Operator certificates**, **Scheduled emails**, **Recipients**, **Help** and **Admin** cover your whole account, so the top bar does not show one site's status on them. The Help form keeps its own **Site** box, because a request can be *Not about one site*.

Unsaved changes

If you have typed changes and not saved them - a gateway's settings or a site's features in Setup, the Compliance settings, the call-out settings, a regulatory profile or notice on Reports, or a change you were writing on Changes - and you choose another site, the console asks first: for example *Change site? Your changes to the gateway's settings will be lost - they have not been saved.* Press **Cancel** to stay and keep

them. Leaving Setup with unsaved changes, or closing the browser tab, asks the same way.

The top bar

The bar across the top is the same on every page. From left to right:

- **Where you are** - the customer's name and the site's name in small letters, and under them the page title.
- **The status pill** - the state the site's gateway reports: **ALL SYSTEMS NORMAL**, **WARNING**, **FAULT**, **OFFLINE**, **STANDALONE**, or **Not connected yet** for a gateway that has never reported. Hover over it to read what it means. Click it to open the site's **Overview**.
- **Alarms waiting** - a red or yellow chip, for example *1 red, 2 yellow alarms waiting*, when alarms at the site have not been acknowledged by anyone yet. Click it to open **Events**.
- **Nobody is told about alarms here** - a red chip when nobody on the alarm list would be told about an alarm at this site. Click it to open **Recipients**.
- **Plant light** - a picture of the stack light on site, lit the same as the real one.
- **Your role** - Viewer, Operator, Installer, Owner or WYLA admin.
- **Help** - the Help page (chapter **Help: the Manual, Training Videos and Asking WYLA**).
- **Sign out**.

> **Where the other links went**
> **Help** and **Sign out** moved from the bottom of the menu to the top bar, so they are always in view. The bottom of the menu keeps the links to this **Manual** and the **Privacy** notice. A WYLA administrator also has a **Customer** box above the Site box.

On a phone or tablet

On a screen narrower than about 920 pixels the menu is hidden behind the menu button at the top left. Press it to open the menu; press it again, press the close button in the menu, tap outside the menu or press **Escape** to close it. Choosing a page closes it too. While the menu is closed, the keyboard's Tab key goes straight to the page. Buttons are large enough to tap, and wide tables either scroll sideways inside their own box - with a *Scroll sideways for more* line under them - or turn each row into a card.

Times are the site's time

Every date and time on the console is now in the **site's** time zone, and says which zone it is, for example **2026-11-07 14:30 NZDT**. This matters when the person reading is somewhere else: a service company in another country, or a laptop whose clock is set to another zone, sees the same times as the people on site.

Every box where you type a date and time is read in the site's time too, and its label says so, for example **Taken at (site time, NZDT)**. If the site's time zone is not known yet, the label says *this computer's time* instead.

For WYLA staff: the platform-wide **Admin** pages, and the "generated ..." time in the Admin header, are in **UTC** and say so, since an admin works across every customer's zone (the Rollout tab's Sent and Finished times are the one exception: your own clock). A WYLA admin working in no customer sees **Every customer** before the site in the top bar, as the sidebar says.

Alarm names and levels

Every page now shows an alarm by its plain name - for example *Pump has stopped when it should be running* - the same words the alarm email uses. The short alarm code is kept for the WYLA team and is not a page's headline.

There is one set of names for the alarm levels, used on every page:

LEVEL	MEANS
Fault (red)	Something needs attention now
Warning (yellow)	Something needs attention soon
Information	A routine notice; nothing to put right

04 TODAY

Today is the page the console opens on after you sign in. It answers one question for the site chosen in the menu: *what needs doing here today?* It lists the jobs that are overdue or due today, the alarms nobody has acknowledged yet, who will be told about an alarm, and the other sites of your organisation that need someone. A new customer also sees a short getting-started list.

The tiles

Four tiles across the top:

TILE	SHOWS
Overdue	Jobs past their date (red), or *nothing overdue*
Due today	Jobs to do today (yellow), or *nothing else due today*
Alarms waiting	Alarms not acknowledged yet - red when one of them is a fault
Who will be told	How many people will be told about a red alarm here, or **Nobody** in red (shown when the console can read the answer for your role)

> **When the Schedule is off**
> The jobs come from the **Schedule** (chapter **Schedule**). Where the Schedule is not switched on, the two job tiles are replaced by one grey **Jobs - Not tracked** tile, and the jobs panel says the Schedule is not switched on and which plan has it. Today never says *nothing overdue* when it cannot know.

Jobs to do

The jobs overdue or due today, overdue first and the longest overdue at the top. The panel heading gives the site's date, for example *today is 2026-11-07 (site date, NZDT)*. Each job has a chip - **overdue by N days** or **due today** - and **Do it**, which opens the form that makes the record, exactly as on the Schedule page. **See the whole schedule** opens the Schedule.

A viewer, or anyone in a read-only customer view, sees **Open Schedule** instead of **Do it** and the line *You can look but not record here. An operator or the account owner records the jobs.*

Alarms waiting for someone

Every alarm at the site that is still open and has not been acknowledged, faults first, then warnings, the newest first within each. Each row gives the alarm's plain name, its message, **Since** the time it was raised (in site time) and its level chip - **Fault (red)**, **Warning (yellow)** or **Information**. **Open Events** opens the Events page, where an operator acknowledges it.

Who will be told

The people who would be told about a red alarm at this site: anyone switched on, with an email address or phone number, whose own alarm settings cover this site - or who is on a notification list that does. The panel names up to six of them. If the answer is nobody, it says in red **Nobody will be told about an alarm at** the site.

This is the same answer as the **Who gets told** table on Recipients and the **Who is told about alarms** panel in Setup. Operators and the account owner change it, on the Recipients page (**Open Recipients**); everyone else is told who keeps the list.

Your other sites

With more than one site, **Your other sites** lists each of the others that needs someone: an open fault or warning, a lab or logbook problem, or jobs overdue. A site with a fault comes first, and the panel then moves to the top of the page, straight under the getting-started list. Each site shows up to three lines of what is open - for example *2 jobs overdue, the longest by 5 days* - a chip (**Fault (red)**, **Warning (yellow)** or **N jobs overdue**) and **Switch to this site**, which switches the menu's site.

Sites with no readings yet are not listed one by one; a line counts them (*3 other sites have no readings yet, so WYLA cannot check them*). **Open All sites** opens the All sites page.

A site with jobs overdue or due today is shown as a warning (its jobs said once), and only a site with no readings and nothing due counts as "no readings yet". A site where a part was switched off lately shows **Jobs no longer tracked**, for example *Scheduled reminders switched off on 2026-11-08: 1 job is no longer tracked*. The same note is shown above **Jobs to do** for this site.

Getting started

While something on it is not done, a new customer sees a short list at the top:

- **Add who gets the alarms** (opens Recipients) - done once at least one person will be told. Shown only to people who can change the list.
- **Check the site's rules** (opens Your rules, or Compliance) - done once you have opened them in this browser. Left out when neither page is switched on.
- **Record a first inspection** (opens the Logbook) - done once a logbook inspection is recorded. Left out when the logbook is off.

> **Hiding the list**
> **Hide this list** puts it away for your organisation in this browser. Once every step is done, the list is not shown anyway.

Set-up with WYLA

While WYLA support is setting your sites up with you, Today shows the set-up items and where each stands. Green items come from your own records; WYLA support marks the others and you can read every note. You do not need to do anything with this card - it is there so you can see what WYLA checked.

A site with no gateway

A customer with no gateway yet sees **No site to show yet**: the page fills in once a gateway is set up at a site. A gateway that is not placed at a site yet has no jobs, records or recipients of its own; Today says so, and still lists your other sites and the alarms waiting.

05 SYSTEM OVERVIEW DASHBOARD

The Overview page shows one site's live plant — one glance tells you whether the system is healthy (the console opens on **Today**; the status pill in the top bar opens the Overview). It is organised top to bottom: live process strip, five KPI tiles, pressure and tank panels, disinfection status, active alerts, and the last 24 hours of flow.

Header bar

The top bar is visible on every page. From left to right: the customer's name and the site's name (e.g. *MacKenzie Water · Te Awa Rd*) above the page title; the **status pill** (ALL SYSTEMS NORMAL, WARNING, FAULT or OFFLINE - click it to come back to this Overview); an **alarms waiting** chip when alarms have not been acknowledged; a rendering of the physical **stack light** showing which lamp is currently lit at the installation; your role, **Help** and **Sign out**. Chapter **Finding Your Way in the Console** describes each. The Overview is no longer the page the console opens on: that is **Today**.

Live process strip

The strip mirrors the physical order of your water system: **Tank** (litres and %) › **Pump** (motor current, amps) › **Filters ×2** (differential pressure across the media filters, bar) › **UV** (lamp current, amps) › **Flow** (litres per minute) › **Chlorine** (dose, mg/L) › **Delivery** (system pressure, bar). Each node shows its input tag and signal type above the icon, the live value below, and a status dot in the corner — green, yellow or red. Animated dashes on the connecting pipes indicate the display is live.



Live process strip and KPI tiles. The Filters node carries a yellow dot because the differential is above Warning 1.

KPI tiles

Five tiles summarise the numbers that matter: **Pump Status** (ACTIVE / IDLE / FAULT, derived from flow and pressure together with the measured current), **Flow Now** (L/min plus litres accumulated today), **Tank Level** (litres, with %, head and the installer-entered capacity), **System Pressure** (bar, with the configured good range), and **Filter Differential** (bar, with its warning threshold; labelled “Filter dP” on screen). Each tile's left edge is colour-striped by status.

Pressure panel

Three gauges show **B · Inlet**, **C · Post-filter** and **J · System** pressure on 0–10 bar dials; the green arc band marks the configured good range (2.7–5.5 bar by default). Below the gauges, the **media-filter differential bar** shows B−C against both warning thresholds (Warning 1 and Warning 2) so you can watch a filter clog developing over weeks.

Tank panel

A live tank graphic shows the current fill with the configured MIN alarm level drawn as a dashed line (there is no high-level alarm). Beside it: volume in litres, the installer-entered capacity, head in metres, 24-hour change in litres, and the sensor part number on record.

Disinfection & dosing panel

One row per device, each with a status chip: **Hallett UV Pure** (Modbus — treatment state, dose, seconds since last communication), **UV Lamp (simple)** (measured lamp current against its minimum, running hours), **Realtech Cl_2 Injector** (dose mg/L, alarm bits, comms age) and **Softener Status K1 / K2** (normally-open status inputs — both open is normal).

Hallett detail view

The **Detail** button on the Hallett row expands a live panel that mirrors Hallett's own utility screen, read over Modbus: Treatment state, UV fan, PCB fan, heater, dosage (mJ/cm^2), UVT %, UVI %, PCB / system / water / lamp temperatures, active warning, and lamp days remaining.



The Hallett detail view expanded on the dashboard — the same information as Hallett's own utility, live over Modbus.

Active alerts panel

Lists every alarm currently active, newest first, each with its severity chip, plain-language description (including the affected part number and which contacts were notified) and the time it was raised. Three buttons: **Silence 7 days** (suppresses notifications while continuing to track the condition), **Acknowledge**, and **Event log ›** (jumps to the Events page). When nothing is active the panel shows an all-clear line with the date of the last red fault.

Flow — last 24 hours

An area chart of flow in L/min since midnight, with the daily high-flow alarm point drawn as a reference. The endpoint dot is the live reading.

06 SITE MAP — SIGNAL TOPOLOGY

The Site Map draws the installation as a wiring diagram that is alive: every field connection is a box, wired to the USR-M300 / Node-RED core in the centre, and the **line itself carries the status**. It answers the fault-finding question “which leg is dead?” at a glance, before anyone opens a cabinet.

What each element means

Boxes around the edge are physical connections: the five analog loops (pump CT, inlet, post-filter, system pressure, UV lamp CT), the tank level, the pulse flow meter, the two N.O. fault contacts, the two Modbus devices (Hallett, injector), the stack light relays, the owner-UI link and the 4G/MQTT cloud uplink. Each box shows its tag and terminal (e.g. B · AIN2), its name, its live value and a status dot. Lines are labelled with the signal type (4-20 mA, PULSE, N.O., RS-485, RELAY, 4G · MQTT).



The live signal topology. The post-filter leg runs yellow because the filter differential warning is active; everything else flows green.

Reading the lines

Green, flowing — healthy, data moving. **Yellow, flowing** — a warning involves this signal. **Solid red** — fault or no signal: this is the exact leg to take the multimeter to (sensor loop, Modbus bus, uplink or lamp output). **Grey dashed** — an idle contact or disabled function; a grey line into a green box is normal for the fault contacts. In the OFFLINE state the cloud uplink turns red and everything downstream of the unit greys out — the unit itself, not a sensor, is unreachable.

How it stays live

The map is driven by the same per-signal quality states as the rest of the UI (GOOD / warning / fault / loop-fault), so it always agrees with the banner, the stack light and the alerts panel. It is visible at both access levels — it changes nothing, so owners can safely use it when phoning their service provider: "the red line is the inlet pressure leg" is a perfect fault report.

07 PLANT VIEW

Plant view draws your site's water treatment on one page, as a train from the source to the tap: **source tank → pump → filters → UV → chlorine → treated tank → flow**. Each block shows its live value and unit, a status chip and colour, its open alarms and a short note saying where the value comes from. It is a quick way to see the whole plant at once, and to show a site to someone who has never seen one.

Opening it

Open **Plant view** in the **Sites** group of the menu, straight after **Site Map**; it shows the site chosen in the menu's site picker. It is part of every cloud plan and cannot be switched off: it shows only what the site already records, like the Site Map. The page refreshes by itself every 20 seconds. Nothing on it changes the plant or the gateway.

> **When**
> In the console from 3 November 2026.

The blocks

A site with two UV units or two drives shows the first one in detail and how many more there are. A Centurio PRO's channels show as *Channel N*, without units: its register map does not name them. pH and turbidity appear only when the reading or the channel is named pH or Turbidity.

BLOCK	SHOWS	WITHOUT THAT EQUIPMENT
Source tank	The level of a site input whose name says it is the raw water (for example "Raw tank", rain, bore)	Not fitted
Pump	With a Bianco NXT drive: pressure, set point, frequency, current, drive state and fault (from gateway software PUSR 1.1.49 / EM300 1.1.73, published 3-4 November 2026)	System pressure (J) and pump current (A): Running or Idle
Filters	The differential pressure, with the pre-filter (B) and post-filter (C) pressures, against your alarm setpoints	Not fitted
UV	With a Hallett: dose, UVT, intensity, lamp days left, treating or not, open alarms	The lamp current (G2) against the lamp-out setpoint
Chlorine	The chlorine injector or controller; pH and turbidity where the site records them	Not fitted
Treated tank	The level (F) in %, and in litres once the tank capacity is set	Not fitted
Flow	Flow now (H), or a serial device's flow reading	Not fitted

What the colours mean

An alarm is shown on the block of the equipment it names, else of the input it names, else by its kind (a filter alarm on the filters, a lamp alarm on the UV, a low tank on the treated tank). The pipes move while the pump runs or water flows.

COLOUR	WHEN
Grey	The gateway is offline or standalone, or its readings have stopped. Every block greys and shows its last value, and a banner at the top says why
Red	A red alarm open on that block
Yellow	A yellow alarm open on that block; a serial device that does not reply; a sensor loop fault (a reading under 4 mA); a UV unit that says it is not treating
Green	None of these
Dashed outline	**Not fitted**: the site has nothing in that place

On a phone

On a screen narrower than about 760 pixels - a phone - the train runs from the top of the page downwards instead of across. On a narrow laptop window it scrolls sideways inside its panel.

08 ALARM STATES & NOTIFICATIONS

Every alarm in the product follows the same life cycle: the condition must hold continuously for its configured delay before the alarm fires; when it fires, the stack light, the banner, the SMS/email and the event log all update together.

Severity and what it looks like

The console names the levels **Fault (red)**, **Warning (yellow)** and **Information**, the same on every page, and shows each alarm by its plain name - the same words as the alarm email.

A **YELLOW warning** turns the banner and stack light yellow and sends an SMS/email to the configured contacts — examples: filter differential above Warning 1, tank below minimum, sensor loop fault (reading under 4 mA), a Hallett warning bit, loss of Modbus communication, or an expired maintenance timer. A **RED fault** turns everything red — examples: pump fault (no current with low pressure), UV lamp not lit, a closed fault contact, or a Hallett alarm bit. Red messages also go to the service provider.



The dashboard in a RED fault state: pump failure detected. Note the red stack light, red process nodes, and the fault entry at the top of Active Alerts.

What a notification contains

Every SMS and email is prefixed with the unit name and severity, describes the condition in plain language with the measured value and the setpoint, and — for any sensor or consumable — includes the **replacement part number** you recorded at setup, so whoever receives the message can order the right part immediately.

The weekly status report

Separately from alarms, the monitor can send an **automatic weekly summary** by email or text: water used over the period, how much life is left in each filter and the UV lamp, anything that alarmed during the week and how it resolved, and a plain statement that the unit is reporting normally.

It is worth switching on even though it tells you nothing urgent. A system that only ever contacts you when something is wrong leaves you with no way to tell "a quiet week" from "the monitor stopped working three weeks ago". The weekly note is the difference. Your installer sets the day, the recipients and the channel; email costs nothing to send, so it is the sensible default.

Composite alarms — reading two things together

Some faults are invisible in any single reading and obvious in a pair. The monitor watches for three of these combinations: **high flow with falling pressure**, sustained, means a **broken pipe**; **no flow with no pressure** means the **pump has failed**; **high pressure with low flow** suggests a **leak** downstream of the delivery point.

The difference matters when the message arrives. "Pressure is low" is a number you have to interpret; "you have a burst line" is something you act on. A composite never fires while one of the readings it depends on is in sensor fault — a conclusion drawn from a broken sensor would be worse than no conclusion.

Mobile connection (SIM) expiry

Where the monitor uses a mobile connection, that SIM is on an annual plan with an expiry date. You are warned **30 days before it lapses**, and again if it does.

This warning exists because of how the failure looks: **a lapsed SIM is indistinguishable from a dead unit**. Same silence, same offline alarm, same worry — but the fix is a phone call to the network provider rather than a trip to the site. The expiry warning is raised by the cloud rather than by the unit, for the obvious reason that a monitor with no working connection cannot tell anyone anything.

Silencing

Silence 7 days stops notifications for the active alarms while the underlying condition continues to be tracked — the banner and stack light stay coloured so nobody can forget the system is not healthy. Silence expires automatically after 7 days or when the condition clears, whichever comes first.

The OFFLINE state

Besides OK / warning / fault there is a fourth condition: **OFFLINE** — the unit itself is unreachable (power cut, 4G outage, antenna fault). The banner turns grey with the time of the last heartbeat, live values show a dash instead of stale numbers, no stack lamp is lit, and after a configurable period without contact an OFFLINE SMS is sent. On the **All sites** page a site whose gateway cannot be reached shows **No data** - WYLA cannot check it - never green.



An unreachable unit: grey banner, dashed values, and an offline notice in Active Alerts with the last-heartbeat time.

Derived pump status

The system has no control wiring to the pump, so its status is inferred: flow present and pressure OK = **Pump Active**; no flow and pressure OK = **Pump Idle**; no flow and no pressure = **Pump Fault**. The pump fault alarm additionally requires motor current to be zero while pressure is below target for more than 30 seconds.

09 ALL SITES AND PER-SITE LOGINS

All sites shows every site of your organisation on one page - red, yellow, green or no data, with the reason - and opens any of them with one click. On 7 November 2026 it replaced two pages: the **Fleet** page and the **Sites overview** (the old addresses still open it). The page is for every customer. The monthly programme report and **Compare sites** on it are part of the many-sites add-on. **Per-site logins** let a school's own people see only their own school; your account owner sets them on the Users page.

The All sites page

Open **All sites** in the **Sites** group of the menu. At the top, tiles: **Sites** (how many, and the organisation's name), **Red** (need attention now), **Yellow** (something due or open), **No data** (WYLA cannot check them - shown only when there are any), **Green** (nothing open) and **Gateways** (how many, and how many are online now). Below, one row per site:

COLUMN	SHOWS
Site	Name and address (an address every site shares is said once, above the table)
Customer	For a service company: whose site it is
State	**Red**, **Yellow**, **No data** or **Green**. A red or yellow site that WYLA also cannot check says *and no gateway data*
Why	Each reason in words, or *Nothing open*; overdue jobs from the Schedule are added here too
Last contact	How long ago the site's gateways last reported (hover for the date and time in site time), and how many are online
Open alarms	Open faults and warnings, for example **1 fault**, **2 warnings**, and how many of them are acknowledged but still open; or **None**
Compliance today	Today's result where the site has a rule set, with a red **Yesterday: not met** chip when yesterday had a day not met; otherwise **No rule set** (choose one on Compliance) or **No result yet today**
Lab	The lab register: for example **E. coli found**, **Sample overdue**, **Due by** a date, **Clear tests needed**, **Up to date**, **Not set up**, **Module off**
Logbook	The logbook: for example **1 inspection overdue**, **1 inspection due soon**, **Action needed**, **Up to date**, **No preset picked**, **Module off**
Schedule	Jobs overdue and due, where the Schedule is on (chapter **Schedule**)

Gateway details
Show gateway details adds the columns the Fleet page had: **Gateway** (**Reporting**, **Silent**, **Never connected**, **Cannot be reached**, **No readings yet** or **Standalone**), **Link** (Wi-Fi, 4G or LAN, with the signal strength), **Settings** (the settings version the gateway last confirmed) and **Recording**. **Hide gateway details** takes them away again.

Opening a site

Click any cell of a site's row - one click, no longer a double-click - to open that site on the matching page. The menu's site picker switches to that site, so every page follows. Hovering a cell says where it goes. On a keyboard, Enter or Space on a cell does the same.

CLICK ON	OPENS
Site, State or Why	The **Plant view** of that site
Last contact	The **Overview** of that site
Open alarms	**Events** for that site
Compliance today	**Compliance**, on that site
Lab	**Lab samples**, on that site
Logbook	The **Logbook**, on that site
Schedule	The **Schedule**, on that site

A site with no gateway yet
Lab samples, the Logbook and Compliance still open for it; the Plant view and Overview say there is nothing live to show.

The map

From 10 November 2026 **List** | **Map** at the top of the page shows the same sites on a map of New Zealand instead of the table. The console remembers your choice on this computer. Each site with a location has one pin, in the same state as its row - the colour, the reasons and the sites you may see are exactly the list's, and the filters (the tiles, Find, State, Customer) narrow the map too. The map shows **sites**, not gateways: a gateway has no GPS, so the place is the site's.

- **One click** on a pin shows its card: the site's name, its customer (for a service company), its state, the first three reasons, when its last reading came in, and **Open site**.
- **Double-click** a pin, or press **Open site**, to open the site's **Plant view** (a site with no gateway yet opens on **Compliance**). The menu's site picker follows, as from the list.
- **Keyboard**: Tab moves from pin to pin (hovering or focusing a pin shows its name); Enter or Space shows its card and moves to Open site; Escape closes the card and goes back to the pin.

- **Show every pin** zooms the map back out to every site. The mouse wheel zooms the map only after you click on it, so scrolling down the page is never caught by the map.
- Under the map, the sites on it are listed with their state - press a name to show its card (handy on a phone) - and any sites with **no location yet** are named, with a link to open each one.

PIN	STATE
Red octagon with **!**	**Red** - need attention now
Yellow triangle with **!**	**Yellow** - something due or open
Grey square with **?**	**No data** - WYLA cannot check the site
Green circle with a tick	**Green** - nothing open

No location yet, and no internet
A site appears on the map once its location is set (see **Setting a site's location** below). Sites with none are listed under the map; for an owner or installer each one that has a gateway has a **Set its location** link. The background map comes from OpenStreetMap over the internet: without it the pins still show where each site is, on a plain background, with a note saying the map pictures cannot be loaded. The page refreshes every 20 seconds without moving the map or closing an open card.

Setting a site's location

From 10 November 2026 an **owner** or **installer** of the site's own organisation sets the site's location themselves, on the site's **Setup** page (the **Gateway** tab), in the **Site location** panel under **Device**. The location is used for one thing: the site's pin on the All sites map. It is the SITE's place - the gateway has no GPS.

1. Choose the site in the menu and open **Setup** (or press **Set its location** beside the site under the All sites map).
2. Click the small map where the site is - zoom in first with **+** - or drag the pin. The **Latitude** and **Longitude** boxes follow the pin. You can also type them (decimal degrees; New Zealand latitudes are negative, for example -43.53 and 172.63); the pin follows what you type.
3. Press **Use this location**. The site's pin is on the All sites map straight away.
4. **Clear location** takes the site off the map again (it asks first); **Undo changes** puts the pin back where it was saved.

Who can set it
An owner or installer of the site's own organisation (a login limited to some sites, only for those sites), and WYLA. Viewers and operators cannot open Setup; a service company sees the location in words but does not change it. Every change is in the **Audit log** (site location changed, with the old and new place). Without internet the small map has no background, but the boxes still work. A site with no gateway yet has no Setup page: ask WYLA to enter its location (Admin > Customers).

What the colours mean

The worst state wins, in the order red, yellow, no data, green: a site WYLA cannot check that also has a yellow problem is yellow. A site with no readings is never shown green. The reason says what it is, for example "Compliance not met yesterday (2026-11-02): Daily minimum free chlorine" (up to three names, then "and N more"), "Lab: E. coli detected in the sample taken 2026-10-20; 1 of 3 clear tests since" or "... has never connected - WYLA cannot check this site. Check its power and SIM." **Close to a limit**, **Not enough data yet** and **In progress** do not change the colour, and neither do **Module off**, **Not set up** or **No preset picked** - except that an E. coli result is red even with no sampling schedule, as its alarm is. Today and yesterday are your organisation's days, in its time zone. The 30 minutes is WYLA's own setting for this page, not a regulation. A standalone EM300 is never marked silent (it checks in once a day by design).

Since 7 November 2026 a site with jobs **overdue or due today** on its Schedule is **yellow** (the Why column says, for example, *Schedule: 2 jobs overdue, the longest by 3 days*), even when no gateway has reported - the State then also says it has no gateway data. **No data** means no readings **and** nothing due or open. The tiles always add up to the rows, and the downloaded CSV uses the same rule.

STATE	WHEN
Red	An open red alarm (acknowledged or not); a gateway not heard from for more than 30 minutes; a gateway that reports a fault on its stack light; a **compliance day not met**, today or yesterday; E. coli found and not yet followed by three clear tests, or a lab sample overdue; an inspection overdue
Yellow	An open yellow alarm - including a calibration check due soon; a gateway that reports a warning on its stack light; a lab sample due soon, or three clear tests still needed after total coliforms were found; an inspection due soon, or one that found a problem not yet put right
No data	WYLA cannot check the site: no gateway at the site yet, a gateway that has never connected, one that is connected but has never sent a reading, or one that cannot be reached now
Green	Nothing open, and readings are coming in

Filters and download

Above the table a line counts what is shown, for example *12 of 40 shown*, with **Clear filters** when a filter is on.

- **The tiles**: click **Red**, **Yellow**, **No data** or **Green** to show only those sites; click it again, or **Sites**, to show every site.
- **Find**: type part of a name, town or region; the list narrows as you type.
- **State**: Every state, Red, Yellow, No data or Green.
- **Customer** (a service company with more than one customer): Every customer, or one.
- **Sort**: Worst first, Site name, Last contact, Most open alarms or Compliance today. On a desktop the column headings sort too: click once for A-Z, again for Z-A.
- **Download CSV**: the rows, for a spreadsheet.

- **Compare sites** (many-sites add-on): one question asked of every site - see **Compare sites** below.

> **Without the many-sites add-on**
> The page still lists every site. One line says: "The monthly programme report and Compare sites are part of the many-sites add-on, which is not in your plan - ask WYLA to add it. This page itself is for every customer."

The monthly programme report

Under the table, **Monthly programme report** gives one month across **all your sites** as a PDF or a CSV - for a board, a council or the Ministry. Pick the month (last month is picked; this month shows "so far") and press **Download PDF** or **Download CSV**. For each site: the compliance days met and not met, lab samples taken against due (school holidays count like any other month), positives and whether three clear tests followed, inspections done and overdue, red and yellow alarms and the longest, gateway uptime and data gaps; and a summary page with the totals. Scheduled emails can carry it too (section **Programme report (every site)**). In the console from 3 November 2026.

A SITE IS	FOR THE MONTH, WHEN
Red	A compliance day not met; an E. coli positive not yet followed by three clear tests; a lab sample missed; an inspection overdue at the end of the month; a red alarm still open at the end
Yellow	A red alarm raised and put right; a yellow alarm; a total coliforms positive without three clear tests; an inspection due soon, or a problem found and not yet put right; no gateway
Green	None of these

> **WYLA's own rule**
> These colours are WYLA's, not a regulator's. Uptime and data gaps are reported but never change a site's colour. The report holds site data only - no list of users and no names of who took or entered anything. A login limited to some sites cannot download it.

Compare sites

From 5 November 2026 the **Compare sites** link on All sites (and in the menu) asks one question of every site over the dates you pick - for example, how many sites had a power outage last term. It needs the many-sites add-on.

Compare sites is offered only to logins that see every site of the account (owners, and users with every site). A login limited to some sites does not see it in the menu; opening its address says so.

1. Choose a ready-made question: **Power outages**, **Water interruptions**, **UV treatment**, **Gateway offline or data gaps**, **Lab and inspections** or **Every alarm**.
2. Choose the dates, or press **Last month**, **Last 3 months** or **This year**. At most 366 days.

3. Read the answer. First a sentence, for example "23 of 400 sites had a power outage between 1 Aug and 31 Oct 2026: 41 outages, 63 hours in total". Then the fifteen sites with the most, as bars; the alarms behind the question; month by month; and every site, including those with none.
4. Click a site's name to open it. **Download CSV** or **Download PDF** saves the same answer; the PDF carries your **Report branding**.

What the numbers cannot show
Notes with the answer say what it cannot show. For example, a power outage is only recorded where a UPS contact is wired to the gateway (chapter **Alarm Inputs: Power Lost and UV Unit Alarm**), so a site showing none may simply have no contact wired. A login limited to some sites cannot open Compare sites.

Limiting a user to some sites (owners)

On the **Users** page the **Sites** column shows **Every site**, the site names, or "N sites".

1. Press **Change** on the user's row.
2. Tick the sites the person may see, or tick **Every site**.
3. Press **Save** (it stays greyed out until at least one site, or Every site, is ticked), or **Cancel**.

Inviting someone
The **Add a user** form has the same picker, **Which sites the new user may see**. Owners always see every site and cannot be limited. You cannot limit yourself or someone ranked above you. Every change goes in the audit log with before and after, and takes effect on the person's next click.

What a limited user sees

Only their own sites' pages, gateways, alarms, events, trends, compliance, reports, call-outs, lab samples and logbook. Anything else simply is not found. Their own **My alarms** entry is narrowed to their sites when the owner limits them, and any alarm recipient or list they create must name their sites.

- Not available to them (WYLA answers that it is "not available to a login that sees only some sites"): Users, the Audit log, feature trials, the customer-wide monthly alarm summary (the per-site one works), **Compare sites**, the **Operators** page (the operator certificate register) and control suspensions.
- Exports (readings CSV, compliance records and gaps) must name a site or gateway; with one site, it is filled in for them.

Before giving many schools their own logins
Alarm lists an owner puts a limited person on still send them every alarm on those lists, including other sites' - put school logins only on their own school's lists. The Operators page does not work for a limited login. The safeguard inside the database is not yet tested on the live system, so ask WYLA before relying on per-site logins to keep schools apart.

When a site is archived or deleted

When WYLA archives or deletes a site (for example a school that leaves the programme), at that moment:

- A login limited **only** to that site is **switched off**: the person can no longer sign in and sees "This login is switched off - ask the account owner to switch it back on." The reason is kept, for example "its only site, Ruawai School, was archived".
- A login limited to **several** sites just loses that one.
- Owners are never limited and never switched off.
- Restoring the site switches nobody back on and gives no site back. Every change goes in the audit log.

Switching a login back on (owners)

1. On the **Users** page the person's **Sites** column shows **Switched off** and why.
2. If they should keep a login, press **Change** and tick the sites they may now see, then **Save**.
3. Press **Switch on**. WYLA refuses while the login's only site is still archived or deleted ("choose its sites first").

Changing someone's role
Changing a person's role (for example operator to viewer) keeps the sites they were limited to. Making them an owner lets them see every site.

10 TRENDS & TOTALS

The Trends page answers “how much water, and when?” — consumption history, pressure behaviour and pump energy, built from data the unit records continuously.

Daily consumption

A 14-day bar chart of litres per day. The dashed line is your configured daily high-flow alarm point; any day that exceeded it is drawn in yellow, and the peak day is highlighted in green with its date and total shown in the legend.



Trends: daily consumption against the high-flow alarm line, 24-hour pressure traces, and accumulated totals.

Pressure — 24 hours

Line traces of inlet (B), post-filter (C) and system (J) pressure across the last day. A widening gap between B and C is a filter clogging; sawtooth behaviour on J shows normal pump cycling.

Accumulated flow table

Totals for today, this week, this month, this year and lifetime, each with a comparison against the previous period and the peak within it. The daily pressure envelope table beside it lists now / today's low / today's high for each pressure point.

Pump runtime

Today's running hours, the daily average and the lifetime total, derived from motor current. (Energy/kWh recording was removed from the product at customer request.)

Hourly totals

A 24-bar chart of litres per hour for today, with the peak hour highlighted and noted in the legend. Hourly totals are recorded and retained for 12 months.

Compare with other sites

With more than one site, **Compare with other sites** draws the same reading at up to four sites on one chart: the menu's site is always line 1; tick up to three more. Each line has its own colour, line pattern (solid, dashed, dotted, dash-dot) and number, and the legend says all three in words, so the chart can be read without telling colours apart. Times are in the menu's site's time, with the zone named. A site whose reading is in a different unit is listed as **not drawn**, with why; a site with no readings in the range says so. **The numbers** gives each site's minimum, average and maximum.

Downloading the readings (CSV)

Export CSV at the foot of Trends downloads the readings. Beside **timestamp** (UTC) are two columns: **site_time**, the site's own clock (YYYY-MM-DD HH:MM:SS), and **time_zone**, for example *NZDT (Pacific/Auckland)*. The columns are now *timestamp, site_time, time_zone, site, device, serial, tag, reading, value, [min, max,] unit*.

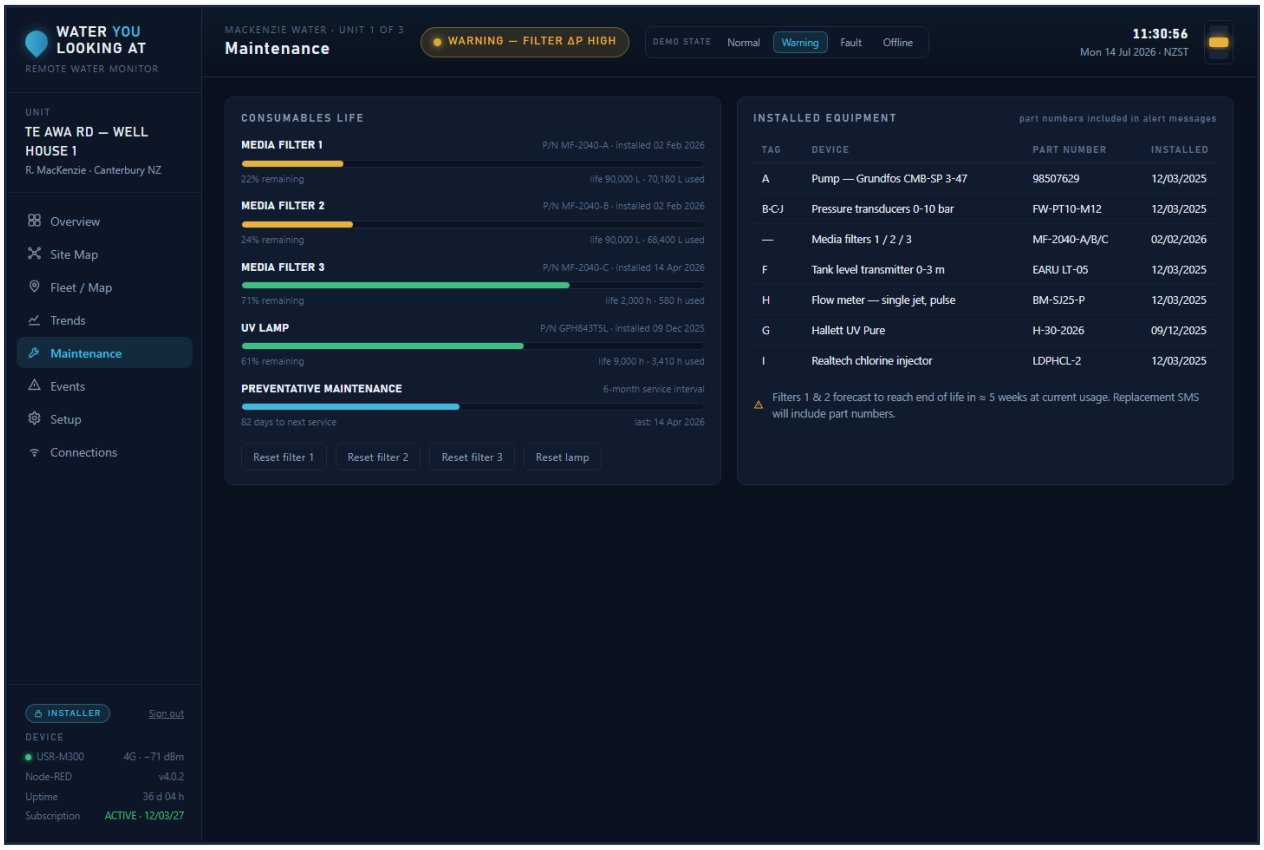
> **For anyone reading the file by column position**
> Every column after timestamp has moved along by two (since 7 November 2026). A spreadsheet or program that reads the columns by name is not affected.

11 MAINTENANCE

The Maintenance page tracks the life of every consumable and reminds you before anything expires. When a life bar reaches zero the system sends a YELLOW reminder that includes the exact replacement part number.

Consumables life

One life bar per consumable: **Media Filters 1, 2 and 3** (life in litres or hours, whichever the installer chose per filter), the **UV lamp** (hours), and the **preventative maintenance** interval (days to next service). Each bar shows percent remaining, the configured life, the amount used, the part number and the install date. Below the bars, **Reset filter 1 / Reset filter 2 / Reset lamp** buttons restart a counter after you fit a new part.



Maintenance: life bars for filters, lamp and service interval, with the installed equipment register on the right.

Installed equipment register

A table of every device on the system — tag, description, part number and install date. These are the part numbers that get embedded in alert messages, so keep them accurate: a wrong entry here means a wrong part number in a 2 a.m. fault SMS.

Forecast note

When consumables are projected to expire soon at the current usage rate, an advisory line appears under the register — e.g. filters forecast to reach end of life in five weeks.

12 EVENT LOG

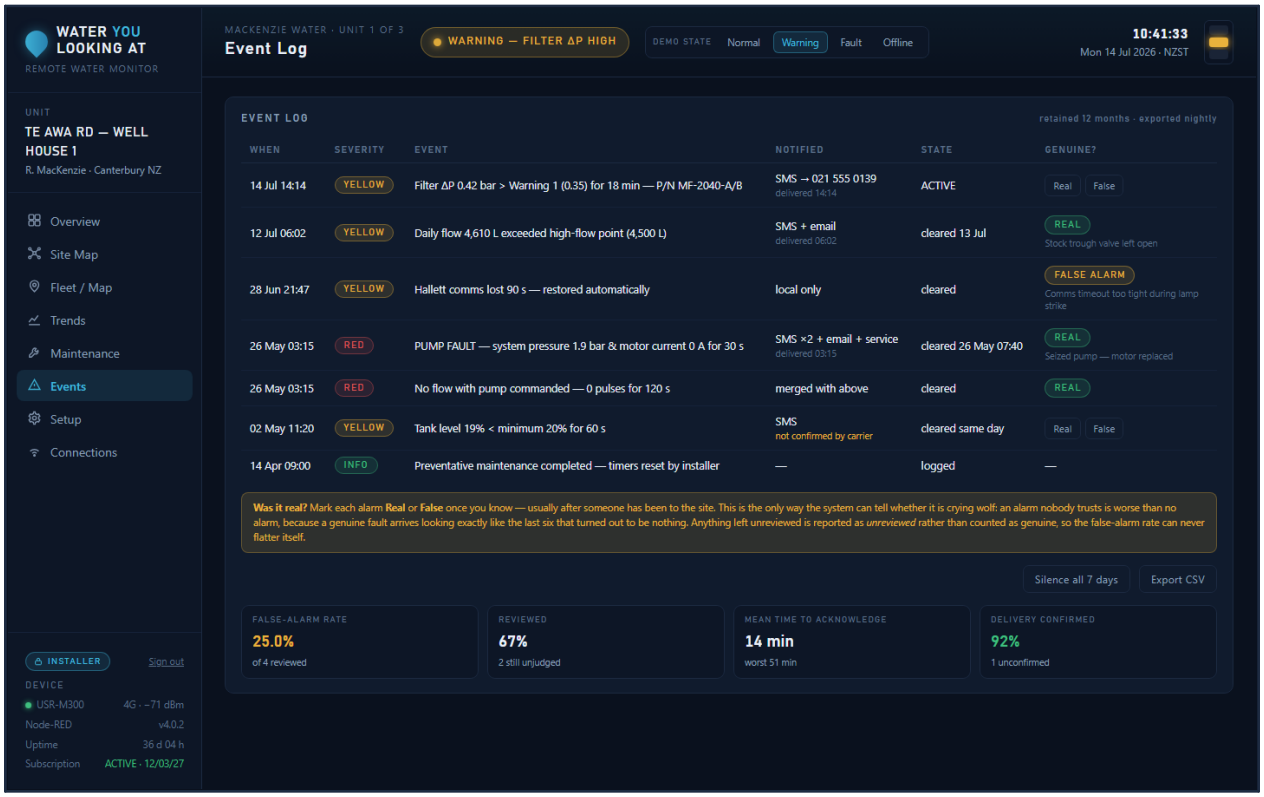
Every alarm, clearance and maintenance action is recorded permanently. The Events page is the audit trail for the installation — what happened, when, who was told, and how it resolved.

The log table

Two filters at the top: **State** - **All states**, **Open**, **Acknowledged (open or cleared since)** or **Cleared** - and **Level** - **All levels**, **Fault (red)**, **Warning (yellow)** or **Information**. The table's columns:

COLUMN	SHOWS
When	When the alarm was raised, in the site's time with the zone
Level	Fault (red), Warning (yellow) or Information
Event	The alarm's plain name and its message; whether it is silenced, until when and by whom
Part	The replacement part number recorded for the input, where there is one
State	Open, **Acknowledged, still open** or Cleared; who acknowledged it and when; when it cleared. A latched alarm that has cleared but still waits for a person shows **Latched - acknowledge**
Genuine?	Real fault / False alarm, or the answer already given
(last)	**Acknowledge**, for an open or latched alarm

Alarms are kept at least 10 years
The panel heading counts the rows shown. A viewer can read the log but not change it; the page says so in one line. Operators, installers and the account owner acknowledge alarms and mark them real or false.



The event log (an earlier design: the columns and buttons on your screen are the ones listed above).

Actions

Acknowledge says a person has seen the alarm: the call-out stops for everybody, and the row then shows who acknowledged it and when. An acknowledged alarm stays open until its condition clears.

A **silenced** alarm says *silenced until* a date and time and who silenced it. Nobody is told about it until then, but the stack light stays lit. **Un-silence** ends the silence early. Silencing a gateway's alarms does not silence a lab sample alarm (E. coli or coliforms found): that stays until the clear tests are recorded.

When the same alarm came and went several times in a row and nobody has judged it, the rows are grouped into one: *Happened 5 times*, from the first time to the last. **Every time** opens the list, each with its own clearing and acknowledgement. Since 7 November 2026 acknowledging an alarm is recorded too (*Alarm acknowledged*: who, when, which alarm, which site; in a support session also *WYLA support acting as* ...).

This site or all sites

A customer with more than one site has **This site** / **All sites** above the filters. **All sites** lists the alarms of every site you can see in one list, newest first, with a **Site** column; each alarm's times are in **its own** site's time. The **State** and **Level** filters still work. **Show this site only** under a site's name switches the menu to that site and shows only its alarms. A login limited to some sites sees only those sites. The choice is remembered in this browser.

Reviewing alarms — was it real?

Each alarm carries a **Genuine?** column with two buttons: **Real fault** and **False alarm**. Press whichever applies once you know — usually after someone has been to the site. On a grouped row the answer is for every time the alarm happened, and the button says so, for example *False alarm (all 5)*. Once judged, the buttons are replaced by the verdict, who gave it and when, with an **Undo** that takes the answer back if it was a mis-tap.

This is worth the few seconds it takes. An alarm system nobody trusts is worse than no alarm system, because a real fault arrives looking exactly like the last six that turned out to be nothing. Marking alarms is the only way the system can know whether it is crying wolf, and it is what justifies changing a setpoint or a delay. Anything you have not judged is reported separately as *unreviewed* rather than being quietly counted as genuine — a false-alarm figure that assumed the best of itself would not be worth reading.

Delivery: sent is not the same as arrived

The **call-out log** on the Call-outs page (chapter **Alarm Call-out**) distinguishes a message that was *sent* from one that was not. Messages that did not go are flagged rather than assumed to have arrived, because from your side a text that silently failed and an alarm that never fired are the same event. If a contact stops receiving messages, the number or address is usually wrong — check it on the Recipients page and use **Send test** there.

Repeated alarms on the same input

If the same alarm raises and clears repeatedly — five or more times in a month, often clearing within a minute or two — the setpoint is almost certainly sitting too close to normal operation rather than a fault recurring. The fix is a small setpoint change or a longer delay, not a new sensor. Ask your service provider to review it; they can see which alarms are behaving this way across the whole site.

13 ALARM CALL-OUT

An email that nobody reads at 3 a.m. is not a call-out. With call-out, each site can say who is contacted next when an alarm is not acknowledged. It can also keep alarms open until a person has seen them, and send a monthly summary of every alarm. Every email, text and call is written to a call-out log. Call-out is set up per site and starts **off**. Until an owner switches it on, alarms are sent once, in the same way as before.

First: texts and calls may not be set up yet

WYLA sends texts and voice calls through a text and call provider. Until WYLA support has set that provider up, the **Recipients**, **My alarms** and **Call-outs** pages show this banner:

"SMS and voice calls are not set up - only email is sent." It goes on: *Texts and calls are written to the call-out log as "not sent" until they are.*

While the banner is showing, everything else still works. Steps run on time, emails go out, and you can acknowledge alarms in the console. Every text or call that would have gone out appears in the call-out log as **NOT SENT**, with the reason. Nothing is quietly dropped, and nothing that did not go is shown as sent. Replying to a text and pressing 1 on a call only work once the provider is set up.

> **Important**
> While the banner is showing, give every escalation step **Email** as well as **Voice call** or **Text**. Otherwise that step reaches nobody.

Who can do what

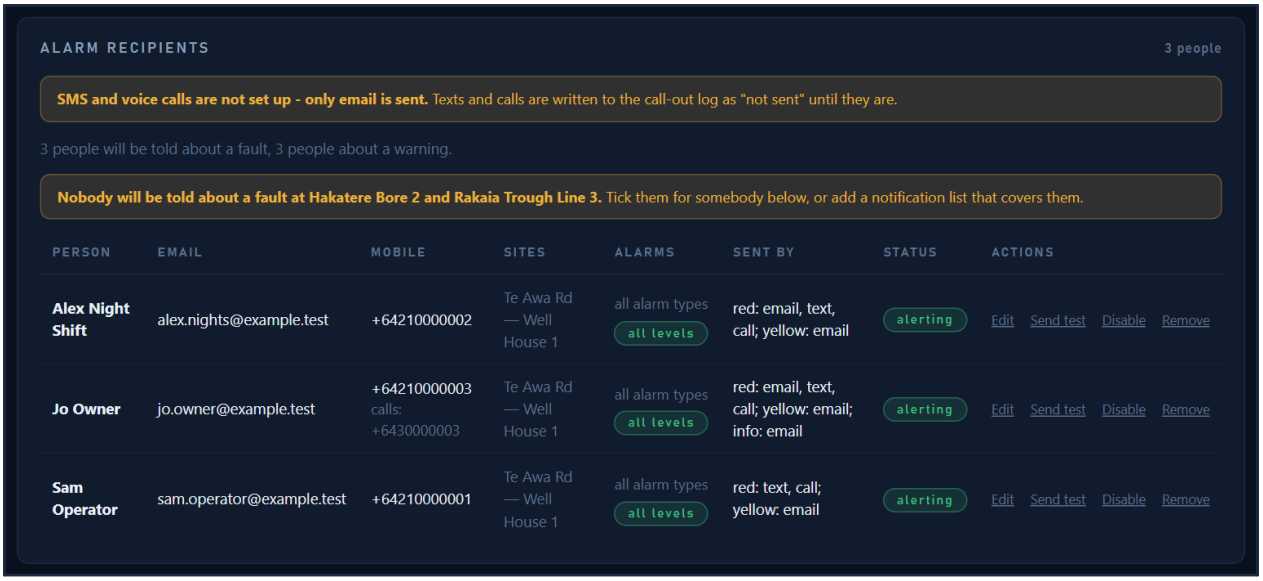
TASK	WHO
Set people's numbers and channels (Recipients)	Operator, owner, administrator
Set your own numbers and channels (My alarms)	Everyone
View the Call-outs page and log	Everyone who can see the site
Acknowledge an alarm	Operator and above
Change call-out settings, run a summary again	Owner or WYLA administrator
Send the privacy notice to a recipient	Owner

Phone numbers and channels (Recipients and My alarms)

Each person on the **Recipients** page (page title **Alarm recipients**) has these call-out fields. Use **Add a recipient** for a new person or **Edit** for an existing one. On **My alarms**, every user sets the same fields for themselves.

- **Mobile** — the number that gets texts. If there is no **Phone for calls**, this number is also the one called.
- **Phone for calls** — optional. Use it for a landline or a second phone that voice calls should go to.
- **Send alarms by** — **Automatic**, **Email only**, **Text only** or **Email and text**. This is the general rule.
- **How each level is sent** — folded away under **Advanced: a different way for each alarm level** (it opens by itself when something in it is ticked): a grid with one row for each alarm level (**Fault**, **Warning**, **Information**) and a tick box for each channel (**Email**, **Text**, **Voice call**). If you tick nothing for a level, that level *uses the send-by choice above*.

A number used for texts or calls must be in international format, starting with + and the country code (for example +64 21 000 0000). If it is not, the form tells you how to fix it before it will save. In the list, the **Mobile** column also shows any call number, and the **Sent by** column shows the grid in words, for example *red: call, text; yellow: email*. **Send test** (or **Send me a test** on My alarms) sends a test the same way a red alarm would be sent. It reports any channel it skipped, for example *voice calls are not set up on this server*.



Alarm recipients: each person's mobile and call numbers, and how each alarm level reaches them. Names and numbers are examples.

Who gets told (Recipients)

The Recipients page has a **Who gets told** table with one row per site and two columns, **Fault (red)** and **Warning (yellow)**: the people who would be told about an alarm at that level and how (email, text, call). It counts each person's own settings and the notification lists they are on. Somebody who cannot be reached the way they chose - for example text only, with a number that cannot be texted, or texts not set up - is

shown apart with a red **not reached** chip and why, and is not counted. A site where nobody hears about a fault says **nobody** in red, and the heading counts those sites.

Since 7 November 2026 this is the one answer to *who is told?*: the **Who will be told** panel on Today, the **Who is told about alarms** panel in Setup and the red **Nobody is told about alarms here** chip in the top bar all show the same thing. Installers and viewers see it read-only; operators and the account owner change it here.

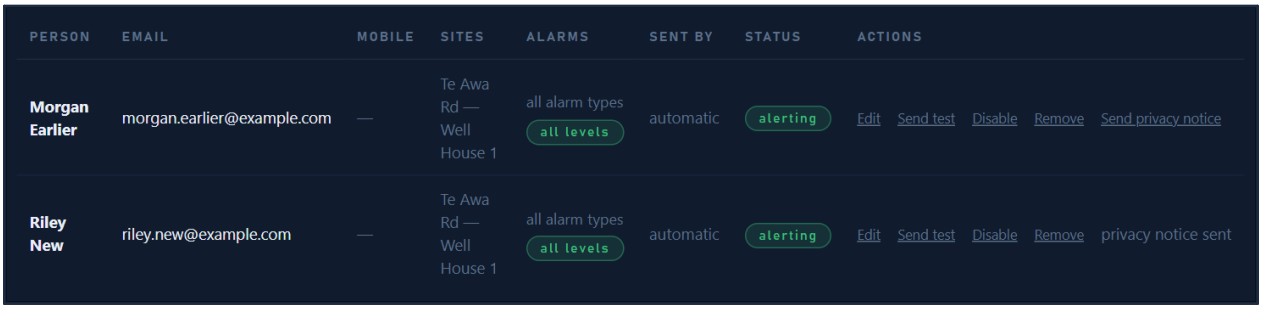
Alarm emails come from **alerts@mail.wateryoulookingat.com**. If someone does not see them, ask them to look in their junk folder and add that address to their safe senders.

Privacy notice for people who never sign in

Many alarm recipients never use the console, so they would not otherwise know that their details are held. WYLA tells them, once:

- **New recipients** — when you add a recipient with an email address who is not a console user, WYLA sends them **one short privacy-notice email**: who holds their details (you, using Water YOU Looking At as your monitoring service), what is held and why, that you decide what is recorded and can correct or remove it, and a link to the WYLA privacy notice. The same happens for a **new operator certificate** of someone who is not a console user (see Operator Certificates and Control Changes).
- **Recipients added earlier** — **nothing is sent to them automatically**. An owner sees a **Send privacy notice** link in the row's actions. Press it and confirm; it sends the same email. The Operators page has the same button for certificate holders.
- **Once per person** — the notice is sent once per person and address. Afterwards the row shows *privacy notice sent* and the button is gone. Every sending is written to your audit log (who, the address and when, never the message).
- Console users never get this email, and a recipient without an email address has no button.

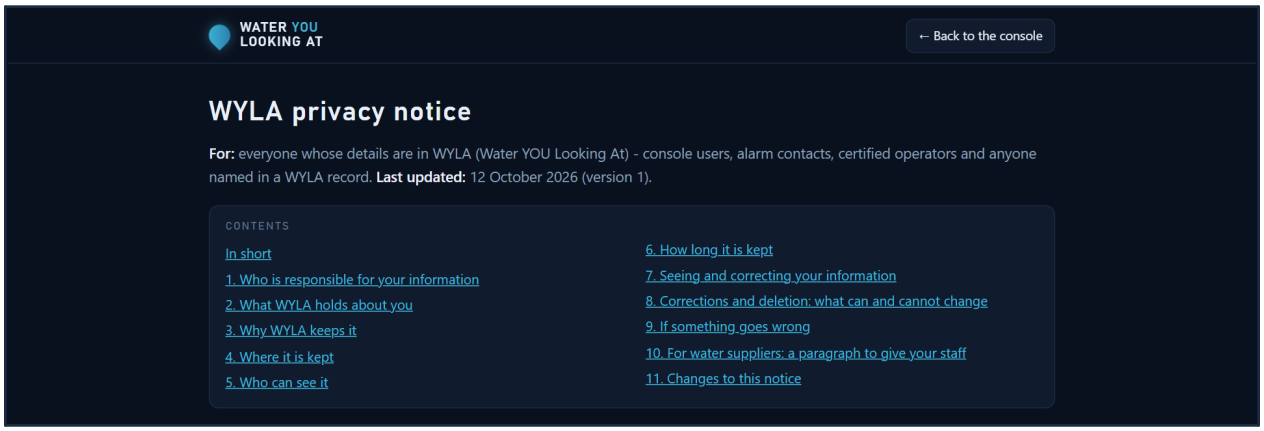
> **Owners: tell the people you added earlier**
> For every recipient and certificate holder added before the privacy notice was introduced (12 October 2026), either press **Send privacy notice**, or make sure, and be able to show, that the person has already been told who holds their details and why.



Two recipients who never sign in: one added earlier, with Send privacy notice, and one added since, already sent the notice.

The privacy notice page

The **Privacy** link at the bottom of the console's sidebar, under the device details, opens the WYLA privacy notice in a new tab. It is the page the privacy-notice email links to. It explains, for console users, alarm contacts and certified operators, what WYLA holds about them, why, where it is kept, who can see it, for how long, and how to see or correct it. Questions go to WYLA's privacy officer at privacy@wateryoulookingat.com. **Back to the console** returns to the console.



The top of the WYLA privacy notice, opened from the Privacy link.

Escalation: calling the next person

Open **Call-outs** for the site chosen in the menu, then go to the **Escalation** panel. Tick **Call the next person until somebody acknowledges** to turn escalation on. These controls then appear:

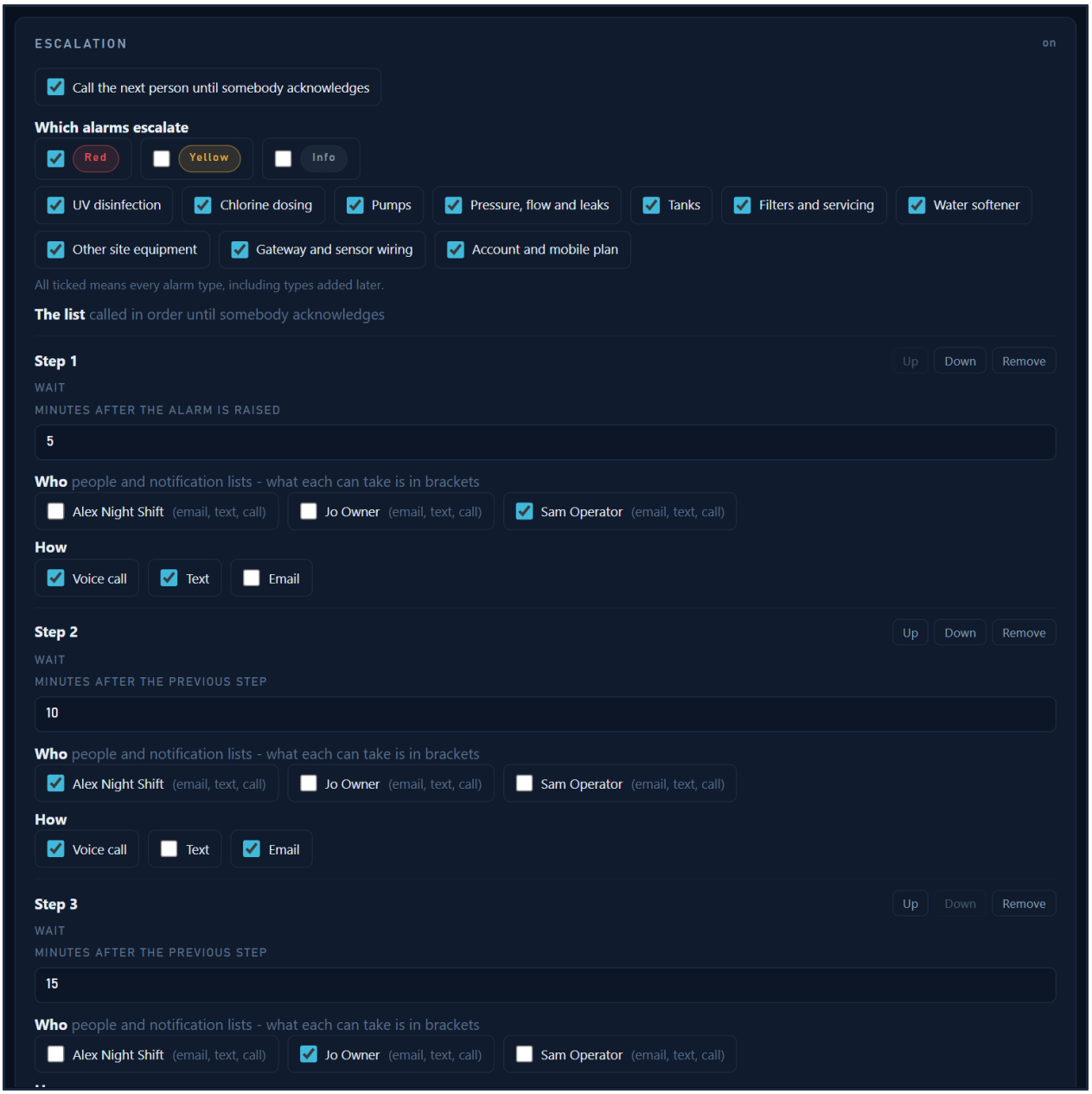
Which alarms escalate — the levels (**Red** is ticked by default) and the alarm types. If every type is ticked, every type escalates, including types added later.
Step 1, Step 2… — each step has a **Wait** in minutes, **Who** (people and notification lists, each showing what it can receive, for example *email, text, call*) and **How** (**Voice call**, **Text**, **Email**). Step 1 waits from when the alarm is raised. Each later step waits from the step before it. **Up**, **Down** and **Remove** rearrange the steps, and **Add a step** adds one (up to 10).
Repeat the whole list — 0 to 10 times, **after** a set number of minutes.

No wait has a default. No regulation we found sets a time, so the boxes start empty with the hint *needed - no default*, and you choose every wait. A yellow warning under a step tells you if someone chosen cannot be reached the way the step says. The step is still saved.

Steps continue until somebody acknowledges the alarm or it clears. If an alarm clears before anyone acknowledges it, its call-out stops, unless the alarm is latched. If the list runs out, the alarm shows **Every step has been tried - nobody has acknowledged** and stays waiting. Pressing **Silence 7 days** on the Overview holds the next step until the silence ends. Call-outs ignore the time of day: there are no quiet hours.

- *An example only. Every number below is the site's own choice, not a default.*
- 0 min: the alarm is raised. The usual first alert goes to everyone it matches on the Recipients page.

- Step 1, Wait 5: at 5 min, the operator on duty by Voice call and Text.
- Step 2, Wait 10: at 15 min, the night-shift person by Voice call and Email.
- Step 3, Wait 15: at 30 min, the owner by Voice call, Text and Email.
- Repeat the whole list 1 time after 30 minutes: step 1 again at 60 min, step 2 at 70, step 3 at 85. After that the alarm waits for a person.



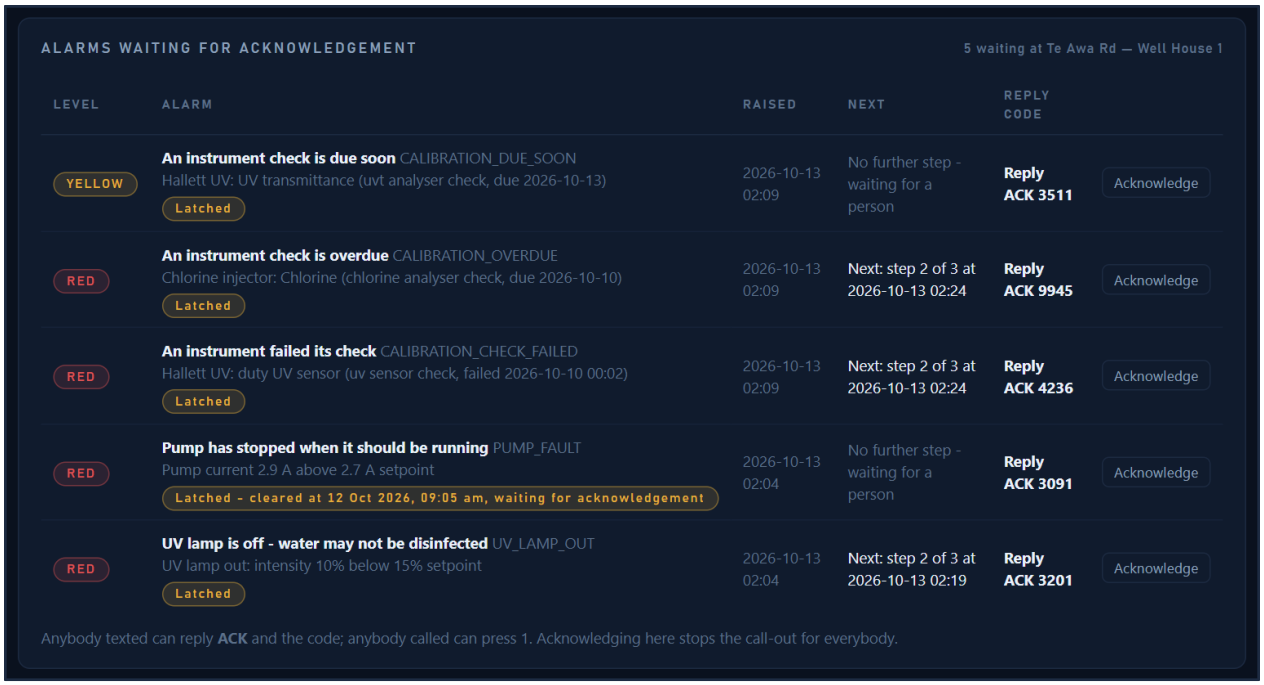
An escalation list with three steps, repeated once.

Acknowledging an alarm

When anyone acknowledges an alarm, the call-out stops for everybody. There are three ways to do it:

In the console — press **Acknowledge** in the **Alarms waiting for acknowledgement** panel on Call-outs, or in the **Event log**. You will see *Alarm acknowledged - nobody else will be called about it*.
By text — reply **ACK** followed by the 4-digit code in the message, for example ACK 4821. The **Reply code** column shows the code. If you have only one open alarm, a plain ACK is enough. A reply is only accepted from a number the alarm was sent to, within 7 days.
By phone — the call reads out the alarm twice, then says *Press 1 to acknowledge this alarm.* Voicemail does not count as acknowledging, so escalation carries on.

Each row in the waiting panel shows **Next**: which step comes next, and when. Alarms waiting at other sites are linked under **Also waiting at other sites**.



Alarms waiting for acknowledgement, with the next step and the Acknowledge button.

Latching

A latched alarm stays open after its condition clears, until a person acknowledges it. That way an alarm that came and went at 3 a.m. is still listed in the morning. In the **Latching** panel you can tick **Latch every alarm**, or choose **Or by alarm type** or **Or by alarm code**. The button **Latch all alarms (BC Design Guidelines B.17 s.20.5.2)** ticks every alarm in one click; that reference is a British Columbia design guideline, not a regulation. A latched alarm that has cleared shows **Latched - acknowledge** in the Event log, and on Call-outs it shows when it cleared. If you switch call-out off, latched alarms still need acknowledging.

Saving the settings

The bar at the bottom says whether call-out is on or off for the site, and shows **unsaved changes** once you change something. **Review and save** lists any problems first, then asks you to confirm a plain-words summary of what will happen. If call-out was off, saving switches it on. **Discard changes** undoes your unsaved edits. **Switch call-out off for this site** stops escalation, latching and the summary email, but alarms are still sent once. Alarms raised before call-out was switched on are not escalated. The **What the rules say** panel lists the regulations and guidelines behind these settings.

The monthly alarm summary

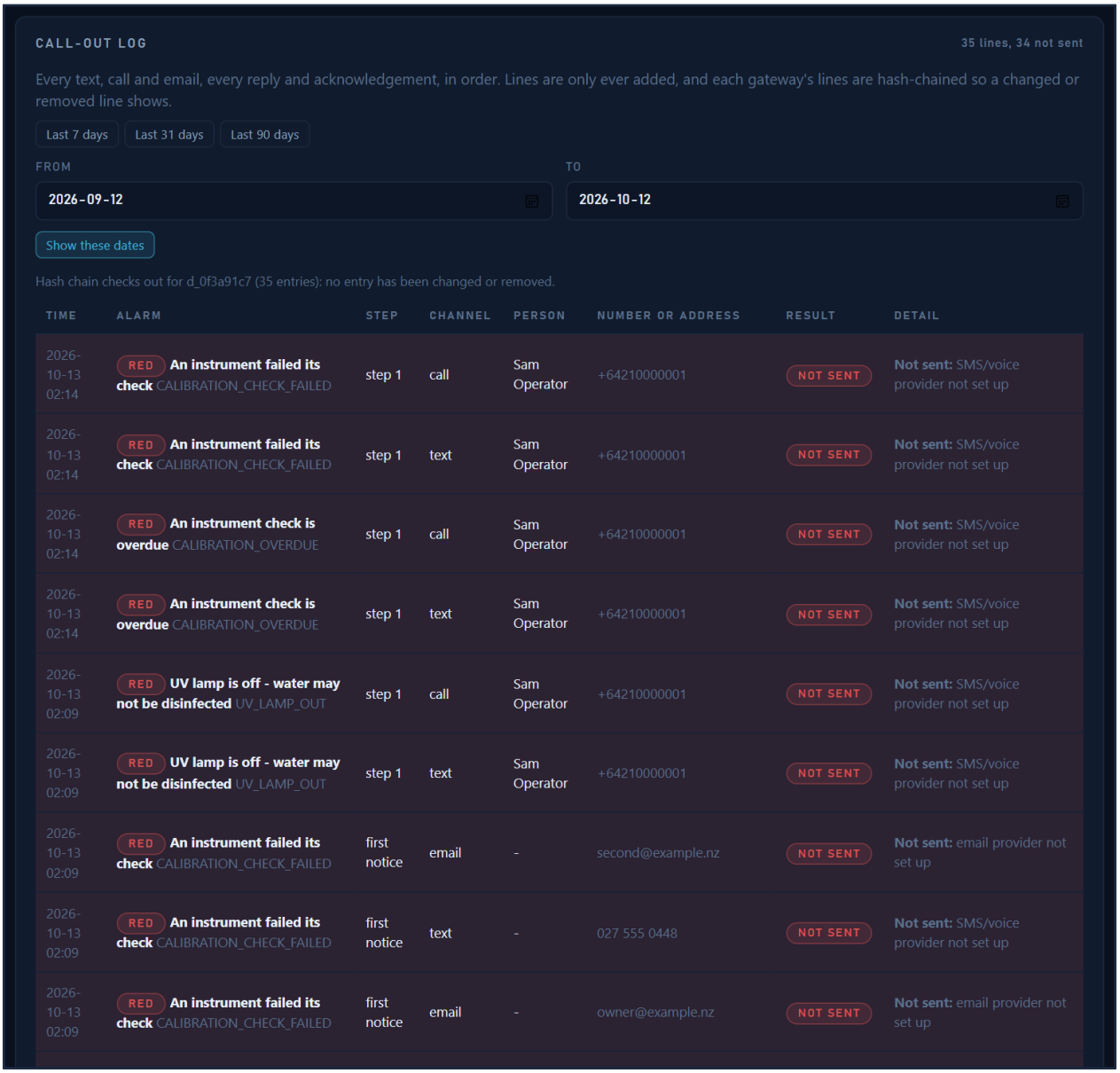
In **Monthly summary email**, tick the people and lists who should get the summary. Only people with an email address can be sent it. On the 1st of each month, in the site's time zone, WYLA works out the previous month and emails it. The summary covers every alarm: when it was raised, acknowledged (by whom, how, and how many minutes it took) and cleared, whether it was latched or escalated, and every text, call and email, including why any were not sent. The email links back to the Call-outs page for that month.

The **Monthly summary** panel has three parts. **Summaries made** lists each summary with the date it was made, who it was emailed to and the result; owners can use **Run again** or **without email**. **Show a month, worked out now** displays any month, with tiles for **Alarms**, **Acknowledged**, **Time to acknowledge** and **Escalated**. **Download this site's month (CSV)** and **Download every site's month (CSV)** export the figures. The summary does not yet include the volume of water treated during each alarm.

The call-out log

The **Call-out log** lists every text, call and email, every reply, every acknowledgement and every change of state, such as **latched**, **cleared**, **list finished** and **stopped**. Choose the dates with **Last 7 days**, **Last 31 days**, **Last 90 days**, or with **From** and **To** followed by **Show these dates**. The columns are Time, Alarm, Step (*first notice*, *step 2*, *step 1, repeat 1*), Channel, Person, Number or address, Result and Detail.

Lines are only ever added; no line can be changed or removed. A line under the panel heading confirms the log has not been tampered with. If that check fails, a red banner appears; tell WYLA support. **Download the call-out log (CSV)** exports the log, oldest first, with UTC and site times.



The call-out log. While texts and calls are not set up, they are logged as NOT SENT with the reason.

Setup checklist for an owner

1. On **Recipients**, give each person who may be called a **Mobile** in international format, and a **Phone for calls** if calls should go to a landline.
2. Under **Advanced**, tick **How each level is sent** for each person, for example Fault by Voice call and Text.
3. Use **Send test** for each person and check that it arrived.
4. On **Call-outs**, for the site chosen in the menu, tick **Call the next person until somebody acknowledges**.
5. Choose which levels and alarm types escalate, add the steps and enter every **Wait**.

6. Set **Repeat the whole list** if the list should repeat.
7. Choose what to latch under **Latching**.
8. Tick who gets the **Monthly summary email**.
9. Press **Review and save**, read the summary and confirm.
10. If the not-set-up banner is showing, make sure every step includes **Email**, and ask WYLA support about turning on texts and calls.
11. For recipients added before the privacy notice existed, press **Send privacy notice**, or confirm that they were already told.

14 COMPLIANCE RECORDING AND DATA GAPS

Drinking-water rules expect you to keep a record of your treatment readings at a fixed interval, and to say when that record has holes in it. The gateway does the recording itself. It stores the minimum, maximum and average of each chosen reading for every recording period. If the link goes down, it holds those records (7 days' worth) and sends them when the link is back. In the cloud, WYLA lists every stretch with no record as a **data gap** and checks the gaps against your site's **gap rule**. All of this is on the **Compliance** page in the menu.

Choosing a site and a gateway

The site and the gateway at the top of the page control everything below them. Anyone who can sign in can view this page. Only the account owner or a WYLA administrator can change the settings; everyone else sees them greyed out, with the line *Only the account owner or a WYLA administrator can change these settings.*

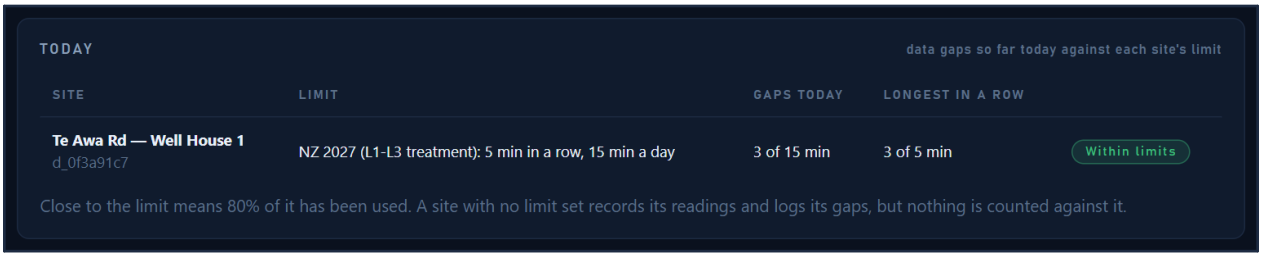
- **Site** — since 7 November 2026 the page names the site chosen in the menu's site picker (*the site chosen in the menu*) and has no site box of its own; it shows **All sites** only while no site is chosen. Choose the site in the menu to see or change its recording settings.
- **Gateway** — one gateway at that site, or **All gateways**. This narrows the gap log and the downloads.

Today: gaps against your limit

The **Today** panel shows one row per gateway with the data gaps counted so far today, measured against the site's limit. **Limit** is the gap rule in use. **Gaps today** is the total minutes of gaps. **Longest in a row** is the longest single gap. The last column has a status chip:

CHIP	MEANING
Within limits	Gaps are under 80% of the limit
Close to the limit	80% of the limit is used
Over the limit	The limit has been passed
No limit set	Gaps are listed, but nothing is counted against them

Data-gap alarms
If the site has a gap limit, reaching 80% of it raises a yellow data-gap alarm, and passing it raises a red one. These go through your normal alarm notifications. While a gateway is offline, or is still sending readings it held during an outage, these alarms wait, because the missing readings may still arrive.



The Today panel: one row per gateway, measured against the site's gap rule.

When a gateway is not recording

Compliance no longer says only "No gateways recording here yet". The **Today** panel, and the headline when there are no results yet, give each gateway one plain sentence saying exactly where it stands, with what to do:

WHAT IT SAYS	WHAT IT MEANS
Compliance recording is switched off for gateway …	Nothing is recorded, judged or sealed for it. An owner switches it on on the **Settings** tab: tick **Record readings for compliance** for the gateway, then **Review and save** (the sentence links there).
Switched on in the settings, but the gateway says it is not recording	The gateway has not taken the setting yet. It takes it with its next configuration (once it is back online, if it is offline).
Recording is on, but no records have reached WYLA yet	Records are on their way; if the gateway is offline it keeps what it records and sends it when it is back.
Has never connected to WYLA	Check its power and its mobile signal.
Has no configuration yet	Apply the standard setup on its Setup page first.
Runs standalone	It keeps its readings on its own memory card, so no compliance records reach WYLA. A standalone gateway keeps its compliance records on its own SD card. The Compliance page says so; its days are not sealed by WYLA and nothing is shown as overdue.
Recording, but no day sealed yet	The date its first day will be sealed (or "by … at the latest"). If that date has passed, the sentence says so: tell WYLA support.

The data-gap log

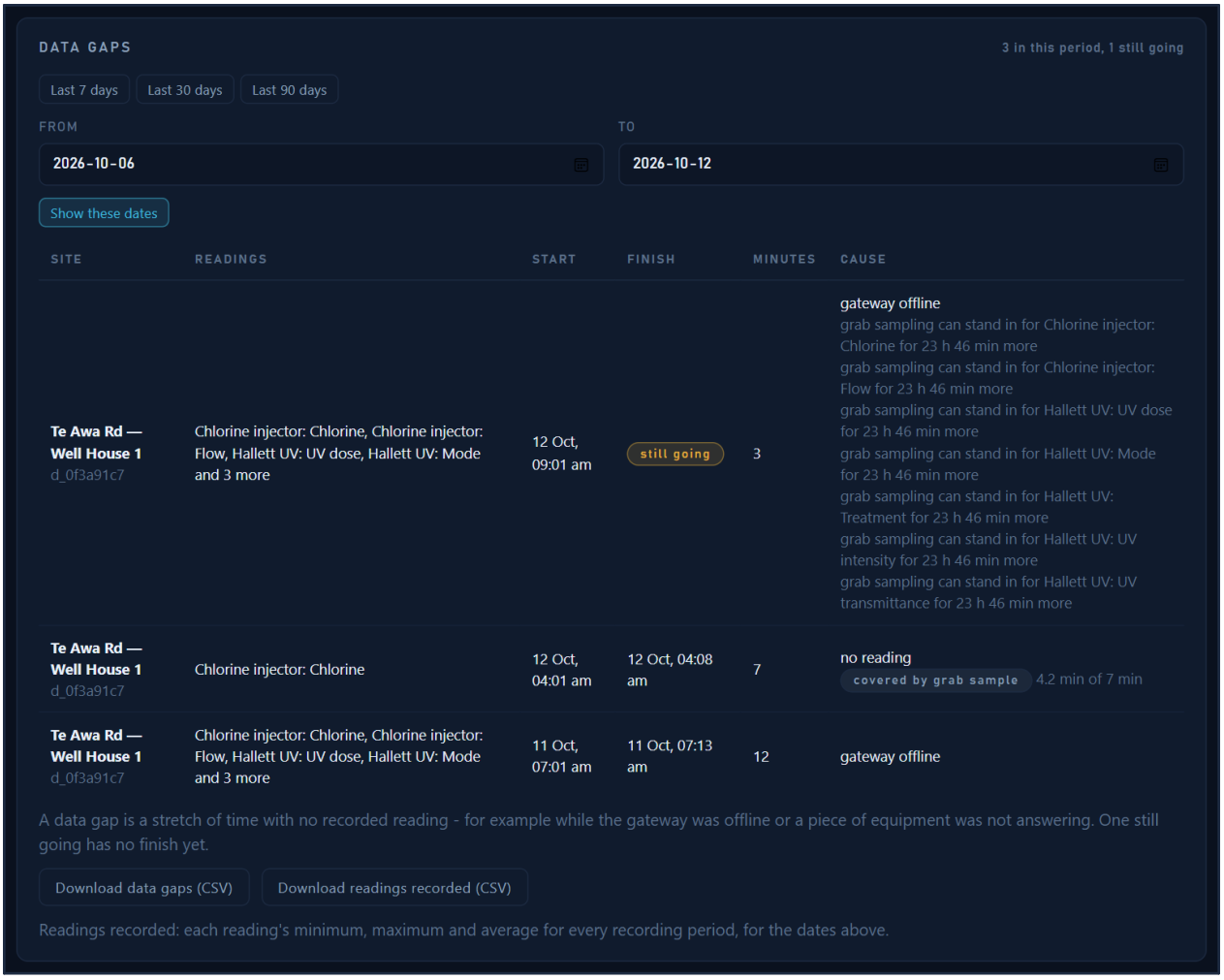
The **Data gaps** panel lists every stretch with no recorded reading, newest first. Its heading shows how many gaps fall in the period you are viewing, and how many are still going. Readings that dropped out together, such as during a gateway outage, appear as one line.

A period only counts as missing after a short wait (twice the **Send every** time, and never less than 2 minutes). This gives held readings time to arrive. A recent gap can shrink, split or disappear when late readings come in. That is expected.

- **Last 7 days**, **Last 30 days**, **Last 90 days** — show that period straight away.

- **From** and **To** — pick your own dates, then press **Show these dates**.
- Columns: **Site** (with the gateway underneath), **Readings**, **Start**, **Finish** (a gap with no finish yet is marked *still going*), **Minutes** and **Cause**.
- If grab samples covered part of a gap, the Cause column also shows *covered by grab sample*. The gap stays in the log either way (see the Calibration and Grab-Sample Log chapter).

CAUSE	WHAT IT MEANS
gateway offline	The gateway was not connected
equipment not answering	The gateway was on, but the instrument was not responding
no reading	The gateway was on, but this reading had no good value
lost at the gateway	The gateway was offline longer than its store holds and dropped these records; they cannot be recovered (see below)



The Data gaps panel: date controls, the gap log and the two download buttons.

Records lost at the gateway

While the internet is down, the gateway keeps its one-minute records on the unit and sends them when the link returns. Its store holds **7 days** of records for a site with up to 32 recorded readings with ordinary names (about 4 days at the extreme of 32 readings with the longest names). If an outage lasts longer than that, the **oldest** records are dropped to make room for new ones.

From gateway software PUSR 1.1.53 / EM300 1.1.78 the gateway tells the cloud which period it dropped. The cloud then:

- labels those minutes **lost at the gateway** in the gap log and the gap CSV. They still count against the site's data-gap limits like any other gap. A yellow note under the gap table says what the cause means and lists each run the gateway reported (site, gateway, from, to, rows, when it was reported);
- prints one line under the gap table in the signed Monthly Compliance Report (section 7) saying that those records were dropped at the gateway because it was offline longer than its store holds and cannot be recovered;
- writes an entry in the **Audit log** (action *gateway_records_lost*);
- shows *rows lost at the gateway: N (from - to)* on the gateway's status line in the **Compliance recording** panel, and as a chip in the **Recording** column of Admin > Fleet, for 30 days.

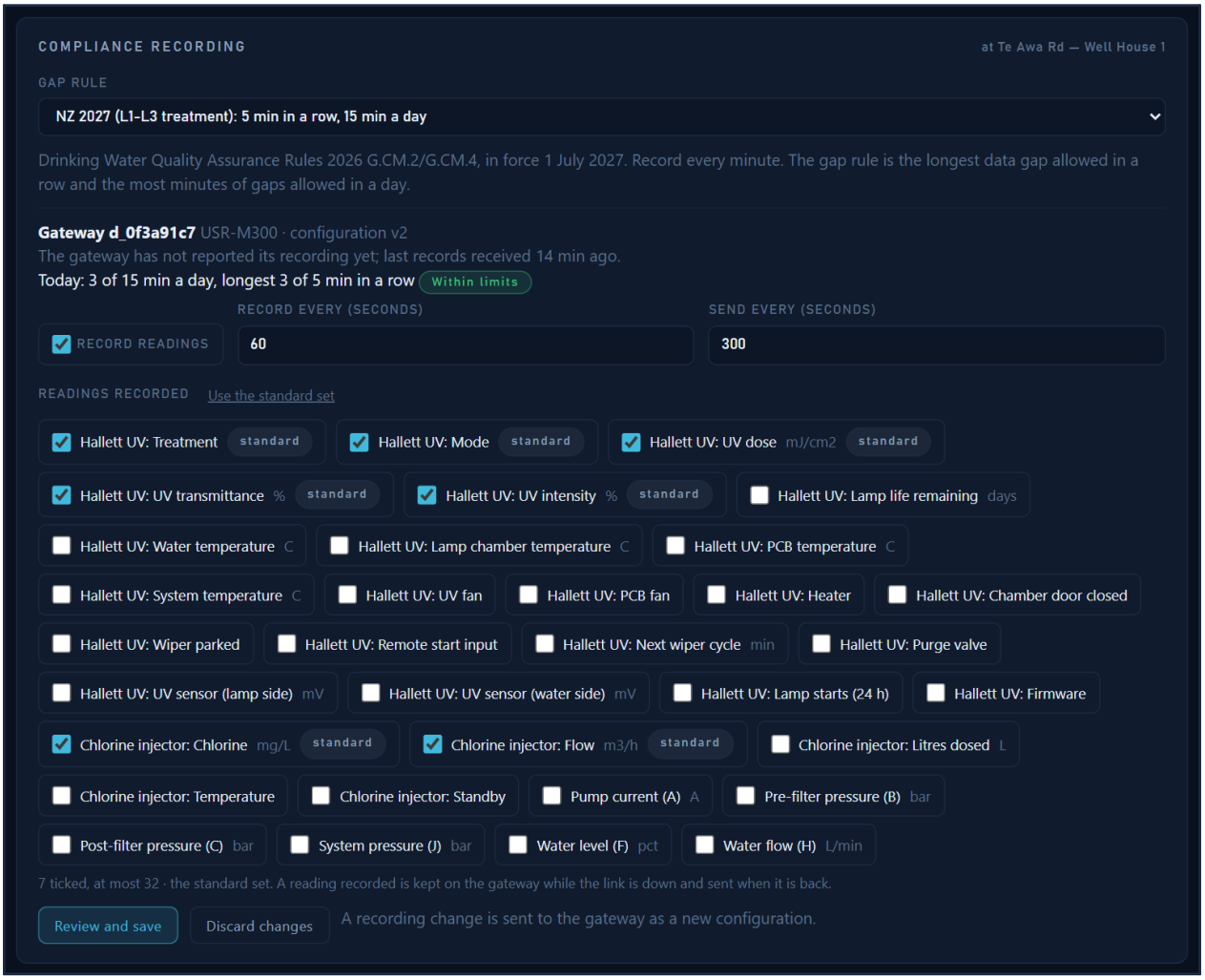
> **Older gateway software, and a wrong clock**
> Earlier gateway software held 7 days only up to about 12 recorded readings (about 3 days at 30) and told the cloud nothing; the lost minutes then simply showed as *gateway offline*. A run the cloud cannot believe - from a wrong gateway clock: one that starts before 2020, ends in the future, spans more than its rows could cover or more than 400 days - is refused and only noted in the Audit log (*gateway_records_lost_refused*). On the gateway's page, **Messages dropped while offline** appears under **Buffered messages** when the gateway has reported dropping alarm or snapshot messages from its separate offline buffer; compliance records are counted on this page, not there.

Recording settings

Pick one site and the **Compliance recording** panel opens. The site's gap rule is at the top, followed by one block for each gateway. Each block starts with a status line showing what the gateway is actually doing, for example *In force on the gateway: every 60 s; 0 rows waiting to send; last records received 2 minutes ago*. Rows waiting to send are readings the gateway is holding until the cloud has them. If the gateway dropped records during a long outage, the line also shows *rows lost at the gateway* with the period, for 30 days (see Records lost at the gateway).

- **Record readings for compliance** — tick to record on this gateway; untick to stop.
- **Record every (seconds)** — the length of each recording period, from 10 to 900 seconds. The default is 60. New Zealand's current rules ask for one-minute records.
- **Send every (seconds)** — how often the gateway sends its stored records to the cloud, from 60 to 3600 seconds. The default is 300. It can never be shorter than **Record every**. A longer value uses less mobile data, but gaps take longer to confirm.

> **No configuration yet**
> If a gateway shows *This gateway has no configuration yet, so it cannot record*, open its Setup page and apply the standard setup first. Until then its boxes stay greyed out. Recording needs gateway software 1.1.33 or later.



One site's Compliance recording panel: the gap rule, then each gateway's settings and the readings it records.

Readings recorded

Under each gateway, the **Readings recorded** list has a tick box for every reading that gateway can record, from its equipment and its own inputs. Readings marked **standard** make up the standard set, such as UV dose and free chlorine. Below the list you can see how many readings are ticked; you can record up to 32 per gateway.

- Tick or untick a reading to start or stop recording it.
- **Use the standard set** — ticks exactly the standard readings and unticks the rest.

Saving your changes

Discard changes puts every box back to what is saved. If you switch to another site with unsaved changes, the page asks you to confirm first.

1. Change the gap rule, the recording boxes or the readings.
2. Press **Review and save**. If anything is wrong, a red *Not saved* box lists what to fix.
3. Read the confirmation, which lists every change in words, and press OK.
4. Each changed gateway is sent a new configuration and picks it up when it next connects. Until then its status line says *The saved setting reaches the gateway when it next takes its configuration.*

Gap rules

The **Gap rule** dropdown sets the longest gap allowed in a row and the most gap minutes allowed in a day. A day is the site's own calendar day. A gap equal to the limit is allowed; anything longer goes over. A new site uses the platform default, **None (record only)**, until you save a rule for it. Choose the rule your regulator or permit applies to you; if you are unsure, ask your regulator.

- **Minutes in a row** and **Minutes a day** appear only when you choose **Custom**. Enter whole minutes from 1 to 1440, or leave one box blank for no limit of that kind; at least one must be filled in. When you switch to Custom, the boxes start with the limits of the rule you had before.

GAP RULE	LIMITS
NZ 2027 (L1-L3 treatment)	5 min in a row, 15 min a day
NZ 2022 L3	15 min in a row, 72 min a day
Ontario: 5-minute records	5 min in a row
None (record only)	No limit and no alarms; gaps are still listed
Custom	Your own limits

Downloading the records (CSV)

Both buttons are at the foot of the **Data gaps** panel and use the site, gateway and dates chosen above them. They save a CSV file that opens in a spreadsheet.

- **Download data gaps (CSV)** — one line for each gap, with site, gateway, readings, start, finish, minutes, cause (including *lost at the gateway*) and any minutes covered by grab samples.
- **Download readings recorded (CSV)** — the compliance record itself: each reading's minimum, maximum and average for every recording period, with the sample count. Each line is marked *continuous*, or *no data* if no good sample came in. Choose a site or a gateway first; this button is greyed out for **All sites**.

Range too big
If a range is too large for one file, the console says so and downloads nothing. Choose fewer days, or pick one site or gateway. WYLA keeps compliance records and the gap log for at least 10 years and never deletes them automatically. Older records are stored compressed and each finished month is archived to write-once storage (see Record Sealing).

15 COMPLIANCE CALCULATIONS

The Compliance page can check each site's one-minute record against the treatment limits your plant is held to, one day and one month at a time. It answers four questions: did the UV reactor deliver its dose, did the chlorine stay above its minimum, was the C.t reached, and did turbidity stay within limits. You pick a rule set for the site (New Zealand, US, Ontario or your own Custom limits). WYLA then gives every day a result, lists every period out of limits and lets you download the figures. **Nothing is calculated until a rule set is picked.**

> **Not legal advice**
> The rule sets follow the regulations as WYLA reads them. They help you keep your records, but they are not legal advice. You remain responsible for your own compliance, so confirm anything you rely on with your regulator.

Opening the calculations

Click **Compliance** in the menu. It shows the site chosen in the menu's site picker (since 7 November 2026 the page names it and has no site box of its own; a **Gateway** box picks one gateway or **All gateways**, and two tabs, **Results** and **Settings**, split what happened from how the site is set up). Two panels appear for that site, below its recording settings. **Compliance results** shows how each day went. **Compliance calculations** holds the limits each day is checked against. The results cover every gateway at the site, and each line names its gateway.

Anyone who can see the site can read and download the results. Only the account owner or a WYLA administrator can change the settings.

Choosing a rule set

The **Rule set** dropdown at the top of the **Compliance calculations** panel sets the limits the site is held to. When you pick a rule set, every calculation in that set is switched on, and a short note under the dropdown says how the set counts time. Another rule set's rules on readings are replaced, but any rules you added yourself stay.

RULE SET	CALCULATIONS	MAIN LIMITS
Off (no calculations)	None	No results and no calculation alarms
NZ 2026 rules, level 3 treatment (from 1 July 2027)	UV, chlorine (FACE), C.t, turbidity, UV flow	UV dose ≥ 40 mJ/cm2 for 95% of production time, never below it for 15 minutes in a row; FACE ≥ 0.2 mg/L at all times; C.t ≥ 15 mg.min/L for 95%, T10 ≥ 5 min
NZ 2022 rules, level 3 treatment (to 30 June 2027)	UV, chlorine, C.t, turbidity	The same UV, FACE and C.t limits, judged over each day's operating time

RULE SET	CALCULATIONS	MAIN LIMITS
NZ level 2 treatment (2022 and 2026 rules)	UV, chlorine, pH, turbidity	UV ≥ 40 mJ/cm2; FAC ≥ 0.5 mg/L; pH 6.5 to 8; turbidity < 5 NTU; all at all times. Since 3 Nov 2026 also the lamp-lit, rated-flow, lamp-life and filter pressure checks (empty until you enter values)
NZ level 2 treatment, self-supplied building (2022 and 2026 rules)	UV, turbidity, UV lamp and flow, filter pressure	No chlorine or pH (not required for self-supplied buildings); turbidity < 5 NTU; UV ≥ 40 mJ/cm2 (see **NZ Schools on Their Own Supply**)
NZ Self-supplied Buildings Acceptable Solution 2025 (schools, marae, halls)	UV, UV lamp and flow	UV dose where reported; lamp lit whenever water flows; flow within the UV unit's rated flow; lamp within its life (see **NZ Schools on Their Own Supply**)
US federal (40 CFR 141)	UV, chlorine, C.t, filter turbidity (off)	UV: 95% of each month's water by volume; FAC not below 0.2 mg/L for more than 4 hours; C.t once a day at peak hourly flow
Ontario (O.Reg 170/03 and the Disinfection Procedure)	UV, chlorine, C.t	UV ≥ 40 mJ/cm2, and 10 minutes off-spec in a row fails; your own chlorine minimum; C.t from the Ontario tables at all times
Custom	Any	Your own limits for every calculation

Fixed numbers
Each calculation shows the regulation clause it comes from. A number set by the rule set is greyed out and cannot be changed. To change it, set that calculation to **Custom**.



The Compliance calculations panel with the NZ 2026 level 3 rule set picked.

NZ level 1 (a small supply, 26-100 people)

Built on 7 November 2026 and not yet deployed. Pick **NZ level 1 treatment (small supply, 26-100 people)** as the rule set (or the site preset **NZ Rules - level 1**). WYLA checks the UV dose where your UV controller reports it (at least 40 mJ/cm2, T1.5(a)), that the lamp is lit whenever water flows, that the flow stays within your UV unit's rated flow (T1.5(c)), the lamp life and run hours (T1.5(b)), and the cartridge filter's pressure drop (T1.4(a)). Enter your equipment's numbers (lit level, rated flow, lamp hours, filter maximum) from the maker's papers: until you do, those checks say *needs a value*. Level 1 asks for no chlorine or pH. A day passes only if every check held all day; the days are kept as evidence (every level 1

rule is non-reporting).

The three calculations

Each calculation has its own dropdown (**UV off-spec**, **Daily minimum chlorine**, **C.t**) with three choices: **Off** stops it, **As the rule set says** uses the rule set's limits, and **Custom** lets you set your own. A line starting *Judged:* says how the day is tested, for example *95% of each day, never 15 min in a row*.

- **UV off-spec** — counts the operating minutes when the reactor was below its minimum UV dose, plus any time water flowed while the reactor was not treating. A minute also counts as off-spec if it was below the validated UVT or above the validated flow, when you have entered those. The day fails if the off-spec share is too high or an off-spec stretch runs too long.
- **Daily minimum chlorine** — records the day's lowest free chlorine, when it happened, the minutes below the minimum and every period below it. Where the rule asks for FACE, the result is called *Daily minimum FACE*. FACE is the free chlorine adjusted to the disinfecting strength it would have at pH 8, so it needs a pH and a temperature. The rules define FACE but give no formula, so check WYLA's method with your regulator.
- **C.t** — disinfectant concentration × contact time, worked out each minute. C is the free chlorine at the end of contact. T10 is the contact tank volume × baffle factor, divided by the flow. The result is compared with a set C.t (NZ) or with the regulation's table for that minute's pH, temperature and chlorine (US, Ontario).

Values only your site can give

Some numbers are not set by any regulation, such as your contact tank volume or your reactor's validated dose. WYLA asks for these and never guesses them. An empty required box shows *needed*; an optional box shows *not used*. Under each calculation, every gateway has a status line:

calculated — the calculation is running.
needs a value: followed by the empty boxes — the calculation stays off until you fill them.
not applicable here (no ...) — that gateway does not record the reading. This is never counted as a failure.

- UV: **Judge the reactor by** (dose or intensity), **Minimum dose**, **Minimum UV dose**, **Log credit claimed for** and **Log credit claimed** (US table), **Validated minimum UV intensity**, **Validated minimum UVT (optional)**, **Validated maximum flow (optional)**.
- Chlorine: **Judge** (FAC or FACE), **Minimum**, **Judge** (only while water flows, or all the time), **pH (for FACE)** and **Temperature (for FACE)**, with **Set pH** and **Set temperature** when you choose a set value.
- C.t: **Required C.t**, **C is**, **Minimum T10 contact time**, **Contact tank volume**, **Baffle factor (T10/T)** (from a tracer study, or typical values from 0.1 unbaffled to 1.0 plug flow), **Flow** and **Design flow**, **pH**, **Temperature**, **Giardia inactivation needed** and **Between table values** (US), and **Giardia inactivation by disinfection** and **Virus inactivation by disinfection** (Ontario).
- Every calculation: **Each minute is judged by** — the minute's worst sample (the default) or its average.

Custom tests and rules on readings

When a calculation is set to **Custom**, you also choose how it is tested: **Within limits for at least (% of each day)**, **Within limits for at least (% of each month)**, **Judge in periods of (minutes)** (a period is out of limits if any minute in it is), **Never out of limits in a row for**, **A stretch fails when it** (reaches that long, or is longer than that), **Percentages are of** (operating time, or volume treated) and **Judge once a day** (every minute, or at the day's peak hourly flow).

Under **Rules on readings**, each rule has a tick box that switches it on or off. A rule set's own rules can only be ticked on or off; the one exception is the NZ 2026 UV flow rule, which asks for your reactor's certified maximum flow. The US filter turbidity rules start off, so tick them only if they apply to your plant. To check another reading, click **Add a rule**, fill in **Name**, **Reading** (and **Reading tag** for a named input), **Must be** (at least, more than, at most, less than), **Limit** and **Judge**, and choose its tests. **Remove** deletes a rule you added.

Operating time, readings used and saving

Water is flowing above (m3/h) sets when the plant counts as operating. Minutes at or below this flow are not judged; 0 means any flow at all counts. If a gateway records no flow, every minute counts as operating time.

The **Chlorine reading tag**, **Flow reading tag**, **pH reading tag**, **Temperature reading tag** and **Turbidity reading tag** boxes show *found automatically* while empty: WYLA picks the readings itself. Fill one in only to make a calculation use a different reading.

Click **Review and save** to see every change before you confirm it. When you confirm, this month's days are worked out again against the new settings, while earlier months keep the limits they were judged with. If something is wrong, a *Not saved:* box lists it. **Discard changes** puts the settings back as they were saved.

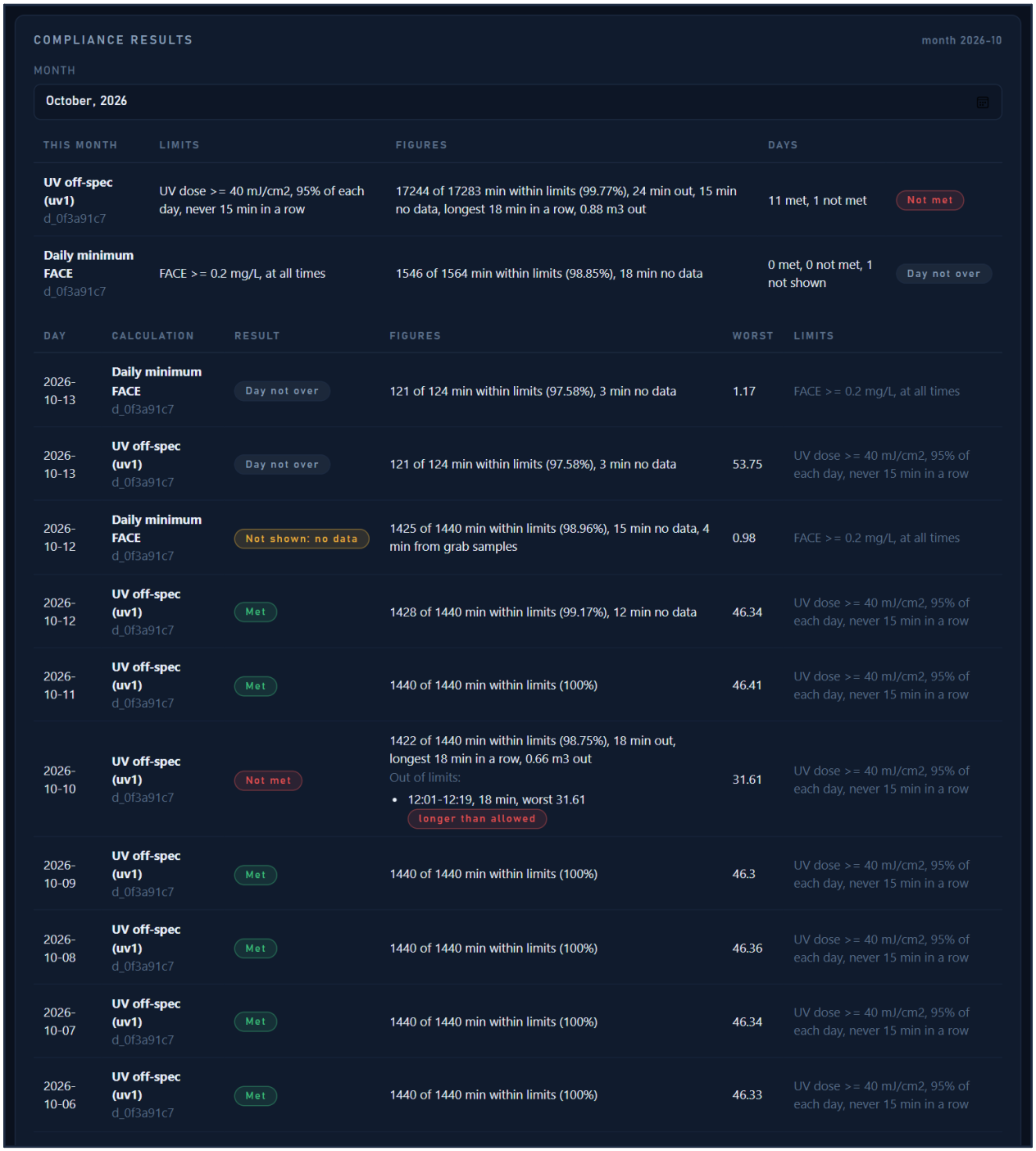
Reading the results

Pick a month in the **Month** box of the **Compliance results** panel. The first table has one line per calculation for the month, with the columns **This month**, **Limits**, **Figures** and **Days** (how many days were met, not met and not shown), plus a result. The second table lists every day, newest first, with the columns **Day**, **Calculation**, **Result**, **Figures**, **Worst** and **Limits**.

A day runs from midnight to midnight at the site. A minute with no data is never counted as within limits, so a day is **Met** only if it would still pass with every no-data minute counted against it.

RESULT	MEANING
Met	The limit held, even counting every no-data minute against it
Not met	The readings that were recorded already break the limit
Not shown: no data	Missing data means the day cannot be shown as met or not met (see Data gaps)

RESULT	MEANING
Not operating	The plant did not run that day
Counted for the month	The rule has only a monthly test
Day not over	Today, until midnight at the site
Close to the limit	Today has already used 80% of its allowance



Compliance results: the month's summary and the result for each day.

The month day by day

At the top of **Results** is the month day by day: one cell a day, in the site's own days, laid out as a calendar with weeks running Monday to Sunday (the 1st sits under its weekday). The zone the days are in is named beside it, for example *NZDT*. Each cell shows the date and the day's **worst** result over every calculation, as a mark as well as a colour, so the colour is never the only signal. A day that is not sealed yet has a **dashed outline** (each day is sealed 8 days after it ends).

Hover over a day, or click or tap it, for its summary: each calculation's result and figures, and whether the day is sealed or the date it should be sealed. **The month in words**, folded below the calendar, lists every day's summary as text.

MARK	MEANING
Tick (green)	Met
Cross (red)	Not met
?	Not enough data - too many minutes with no data to say it was met
…	Today - the day is not over yet
o	Not operating
□ (square)	Recorded (or sealed) but no verdict: no rule set, or not worked out yet
-	Nothing recorded
(blank)	Still to come

Every period out of limits

Under each day's figures, WYLA lists every period that was out of limits: every stretch of chlorine below the minimum, of UV off-spec, of C.t below the required value. Each line gives the start and end in the site's time, how many minutes it lasted and the worst value. Notes say when a period *goes on from the day before*, *goes on into the next day*, is *still going*, or had no data in it or after it (no data never counts as a recovery). A period longer than the rule allows, such as US chlorine below 0.2 mg/L for more than 4 hours, is marked **longer than allowed**. When a day has more than three periods they are folded under a line such as *5 periods out of limits*; click it to open the list. At most 200 periods are listed for one day, but the one-minute records keep every one.

Downloading the results

Download daily results (CSV) saves the month in the **Month** box as a spreadsheet file, with one line per gateway, calculation and day. Each line shows the site's day and its UTC times, the result (pass, fail, incomplete, idle or pending), the minutes within limits, out of limits and with no data, the longest run out of limits, the worst value and when it happened, the volumes and the limits. The last column, **out_of_limits_periods**, lists that day's periods in local time, for example *05:00-09:01 241min worst 0.15 too-long*; *none* means the day was checked and nothing was out of limits.

Calculation alarms
Calculation alarms use your normal alarm routing. A yellow alarm means 80% of an allowance has been used; a red alarm means a limit has been broken.

16 NZ SCHOOLS ON THEIR OWN SUPPLY

A New Zealand school, kura, marae or hall that supplies its own water is a drinking-water supplier. Most follow the **Self-supplied Buildings Acceptable Solution 2025**; some follow the full Rules at level 2. This chapter covers the site preset for schools, the two rule sets made for them, the values you enter from the maker's documents, and the notification case WYLA opens when the UV lamp was out while water flowed.

The school preset

On **Setup** > *the site* > **Features** pick **NZ school - Acceptable Solution (self-supplied building)**. It switches on **Compliance calculations**, **Regulator reports**, the lab sample register, the logbook and scheduled reminders (as well as text alarms, remote support and data export), and suggests the rule set **NZ Self-supplied Buildings Acceptable Solution 2025** for the Compliance page (you accept it when you save). Your organisation's plan must include these modules - see **Features and Plans**.

> **Switching it on**
> In the live console since 3 November 2026. WYLA switches it on for your organisation in your plan (Features); your owner then switches it on for each site.

Keep Compliance calculations and Regulator reports on

The school preset starts with **Compliance calculations** and **Regulator reports** on, so the daily school checks show on the **Compliance** page and the **UV lamp out while water flowed** case opens on the **Reports** page. They are not required, so an owner can switch them off. The checks keep running in the background either way and their alarms are still sent, but with Compliance calculations off the page is hidden, and with Regulator reports off the case does not open.

> **Leave Regulator reports on at every school**
> An Acceptable Solution school sends no routine reports, but Regulator reports is what opens the "may be unsafe" cases and their drafts for Taumata Arowai and the Ministry - for a UV outage while water flowed and for an E. coli positive (chapter **Lab Samples**). Switch it off and neither opens a case.

Picking the rule set

On the **Compliance** page, **Rule set** has two choices for schools:

RULE SET	FOR	WHAT WYLA CHECKS
NZ Self-supplied Buildings Acceptable Solution 2025 (schools, marae, halls)	Most schools	UV dose at least 40 mJ/cm2 where the UV controller reports a dose; the lamp lit whenever water flows; the flow never above the UV unit's rated flow; the lamp within its life. Filter differential pressure is there but off
NZ level 2 treatment, self-supplied building (2022 and 2026 rules)	A school on the Rules (101-500 people)	No chlorine or pH (not required for self-supplied buildings); turbidity under 5 NTU; UV 40 mJ/cm2; the same UV checks; filter differential pressure

Values only you can give

Every equipment value starts empty and shows **needs a value** until you enter it from the maker's documents or the panel installer. Nothing is judged until then.

VALUE	WHERE IT COMES FROM
Lamp lit level (A)	The lamp current below which the lamp is out - from the UV maker or the panel installer
UV rated flow (m3/h)	The maker's rated flow for 40 mJ/cm2, from its written evidence. To convert: 1 L/min = 0.06 m3/h (so 50 L/min = 3 m3/h)
Filter differential pressure (bar)	The cartridge maker's maximum; tick the rule on where the maker gives one
Lamp life (h)	The maker's lamp life, where a lamp-hours reading is recorded

> **Which readings are used**
> Unless you name others in the reading boxes (**UV lamp current**, **UV lamp life remaining**, **UV lamp hours**, **Pre-filter pressure**, **Post-filter pressure**, flow), the school rule sets use the standard panel's lamp current (G2), the pre- and post-filter pressures (B and C) and the flow meter (H). The lamp and flow checks need a flow meter: without one they show **not applicable**. Lamp current shows the lamp is lit; it does not measure the dose.

The clause list

Under the Acceptable Solution rule set the page lists what a record of readings cannot show, for you to keep yourself. WYLA never marks these as met:

- SSB.3(a)-(c): a cartridge filter (final stage 5 micron or less) and a UV system sized for the peak demand.
- SSB.4: a validated UV unit (or one installed before 17 October 2022 with written evidence of 40 mJ/cm2).
- SSB.12: tank inspections - use the **Logbook**.
- SSB.13: E. coli and total coliforms sampling - use **Lab samples**.

- SSB.15: events and emergencies documented with a response plan.
- SSB.16: records kept at least 3 years (WYLA keeps its records 10 years).

When the flow is above the rated flow

If the flow meter shows more water going through the UV unit than its rated flow, WYLA raises the red alarm **Water went through the UV unit faster than it is rated for** (alarm type **UV disinfection**). The email says for how many minutes today and the highest flow. Check what was drawing water at those times, the flow restrictor before the UV unit, and that the rated flow entered is right for this UV unit.

The case: UV lamp out while water flowed

Whenever the lamp current was below the lit level while water was flowing, WYLA opens a notification case on the **Reports** page: **UV lamp out while water flowed - drinking water may be unsafe** (Water Services Act s21(2)). It has a pre-filled draft and two clocks showing the time since it happened: **Notify Taumata Arowai** and, at a school or kura, **Tell the Ministry of Education / NZSPA**. Reminders go only to your own people. WYLA never sends the notice.

> **This is your judgement**
> Any lamp-out period while water flowed opens a case - even a short one, such as a lamp warming up. If no untreated water reached anyone, close the case with that reason. If it may have, act on your water safety plan and notify straight away. Cases within 24 hours fold into one.

School or kura, and the Ministry contact (owners)

On **Reports** > **Profile** for an NZ site:

- Tick **This supply is a school or kura: when the water may be unsafe, tell the Ministry of Education / NZSPA as well**. The profile header then shows "School or kura", and every "may be unsafe" case (including one you open by hand) gets the Ministry clock.
- Fill in **Ministry of Education / NZSPA contact (schools)** under Notifications. If it is empty, WYLA uses a report recipient whose role names the Ministry of Education, MOE, the School Property Agency or NZSPA.

More for schools

In the console from 3 November 2026. Three more tools help a school's caretaker and office:

- **Suggested reminders** on the **Reminders** page, marked "for schools": after heavy rain, at the start of each term (flush the pipes), and in the school holidays a notice if the UV has been off (chapter **Reminders**). Every number in them is yours to give.
- **The plant-room QR code**: the caretaker records the daily check (is the UV light on, any leaks), inspections and jobs done from a phone, with no login (chapter **Plant-room QR Code**).

- **The Do Not Drink kit**: the tap notice, the parents' letter and the safe-again notice, ready when the water may be unsafe; WYLA never sends them (chapter **Do Not Drink Kit**).

17 CALIBRATION AND GRAB-SAMPLE LOG

Your compliance record is only as good as the instruments behind it. The rules ask you to check the duty UV sensor against a reference sensor, the online UVT analyser against a bench UVT, and the chlorine, pH and turbidity analysers against a grab sample or a standard, at set intervals. When an analyser is down, grab samples may stand in for it for a while. This log records both. It tells you when a check is due, raises an alarm when one is late or has failed, and keeps every entry for at least 10 years. No entry can be changed or deleted: a mistake is put right with a correction.

Finding the log

Open **Compliance** for the site chosen in the menu. The log only appears for a single site, not for **All sites**. It sits below the compliance calculations in three panels: **Instrument checks**, **Grab samples** and **Instrument check settings**.

The lists of entries follow the dates chosen in the **Data gaps** panel higher up the page: **Last 7 days** (the default), **Last 30 days**, **Last 90 days**, or **From** and **To** with **Show these dates**. The log always shows every gateway at the site.

YOUR ROLE	WHAT YOU CAN DO
Viewer	See the log and download the CSV files
Operator or installer	Also record checks, grab samples and corrections
Owner or WYLA administrator	Also change the Instrument check settings

> **Support sessions**
> When WYLA support views your account, the session is read-only, so the entry forms and the settings buttons are hidden.

The Instrument checks table

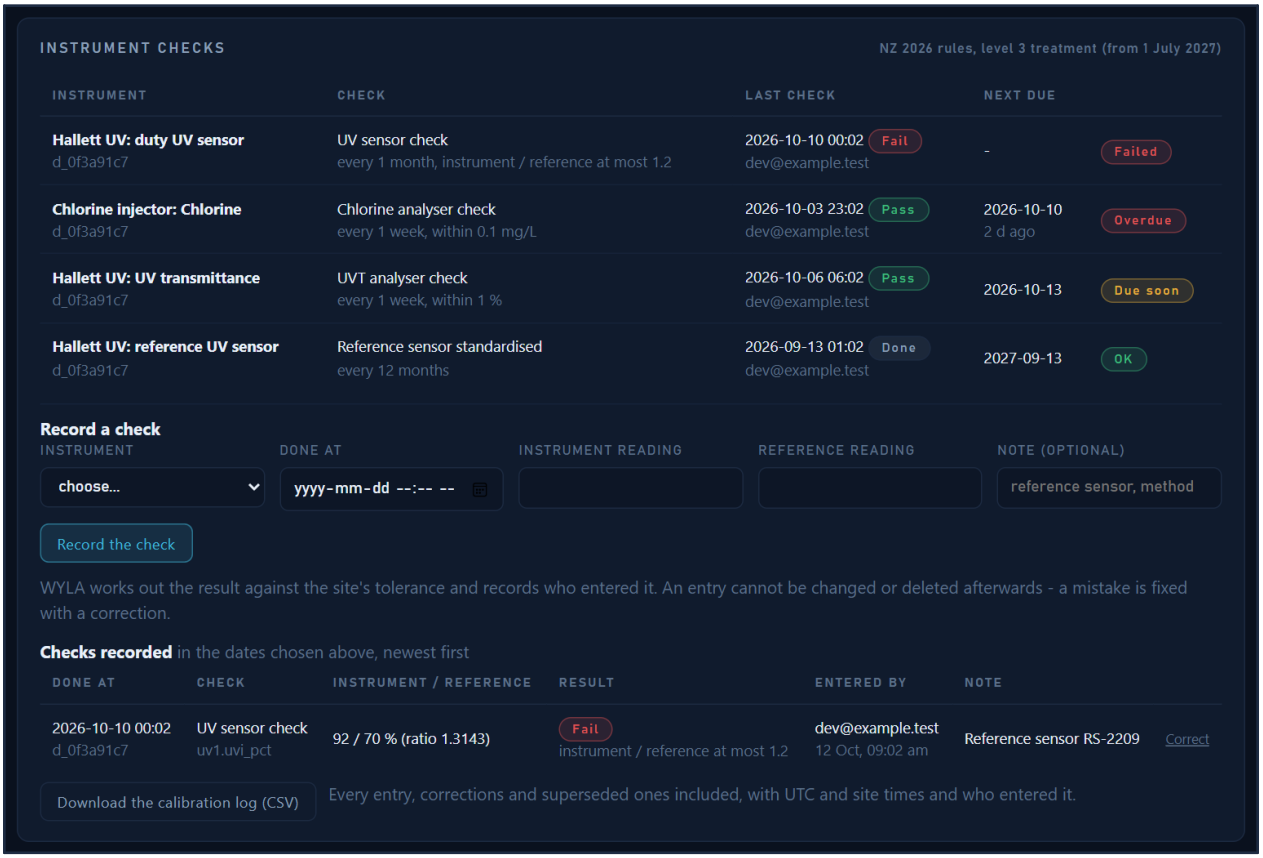
WYLA lists the instruments behind each gateway's recorded readings: each UV unit's duty UV sensor and reference UV sensor, and an analyser for each UVT, free chlorine, pH and turbidity reading. The heading shows the rule set in use, or *no rule set picked*. Instruments that need attention are listed first.

Instrument shows the gateway the instrument is on, and says *no reading received yet* if the reading has not arrived (nothing falls due until it does). **Check** shows the kind of check and its schedule, for example the interval and tolerance, or which value is still missing. **Last check** shows when the last check was done, its result and who entered it. **Next due** shows the due day, and how long ago that was if it has passed. The last column is the status; hover over it to see the clause of the regulation.

A check falls due one interval after the last check that did not fail, by the end of that day on the site's own calendar. If an instrument has never been checked, its first check is due one interval after its schedule started: when the rule set was first picked, or when the reading first arrived, whichever is later.

- **Alarms:** WYLA raises *An instrument check is due soon* (yellow), *An instrument check is overdue* (red) and *An instrument failed its check* (red). They come under the alarm type **Filters and servicing** and clear themselves when the status recovers.

STATUS	MEANING
OK	Checked, and not due yet
Due soon	Inside the reminder window before the due day
Overdue	The due day has ended without a check
Failed	The latest check failed. This stays until a check passes
Not checked yet	Never checked, and not due yet
Needs a value	The rule leaves a value to your site and it is still empty
Not scheduled	The check is switched off or not in the rule set



Instrument checks: each instrument's status, and the Record a check form.

Recording a check

WYLA works out the result against the site's tolerance and records who entered it. For a duty UV sensor, the duty reading divided by the reference reading must be no more than the limit (a sensor reading low passes). For an analyser, the difference from the reference must be within the limit. The result shows as **Pass**, **Fail**, **Done** (reference sensor standardised) or **Not judged** (no tolerance set yet). Each entry keeps the tolerance it was judged against, so a later settings change never rewrites it.

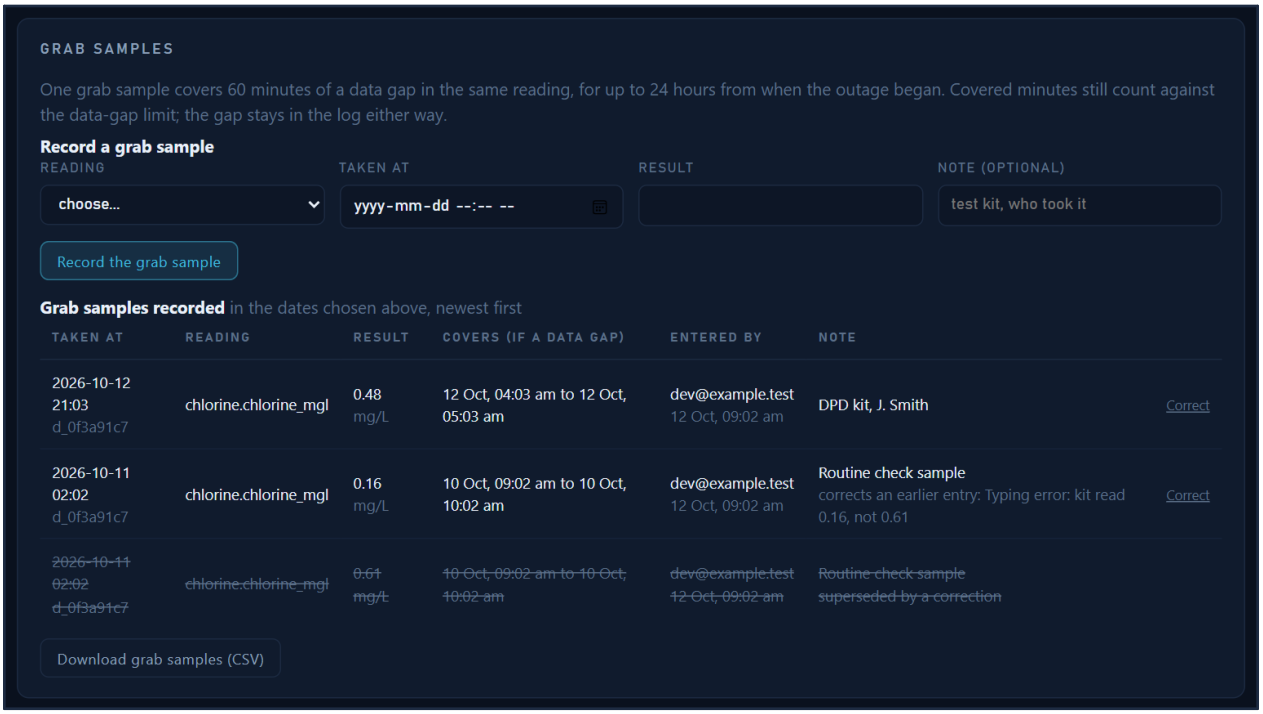
Below the form, **Checks recorded** lists every check in the chosen dates, newest first, with the columns **Done at**, **Check**, **Instrument / reference** (with the ratio or difference), **Result**, **Entered by** and **Note**.

1. Under the table, choose the instrument in **Instrument**. **Done at** fills in with the current time; change it if the check was done earlier. It is in this computer's time and can be up to 400 days back, but never in the future.
2. Enter the two readings. The box names depend on the check: **Duty sensor reading** and **Reference sensor reading**; **Online analyser UVT** and **Bench (spectrophotometer) UVT**; **Analyser reading** and **Grab sample result**; or **Analyser reading** and **Reference (grab or standard)**. **Reference sensor standardised** has no readings.
3. Optionally add a **Note (optional)**, such as the reference sensor, the method or the certificate number.
4. Press **Record the check**.

Grab samples

The **Grab samples** panel starts with a line that states your site's rule in words: how many minutes one grab covers, and for how long grab sampling may stand in. To record one, choose the **Reading**, set **Taken at**, enter the **Result**, add a **Note (optional)** such as the test kit or who took the sample, and press **Record the grab sample**.

A grab sample only covers time inside a logged data gap of the same reading, and no more than your rule allows, counted from the start of the outage. **Grab samples recorded** lists **Taken at**, **Reading**, **Result**, **Covers (if a data gap)**, **Entered by** and **Note**. *nothing (no grab rule)* means your rule set has no grab substitution. The gap always stays in the data-gap log, marked as covered.



Grab samples: the site's rule in words, the entry form and the log, including a corrected entry.

Correcting an entry

The old entry stays in the log, struck through and marked *superseded by a correction*. The new one shows *corrects an earlier entry* with your reason. Only the newest version counts. An entry can be corrected only once, so to fix a correction, correct the latest version. Keep the same gateway and instrument.

1. Find the entry in the log and press **Correct** on its row.
2. The form above fills with that entry's values and shows: *Both stay in the log; this one counts from now on.*
3. Change what was wrong, and fill in **Why it is being corrected**. This is required.
4. Press **Record the correction**, or **Cancel the correction** to stop.

> **Every entry is fingerprinted**
> Each entry carries a fingerprint of the entry before it on the same gateway. If anyone changes or removes an entry outside WYLA, a red banner says the log *no longer checks out*. Tell WYLA support if you see it.

Instrument check settings

Nothing is scheduled and no reminder is sent until an owner picks a **Rule set**: **Off (no checks scheduled)**, the NZ 2026, NZ 2022 and NZ level 2 rules, **US federal**, **Ontario** or **Custom**. You can record entries whatever the setting.

Each check has a tick box to switch it on, and these fields: **Check at least every** with its **Unit**, **Instrument / reference at most** (UV sensor), **Difference at most**, **Difference at most (% of the reference)**, and **Remind this many days before it is due**. Leave the reminder blank for the default: 1 day for weekly or shorter checks, 7 for monthly, 30 for yearly. A value fixed by the rule set is greyed out. A box marked *needed* is one the regulation leaves to the instrument maker or your regulator, and WYLA never fills it in for you. The grab-sample block sets how long one grab covers and for how long grab sampling may stand in. **Instruments checked here** lets you untick an instrument that is not used for compliance.

Review and save lists every change for you to confirm. **Discard changes** puts the settings back as they were.

Downloading the log

Download the calibration log (CSV) and **Download grab samples (CSV)** save every entry in the chosen dates, oldest first, corrections and superseded entries included. Each row has UTC and site times, who entered it, the entry's id and its fingerprint. If there are more than 20,000 entries, narrow the dates.

18 LAB SAMPLES

A school or marae on its own water supply sends treated-water samples to a laboratory for **E. coli** and **total coliforms**. The **Lab samples** page keeps every sample and its results, works out when the next one is due, reminds you before it is, and raises a red alarm the moment an E. coli positive is recorded - in New Zealand it also opens a "may be unsafe" notification case with a draft for you to send. WYLA never sends anything to the laboratory, Taumata Arowai or the Ministry: it is your record and your reminder.

Who can do what

Open **Lab samples** in the menu (it shows where the site has the lab sample register switched on - see **Features and Plans**).

WHO	CAN
Anyone who can see the site	Read the register, the schedule and the status; download both CSV files, the lab report and an incident record (PDF)
An operator or above	Record a sample, add results, correct an entry
The account owner (or WYLA)	Set up the **Sampling schedule**

> **Switching it on**
> In the live console since 3 November 2026. WYLA switches it on for your organisation in your plan (Features); your owner then switches it on for each site.

Setting up the schedule (owners)

Under **Sampling schedule** answer the questions below and press **Save the schedule**. The schedule is worked out from these answers only, and **the strictest that applies decides**. WYLA never guesses: until enough is answered the page shows **Needs a value** and says what is missing.

QUESTION	WHAT IT DOES
A state school (the Ministry of Education's monthly testing) - Yes / No	Yes: a sample is due in **every calendar month, school holidays included** (the Ministry's requirement for state schools)
Population the supply serves	100 people or fewer: every 3 months; 101 or more: monthly (Self-supplied Buildings Acceptable Solution, SSB.13(c))
Remind days before (optional)	How early the yellow reminder starts. Empty uses **WYLA's default**: 7 days for monthly, 30 for every 3 months. This is WYLA's own convenience, not a rule

Switching the reminders off
Switch the reminders off clears the schedule: nothing is due and no reminder is sent, but samples can still be recorded and everything already recorded stays.

Emailing someone before a sample is due

From 3 November 2026 an owner can also have WYLA email the person who takes the sample - the caretaker, or someone outside your organisation - before it is due, on the day and while it is overdue: on the **Reminders** page make a reminder for **The lab sample (E. coli)** with **When the next lab sample is due**, and this page's schedule decides (chapter **Reminders**). The email's **Mark as done** button records only that the sample was taken. It does not add a sample to this register: record the sample and its results here as usual. The reminders and alarms on this page carry on as before.

Recording a sample

Under **Record a sample**:

1. **Taken at** - the date and time the sample was taken (in this computer's time).
2. **Sampling point** (required) - the tap the sample came from, for example "kitchen tap, treatment building".
3. **Sample ID**, **Laboratory** and **Taken by** - as on the laboratory's form.
4. Results, if you have them: for **E. coli** and for **Total coliforms**, pick the sign (=, < or >), type the value and the **Unit** (for example MPN/100 mL). Once you give results, both E. coli and total coliforms are needed. **Other results (optional, one per line)** takes anything else, such as "Turbidity 0.3 NTU".
5. **Results came back** (optional) and **Note (optional)**.
6. Press **Record the sample**. WYLA records who entered it; an entry cannot be changed or deleted afterwards.

No results yet?
Record the sample when it is taken, without results. It shows **Results awaited**. When the laboratory replies, press **Add results** on that line: WYLA records a new entry that completes the first one.

Sampling points, sample types and MAVs

Built on 7 November 2026 and not yet deployed. **First, list your supply's components and sampling points** on the Reports page (**Regulatory profile**, the Components and Sampling points tables). Until you do, the Lab page records samples the old way and says so.

Recording a sample. Pick the sampling point (the page shows its type and component, for example *treated water - Main plant (TP04026)*); type the laboratory's sample ID, or tick **Make one for me** (WYLA

makes an ID like W-261107-SITE-01 and says so on the entry). For each result pick the determinand from Taumata Arowai's list, = (exactly), < (less than) or > (more than), the value and the unit from the drop-down - only the list's units are offered. **Add a result** for more. At a treated or distribution point E. coli and total coliforms are recorded together; a chemistry-only sample needs no micro result.

Reading the register. *over the MAV* (red) and *over half the MAV* (amber) chips; *ask the lab* when its limit is above the MAV; *Results recorded* for a source or chemistry sample (no micro test); older samples say *entered before sample types*. A red banner at the top lists results over their MAV that no later sample at that point has cleared. A source water sample never raises a micro alarm and never counts as a treated sample. MAVs are limits for drinking water, so a source result above one is not an exceedance and raises no alarm, but its red chip says what it means, for example *Source water: 5x the drinking-water MAV (0.01) - treatment must remove it*. A sample sent to the laboratory with its determinands picked and no values yet keeps them: the entry lists them (*awaiting: pH; Iron; Arsenic*) and **Add results** offers them. Lists of determinand names are separated by semicolons, because one of Taumata Arowai's names has a comma in it (*Nitrate, short-term*); a result row you add starts in the determinand's usual unit (for nitrate, mg/L as NO3), which you can change.

Sampling schedules. The panel **Sampling schedules** lists each schedule with where it comes from, its points and determinands, next due, missed periods, and for *until three results under half the MAV* the count so far. Owners use **Add a schedule of your own** and **Archive** (kept in the records). The defaults for your level are set up from **Default cadences for this level**. Each schedule is a job of its own on the Schedule page.

What meets a schedule. Only a sample with a result for the schedule's determinands, taken at one of its points (or at a point of its component type). A sample still waiting for the laboratory meets no schedule yet: the schedule says *1 sample awaiting results* until the results are added. A sample entered before the site had sampling points has no point recorded, so it never meets a schedule for a point or a component: the schedule says *point not recorded*, and **Set the point** opens that sample's correction to pick its point (the original stays in the register). A sample carrying only some of the schedule's determinands does not meet it either - a schedule's determinands are what the Rules ask of one sample, so two part-samples are not added together: the schedule says *1 sample has only some of the determinands (missing: ...)*, and **Add results** opens that sample's correction with a row for each missing one. Correcting only the point of an old sample keeps its results and units (a unit written another way, such as MPN/100 mL, is matched to the list's).

What each sample counts for. Under each sample the register says *Counts for* and the schedules it counts for, or *Counts for no sampling schedule*, then any schedule it does not count for yet and why (*results awaited*, *point not recorded*, *only some of the determinands*). The Schedule page and the reports read every sample the same way. A sample entered before sample types says *entered before sample types - point not recorded*: it is never matched to a point by the name typed for it, so it serves no report rule and no schedule for a point or a component, but the two school schedules (the Ministry of Education's monthly testing and the Acceptable Solution's) still count it as the treated-water sample they always did - until its point is set.

Before you set a point. The point decides the kind of water, and the two school schedules count treated-water samples only. If the point you pick in a correction would change what the sample counts for, the form says so in red above **Record the correction**, for example *This sample will no longer count for*

"Ministry of Education: every calendar month, school holidays included"; that schedule will show Overdue for 2026-10. A kitchen or hall tap is usually a distribution zone point; check which point the sample was really taken at before you save.

Import a results file

Instead of typing results in, you can bring in the file your laboratory sends you: a CSV or text file, an Excel workbook (.xlsx), or a PDF with text in it. Old Excel files (.xls) are refused: save them from Excel as .xlsx or CSV first. The panel **Import a results file** is under the register where the Lab results import module is on (Cloud Compliance Plus); an operator or the owner imports, and the site needs its sampling points (set on the Reports page). Built on 8 November 2026 and not yet deployed.

1. Choose the file. Leave **Laboratory** on *Work it out from the file*, or pick your laboratory's mapping. Tick **Make IDs for samples without one** only if the laboratory gives no sample ID.
2. Press **Read the file**. WYLA keeps the file exactly as you uploaded it and shows every sample it found, each with its checks: red **Fix** - it cannot be saved yet (a test or sampling point WYLA does not know by the laboratory's name, a unit that is not Taumata Arowai's, a date in the future); red **Alarm** - it will be saved and raise an alarm (E. coli found, or a result over its maximum acceptable value); amber **Check** - read it before saving (total coliforms found, a day with no time, a correction of a sample already in the register); green - ready.
3. If WYLA asks, say which column is which, which test on Taumata Arowai's list each of the laboratory's names is (or *Not a lab result - leave it out*), which of the list's units each unit is, and which of your sampling points each of the laboratory's place names is. Tick **Keep this for the next file from this laboratory** and the next file maps itself. Press **Read the file again with these**.
4. Untick any sample you do not want, then press **Save N samples**. Nothing is saved before this. A sample the register already has with the same results is skipped; one with different results is saved as a correction - the earlier entry stays, marked corrected.

- Each imported sample shows **Original lab file**, which downloads the file exactly as it was uploaded - also after **Fix a mistake** or **Add results**: the correcting entry keeps the link.
- Rows of the file that are left out (a row with no result, or with no test and no result) are listed above the samples, each with its reason; nothing is saved from them.
- pH has no unit in Taumata Arowai's list: *pH units* (or a blank) is kept as no unit, with nothing to check; any other unit against pH is left out with an amber note.
- **Abandon this import** saves nothing (the file stays in the list of earlier imports).
- A scanned PDF (a picture of the report) cannot be read: WYLA keeps it and you type the results in.
- WYLA never sends your results or files to the laboratory, Taumata Arowai or anyone else.

What a result means

WYLA reads every result the cautious way:

RESULT	SHOWN AS	MEANING
0, or <1	Clear	Not detected
Any other value, or a > result	**Positive**	Detected
A < result above 1 (for example <10)	Ask the lab	It cannot show that none was found: not a positive, and not a clear test either. Ask the laboratory what it means
No results yet	Results awaited	Add them when they come back

A positive result

When a positive is recorded, a red banner opens at the top of the page and stays until **three clear tests in a row** are recorded (the Ministry of Education: "Three clear tests are required after a positive test"). The banner counts them: "1 of 3 so far". An "ask the lab" result breaks the run; a sample still awaiting results does not count.

For **E. coli** WYLA also raises the red alarm **E. coli was found in a lab sample** straight away, by email to the people on the site's alarm list (and by text or call where **Text and voice alarms** is on). For **total coliforms** (with no E. coli) it raises the yellow alarm **Coliforms found in a lab sample** as soon as the sample is recorded (since 7 November 2026; before, a coliform positive was raised as *A lab sample is due soon*). It stays on until three clear tests in a row are recorded, and a clear re-test updates or clears it at once. Silencing a gateway's alarms does not silence either lab alarm.

> **E. coli found: act now, before any re-test comes back**
> Stop drinking and food-preparation use, put up do-not-drink notices and provide other water. Notify Taumata Arowai and the Ministry of Education straight away - WYLA does not do this for you. Then check the UV unit, the filters, the tanks and the pipes, and arrange the re-tests with your laboratory.

The "may be unsafe" case (New Zealand)

At a New Zealand site, an E. coli positive also opens a notification case straight away on the **Reports** page: **E. coli detected in a laboratory sample - drinking water may be unsafe** (Water Services Act s21(2)). It names the sample, the results, the sampling point, the laboratory and the register entry, and has a pre-filled draft and the clock **Notify Taumata Arowai** - at a site ticked school or kura also **Tell the Ministry of Education / NZSPA** - showing the time since the result. One case per sample: a correction of the sample is the same case. WYLA never sends the notice; you do, and you record it on the case (chapter **Regulator Notifications**).

Is a case opening at your site?
Above the register the Lab samples page says either that a positive also opens a "may be unsafe" case, or that it raises a red alarm only - because **Regulator reports** is off at the site, or the site's regulatory profile does not name New Zealand. Then telling Taumata Arowai (and, for a school, the Ministry) is entirely up to you. The case is your judgement, as the UV case is: close it with a reason if no unsafe water reached anyone. Three clear tests do not close it by themselves - record the resolution and close it.

A result over its limit

Built on 7 November 2026 and not yet deployed. **Lab result over its limit** (red alarm): a treated or distribution result above its maximum acceptable value. Tell the laboratory and Taumata Arowai as your plan says and take a follow-up sample from the same point; the alarm clears when a later sample at that point is under the MAV.

Where the site's profile names New Zealand and Regulator reports is on, two notification cases open as well: *A result over its maximum acceptable value* (one per sample and determinand), and *Total coliforms found in a laboratory sample - decide whether to notify* (total coliforms without E. coli; whether that alone must be notified is not yet confirmed). A source water sample never opens a case.

Next sample - the status panel

The **Next sample** panel shows one of: **Up to date**, **Due soon**, **Overdue**, **Positive**, **No sample yet**, **Needs a value** or **Not set up**. Below it: **Next sample due by** the earliest date any schedule is due (with that schedule's name when the site has more than one), the schedules with **No sample yet** named (for example a yearly source schedule in **Sampling schedules** further down - the chip then says *No sample yet: 1 schedule*), a table of each school schedule that applies with the clause it comes from, and for a state school **Months with no sample**.

ALARM	LEVEL	WHEN
A lab sample is due soon	Yellow	The next sample is within the reminder window
Coliforms found in a lab sample	Yellow	A total-coliforms positive (no E. coli); stays on until three clear tests in a row are recorded
A lab sample is overdue	Red	A sample the schedule asked for was not recorded in time (for a state school: a month went by with none)
E. coli was found in a lab sample	Red	An E. coli positive; stays on until three clear tests follow, raised again for each new positive

Where the alarms appear
Site alarms are raised on the site's first gateway. A site with no gateway yet gets no alarm, but its page still shows what is due. The due and overdue reminders are in the **Filters and servicing** alarm type; the E. coli and coliforms alarms are in **Other site equipment**, beside the water-quality limits - make sure the right people receive both.

Not scheduled by WYLA

The page lists what WYLA does not remind you about, so nobody relies on it:

- Extra samples while more people than usual are on site (SSB.13(d)-(e)) - record them as ordinary samples.
- Source water samples and the chemical tests - record them with **Other results** if you wish.
- The gap between re-tests after a positive: no source states one. Follow the laboratory's and the Ministry's advice.

Correcting an entry

Press **Correct** on the entry, change what was wrong, type **Why** it is being corrected, and record it. Both entries stay in **The register**; the new one counts from now on. An entry can be corrected once. The register is chained so that any entry changed or removed outside WYLA shows a red banner naming it.

Downloads

- **Download the register (CSV)** - every entry, corrections included, with UTC and site times.
- **Month for Argest (CSV)** - pick a month (YYYY-MM): one row per result, or one row saying no sample was recorded that month. Argest publishes no import format, so this is a list to copy into its **water testing results** tab, not a file to upload.

Monthly results for Argest

On the Lab page of a state school (the lab settings say state school, or the regulatory profile says school or kura), the panel **Monthly results for Argest** gives a list to copy from: Argest publishes no import format. Each line is in the order you type a result into Argest's *water testing results* tab. WYLA sends nothing to the Ministry of Education, NZSPA or Argest. Built on 8 November 2026 and not yet deployed.

1. Choose the first and last month (the twelve months to last month by default). The summary under the buttons follows the months you choose.
2. Press **List for Argest (PDF)** or **(CSV)**. Every calendar month is listed, school holidays included; a month with no sample says so in red - take one. After a positive result, each following sample is marked *re-test 1 of 3*, *2 of 3*, *3 of 3*.

- If the panel says the Ministry of Education school number is not entered, add it on the Reports page (regulatory profile, identifiers).
- The Ministry's monthly test is of the water people drink: treated-water samples and tap samples (a distribution-zone point) are both listed and counted, a positive tap sample too; source (raw) water samples are not. Taumata Arowai's schools page names no sampling point, and the school Acceptable Solution takes the treated-water sample from a tap in the treatment building or the farthest building (SSB.13); whether NZSPA reads it the same way is still to be confirmed.

The lab report and the incident record (PDF)

From 5 November 2026 two reports can be saved as a PDF, for your board, an inspector or the regulator. WYLA sends neither to anyone.

- **Download PDF**, beside the CSV button - the lab report for the last 12 months: the sampling rule and its source, samples taken against due, detections, a month-by-month strip, every sample, and where a positive result stands.
- **Incident record (PDF)**, on a positive sample's row - what was found, who entered it and when, the alarm it raised, the notification case and what was recorded against its deadlines, the follow-up samples, and the logbook entries in that window. Anything with no entry reads "not recorded": nothing is filled in for you.

> **What each PDF carries**
> Your **Report branding**, the site address and the people marked **Print on reports** (chapter **Regulator Reports**, **People and organisations of a site**). Who took a sample and who entered it print too, because they are part of the record.

Where WYLA's rule list comes from

WYLA uses Taumata Arowai's own **Rule Summary List** and **Parameters and determinands list**, kept inside WYLA exactly as published (the versions of 28 March 2025 and 22 September 2025). Rule IDs, determinand names, MAVs and units on the Lab page and in the reports come from them; nothing is retyped. Units are offered exactly as the list writes them (for example *MPN/100ml*). When Taumata Arowai publishes a new list, WYLA support checks and installs it.

19 DO NOT DRINK KIT

When the water at a school may be unsafe, the **Do Not Drink kit** has the notices ready: a printable **"Do not drink"** notice for the taps, a **letter to parents and the community** ready to copy into your own email, and - once there have been three clear tests in a row - the **"Safe to drink again"** notice and letter. **WYLA never sends any of it.** You print the notices, put them on the taps, and send the letter yourself.

Where to find it

On the **Lab samples** page, the **Do Not Drink kit** box (**Open the Do Not Drink kit**); and on the **Reports** page, the **Do Not Drink kit** button on a "may be unsafe" case (an E. coli positive, the UV lamp out while water flowed, or a case opened by hand). Opened from a case, the kit is for that case.

WHO	CAN
Anyone who can see the site	Read the kit, the notices prepared so far, and download them again
An operator, installer or above	Prepare a notice or a letter
The account owner (or WYLA)	Fill in and save the details on the notices

> **Switching it on**
> In the console from 3 November 2026. It comes with the **Lab sample register** or **Regulator reports**: with both switched off at the site, the page says notices cannot be prepared.

Fill in the details once (owners)

Under **The details on the notices**, fill in **What to use instead** (for example bottled water from the school office), **Who to contact** and **Their phone**, and if you wish **Their email**, **Which taps** and **Anything else**. Press **Save the details**. Do it now, before you need it.

> **Nothing is guessed**
> If a detail is empty, the page says **Needs a value**, the notice prints a line to write it on by hand, and the letter shows *[needs a value: ...]* where it goes.

When the water may be unsafe

The notice says not to drink the water from that tap or use it to prepare food or drinks, what to use instead, which taps, from which date and who to contact. The letter also names Healthline, New Zealand's free 24-hour health advice line. Neither gives advice of WYLA's own: a Do Not Drink notice is not a boil-water notice.

1. Act on your water safety plan and tell the people who must be told (see **Lab Samples** and **Regulator Notifications**). The kit does not notify anyone.
2. Press **"Do not drink" tap notice (PDF)**, print it, and put it on every tap and fountain named.
3. Press **Letter to parents and the community**. The page shows the letter's subject and text: select it, copy it into your own email, and send it.

Safe to drink again

"Safe to drink again" notice (PDF) and the **"Safe again" letter** are offered only once the lab register shows **three clear tests in a row** (the Ministry of Education's rule for state schools) - counted from the positive sample for an E. coli case, or from the event for a UV or hand-opened case. A positive, or a result to ask the lab about, starts the count again. Until then the buttons say why they cannot be used. The safe-again notice lists the clear tests.

What is kept

Every notice and letter prepared is listed under **Prepared so far**, with who prepared it and when, and kept for good - it is the record that the school told people. **Download again** makes the same file again, and the console checks it matches what was recorded (it will not match if your logo has changed since). The sources of the wording are listed at the bottom of the page. The wording was checked against Taumata Arowai's schools guidance and Health NZ's Healthline page on 3 November 2026; the letter's handwashing line is Taumata Arowai's advice and says so.

20 INSPECTION LOGBOOK

The **Logbook** page is the record of the routine checks a self-supplied school must keep for at least three years: filter checks and cartridge changes, the UV lamp and its quartz sleeve, the water tanks, backflow prevention and the pipes. Pick a preset and WYLA reminds you before each check is due. Anyone who can see the site reads it; an operator or above records entries; the account owner changes the settings.

Picking a preset (owners)

Under **Logbook settings** choose a **Preset**, then press **Save the logbook settings**. Nothing is due until a preset is picked.

INSPECTION	NZ SCHOOL - ACCEPTABLE SOLUTION AND SCHOOLS-PAGE CHECKS	NZ SCHOOL - SCHOOLS-PAGE CHECKS ONLY
Cartridge filter check	Monthly	Monthly
Cartridge filter change	Needs a value (the maker's interval)	Needs a value
UV lamp and quartz sleeve check	Yearly	Yearly
Treated water tank inspection	Every 3 months (SSB.12(a))	Yearly (the page's yearly tank clean)
Untreated water tank inspection	Yearly (SSB.12(b))	Yearly
Backflow prevention check or device test	Yearly	Yearly
Pipe and air-gap check	Yearly	Yearly

Switching it on
In the live console since 3 November 2026. WYLA switches it on for your organisation in your plan (Features); your owner then switches it on for each site.

Which preset?

- **NZ school - Acceptable Solution (Self-supplied Buildings 2025) and the Taumata Arowai schools-page checks**: a school on the Acceptable Solution (most schools). It combines the Acceptable Solution's tank inspections with the checks on Taumata Arowai's page for schools.
- **NZ school - the Taumata Arowai schools-page checks only (a school on the Rules)**: a school that follows the full Rules instead.
- **Custom**: only the types you add yourself.

> **Needs a value**
> The cartridge change interval is the cartridge maker's, so WYLA leaves it empty and shows **Needs a value** until you enter it from the maker's instructions.

Presets for supplies on the Rules (levels 1 and 2)

Built on 7 November 2026 and not yet deployed. Two more presets, **NZ Rules - level 1** and **NZ Rules - level 2**, add a new type: **Backflow risk and cross-connection assessment**.

TYPE	LEVEL 1	LEVEL 2	SOURCE
Cartridge filter check	monthly	monthly	Schools page; T1.4(a) / T2.8(d)-(e)
Cartridge filter change	needs a value	needs a value	The maker's (T1.4(a) / T2.8(d))
UV lamp and quartz sleeve check	yearly	yearly	Schools page; T1.5(b) / T2.10(f)(iii)
Backflow risk and cross-connection assessment	every 2 years	yearly	2026 Rules D1.2(a) / D2.8(a)
Backflow prevention check or device test	every 2 years	yearly	2026 Rules D1.2(d) / D2.8(d)

Where the intervals come from

The filter, UV lamp and sleeve, tank, backflow and pipe intervals come from Taumata Arowai's guidance for schools ("Treat water to make it safe to drink"), re-checked on 3 November 2026. They are that page's guidance, not Ministry of Education requirements: the Ministry's own requirements are the monthly E. coli and total coliforms tests and three clear tests after a positive (chapter **Lab Samples**), reporting in Argest, and a drinking water safety plan. The page gives no tank inspection interval, so the schools-page preset uses its yearly tank clean. Each inspection line quotes its source.

Changing the intervals

Each inspection line shows **The rule** (the preset's interval and where it comes from) and **This site (more often only)**. You may make a check **more frequent** than the preset, never less frequent - WYLA refuses that and names the clause. You can also:

- Untick a type that does not apply to the site (for example no untreated tank). It shows **Switched off**.
- Set **Remind days before** for a type (WYLA's default: 7 days for monthly, 30 for longer).
- Under **The site's own types** press **Add a type**: give it a **Name**, and **How often** if it should be reminded - a type with no interval is **Log only**. Up to 20; **Remove** takes one away (its entries stay).

Two checks WYLA does not schedule
The NZ School Property Agency asks for the pipes to be flushed at the start of each term, and Taumata Arowai for dual-check backflow valves to be replaced every five years. Neither is a preset type: add one as the site's own type if you want a record or a reminder.

Recording an inspection

Under **Record an inspection** (an owner must pick a preset first - until then WYLA answers "choose a logbook preset for this site first"):

1. Pick the **Inspection**.
2. **Done at** - when it was done (this computer's time) - and **Done by**.
3. Pick the **Outcome**: **Checked - all good**; **A problem found and put right**; **A problem found - still to be put right** (a note is required, and the type stays flagged **Action needed** until a later entry); or **Done** (a part replaced or a task done).
4. Add **Notes** - for a cartridge change, the cartridge and its pore size.
5. Press **Record it**. WYLA records who entered it; an entry cannot be changed or deleted.

What the page shows

Inspections lists each type with **Last done**, **Next due** and its state: **Up to date**, **Due soon**, **Overdue**, **Not done yet**, **Action needed**, **Needs a value**, **Log only** or **Switched off**. **Logbook entries** lists every entry, newest first, for the last year, with the rule it was due under and who entered it. **Download the logbook (CSV)** gives every entry, corrections included.

From 5 November 2026 **Download PDF**, beside the CSV button, saves the **logbook report** for the last 12 months: each inspection with its interval, source, last done, next due and state, then every entry and a count per type. It carries your **Report branding**, the site address and the people marked **Print on reports** (chapter **Regulator Reports**, **People and organisations of a site**); who did each inspection prints too, as part of the record.

ALARM	LEVEL	WHEN
An inspection is due soon	Yellow	One or more inspections fall due within their reminder window (the email names them)
An inspection is overdue	Red	One or more inspections were due and not recorded (the site also shows red on **All sites**)

Correcting an entry

Press **Correct** on the entry, fix it, give **Why it is being corrected** and press **Record the correction** (or **Cancel the correction**). A correction must be of the same inspection type, and an entry can be corrected once. Both stay in the logbook.

> **Switching the module off**
> If the lab register or the logbook is switched off for a site, new entries and settings are refused and the reminders stop, but everything recorded stays readable and comes back when it is switched on again.

Emailing someone before an inspection is due

From 3 November 2026 the **Logbook** page has a **Reminders** box. Press **Open Reminders** to have WYLA email the caretaker or the contractor before an inspection is due, on the day and while it is overdue: make a reminder for **A logbook inspection**, pick the **Inspection**, and choose **When the logbook says it is due** so this page's interval decides (chapter **Reminders**). When the person presses **Mark as done** in the email - no sign-in needed - WYLA **adds the entry to this logbook**: outcome **Done**, done by the name they type, with the note "Recorded from a reminder email by" that name. It is an ordinary entry: it cannot be changed or deleted, and a correction works as above. An inspection recorded on this page moves the reminder on too.

21 PAPER RECORD SHEETS

Some sites write their records by hand first: the daily plant check, the inspections, the field tests, the lab sample labels, the complaints. WYLA prints a month of sheets laid out the way it keeps those records, with a code on every page that opens the page in the console where the sheet is typed in. Taumata Arowai accepts notebooks and paper records (Reporting Guidance v1.2 p.9). Built on 7 November 2026 and not yet deployed: nothing has been printed for a real site yet.

Printing the sheets

On the **Logbook** page, at the foot, the panel **Paper record sheets**: pick the **Month** (this month by default) and the parts (all ticked), then press **Print the record sheets (PDF)**. An operator or the owner prints; everyone else reads *An operator or the owner prints the record sheets.* The panel also lists the last prints with who printed them and a short code. Each sheet's code holds the console's address - the one set up for the server, or else the address you opened the console at, when the server accepts that address (it is on the server's list of console addresses). If neither is known the panel says *Record sheets cannot be printed yet* - ask WYLA support.

PAGE	WHAT IT IS FOR
Cover	What each page is for, and every part left out with the reason (its module is off at the site, or nothing is due that month)
Daily plant check	One row per day over two pages: UV on, leaks, initials
Logbook	One sheet per inspection type due in the month, with two spare rows
Field tests	One sheet per field-test check (the determinand and unit printed, and the spacing line where the check asks for it), with four spare rows. In the month a check was made it asks its share of the month (8 a month made on the 7th of a 30-day month: 6) and the sheet says so; every later month asks the full number. Readings typed in for days before the check was made count, by their own dates
Lab samples	The samples due by the site's schedules and any re-tests, with the supply and component IDs
Complaints	One sheet for consumer complaints

At the plant

Fill the boxes by hand: tick Y or N, write the date, the time, the value and your initials. If the UV is off or there is a leak, tell the person in charge straight away (the sheet says so in red). On the lab sheet, copy the laboratory's sample ID from the bottle's label.

Typing a sheet in

Scan the code on the sheet with a phone or tablet, open the address printed under it, or type the short code on the back-entry page; sign in (operator or above). The page **Paper record sheet** shows a grid laid out like the sheet: type what is written, leave blank rows blank, and press **Save the rows typed in**. A row WYLA cannot save says why; the others are kept. Every record saved this way is an ordinary logbook entry, lab sample or document version, and its note starts *From paper record sheet … page … (month).* Field tests and complaints are added to the field test log and the complaints register, as one new version each.

Keeping the paper

On the same page, attach a scan or photo of the filled sheet (PDF, JPEG or PNG): it is filed on the site's **Paper record sheets (scans)** document in the Document library. Keep the paper as your plan says.

What WYLA keeps

Every print: the month, the pages as printed, the PDF's fingerprint (SHA-256), who printed it and when. A print is never changed or deleted, and it is kept at least 10 years with the site's other records. The pages as printed are what the back-entry page lays its grid out from, so a sheet typed in months later still matches the paper.

22 PLANT-ROOM QR CODE (CARETAKER CHECKS)

A QR code on the plant-room door lets a caretaker record the checks from their phone, **without a WYLA login**. They scan it, type their name, and record the day's check, an inspection, or a job that is due. Everything goes into the site's **Inspection logbook**, which nobody can change afterwards, marked as recorded from the code.

Who can do what

On the **Logbook** page, the **Plant-room QR code** box has **Open the QR code**, which opens the code's page for the site.

WHO	CAN
Anyone with the code	Open the door page and record a check, an inspection or a job done
Anyone who can see the site	See whether a code is in use, the codes the site has had and what was recorded from the code, with its photos
The account owner (or WYLA)	Make the code, make a new one, switch it off, and download it

Switching it on
In the console from 3 November 2026. It is part of the **Inspection logbook** (in the Cloud Compliance plans): with the logbook switched off at the site, the door page records nothing and says so.

Making the code and printing the sign (owners)

1. Pick an inspection preset on the **Logbook** page first, so the code has inspections to offer.
2. Open **Plant-room QR code** and press **Make the code**.
3. Press **Download the A4 sign (PDF)**, print it, and put it on the inside of the plant-room door. **PNG** and **SVG** give the code alone, for your own sign. The sign carries your Report branding.

Treat the sign like a key
Anyone who can read the sign can add entries to your logbook under any name they type. Entries are limited (30 an hour for each code), always marked as recorded from the code, and never deleted. Put the sign inside the plant room, not on the outside of the building. If you think it has been photographed or misused, press **Make a new code**: the old sign stops working at once. **Switch it off** stops it until you make a new one. The link inside the code is shown to owners only.

At the plant: what the caretaker sees

Scanning the code opens a page with the school's and the site's name and three parts. No sign-in is needed: the caretaker types their name in each.

- **UV off or a leak** is saved as **Action needed**, and the page says in red to tell the person in charge of the water now. It does not raise an alarm by itself; the gateway's own UV alarms are unchanged.
- Each part can take a **photo** (optional): JPEG or PNG from the phone's camera, up to 5 MB. WYLA redraws it before keeping it and removes its location and camera details. Some phone photos may show sideways.
- A thank-you page confirms what was recorded and when. **Record something else** goes back.
- A code that has been replaced or switched off says so and records nothing.

PART	WHAT THEY RECORD
Daily check	**Is the UV light on?** (yes or no), **Any leaks?** (no, or yes and where) and anything else. Press **Save the daily check**
An inspection	Which of the site's inspections, how it went, and what was checked, found and done. Press **Save the inspection**
A job that is due	Each reminder due now, with **It is done**

What goes into the logbook

A daily check is a **Daily plant check** entry: it is a record only, never due and never an alarm. An inspection counts like any other inspection of that kind, and resets its due date. A job marked done counts as done on the **Reminders** page (and adds its logbook entry when it is a logbook reminder). Every entry reads *Recorded by QR at the plant by* the name typed, and the photo is kept with it; the entry carries the photo's fingerprint (SHA-256), so the record shows if the photo were ever changed. The code's page lists what was recorded from it, with a **Photo** link for each photo.

23 REMINDERS

Reminders are friendly emails that tell the people you choose a job is coming up at a site - change the cartridge filter, check the UV lamp, take the E. coli sample - then again on the day, and again while it is overdue. Every email has a **Mark as done** button that works without signing in, so a caretaker or contractor can confirm the job straight from the email. They are **reminders, not alarms**: they never raise an alarm and never replace the alarms of the logbook and the lab register.

Who can do what

Open **Reminders** in the **Today** group of the menu; it shows the site chosen in the menu. The **Logbook** page also has a **Reminders** box with **Open Reminders**.

WHO	CAN
Anyone who can see the site	See the site's reminders, when each is next due, who did it last, and its **History**
An operator, installer or above	**Mark as done**
The account owner (or WYLA)	Make, change and archive reminders, and choose who gets the emails

> **Switching it on**
> In the console from 3 November 2026. Scheduled reminders is in the Cloud Compliance and Cloud Compliance Plus plans (see **Features and Plans**); an organisation that had WYLA before then gets it when WYLA adds it to the plan. At a site with the **NZ school - Acceptable Solution** preset it starts switched on; at other preset sites your owner switches it on in **Setup** > *the site* > **Features**.

Setting one up (owners)

Press **New reminder** and fill in:

1. **The task** - **A job of your own** (type a **Title**, for example "Cartridge filter change"), **A logbook inspection** (pick the **Inspection** from the site's logbook), or **The lab sample (E. coli)**.
2. **When** - one of the schedules below.
3. **Email days before** - how early the first email goes (3 to start with; 0 = none).
4. **At (the site's time)** - the hour the emails go, in the site's time zone (08:00 to start with).
5. **While overdue, every (days)** and **At most (times)** - the repeats while it is not done (every 2 days, at most 5 times, to start with).

6 **A note for the email (optional)** - where the parts are, who to call.

7 **Who gets the emails** - press **Add recipient** for each person: their **Email** and, if you wish, their **Name**. Up to 20; people outside your organisation are allowed.

8 Press **Make the reminder** (or **Save the reminder** when changing one).

> **Limits**
> 20 people a reminder, 200 reminders and 500 reminder emails a day for your organisation. An email over the daily limit is kept and tried again later.

The schedules

WHEN	HOW IT WORKS
Every N days, weeks or months	Counted **from when it was last done**: mark it done and the next one is due one interval after that day - done late, the next one moves later. **First due (optional)** sets the first date; otherwise it is one interval from today
On fixed dates	Type the dates: **03-01** means 1 March every year, **2027-01-15** means that one day. When every one-off date has passed it shows **Finished**
After N hours or litres	Pick the **Gateway** and its **Counter** (pump hours, UV lamp hours, an input's run hours, or litres through the main meter) and **After** how many. **Used so far (optional)** is for a part that is already part-used. The first email goes when the use so far says it will be reached within the days before
When the logbook says it is due	For a logbook inspection: the logbook's own interval decides, counted from its last entry
When the next lab sample is due	For the lab sample: the **Lab samples** page's sampling schedule decides

> **Waiting**
> A reminder shows **Waiting**, with the reason, and sends nothing while there is nothing to count from yet: no reading from the gateway's counter, no logbook preset picked, the inspection switched off or needing a value, or the lab schedule not set up. A counter needs a gateway that reports its run hours or litres.

After heavy rain, start of term, school holidays

Three more schedules, for **a job of your own**. Under **New reminder**, the **Suggested:** buttons fill them in (marked "for schools" at a site with the NZ school preset); nothing is made until you save it. In the console from 3 November 2026.

WHEN	HOW IT WORKS
After heavy rain	Type **Heavy rain is (mm in a day)**: it starts empty (WYLA suggests 25 mm - WYLA's suggestion, not a rule; no regulation gives a figure). The cloud looks up yesterday's rain at the site from 06:00 site time; when it reached your figure the reminder falls due that day ("Check the filters and the UV"). It uses the site's location, or the **Latitude** and **Longitude** you type; a site with neither cannot have one
At the start of each school term	Due on each term's first day ("Flush the pipes at the start of term"), from the Ministry of Education's term dates for 2026 and 2027. Where each school picks the day - the first day of Term 1 - the **School term dates** table says **needs a value**: type your school's own days. Not done by the next term, it moves on
School holidays: keep the UV running	Only at a school site and only on a day that is certainly a school holiday. Pick the gateway, the **UV reading (tag)** (G2 on the standard panel), the **Lit level (on at or above)** - your UV's own value, there is no default - and **Notice after (hours off)** (WYLA suggests 24). When every one-minute record over those hours is below the lit level, a yellow **Notice** email goes out. It is a notice, not an alarm, and it closes by itself when the UV is lit again. No readings (a gateway offline) is never taken as the UV being off

Watching
Between rain days, terms and holidays these reminders show **Watching** and send nothing. If the weather service cannot be reached, no rain reminder goes out and the cloud tries again an hour later. Rainfall: weather data by Open-Meteo.com (CC BY 4.0); the cloud sends it only the site's location, rounded to about 1 km, and its time zone.

On a Saturday or Sunday

A reminder on a date - every N days, weeks or months, fixed dates, or the start of term - can move to the next working day. Under **On a Saturday or Sunday** choose **Move to the next working day (Mon-Fri)**: a due day on a Saturday or Sunday then moves to the Monday after it. The list, the Schedule and the emails say *moved from <day> (Sunday), a weekend*. It is off unless you choose it (**Keep the day as it is**).

Public holidays are not known
WYLA does not know public holidays, in New Zealand or anywhere else, so a reminder can still fall on one. A reminder that follows the logbook or the lab register keeps the rule's date (moving it later could make the job late), and so do counter, heavy-rain and school-holiday reminders; the editor says why the choice is not offered for them.

The emails

- **Before it is due** - the set number of days before (3 to start with).
- **On the day**.
- **Overdue** - every few days while it is not done (every 2 days, at most 5 times, to start with).

- Only the newest email goes: if the server was down for a while, people get one email, not a pile.
- A failed send is tried again 3 times over an hour. If it still fails, whoever made or last changed the reminder gets an email, and the **History** shows every try.

> **What an email carries**
> Only the job, the site's name, the due date and your note, with your organisation's branding at the top (**Report branding**). No list of your users, nobody's phone number, no alarm details. Each email says "This is a reminder, not an alarm."

Who gets them

Each reminder has its own list. When you save, each new person from **outside** your organisation first gets one email: **You have been added to reminders from** *your organisation* **by** *you*, what the job is and how to stop. No reminder goes to them before that. Someone who is already a user of your organisation is not told. In the editor each person shows a state:

STATE	MEANING
To be told	Saved; the first email has not gone yet
Receiving	Told; gets the reminders
Stopped	The person used the stop link, with when

> **Added someone late?**
> A person added after an email went gets the next email, not that one.

The Mark as done button

In the email, **Mark as done** opens a small page - no sign-in needed. It shows the job and the site; type **Who did it (your name)**, add a **Note (optional)** and press **Confirm - it is done**. Just opening the link changes nothing: only the button records it. In the console, **Mark as done** on the reminder's row does the same (operators, installers and above).

THE REMINDER IS FOR	MARK AS DONE RECORDS
A job of your own	That it was done, by whom, and when the next one is due
A logbook inspection	The same, and **adds the entry to the site's logbook** (outcome Done, with the name typed and "Recorded from a reminder email by" that name)
The lab sample	Only that the sample was taken. **Type the result on the Lab samples page** when the lab sends it - the email does not record a result

> **One button, one job, 60 days**
> Each email's button works **once**, for that one job, and **expires after 60 days**. If someone already marked it done, the page says by whom and changes nothing. If the job was done another way or you changed the schedule, the page says the reminder "has moved on". Anyone holding the email can press the button, so send reminders only to people you trust to confirm the job.

Stopping them

- **A recipient**: every email ends with **Stop sending me these** (no sign-in). The link opens a page with a button; the button stops that address for that reminder (mail programs' own unsubscribe button works too). You see **Stopped**, with when. To send to them again, **Remove** the address, save, add it again and save - they are told again. Only do that if they asked.
- **A person on your list**: press **Edit**, then **Remove** beside them, and save.
- **The whole reminder**: press **Edit**, then **Archive it**. Nothing more is sent; its history is kept.

History, and if nothing is being sent

History on a reminder lists every email (Before it is due, On the day, Overdue, You have been added, Not-sent notice) with its result (Sent, Not sent, Failed, Retrying), and every done with who did it and whether it came from the email link. Only owners see the email addresses. Nothing in it can be changed or removed.

- The page says the server cannot send reminder emails yet: WYLA has not set its public address. Tell WYLA.
- A reminder shows that Scheduled reminders is not switched on for the site: switch it on in **Setup >** *the site* **> Features**.
- A reminder shows **Waiting**: see the reason (above).
- A person shows **Stopped**: they used the stop link.

24 RECORD SEALING

A regulator has to be able to trust that your compliance record was not changed after the fact. WYLA seals each day's records once they have settled. Any later change then shows up, and late data is added as an amendment, never as an edit. The **Record seals** panel lets anyone who can see a site check this for themselves.

What a seal is

A site day is a calendar day in your site's own time zone. Eight days after a site day ends, WYLA seals it. The wait is there because a gateway holds 7 days of readings through an outage (for up to 32 recorded readings with ordinary names; about 4 days at the extreme) and sends them late. The seal covers the day's one-minute records, any differing repeats, the data-gap log and the daily compliance results. Each seal is linked to the gateway's previous seal, so the seals form an unbroken chain.

The fingerprint is a hash: a short code worked out from the data. Change one digit of the data and the code no longer matches.

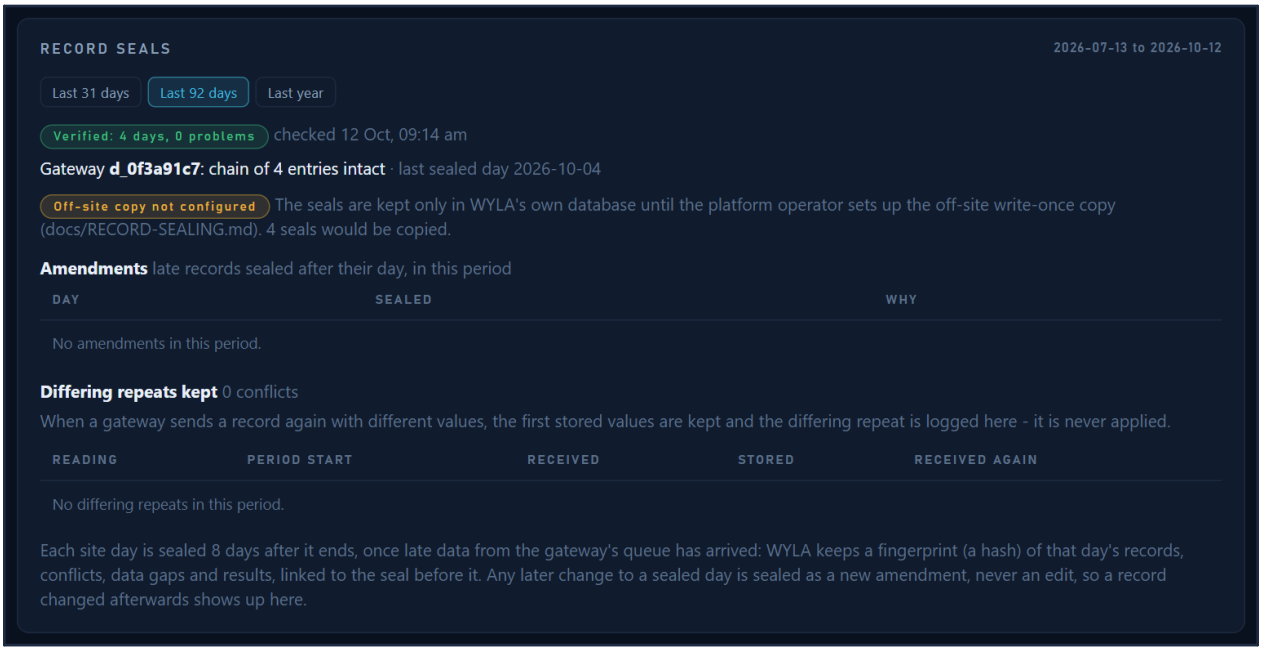
Records can only be added, never changed or deleted. If late data arrives for a day that is already sealed, WYLA adds an **amendment**: a new link in the chain that says what arrived and why. The original seal is never overwritten.

> **What a seal can prove**
> A seal proves the data has not changed since it was sealed. It cannot speak for the time before. Days that ended less than 8 days ago are not sealed yet.

Opening the panel

Open **Compliance**, choose one site in **Site**, and scroll to **Record seals**, the last panel on the page. Every role can use it, viewers included. The dates checked are shown on the right of the heading.

Choose how far back to check with **Last 31 days**, **Last 92 days** (the default) or **Last year**. Each press makes the server work out every fingerprint again from the stored data and compare it with the seals. While it works, the panel says *Checking the seals…*. While the page stays open, the check is repeated every few minutes.



The Record seals panel after a check: the result, each gateway's chain, the off-site copy line (not configured on this test copy), and the amendments and differing repeats tables.

Reading the result

The green result also shows when the check was made. Below it there is one line for each gateway. It says *chain of N entries intact* and gives the last sealed day, or shows **chain broken** and the entry where the chain breaks.

A red problem names the gateway, the day and what differs: for example, that the records changed after the seal (with the count then and now), or that the data-gap log differs from its last seal and no recorded re-work explains it.

YOU SEE	WHAT IT MEANS
Verified: N days, 0 problems	Every chain is intact and every sealed day matches its seal and amendments
Nothing sealed in this period yet	No day in the range has been sealed yet
N problems found	A record no longer matches its seal (red)

> **If a problem is shown**
> Do not try to fix it yourself. Note the gateway, the day and the message, and tell WYLA support. WYLA never seals over a difference it cannot explain; the day is left as it is for a person to look at.

Amendments

The **Amendments** table lists late changes to sealed days in the range, under **Day**, **Sealed** and **Why**. The reason is written by WYLA, for example the number of late records received and when, or that the data-gap log or daily results were worked out again because late data arrived or a grab sample was entered for that day. An amendment is normal and is not an error: it shows the record was added to openly.

WYLA waits until a sealed day has had no new data for an hour before it amends, so a backlog arriving in batches makes one amendment, not twenty. Until then, the day shows an **amendment due** chip with what has arrived.

Differing repeats

Gateways sometimes send a reading twice. An identical repeat is simply ignored. If a repeat arrives with *different* values, the first stored values are kept and the repeat is never applied. It is logged under **Differing repeats kept**, with the columns **Reading**, **Period start**, **Received**, **Stored** and **Received again**; the values that differ are in bold. Only the first 200 are shown; choose a shorter range to see the rest.

The off-site copy

Someone with direct access to the database could try to change both the records and their seals. To guard against that, every seal and amendment is also written once to separate, write-once storage, together with the records it covers. That storage is outside WYLA's database, and nothing in it can be changed or deleted for 10 years. Copies are made on the regular sealing pass, about every 15 minutes, and WYLA support can check the database against them at any time.

The line under the gateways shows the copy's state. **Off-site write-once copy** gives where the copy is kept, how many entries are waiting, and when it was last written. If the last copy failed, a yellow warning says so, and WYLA tries again on its next pass. **Off-site copy not configured** means the seals are only in WYLA's own database for now. Sealing carries on, and the waiting seals are copied once the copy is set up.

Older records, and the monthly archive

Once records are 45 days old, WYLA stores them compressed so that years of one-minute readings take far less space. Nothing is deleted or changed: every record is kept and reads back exactly as it was stored, late readings for an older day are still accepted, and the seals still verify.

Each finished month is also archived once to a second write-once store, separate from WYLA's database, where nothing can be changed or deleted for 10 years. A month is archived on the 10th of the next month, after all its days are sealed; October 2026 is the first, on 10 November. Before it is sent, the month is test-loaded into a spare database and every file is checked against a list of its fingerprints. The archive holds:

- The one-minute records and any differing repeats, the data-gap log and the daily compliance results.
- The seals and amendments, and where their off-site copies are.

- The calibration and grab-sample log, the call-out log, the alarm history (raised, acknowledged and cleared) and the audit log.
- Signed reports with their signatures, regulatory profiles, notices to regulators and notification cases.
- Operator certificates, control permissions, the control log, operator-in-charge designations, shift schedules and shift entries.
- Each gateway's settings, and the customer, site, gateway and reading names needed to read the rest.

Left out on purpose
Alarm contacts and contact groups, user accounts, sign-in history and invoices are not archived, so they can still be deleted if someone asks. The call-out and audit logs are archived, so an entry made before a contact was deleted still shows the number or address used at the time.

For WYLA administrators: **Admin > Reliability** lists each archive run under **Backup and restore history** as *monthly archive*, and **Admin > Health** shows a warning under **What needs attention** if an archive run failed in the last 7 days, or if no month has archived in 45 days. Since 13 October 2026, Admin > Health also has a **Monthly archive** panel for the latest run: the **Month** it covered, when it **Ran**, the **Result** (OK, failed or running, with the **Detail** of a failure) and, when the latest run did not succeed, the **Last archived** month. Its button **Run history: Admin > Reliability** opens the full list. Before the first run it says *none has run yet*.

25 DOCUMENTS AND YOUR RULES

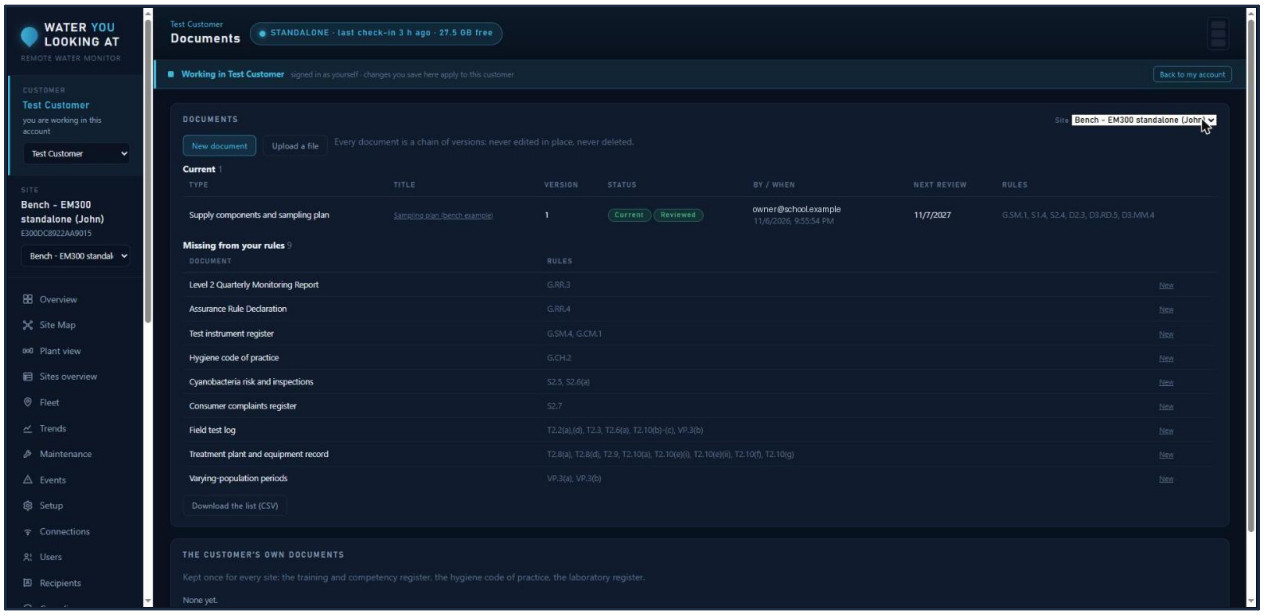
The NZ Rules ask a water supplier to keep plans, registers, logs and certificates beside the readings WYLA already records, and to say once a year (every month at level 3) whether every assurance rule was complied with. Two pages do this: **Documents**, a library where each document is kept as a chain of versions, and **Your rules**, a checklist of the rules that apply to your site with what stands behind each one. Three reports are built from the checklist and kept in the library. This part of WYLA is new on 7 November 2026 and has not yet been used at a real site.

What the library is, and why versions are never edited

A document in WYLA is a **chain of versions**. Each version records who entered it, when, and why; the files attached to it are kept with their SHA-256 fingerprint; and each version is hashed over the one before it, so a change made behind WYLA's back shows up as a broken chain. Nothing is ever edited in place or deleted: to change a document you add a version, and every older version stays readable. Under the Water Services Act 2021 (section 179) altering or falsifying a record is an offence, and the yearly assurance declaration asks what was in force for a period - so WYLA keeps the version that was in force then, as it was.

Some document types are **controlled**: a new version only counts as current once an owner signs it with a fresh passkey sign-in, the same rule as signing the Monthly Compliance Report. The others are current as soon as they are saved. Most types carry a **review date** (usually twelve months on); WYLA raises an alarm when a review is due.

> **Switching it on**
> The module **Document library and rule checklist** is in the Cloud Compliance Plus plan (chapter **Features and Plans**). Your account owner switches it on at a site under **Setup** > *the site* > **Features**. It starts on at a site made with the **NZ Rules - level 1 or 2** or **NZ Rules - level 3** preset, and off at a school on the Acceptable Solution (schools seldom need it). While it is off, **Documents** and **Your rules** are greyed in the menu; a library a site already has is kept, and comes back when the module is switched on again.



The Documents page: the site's documents grouped Current, Due for review, Draft and Retired, the types your rules still ask for, and the customer's own documents below.

Telling WYLA what kind of supply you are

Which rules apply to a site is decided by rule 6 of the Rules from two facts in the site's regulatory profile on the **Reports** page (chapter **Regulator Reports**): the **Supply category (NZ Rules)** and the **Population served**. Only an owner can set them. The category is one of nine: **Networked supply**, **Self-supplied building**, **Downstream of a networked supply, with its own treatment**, **Downstream of a networked supply, treated water only**, **Downstream of a self-supplied building**, **Water carrier service**, **Water carrier supply**, **Community drinking water station** or **Very small community**. The population sets the level:

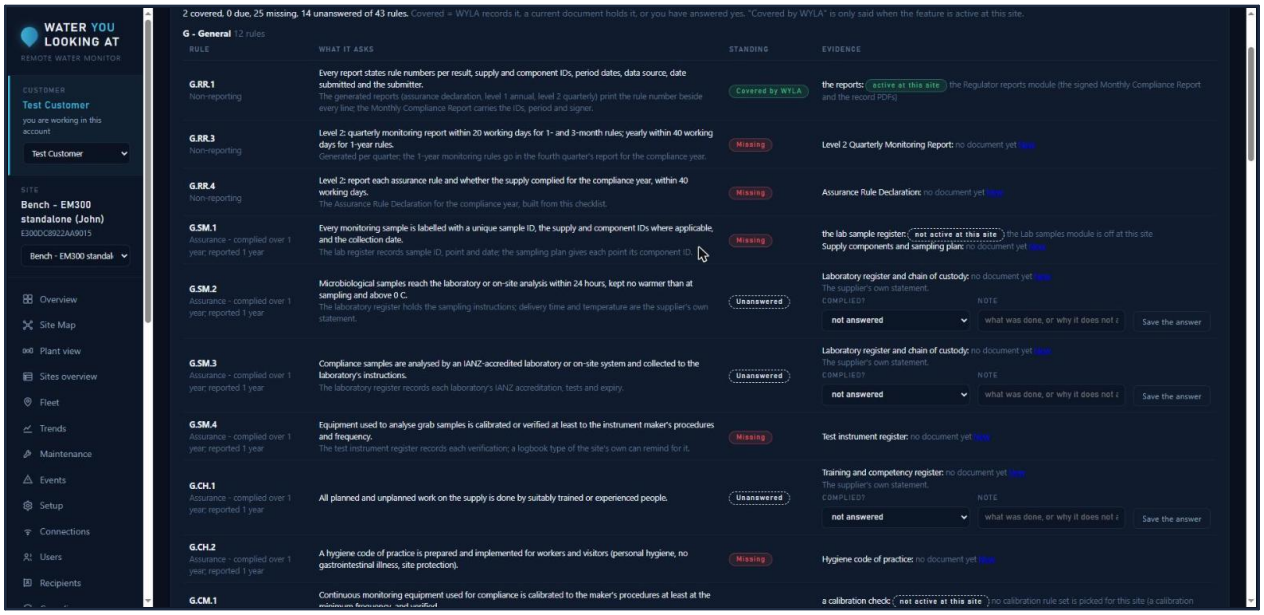
PEOPLE SERVED	LEVEL	WHAT IT MEANS
25 or fewer	Very small community	The Rules have no module for it, so Your rules says there is nothing to list
26 to 100	Level 1	The General rules (G) plus the level 1 source (S1), treatment (T1), distribution (D1) and varying-population (VP) modules that fit your category
101 to 500	Level 2	G plus S2, T2, D2 and VP
Over 500	Level 3	G plus S3, T3 and D3; the varying-population rules do not apply

The category trims the modules
A self-supplied building has no distribution module; a supply downstream of a networked supply has no source module, and one taking treated water only has no treatment module either. A water carrier supply or a community drinking water station is level 1 whatever it serves. A water carrier service has its own module (WC) that WYLA does not list. The page prints your category, population, level and the module codes (G, S2, T2, D2, VP) at the top, so you can check WYLA read your supply the way you meant. If you elect to work to a higher level than your population gives, set the population band that gives the modules you use.

The Your rules page

Your rules is in the menu after **Documents**. Until the category and population are set it shows one yellow line - *Set the supply category and the population served on the Reports page (the regulatory profile) to see which rules apply* - with an **Open the Reports page** button, and nothing else. Once they are set it lists every rule of your modules, grouped by module in the order of the Rules, with four columns: **Rule** (the number, the kind of rule - Assurance, Monitoring or Non-reporting - and how long it is complied over and reported), **What it asks** (the rule in plain words, keeping its numbers), **Standing** (a chip) and **Evidence** (what stands behind it). Above the list: *N covered, N due, N missing of N rules*. Covered means WYLA records it, a current document holds it, or you have answered yes. The same counts appear as one line on the **Compliance** page, *Your rules: ...*, linking here.

CHIP	MEANING
Covered by WYLA (green)	A part of WYLA judges or logs the rule and is active at this site - a compliance calculation that is on with nothing missing, a calibration check, the lab register with its schedule set, a logbook type, one-minute recording from a live gateway, the data-gap rule, or regulator reports. It is only said when the feature really is active here
Document current (green)	A document of a type the rule names is current and its review is not yet due
Review due (yellow)	Such a document exists but its review is due within 30 days or overdue, or it is still an unsigned draft
Missing (red)	Nothing is in place and there is no statement to give
Yes / **No** / **Not applicable**	The rule is a physical or management act WYLA cannot see, and this is your owner's answer (green, red, or dashed)
Unanswered (dashed)	The rule takes your owner's statement and none has been given
Not applicable (dashed)	A self-supplied building: the Rules drop the free available chlorine and pH rules of T2 for it (the UV half of T2.9 still applies)



Your rules: the supply line at the top, the rules by module with their standing and evidence, and the Reports panel below.

The evidence column, and answering a rule

Each rule shows every kind of evidence that can satisfy it, as the server found it at your site: a WYLA feature with **active at this site** or **not active at this site** and a short reason (for example which calculation, and that it is switched off or has a value missing); a document type with a link to the document that stands for it, its status chip and *review by* date - or *no document yet* and a **New** link that opens the Documents page with that kind already chosen; or *The supplier's own statement*, with who last answered and when.

For a rule that takes your statement, an owner answers it on the page: **Complied?** (*not answered*, *yes - complied*, *no - did not comply* or *not applicable*), a **Note** of up to 500 characters (*what was done, or why it does not apply*), then **Save the answer**. Pressing it with nothing picked says *Pick yes, no or not applicable first*. Each answer is kept for good with who gave it and when (the newest counts; it also goes in the audit log) and is what the assurance declaration reports. A rule WYLA judges from records or a document cannot be answered by hand. Anyone else who can see the site sees the answer and note, read-only.

> **The statements are yours**
> Where a rule is about something WYLA cannot see - a bore head inspection, a membrane integrity test, a sampling schedule for a zone - the yes or no is your organisation's own statement, made by its owner. WYLA records it; it does not check it. The rule's notes say what a Custom rule or your laboratory could add.

The Documents page

Documents is in the **Records** group of the menu, after **Lab samples**. It shows the site chosen in the menu's site picker. The page has two panels. **Documents** holds the site's own, in groups: **Current**; **Due for review** (current, but the review date is within 30 days or past); **Draft** (a controlled document nobody has signed yet); **Missing from your rules** (the kinds of document your rules ask for that no document covers, each with the rule numbers and a **New** link); and **Retired**, greyed out. Each row shows **Type**, **Title** (press it

to open), **Version**, **Status** (**Draft**, **Current** or **Retired**, with **Reviewed**, **Review due** or **Review overdue** beside it), **By / when**, **Next review** and **Rules** (the rule numbers the type is kept for). **Download the list (CSV)** saves the table. The second panel, **The customer's own documents**, holds the documents kept once for every site (see **Documents kept once for the organisation**).

- **New document** - the form for a new document of any kind (next section).
- **Upload a file** - the same form with a kind that takes a file already chosen (at a site, the drinking water safety plan); change **Kind** if you meant another.
- **New customer document** - under the customer's panel: the training register, the hygiene code or the laboratory register.
- A site with no gateway yet has no library: *No site yet: a site's documents come with its first gateway.* The customer's own documents are still there.

New from a template

Press **New document** and fill in:

1. **Kind** - the document type. Picking one shows what it is for, *A controlled document: it counts as current only once an owner signs it* where that applies, *Reviewed every N months*, and *Kept for rules:* …. The three generated report types are not offered: the Your rules page builds those.
2. **Title** - up to 200 characters, for example *Backflow register 2026*.
3. The type's own fields: text boxes, numbers (with their unit), dates, drop-down lists, tick boxes and tables. A field marked **(needed)** must be filled. A table starts empty: **Add a row** for each entry, **Remove** to take one out; a row with nothing in it is dropped when you save. A table holds up to 2,000 rows.
4. **Files** - **Attach a file** takes PDF, JPEG, PNG, CSV, text, Word (.docx) or Excel (.xlsx) files, up to **15 MB each** and up to 40 on a version; you can pick several at once. Each file is read in your browser and sent; the page then shows its size and the first part of its SHA-256, which is kept in the version's hash. **Leave out** drops one before you save. A file of another kind, an empty file or one over 15 MB is refused with a line saying why, and a file whose contents do not match its kind (a web page named .png, say) is refused by the server.
5. **Note (optional)** - up to 500 characters, kept with the version.
6. **Create the document**, or **Cancel**. Problems are listed under *Not saved:* (a needed field empty, a number that is not one, a file-only kind with no file).

What is recorded
WYLA records who entered it. A type that needs no signature is current the moment it is saved, and its next review date is set. A controlled type is created as a draft: *Document created as a draft - an owner signs it to make it current.* Files picked before the document existed are stored right after it is created, as version 2 with the same content and the note *files attached*.

Open: versions, files and the chain check

Press a title to open the document. The heading shows its type, status chip and review chip, *Kept for rules: ...* and *Next review by* a date. Below it, one line reports the chain check - *Version chain checked: N versions, each hashed over the one before - intact* - or a red banner, *The version chain is broken at version N ... A version was changed or removed outside WYLA*; tell WYLA straight away if you ever see it. Then the version on show: its number, when and who, *signed by* whom if it is signed, its note, every field as a table, each table field as a table, and its files - press a file name to download it (the server checks the bytes against the stored SHA-256 before sending). The **Versions** table lists every version newest first (**Recorded**, **Signed**, **Note**, **Files**); press **Version N** to see an older one, marked **An older version - read-only**. **Back to the list** returns to the page.

- **New version** - the form again, started from the latest version's content. Say **Why this version (the reason, kept with it)**. Under **Files of the previous version** every file is ticked to carry over; untick one to leave it out of this version. **Record the version** saves it: current at once for an ordinary type (the review date moves on), a draft beside the version in force for a controlled one.
- **Sign version N** - controlled documents only, owners only; next section.
- **Retire** - owners only. WYLA asks *Retire "..."? It stays in the library, read-only, with every version. Say why*; the reason is required and is kept as the last version. A retired document has no review date and nothing more can be added to it, but every version stays readable and it still counts for the period it was in force.
- **Download PDF** - the version in force as a record report: the site, the type, the version, who and when, *Kept for rules*, the fields and tables, each file with its SHA-256, and the chain check. A document whose latest version is unsigned prints its latest version watermarked **DRAFT - NOT IN FORCE**.

Signing a controlled document

Six types are controlled: the **Treatment plant and equipment record**, the **Hygiene code of practice**, the **Drinking water safety plan and procedures**, and the three generated reports. Under the versions table the page says *A controlled document: version N counts as current once an owner signs it*, and an owner (or a WYLA administrator) sees **Sign version N**. Press it and confirm: *Sign "..." version N as current? You will be asked to sign in again with your passkey to sign this document. The version is then frozen: its content, files and SHA-256 are kept and never edited.* If your last passkey sign-in was more than a few minutes ago WYLA asks you to sign in again first - a password alone, or a Microsoft or Google sign-in, is not enough - then signs. The toast says *Signed - "..." is now current*, and the review date is set from the signing time.

The signature names the version you had on screen. If someone added a newer version between your reading it and your pressing **Sign**, nothing is signed: the page says *"..." changed since you opened it - a newer version was added. Review it before signing* and reloads the document so you can read what changed. A version re-signed later does not restart the time it has been in force. A login limited to some sites can never sign, and a controlled document already in force with nothing newer has nothing to sign.

Review dates and the two alarms

Most types are reviewed every **12 months** from the time the version in force was signed (a controlled type) or saved; the backflow register is every 24 months at a level 1 supply. The running logs - the field test log, the varying-population periods, the watermain repair and storage records - and the three generated reports are never *due for review*. Once an hour WYLA looks at every live site's documents in force and keeps two site alarms in step with them, in the **servicing and records due** category:

- One alarm per site for each state, naming every document in it (title, type and the day its review falls due), earliest first; the alarm clears and is raised again when a document joins or leaves the list. The email's help says what to do.
- To clear it: open the document, read it through against what is at the site now, and add a new version - with the changes, or with a note that it was reviewed and found current - and sign it if the type is controlled. A document no longer needed is retired, with a reason.
- The documents kept once for the organisation are checked on the customer's first live site only, so an organisation with many sites gets one alarm for them, not one per site.
- At a site where the module is switched off both alarms are cleared and nothing new is raised; the library itself is kept.

ALARM	WHEN
DOCUMENT_REVIEW_DUE (yellow) - *A document review is due soon*	At least one document's review falls due within the next 30 days
DOCUMENT_REVIEW_OVERDUE (red) - *A document review is overdue*	At least one document is past its review date with no new version signed or entered

Documents kept once for the organisation

Three types belong to the organisation, not to a site, and are listed under **The customer's own documents** on every site's Documents page: the **Training and competency register** (who works on the supply and what they hold), the **Hygiene code of practice** (the code as a file, and a table of who has read and acknowledged it) and the **Laboratory register and chain of custody** (the accredited laboratories you use and their sampling instructions). One current copy counts for every site's rules. An owner or operator with the whole organisation adds and updates them; a login limited to some sites (chapter **All Sites and Per-site Logins**) can read them - a school caretaker must be able to read the hygiene code - and download their files and PDFs, but cannot add to them.

WHO	CAN
Anyone who can see the site	Open both pages, read every version, download files, the PDF and the CSV list
Operators	New document, New version, attach files - at their sites
Owners (and WYLA administrators)	Also answer a supplier rule, **Sign**, **Retire**, build the three reports and add the organisation's own documents

WHO	CAN
A login limited to some sites	As an operator for its own sites; reads the organisation's documents; never signs or retires, never answers a rule and cannot build a report

The three generated reports

At the foot of **Your rules** the **Reports** panel offers the reports your level needs, each built from the standing above and from the site's own records. An owner presses the button (everyone else reads *An owner builds these reports*); the page then shows … *built: "…" - a draft in the document library until an owner signs it* with **Open it in Documents**. Each report is kept as a controlled document of its own type: version 1 holds the period and the counts, version 2 the same with the PDF and a CSV attached. An owner signs it on the Documents page exactly as any controlled document, which makes it current - and from then the checklist shows the reporting rule it serves as **Document current**. The period boxes start at the last period that has ended; a period not yet started, or one written wrongly, is refused with a line saying what is expected.

REPORT	BUTTON AND PERIOD	WHAT IT HOLDS
Assurance Rule Declaration (G.RR.4 at level 2, G.RR.7 at level 3)	**Compliance year (ending 30 June)** - type the year it ends in (2026 is 1 July 2025 to 30 June 2026). At level 3 a second box, **Month**, and **Monthly Assurance Rule Declaration**: the 1-day and 1-month assurance rules for that month	One line per assurance rule of your modules: complied **yes**, **no** or **not applicable**, the basis and the evidence named. A calculation is yes when at least one day of the period was judged and none failed; the data-gap rule (G.CM.4) is judged from the gap log against your gap rule; a document is yes only when a version was in force for the whole period (a controlled one from its first signing); the field test log is judged from the values and counts logged, not for merely existing; a rule that takes your statement carries your answer, and one not answered is **NOT ANSWERED** - counted on its own as **Not answered**, never inside **Not complied** - and the PDF asks for the answers before signing
Level 1 Annual Monitoring Report (G.RR.2)	**Year** - the compliance year; offered at a level 1 site only	One line per monitoring rule: the results from the first source in place - the calculations' daily verdicts (days judged, periods not complied, the worst value), the lab register (every sample of the period by sampling point, with sample ID, date, laboratory and the component ID from your sampling plan), the field test log (each determinand counted against what the rule asks per month) or your statement; then every lab sample, every field test and every data gap of the period
Level 2 Quarterly Monitoring Report (G.RR.3)	**Quarter**, written *2026-Q3*; offered at a level 2 site only	The same, for a calendar quarter. The front page counts **Complied**, **Not complied** and **Not answered by the owner** separately (a rule only you can answer that you have not), and so do the stored document and the CSV's closing *summary* rows

Rule numbers on every line, and you submit it
Every PDF prints the rule number beside every line, a **The supply** block with the supply ID, component IDs, category, population and modules (G.RR.1), *Kept for rules*, your report branding and a **DRAFT** watermark until signed. The CSV has one row per rule (and, for a monitoring report, per sample determinand with its unit and MAV, field test and gap). Each sample names the rules it serves by its kind of water and determinands (for example T2.1 for water leaving the plant, D2.1 for a zone tap, S2.1 for the source); a sample whose point is not recorded (entered before sample types) serves none and says so - it is never matched to a point by its name. Signing freezes the files; you then send the report to Taumata Arowai yourself through Hinekorako. WYLA never submits anything. At level 3 the monthly monitoring report (G.RR.5, G.RR.6) is the signed Monthly Compliance Report and the lab register PDF, not a generated document.

The Level 3 Monthly Rules Report

Built on 7 November 2026 and not yet deployed. At a level 3 site the Reports panel of **Your rules** has a **Month** box and the button **Level 3 Monthly Rules Report** (an owner). It lists every level 3 rule reported monthly (for months before July 2027 the 32 rows of Taumata Arowai's Rule Summary List; from July 2027 the 2026 Rules' monthly rules) with the component ID, the WYLA rule beside it, and **complied**, **not complied** or **not recorded in WYLA**; the days not met, every period out of limits, the data gaps of the rule's own readings with the minutes grab samples covered, and the distribution zone samples. It is kept as a draft document with its PDF and CSV: sign it in Documents, upload it, then press **Record the upload**. A rule WYLA keeps no record for says so - it is never shown as complied.

The document types

Sixteen kinds can be made by hand (four of them at a level 3 supply only) and three are built by the reports. Every kind takes attached files; a **file** kind is a file with a small form beside it. The rules a kind is kept for come from the rule catalogue, so the page, the PDF and the checklist always agree.

DOCUMENT	WHAT IT IS FOR	KEPT FOR RULES
Supply components and sampling plan	The supply's components and every sampling point, so each sample carries its component ID and samples are taken where the rules say. Reviewed yearly	G.SM.1, S1.4, S2.4, D2.3, D3.RD.5, D3.MM.4
Treatment plant and equipment record (controlled)	What the plant is: filter, UV unit and its validation, chlorine dosing, contact tank, and the installation checklist with photos. Reviewed yearly	T1.3-T1.5, T2.7-T2.10, T3.BF.2, T3.BU.1, T3.PA.1, T3.PU.1 (27 rules)
Backflow register and device tests	Every point of supply with a medium or high backflow risk, the device protecting it and each test. Reviewed yearly (every two years at level 1)	D1.2(a)-(f), D2.8(a)-(f), D3.BF.2-D3.BF.5
Consumer complaints register	Taste, odour, colour and illness complaints, their investigation and the cause found. Reviewed yearly	S1.6, S2.7

DOCUMENT	WHAT IT IS FOR	KEPT FOR RULES
Cyanobacteria risk and inspections	The cyanobacteria risk category of each source and the in-season inspections of the intake. Reviewed yearly	S1.5, S2.5, S2.6, S3.CD.5-S3.CD.8, T3.CY.1, T3.CY.2
Test instrument register	Handheld and online instruments used for compliance results, and each verification against a standard. Reviewed yearly	G.SM.4, G.CM.1
Training and competency register (organisation-wide)	Who does work on the supply, their qualifications and training, and when each expires. Reviewed yearly	G.CH.1, D1.2(d), D2.8(d), D3.BF.4
Hygiene code of practice (organisation-wide, controlled)	The code itself as a file, and who has read and acknowledged it. Reviewed yearly	G.CH.2
Field test log	On-site readings with a handheld meter: FAC, pH, turbidity, UVT, UVI, fluoride. Never due for review; the checklist counts the month's tests	T1.1(c), T2.2, T2.3, T2.6(a), T2.10(b)-(c), D2.2, D2.4, D2.7, VP.3(b), VP.4(b), D3.RD.3 (grab), D3.RD.4, D3.RD.8
Laboratory register and chain of custody (organisation-wide)	The accredited laboratories used and their sampling instructions as a file. Reviewed yearly	G.SM.2, G.SM.3
Varying-population periods	When the population rose above 100 or 500 and which extra sampling tier applied. Never due for review	VP.1-VP.4
Drinking water safety plan and procedures (controlled, file)	The plan, risk assessments and standard operating procedures as files, with what each version changes. Reviewed yearly	S3.CR.1, D3.BF.1, D3.HP.5, D3.FO.1, D3.FO.3, D3.RD.2, D3.MM.1
Source register (level 3)	Each source, its class under rule 8, who assessed it and when the assessment is due again. Reviewed yearly	S3.CR.1-S3.CR.3, S3.AB.1
Watermain repair and commissioning record (level 3)	Each repair or new main: the risk assessed, the procedure, disinfection and the E. coli result before return to service. Never due for review	D3.HP.1-D3.HP.5
Storage facility inspection and cleaning record (level 3)	Every inspection, clean and entry of a storage facility, with the disinfection and E. coli result. Never due for review	D3.FO.2-D3.FO.6
Chemical schedule and batch certificates (level 3)	Every treatment chemical, whether it has a MAV, and the certificate of analysis or conformance for each batch. Reviewed yearly	T3.CH.1, T3.CH.2
Assurance Rule Declaration (generated, controlled)	One line per assurance rule in the site's modules: complied yes / no / not applicable, with the evidence named	G.RR.4, G.RR.7

DOCUMENT	WHAT IT IS FOR	KEPT FOR RULES
Level 1 Annual Monitoring Report (generated, controlled)	Per level 1 monitoring rule: the results, samples with component ID, sample ID and date, the worst value and every data gap	G.RR.2
Level 2 Quarterly Monitoring Report (generated, controlled)	Per level 2 monitoring rule: results, samples, complied or not, periods not complied, worst value and data gaps	G.RR.3

What it does not do

- **WYLA never submits anything to the regulator.** The declaration and the monitoring reports are signed PDFs for you to send through Hinekorako; recording them in WYLA is not reporting.
- **Source-water samples do not go in the lab register.** The register treats every sample as treated water and alarms on any detection, so a raw-water sample (rules S1.1, S2.1, S3.CD.2) would raise a false alarm. Keep those with your laboratory or in a document.
- **The statements for supplier rules are your owner's own.** WYLA records the yes, no or not applicable and the note; it does not check what was done.
- **Covered by WYLA** is only said where a feature really judges or logs the rule and is active at the site. Chlorine dioxide, ozone, membranes, source chemistry and zone sampling schedules are not judged by WYLA; the rule's notes say so.
- The level 2 cartridge-filter differential pressure rule is judged by the level 2 rule sets only; a level 3 site judges it with a Custom rule.
- A reminder email through the **Reminders** page is not built for document reviews; the two alarms above do that for now.
- New on 7 November 2026 and not yet used at a real site: the rule catalogue (221 rules, mapped from the 2026 Rules on 6 November) has not yet been re-checked against the primary text. If a rule reads wrongly for your supply, tell WYLA.

26 SCHEDULE

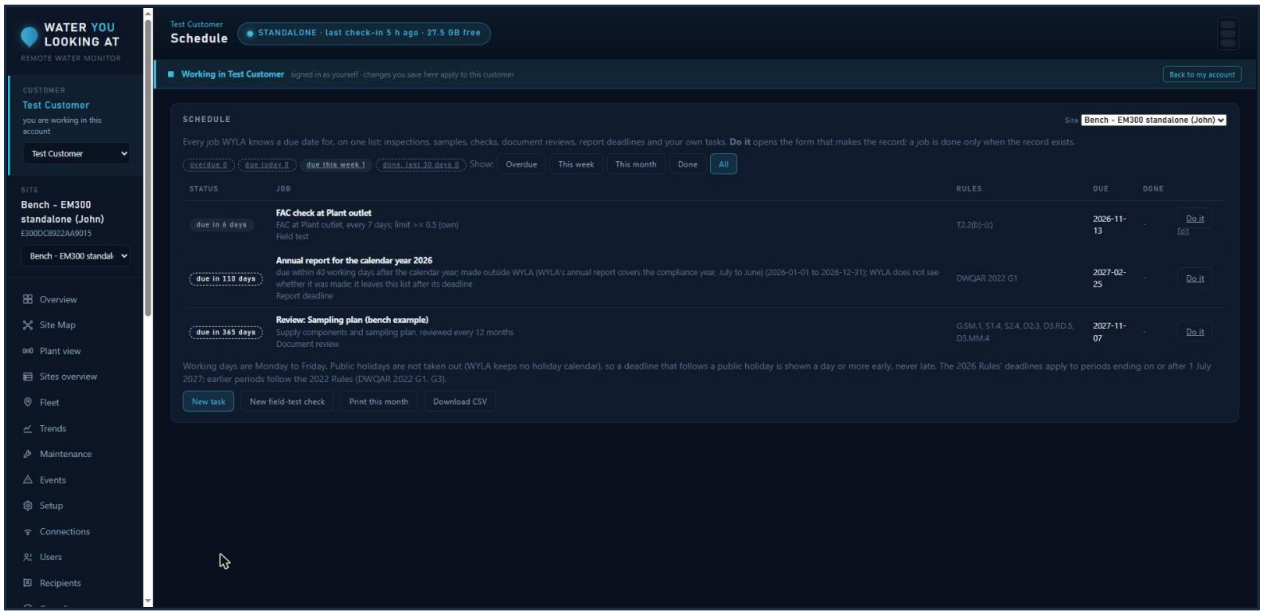
Every part of WYLA that keeps a due date - the logbook, the lab register, the calibration log, the document library, reminders, the regulator's report deadlines - now feeds one list per site. The **Schedule** page shows every job with a due date in one place: what is still to do, what is done and by whom, and what is overdue and by how long. Each job has a **Do it** that opens the form that makes the record. You can add your own tasks and field-test checks to the same list. The page is new on 7 November 2026 and has not yet been used at a real site.

What the page is

Schedule is in the **Today** group of the menu. It shows the site chosen in the menu's site picker (it has no site box of its own since 7 November 2026). The page says what it is in one line: *Every job WYLA knows a due date for, on one list: inspections, samples, checks, document reviews, report deadlines and your own tasks. Do it opens the form that makes the record; a job is done only when the record exists.*

The page mostly **reads** the schedules the other parts of WYLA already keep. It never works out a due date of its own for them: the logbook's next inspection is the logbook's own date, a calibration check is the calibration log's, and so on. **Nothing is ticked without a record behind it.** A job shows **done** only when the record of that occurrence exists - the logbook entry, the lab sample, the calibration check, the new document version, the signed report. The only exception is a task of your own that has no form (see **Mark as done**).

COLUMN	WHAT IT SHOWS
Status	A chip: **overdue by N days** (red), **due today** (amber), **due in N days** (blue, within the next 7 days), **due in N days** with a dashed edge (further off - upcoming), or **done** with the date and who did it (green). A field-test check with a reading also shows **within limit** or **outside limit**
Job	What the job is, a line of detail, and its kind (for example *Logbook*, *Lab sample*, *Report deadline*, *Task*)
Rules	The rule numbers the job serves, where the source names them (for example SSB.12(a), T2.2(b)-(c), G.RR.3)
Due	The due day, in the site's own calendar
Done	For a done job: the day, the person the record names, *(entered by ...)* when someone else typed it in, and *(record kept)*
(buttons)	**Do it**, and for your own tasks **Mark as done** and **Edit**



The Schedule page: the summary chips and filters, the jobs with their status, rules, due day and who did them (an earlier layout: since 7 November 2026 the site comes from the menu, and Add a job, Print this month and Download CSV are at the top).

The order of the list

Overdue jobs come first, the longest overdue at the top, and their rows are shown in red. Then the jobs due today, then those due soonest, then the upcoming ones. Done jobs come last, newest first, greyed out. A done job stays on the list for **30 days** after it was done, then leaves it - the record itself stays where it always was (the logbook, the lab register, the library). A job is **overdue** once the end of its due day has passed with no record behind it.

Where the jobs come from

A source only adds jobs while its module is switched on at the site (chapter **Features and Plans**). Switch one off and its jobs leave the list; its records stay where they are.

KIND OF JOB	COMES FROM	DONE WHEN
Logbook inspection	Each scheduled inspection type of the logbook, at the logbook's own next due day (chapter **Inspection Logbook**)	A logbook entry of that type is made
Lab sample	The lab register's next E. coli and total coliforms sample (chapter **Lab Samples**); a month that ended with no sample is overdue from that month's end	A sample is entered in the register
Calibration check	Every instrument in the site's calibration log, at its own due day; a failed check stays overdue from the day it failed (chapter **Calibration and Grab Samples**)	A check is logged (a failed one only clears when a check passes)
Document review	Every site document in force with a review date (chapter **Documents and Your Rules**)	A new version is made - or, for a controlled document, signed

KIND OF JOB	COMES FROM	DONE WHEN
Reminder	Each of your own reminders on the Reminders page, at its next occurrence (chapter **Reminders**). A logbook or lab reminder is not listed twice	Someone presses **Mark as done** for the reminder
Report deadline	The regulator's report deadlines for the site's NZ Rules level (see **Report deadlines** below)	The report for that period exists in WYLA
Field-test check	Your own checks, made on this page (see **New field-test check**)	The field test log has a reading for that determinand and point in the period
Your task	Your own tasks, made on this page (see **New task**)	**Mark as done** on this page - or a new version of the document linked to it

The summary chips and the filters

Above the list four chips count the jobs: **overdue** N, **due today** N, **due this week** N and **done, last 30 days** N. A chip with nothing in it is shown dashed. Press a chip to show just those jobs. Beside them, **Show:** picks a filter (the one in use is highlighted):

- **Overdue** - only the overdue jobs.
- **This week** - everything to do within the next 7 days, overdue jobs included.
- **This month** - everything to do by the end of the site's current month, overdue jobs included.
- **Done** - the jobs done in the last 30 days.
- **All** - the whole list (the default).

> **An empty list**
> Each filter says when it has nothing to show: *Nothing overdue.*, *Nothing to do this week.*, *Nothing to do this month.*, *Nothing done in the last 30 days.* or *Nothing on the list yet.* A site with no gateway has no schedule: *No site yet: the schedule belongs to a site, which comes with its first gateway.*

Do it

Do it takes you to the page where the record is made, with the right form already open where that page allows it. Make the record there as usual; when you come back to the Schedule the job shows **done**. A done job has no Do it.

JOB	DO IT OPENS
Logbook inspection	The Logbook, with a new entry of that inspection type
Lab sample	Lab samples, with a new sample
Calibration check	The Compliance page's calibration log for that instrument

JOB	DO IT OPENS
Document review	The document in the library (add a new version, or sign it)
Reminder	The Reminders page, ready to mark that reminder done
Report deadline	The Your rules page and its report buttons, or the Reports page for a monthly report
Field-test check	The field test log in the library with a new reading row already filled in (today's date and time, the determinand and the sampling point); type the value and record the version

> **Your role still counts**
> Do it only opens the page. Whether you can make the record there depends on what your login may do on that page, exactly as if you had opened it from the menu.

Mark as done (your own tasks only)

Mark as done appears only on **your own tasks** that have no form behind them - flushing a dead-end main, say, or checking the plant-room door lock. Every other job is done through its own page with **Do it**; a field-test check is never marked done here (it is done by a reading in the field test log), nor is a task linked to a document (it is done by a new version of that document).

1. Press **Mark as done** on the task's row. A line opens under it.
2. Type a **Note (optional)**, up to 1,000 characters - what was done or found.
3. Press **Confirm - it is done** (or **Cancel**). The toast says *Marked as done* and the task moves on to its next due day.

> **A done is kept for good**
> As the page says, *WYLA records who marked it and when. A done is never changed or deleted afterwards.* It is recorded at the moment you confirm. WYLA never accepts a done dated before the task existed, or before that occurrence was open. Each done goes in the audit log.

A job that is done

A done job shows when it was done and who did it. Under **Due** it says what follows from it, in words: *Follow-up due 2026-11-08 (today): put the problem right* when the inspection found a problem still to be put right, *Follow-up due ...: the re-test samples* after a positive lab result, and *Next due ...* on the newest done of each job. An older done row says *was due <day>*. A problem that a later entry has put right no longer says it is still to be put right.

A done **lab sample** names the schedules it counts for (*counts for "T2.1: ..."*) and the rules of those schedules under **Rules** - a source sample S2.1's, a sample at the plant the school schedules' and T2.1's - and any schedule it does not count for yet and why. Its **Next due** comes from those schedules (two dates when it counts for two); a sample that counts for no schedule of the site, such as a zone sample at a school with no

zone schedule, shows **-**.

New task

Press **Add a job** at the top of the page. It asks *What would you like to add?* - **A task of your own**, **A field-test check** (only where the Document library is on; otherwise it says so), **An email reminder** (it opens the Reminders page; only the account owner makes those, and anyone else is told so) or **Cancel**. The form opens at the top of the page. **A task of your own** adds a job of your own (the form is headed **New task of your own**). Fill in:

1. **Title** - what the job is, up to 120 characters (for example *Flush the dead-end main*). It is needed.
2. **Detail (optional)** - up to 1,000 characters.
3. **Repeat** - **Once, on a date** (then **On**); **Every N days** (**Every (days)** and an optional **First date**); **Weekly, on weekdays** (tick Mon to Sun); **Monthly, on a day** (**Day of the month**, 1 to 31 - the 31st of a 30-day month is the 30th, and in February the 28th or 29th); or **Yearly, on a date** (**First date**; it repeats on that day each year, and cannot be 29 February).
4. **Rule ids (optional, comma separated)** - the rules the task serves, for example *T2.2, D2.2*.
5. **Document to open with "Do it" (optional)** - pick a document type, or *none*. See the callout below.
6. Press **Make the task** (or **Cancel**). Anything missing is listed under *Not saved:* - for example *say what the job is (the title)*, *give the date* or *tick at least one weekday*.

- An **every N days** task counts on from the later of the day it was due and the day it was done: done late, the next one is N days after the done; done early, it is still N days after the due day, so doing it early never pulls the task forward.
- **Edit** on a task's row opens the same form (**Save the changes**). Changing the repeat carries on from the last done. An owner, or the person who made the task, also sees **Remove this task** there; it asks first (**Yes, remove it** / **Keep it**). The task leaves the list, and what was already done stays in the records.
- The form says it plainly: *An overdue task of your own raises no alarm and sends nothing. For an email before it is due, make a reminder on the Reminders page.*

> **Linking a document type**
> When a task names a document type, it is done by a **new version of a document of that type** made after the previous occurrence - so a register you revise every month counts as done every month without anyone pressing a button. Such a task has no Mark as done. Every version of the type counts; the version that retires a document does not.

New field-test check

Add a job, then **A field-test check**, adds a test your supply does by hand - free available chlorine at the plant room tap, say, or turbidity before the UV. Fill in:

1. **Determinand** - FAC, pH, turbidity, UVT, UVI, fluoride or other.
2. **Sampling point** - free text, for example *plant room tap* (optional, but needed if you test at more than one point).
3. **Title (optional)** - left empty, it reads like *FAC check at plant room tap*.
4. **How often** - **Every N days** (**Every (days)**, counted from the day the check starts; 7 to begin with), **On weekdays** (tick the days) or **N times a month** (**Times a month**). A check made part-way through a month asks only that month's share, rounded down: 8 a month made on the 15th of a 31-day month asks 4 in that first month.
5. **Lowest allowed (optional)** and **Highest allowed (optional)**, and **The limit is**: **the rule set's** (the site's calculation rule set, where it has a value) or **our own** (then give at least one of the two).
6. **Rule ids (optional, comma separated)** - left empty, WYLA uses the usual rule: T2.2(b)-(c) for FAC and pH, T2.2(a),(d) for turbidity and fluoride.
7. Press **Make the check** (or **Cancel**). The toast says *Field-test check made*.

- **Where the readings go.** The readings are rows in the **field test log**, a document in the Document library, so a field-test check needs the **Document library** module at the site. Without it the check is still listed, marked *the Document library is off at this site*, and can never be done.
- **When it is done.** When the site's current field test log has a row with that determinand (and that sampling point, when one is set) dated in the period. A check of N times a month needs N rows in the month. Every other reading of the last 30 days is listed as a done job of its own.
- **How each reading is judged.** Each row's value is compared with the limit and the chip says **within limit** or **outside limit**, with the value and the limit (for example *within limit 0.6 (>= 0.5)*). With **the rule set's** limit, WYLA keeps the rule's own comparison: FAC from the rule set's chlorine limit (at least 0.5 mg/L on the level 2 set, T2.6(b)), pH from its low and high, turbidity from its tightest rule judged on every reading, UVT from its validated minimum - so where the rule is *turbidity < 5*, a reading of 5.0 is outside. With **our own** limit, a reading equal to the limit is within.

> **Outside the limit is your call to act**
> An **outside limit** chip does not raise an alarm, and a missed check does not either - the list shows both. Act on an outside reading as your rules and your drinking water safety plan say. The testing itself, and how often you test, are yours: WYLA suggests no number of tests a month.

Report deadlines

Where the site's regulatory profile on the **Reports** page is set to New Zealand with a **Supply category (NZ Rules)** and a **Population served**, and the Regulator reports module is on, the list carries the regulator's report deadlines for the site's level (chapter **Documents and Your Rules** explains the levels). Without that profile there are none.

What a deadline counts. Report deadlines are counted in working days as the law defines them (Legislation Act 2019 s13): weekends, public holidays (Waitangi Day, Good Friday, Easter Monday, Anzac Day, King's Birthday, Matariki, Labour Day, with the Monday after a weekend Waitangi or Anzac Day) and every day from 25 December to 2 January are not working days. Your region's anniversary day does not change the deadline.

Two dates. Where the two differ, the row shows the deadline and an earlier **Aim for** date that counts every weekday - Taumata Arowai has used both. Reminders and alarms use the earlier one, so you are never told late. For example: *Due 2 March 2026 ... Aim for 25 February 2026 (counting every weekday ...)*.

Published dates. When Taumata Arowai has published a date for a round, that date is shown: 25 February 2026 (the 2025 year), 1 April 2027 (the 2026 year), 14 July 2027 (June 2027), 28 July 2027 (April-June 2027) and 22 September 2027 (the reduced January-June 2027 report).

Beyond 2031. Public holidays are known up to the end of 2031. Later deadlines are counted Monday to Friday and the page says so; WYLA adds later years in an update.

PERIOD	DEADLINE	RULE	MADE BY
2022 Rules - periods ending up to 30 June 2027			
Levels 1, 2 and 3: the calendar year	40 working days after 31 December (published: 25 Feb 2026, 1 Apr 2027)	DWQAR 2022 G1 / G2.2 / G4 and G5	The Hinekorako upload file where the Hinekorako module is on (Compliance Plus), else made outside WYLA
Level 2: each quarter (the first one shown is October-December 2026, due 1 February 2027)	20 working days after the quarter end	DWQAR 2022 G2.1(d)	The Level 2 Quarterly Monitoring Report, and the Hinekorako upload file (Compliance Plus)
Level 3: each month	10 working days after month end	DWQAR 2022 G3	The signed Monthly Compliance Report or the Level 3 Monthly Rules Report, and the Hinekorako upload file (Compliance Plus)
Levels 1 and 3: January-June 2027 (the reduced set)	22 September 2027	2026 Rules Sch 2 cl 2(1)(c)	Made outside WYLA
2026 Rules - periods ending from 1 July 2027			
Level 1: the compliance year (1 July to 30 June)	40 working days after 30 June	G.RR.2	The Level 1 Annual Monitoring Report

PERIOD	DEADLINE	RULE	MADE BY
Level 2: each quarter	20 working days after the quarter end	G.RR.3(f)	The Level 2 Quarterly Monitoring Report
Level 2: the compliance year, rules with a one-year compliance period	40 working days after 30 June	G.RR.3(g)	Made outside WYLA
Levels 2 and 3: the compliance year	40 working days after 30 June	G.RR.4 / G.RR.7(d)	The Assurance Rule Declaration
Level 3: each month	20 working days after month end	G.RR.5(e), G.RR.6(e), G.RR.7(c)	The signed Monthly Compliance Report or the Level 3 Monthly Rules Report
Level 3: the compliance year, grab sample rules with a one-year reporting period	40 working days after 30 June	G.RR.6(f)	Made outside WYLA

- A report made in WYLA shows *made; record when you upload it* until you record the upload (below). A generated report that is not yet signed says *generated, not yet signed*. A retired report does not count.
- Deadlines are listed from about 400 days back, but never from before the day the site's NZ profile was first set - a site set up today is not shown a year of reports it was never asked for here.
- **Do it** opens the Your rules page (its report buttons) or, for a monthly report, the Reports page.

> **Done means the upload is recorded**
> WYLA does not upload for you. A report deadline shows **done** only once someone has recorded the upload with **Record the upload**. When this part goes live, every past deadline on the list with no recorded upload shows as overdue until its upload is recorded.

Record the upload

Beside each report deadline (and beside a report just built on **Your rules**) is a **Record the upload** button; on a done deadline it reads **Uploads recorded**. It opens a panel that starts *WYLA does not upload for you. Record here when you uploaded it, so the deadline shows done.*

When you have uploaded a report to Hinekorako (or sent it another way), fill in: **Report** and **Period** (filled in from the deadline), **Rules**, **Day you submitted it**, **How you sent it**, **Who submitted it** (the report states the submitter - 2026 Rules G.RR.1) and, if you have them, **Their email**, **The portal's reference**, **Evidence** (the acceptance screen saved as a file on the report's document) and a **Note**. Only then does the deadline show done, and the report alarms clear at once.

Under the form is every record for that period. A mistake is put right with **Correct** (a new record with the reason); a record made by mistake is **Withdrawn** with a reason. Nothing is edited or deleted, and every record is in the site's hash chain. When a period is submitted more than once, the latest submission counts. An operator or the owner records an upload; everyone who sees the site reads the list (also a CSV).

Alarms for overdue records

Built on 7 November 2026 and not yet deployed. Four alarms watch the records the Schedule lists. Each is one alarm per site, emailed through the usual alarm routing (alarm type **Filters and servicing**), and each clears by itself when the record is made.

ALARM	WHEN	WHAT TO DO
Report due soon (yellow)	10 working days before the **Aim for** date (WYLA's own number)	Make the report, upload it, then **Record the upload**
Report past its deadline (red)	The deadline has passed and no upload is recorded	Upload it now and record it; if it was uploaded, record the upload
Field test overdue (red)	A field-test check's occurrence is overdue	Take the test and add it to the field test log (Do it)
Complaint still open (yellow)	A complaint open more than 7 days (WYLA's own number; the Rules set no time), or at once when it may be linked to cyanobacteria	Investigate it and record what was done in the complaints register

Default cadences for your level

Built on 7 November 2026 and not yet deployed. On the Schedule page and on **Your rules**, the panel **Default cadences for this level** lists what a level 1 or 2 supply must sample, test and inspect, taken from Taumata Arowai's Rule Summary List (never typed in by hand): lab schedules (monthly, every 3 months, yearly, every 3 years), field-test checks of 8 a month with the spacing line, and the logbook preset for your level. Each line says whether it is already set up.

An owner ticks the ones to set up and presses **Make the ticked ones**; nothing is made before that, and pressing it twice makes nothing twice. Lab samples need your sampling points first (Reports page). A reading WYLA records every minute with the calibration log on is *covered by continuous monitoring* - you may still add the check. Rows the list leaves to a risk assessment say *needs a value*.

Print this month and the CSV

- **Print this month** makes a PDF sheet of the site's current month (its own time zone), with your organisation's report branding: **Overdue** (every job overdue now, whichever month it fell due in), the jobs still to do in the month, and **Done** (with the date and who), each with its kind, rules and due day. Pin it up in the plant room or take it to the board meeting.
- **Download CSV** saves the list as a spreadsheet: status, kind, job, detail, rule ids, due day, due time (UTC), days overdue, days to go, when done, who did it, the record, the page Do it opens and who entered it. The last column, **follow_up**, says what follows a done job (as under Due), and the printed month's **Done** table has a **Follow-up** column in place of Due.

On the All sites page

On the **All sites** page (chapter **All Sites and Per-site Logins**), each site's row has a **Schedule** column: red *N overdue, longest N days* when anything is overdue, amber *N due this week* when something is due within 7 days, else green *nothing overdue*. Press it to open that site's Schedule. A login limited to some sites sees only its own sites there.

A part switched off at the site

If a part whose jobs the Schedule lists - Scheduled reminders, the Inspection logbook, the Lab sample register, Calibration, the Document library or Regulator reports - is switched off at a site in **Setup > Features** (by changing the kind of site, or by its own switch), the Schedule and Today say so for 30 days: *Scheduled reminders was switched off at this site on <day> by <who>; 3 jobs stopped being tracked here (1 of them overdue)*. Nothing is deleted: switch it back on and the jobs are listed again, and the note goes. A part that goes off another way (a plan change, a trial ending) is not noted, and nor is one switched off with nothing open.

Who can do what

WHO	WHAT THEY CAN DO ON THE SCHEDULE
Anyone who can see the site (viewer and up)	Read the list, use the chips and filters, **Do it**, **Print this month** and **Download CSV**
Operator, installer and owner	Also **Add a job** (a task or a field-test check), **Edit** and **Mark as done**
Owner, or the task's maker	Also **Remove this task**
A login limited to some sites	Sees and completes the jobs of its own sites (Mark as done included, for an operator), but cannot add, change or archive tasks

> **No new alarms**
> The Schedule raises no alarm of its own. Each source keeps its own due and overdue alarms as before - the logbook's, the lab register's, the calibration log's and the document reviews' (**DOCUMENT_REVIEW_DUE** and **DOCUMENT_REVIEW_OVERDUE**). Your own tasks and field-test checks raise none: an overdue one shows red on the list, and that is all. Every task made, changed, archived or marked done goes in the audit log.

Which plans have it

The module is **Schedule and to-do list** (chapter **Features and Plans**). It is in **Cloud Compliance** and **Cloud Compliance Plus**; it is not part of Cloud Basic, but WYLA can add it to a Cloud Basic customer. It is switched on or off per site by your owner under **Setup >** *the site* **> Features**, and starts on at every preset. While it is off, **Schedule** is greyed in the menu and its All sites column goes; nothing can be added or marked done, but the tasks and dones already kept stay, and come back when it is switched on again.

Things to know

- The date and time filled in on a field-test row by **Do it** come from **your browser's clock** (and its time zone), not the site's. If you are entering a reading taken earlier, or from another time zone, correct them before you record the version. A row with no date is not counted.
- A missed weekly, monthly or yearly task stays open at the **oldest missed occurrence**. Each **Mark as done** completes one occurrence, so a weekly task missed for three weeks needs a Mark as done for each missed week to bring it up to date. (An every-N-days task done late counts on from the day it was done, so one Mark as done catches it up.)
- Your own tasks send no emails. For a heads-up before a job is due, make a reminder on the **Reminders** page; it then appears on the Schedule as a reminder job.
- Do it on a report deadline opens the Your rules page at the site; pick the report and the period there.
- Your own lab sampling schedules (Lab page, **Sampling schedules**) are each a job of their own on the list, beside the job for the site's lab settings.

27 REGULATOR REPORTS

Most regulators expect a monthly account of how your treatment performed. The **Reports** page makes a **Monthly Compliance Report** for one site and one calendar month, in the site's own time, from the records WYLA already holds: the daily verdicts, every period out of limits, the data gaps, grab samples and instrument checks, alarms, notices to the regulator, changes made at the panel and the day seals. You download it as a PDF and as CSV files. The person responsible for the supply reviews it, **signs it in the console with a fresh passkey sign-in**, and sends it to the regulator. Click **Reports** in the menu, below Compliance.

> **WYLA never submits anything to a regulator**
> WYLA prepares the report. It never sends a report, a notice or any other message to a regulator or health authority. A person reviews and signs the report, then sends it through the regulator's own route: Hinekorako, the State's form or system, or email. Responsibility for the water supply, and for what is sent, stays with the supplier.

The Reports page

The page shows the site chosen in the menu's site picker (since 7 November 2026 it has no site box of its own). It shows, from top to bottom:

- **Notifications** — events a regulation says must be notified, with their deadlines (see the next chapter, Regulator Notifications).
- **Monthly Compliance Report** — the chosen month's report, its draft files and the sign-off.
- **Signed reports** — every month signed so far, with each version and its files.
- **Regulator notices** — the log of when a regulator was told about something.
- **Regulatory profile** — who the regulator knows this site as.
- **People and organisations** — the site address and who is who at the site, printed on its reports (from 5 November 2026).
- **Who may sign** — shown to owners only.

YOUR ROLE	WHAT YOU CAN DO
Viewer	Read the report, the profile and the notices; download the draft and signed files
Operator or installer	Also record notices to the regulator; sign reports when an owner names you
Owner	Also sign reports, edit the regulatory profile and the people and organisations, and name who may sign

YOUR ROLE	WHAT YOU CAN DO
WYLA administrator	Prepare and read everything and edit the profile; never signs a customer's report

> **Support and service companies**
> When WYLA support views your account, or a service company can see your site, the page is read-only: it says *A customer view is read-only: reports are signed by the customer.*

Step 1: the regulatory profile

Set up the profile first, so the report carries the identifiers your regulator uses. Until it is set, the report shows a yellow line: *No regulatory profile yet*. Only an owner or a WYLA administrator can change it; everyone else sees it greyed out.

- **Jurisdiction** — **New Zealand (Taumata Arowai)**, **United States (State primacy agency / EPA)**, **Canada - Ontario**, **Canada - British Columbia**, **Canada - Alberta**, **Canada - Saskatchewan** or **Other**. Picking one shows that jurisdiction's identifier boxes.
- **Population served** — a whole number of people.
- **Supply category (NZ Rules)** — from 7 November 2026: one of the nine rule 6 categories (networked supply, self-supplied building, the three downstream kinds, water carrier service or supply, community drinking water station, very small community), or *not set*. With the population it decides which rules the **Your rules** page lists (chapter **Documents and Your Rules**); it is printed on the Monthly Compliance Report's profile lines.
- **Classification** — free text, for example *NZ Level 3*.
- **Source** — not set, surface, gwudi (ground water under the direct influence of surface water), ground or mixed. **Filtered** — not set, yes or no.
- **Regulator** and **Regulator contact** (phone or email).
- **Report recipients** — one per line, as *Name <email> (role)*. This records who the report goes to; WYLA does not send it to them.
- **Notes**, and the **Notifications** block, which the next chapter explains.

JURISDICTION	IDENTIFIER BOXES
New Zealand	NZ supply ID (from Hinekorako, e.g. TEA001); NZ supply component IDs (e.g. TP04026)
United States	PWSID (two letters and seven digits, e.g. TX1234567); State (two letters); Entry point / facility IDs
Ontario	Drinking water system number
Alberta	Approval to operate number
British Columbia, Saskatchewan	Operating permit

JURISDICTION	IDENTIFIER BOXES
Every jurisdiction	Regulator reference (any other identifier)

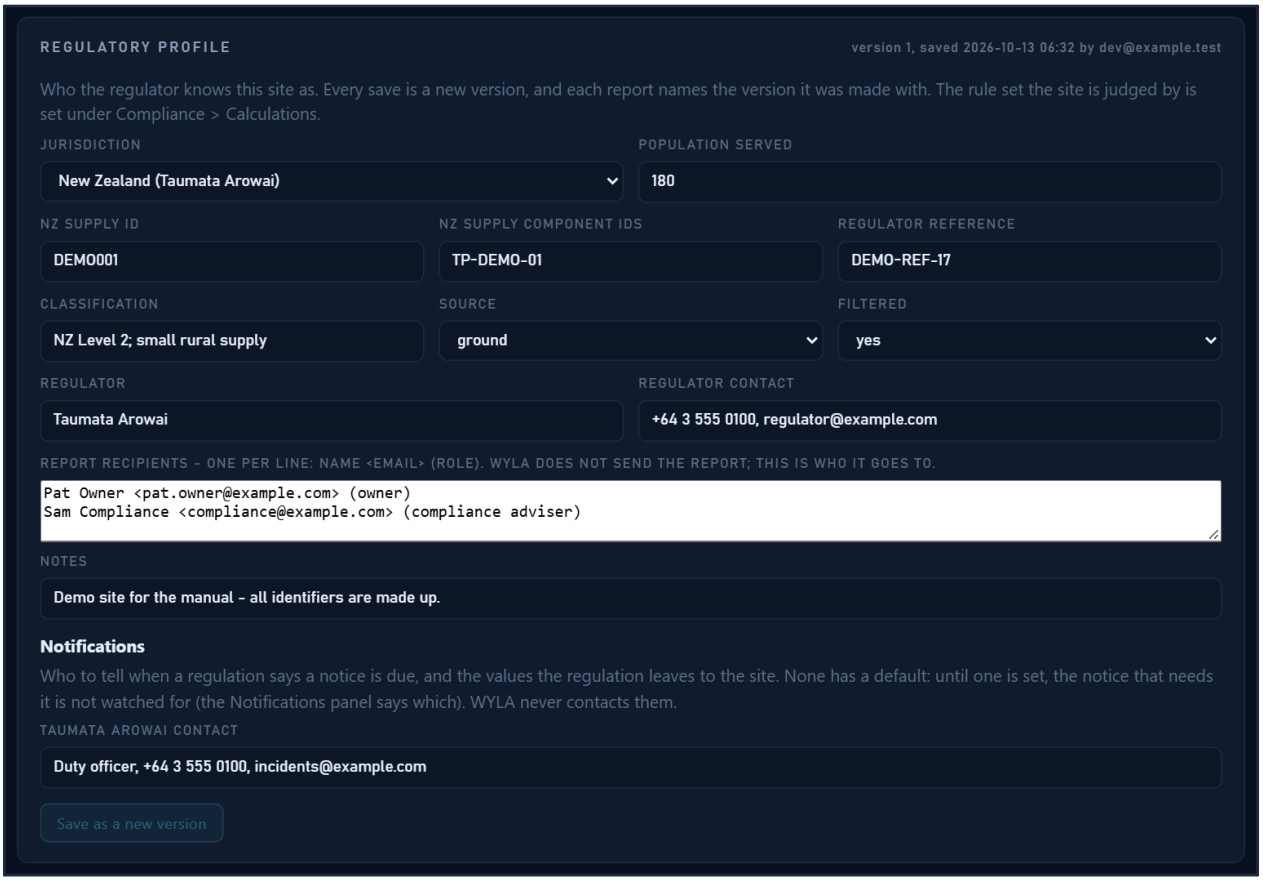
Components, sampling points and region

Built on 7 November 2026 and not yet deployed. For a New Zealand profile, two tables: **Components** (type - source, treatment plant or distribution zone -, the Hinekorako ID copied from the Supply Details page, a name) and **Sampling points** (name, type, the component it belongs to). The page shows hints under a row whose ID does not look like the usual shape (the shapes are inferred from examples, so a hint never stops a save). A site with the older comma list of component IDs gets **Turn into typed components**. Also: **Region** (for public holidays in deadlines - the Rules' deadlines do not use it) and, for a state school, the Ministry of Education school number. Removing a saved point keeps it in the records (older samples still name it). A new **Supply components and sampling plan** document is filled in from these tables.

Saving the profile

Press **Save as a new version**. **Discard changes** puts the boxes back as saved. A yellow box may show format hints, for example that a PWSID is usually two letters and seven digits. Hints never stop you saving, because regulators change their formats.

Every save is a new version; nothing is overwritten. The panel heading shows the version, when it was saved and by whom, and earlier versions are listed under the form. Each report names the profile version it was made with. The rule set the site is judged by is not set here: it stays under Compliance, in the Compliance calculations panel.



The Regulatory profile of a test site in New Zealand, saved as version 1, with its Notifications block.

People and organisations of a site

From 5 November 2026 the Reports page has a **People and organisations** card, below the Regulatory profile. It holds the **Site address** and up to 12 entries saying who is who at the site. Only an owner can change it; everyone else who can see the site sees it read-only.

1. Type the **Site address**.
2. Press **Add a person or organisation** and pick the **Role**: Principal, Board contact, Water supply contact, Caretaker / property manager, Project manager, Installer, Service company, Inspector, Laboratory, or **Other** with your own **Title**.
3. Fill in **Name**, **Organisation**, **Phone** and **Email**, and a **Note** if you wish. An entry needs a name or an organisation.
4. Leave **Print on reports** ticked to print the entry on the site's reports. Untick it to keep the entry in the console only. The note never prints.
5. Press **Save**. **Remove** takes an entry away.

REPORT	WHERE THE ADDRESS AND THE TICKED ENTRIES PRINT
Monthly Compliance Report	In the header, as a **People and organisations** table

REPORT	WHERE THE ADDRESS AND THE TICKED ENTRIES PRINT
Scheduled email reports	Under the site's heading
Lab report, incident record and logbook report (PDF)	With the site's name, on each report (chapters **Lab Samples** and **Inspection Logbook**)

> **Only add people who expect it**
> These reports can go to people outside your organisation, so only add people who expect to be named on them. Nothing is taken from your user list or your alarm recipients: a person is on a report only because an owner typed them in here. A report that was signed before the details were added keeps its header exactly as signed and is not marked as changed; later months print the details.

Step 2: the month's report

In the **Monthly Compliance Report** panel, pick the month in the **Month** box. It starts at last month, and offers nothing earlier than the site's first month with records - a line beside it says *This site's records start in* that month. WYLA works the report out there and then.

At the top of the report a **headline** says the month's answer in plain words: **Compliant** (every day judged met its limits; *so far* while the month is not over), **Not compliant** with each calculation and how many days were not met, **Not enough data** (days with too many minutes of no data to judge, or no records at all for the month) or **Not judged** (no compliance calculation is switched on, so there are no daily verdicts). Under it, a strip of small boxes, one a day, shows each day's worst result: met, not met, not enough data, not operating or no result.

A chip shows where it stands: **draft - not signed**, **signed - version N**, **signed vN - the month's data has changed since** or **signed vN - restatement needed**. Next to it are the site, the first and last day and the site's time zone (for example *site time, NZDT*). A profile or site detail saved after signing is named for what it is; it does not mark the month's data as changed, and the signed report stands.

The summary lines are **Calculations**, **Days not met**, **Periods out of limits**, **Data gaps** (how many, and the minutes), **Alarms**, **Regulator notices recorded** and **Volume treated**. A table gives each calculation's month, with the columns **Gateway**, **Calculation**, **Month**, **Days not met** and **Days with no result**. Below it, **Periods out of limits (joined across midnight)** lists each period with **From**, **To**, **Minutes**, **Worst** and **Regulator notified**, which shows any notice you recorded for that period or *not recorded*. The first 60 periods are shown; the PDF and CSV have them all.

A folded line, **Record integrity**, says how many gateway-days had data, how many are sealed and how many are not sealed yet (days seal 8 days after they end; see Record Sealing). Open it for the report's **content SHA-256** and **snapshot SHA-256**: fingerprints of exactly what the report says and of the records it was built from.

Volume treated
Volume treated shows *not measured (needs a flow totaliser)* unless a gateway records a flow volume, and then *see the UV results (by volume)*. Where a rule is judged by volume, such as the US UV test, and no volume is recorded, the report judges by operating time and says so. WYLA never estimates a volume.

What the report contains

The PDF has a header and twelve sections. Each section names the clauses it is evidence for, and the PDF ends with a table of them. From 10 November 2026 a report cites only the rules of the site's own jurisdiction, as set in its regulatory profile: an NZ site's report cites NZ clauses only, never a US, Ontario, Alberta or BC one. A section with no clause of that jurisdiction prints without one (for an NZ site: Chlorine, Daily statistics and Alarms and notices). With no jurisdiction set, the report cites no regulation and says so; set the jurisdiction in the regulatory profile before signing.

SECTION	WHAT IT HOLDS
Header	Site, supplier, period, regulatory profile, gateways, rule sets, report ID, version and state, and the two SHA-256 fingerprints; from 5 November 2026 also the site address and a **People and organisations** table, where an owner has filled them in
1 Daily verdicts	One row per day per calculation: met, not met, incomplete, not operating or no result
2 Chlorine	Each day's lowest value and when; every period below the minimum, and when the regulator was notified
3 UV	The month's share within validated conditions and off specification; every off-spec stretch
4 C.t	The figures at peak hourly flow, or the daily share
5 Other rules	Your rules on readings and their periods out of limits
6 Daily statistics	Each reading's daily minimum, maximum and mean
7 Data gaps	Every gap in the month: readings, from, to, minutes, cause, whether it began before or continues, and minutes covered by a grab sample
8 Grab samples and checks	Every entry, with corrections and their reasons
9 Alarms and notices	The alarm summary, every notice to a regulator and every notification case
10 Operator inputs	Values WYLA cannot measure, such as volume treated; also **Changes made at the panel** (see Operator Certificates and Control Changes)
11 Record integrity	Each gateway-day: sealed, or not yet sealed with its snapshot fingerprint
12 Sign-off	The statement, who signed, their role, the passkey check and its time; or DRAFT - not signed

The data gaps section

Section 7 lists every data gap that touches the month, cut to the month's first and last minute, with the readings affected, the start and finish, the minutes and the cause (as in the data-gap log on the Compliance page). A gap that started in the month before is marked as having begun before, and one still going at the month's end as continuing. Minutes covered by a grab sample are shown, but the gap is never removed. This is the record of every gap that New Zealand's 2026 rules (G.RR.2 and G.RR.5) and similar rules ask for.

When any gap of the month is *lost at the gateway*, one line under the table says that those records were dropped at the gateway because it was offline longer than its store holds, and cannot be recovered (see Records lost at the gateway in the Compliance Recording and Data Gaps chapter).

Draft files

Download draft PDF and **Download draft CSV files (zip)** give you the report as it stands. A draft is marked **DRAFT - NOT SIGNED** and is never a record; use it to check the month before signing. Once the month is signed, the panel offers the **signed** PDF and CSV files first (**Download signed PDF (version N)**); drafts of the data as it is now are folded away and marked *not signed - do not send these to the regulator*, and are not offered at all while nothing has changed since the signature.

The zip holds one CSV file per section (verdicts, month, out_of_limits_periods, daily_statistics, data_gaps, grab_samples, calibration_checks, alarms, notices, notification_cases, record_integrity, differing_repeats, and changes_made when there were changes), plus `_meta.csv` with the report ID, version, fingerprints, signer and statement version. The files are UTF-8 and open in a spreadsheet. From 5 November 2026 `_meta.csv` also has `site_address` where the site has an address, and the zip gains `people_and_organisations.csv` when the site has people marked for reports.

Step 3: signing the report

An owner can always sign. An operator or installer can sign when an owner has named them (see **Who may sign** below). A viewer and a WYLA administrator never can. If something stands in the way, a yellow box says what, for example *the month is not over yet - a report is signed once its month has ended*, *there are no records for this month, so there is nothing to sign* (also for a month before the site's records start), or that it is *already signed as version N - nothing has changed since*. The server refuses these too, whatever is typed.

Above the sign-off, **Ready to sign?** lists each thing that makes a report fit to sign, with **yes**, a red **no** (it stops signing) or a yellow **check** (a warning to read), and where to put it right:

1. Pick the month and read the report, or the draft PDF.
2. Under **Sign this report**, read the statement and tick **I have read the report and make the statement above**.
3. Press **Confirm it is you and sign**.

4. A window asks you to **sign in again with your passkey to sign this report**. Confirm on your device (Windows Hello, your phone or your security key).
5. The report is signed. Its chip changes to **signed - version 1** and it appears under **Signed reports**.
6. Download the signed PDF (and the CSV if your regulator wants it) and send it to your regulator yourself.

CHECK	IF NOT
The month is over	**no** - a report is signed once its month has ended
There are records for the month	**no** - nothing was recorded, so there is nothing to sign
A rule set is switched on, so each day has a verdict	**check** - without one the report has no daily verdicts (link to Compliance > Settings)
The regulatory profile is set (the regulator's identifiers)	**check** - add it, or the identifier that is missing, in the regulatory profile
Every day has a result	**check** - the days with no result; see Data gaps on the Compliance page
Every day is sealed	**check** - you can still sign; WYLA flags a restatement if late data changes a day. When nothing at all is sealed for the month, it says why, gateway by gateway - for example *compliance recording is switched off for gateway M300-2451-0104* - not just that nothing was recorded
You may sign this site's reports	**no** - an owner can name you
The signing statement is approved	**no** - signing opens once it has been approved

A passkey is required - a password alone is refused
Signing needs a passkey sign-in within the last 5 minutes. If you signed in with a password, or your passkey sign-in is older, the report is not signed and the panel asks you to sign in again with your passkey. Allow pop-up windows for the console's address, or the sign-in window cannot open. See Signing in to the Cloud Console.

What signing does

When you sign, WYLA works the report out again. If anything changed while you were reading (late data arrived, for example), nothing is signed and you are asked to review it again. Otherwise WYLA freezes that version: the PDF, the CSV zip and the report's content are kept with their SHA-256 fingerprints, together with who signed, their role, why they may sign, when they confirmed it with their passkey, the statement wording and the profile version. Signed versions can never be edited or deleted. A file is only served while it still matches the fingerprint kept at signing.

The statement wording (version 2026-11-07)
Since 7 November 2026 the statement is the approved wording, version **2026-11-07**: *I have reviewed this report. To the best of my knowledge, it is a true and complete summary of the monitoring records held in WYLA for this site for the period shown. Where a value was not measured, or a period of records was lost or is not yet sealed, the report says so. This report does not by itself show that the water supply met every requirement. Responsibility for operating the water supply, and for any submission to a regulator, remains with the supplier.* It replaces the placeholder wording of 12 October 2026, which can no longer be signed on the live service. Its version is stored with every signature, so a later wording gets a new version and never changes what an earlier report said.

Signed reports

The **Signed reports** panel lists every signed month with a chip: the latest **version**, or **restatement needed**. Each month has a table with the columns **Version**, **Signed**, **By** (with their role, and *named to sign* for an operator or installer), **Correction reason**, **Content SHA-256** and **Files as signed**, which has three buttons: **PDF**, **CSV** and **JSON** (the report's content exactly as signed). A version that has been corrected is struck through and marked *superseded*.

If some days were not sealed yet when the report was signed, a line says so, and how many have sealed since and still match. The panel ends with *Signature chain checked: N signatures, unbroken.* A red line means a signed record no longer checks out; tell WYLA support.

Emailing the signed report automatically
From 3 November 2026 your owner can have each signed report emailed to the people they choose - your contractor, the council, the Ministry - within minutes of the signature, exactly as signed and never unsigned (chapter **Scheduled Email Reports**). That email is a copy: the report to the regulator still goes as above.



Signed reports: version 1 with its signer, fingerprint and the files as signed, and the signature chain checked.

Corrections and restatements

Data can change after you sign: a gateway sends readings it held through an outage, it reports that records of a signed day were lost at the gateway (so a gap's cause changes), a back-dated grab sample re-works a day, or a sealed day is amended. WYLA checks the signed days every time the reports are listed. When one has changed, it shows **restatement needed** on the signed month, a yellow **Restatement needed** banner

on the Compliance and Reports pages, and a section in the next month's report. The banner names the day and the gateway, and says what changed, for example *new records arrived after signing*.

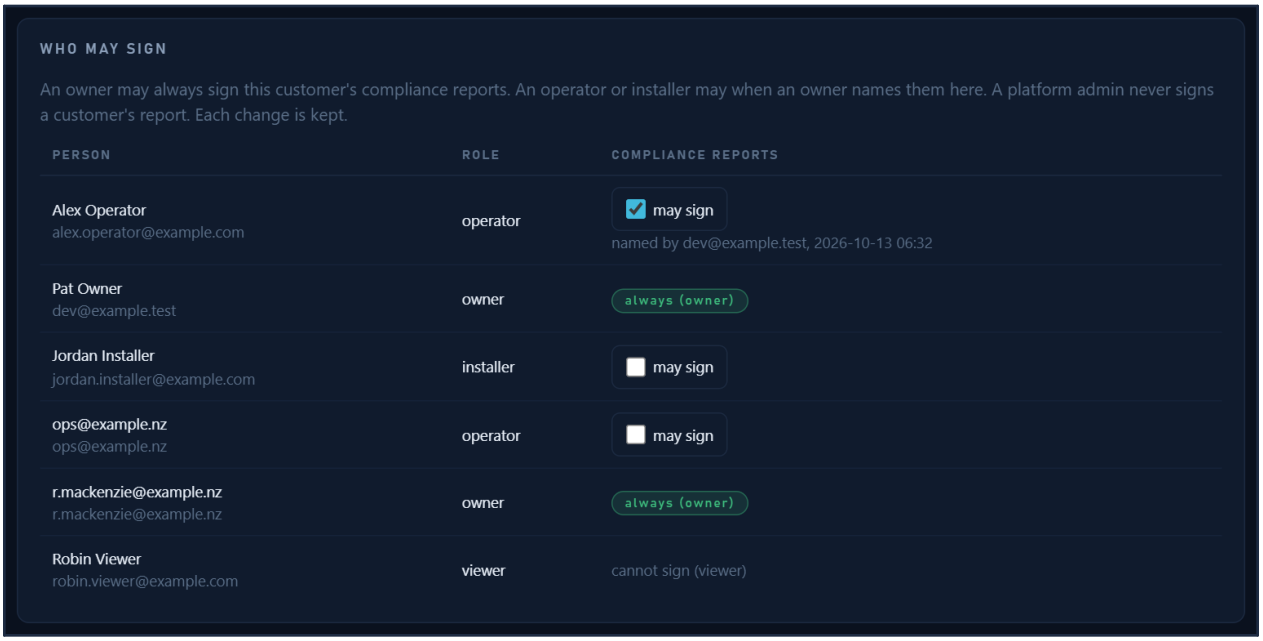
The signed report is never edited. Instead you sign a corrected version:

1. Pick the month. The sign-off is now headed **Sign a corrected version (version N)**.
2. Fill in **Why is it being corrected? (kept with the new version)**, for example *late data from gateway outage*. It is required.
3. Tick the statement and press **Confirm it is you and sign**, with your passkey as before.

- The old version stays, marked superseded; the new one shows your reason.
- A correction with exactly the same content as the version it would replace is refused: there is nothing to correct.
- Send the corrected version to your regulator if they have the earlier one.

Who may sign

Owners (and WYLA administrators) see the **Who may sign** panel, with the columns **Person**, **Role** and **Compliance reports**. An owner shows **always (owner)**. An operator or installer has a **may sign** tick box: tick it to name them, untick it to withdraw. The panel shows who named them and when. A viewer shows *cannot sign (viewer)*. Every change is kept. A WYLA administrator can manage the list but never signs a customer's report.



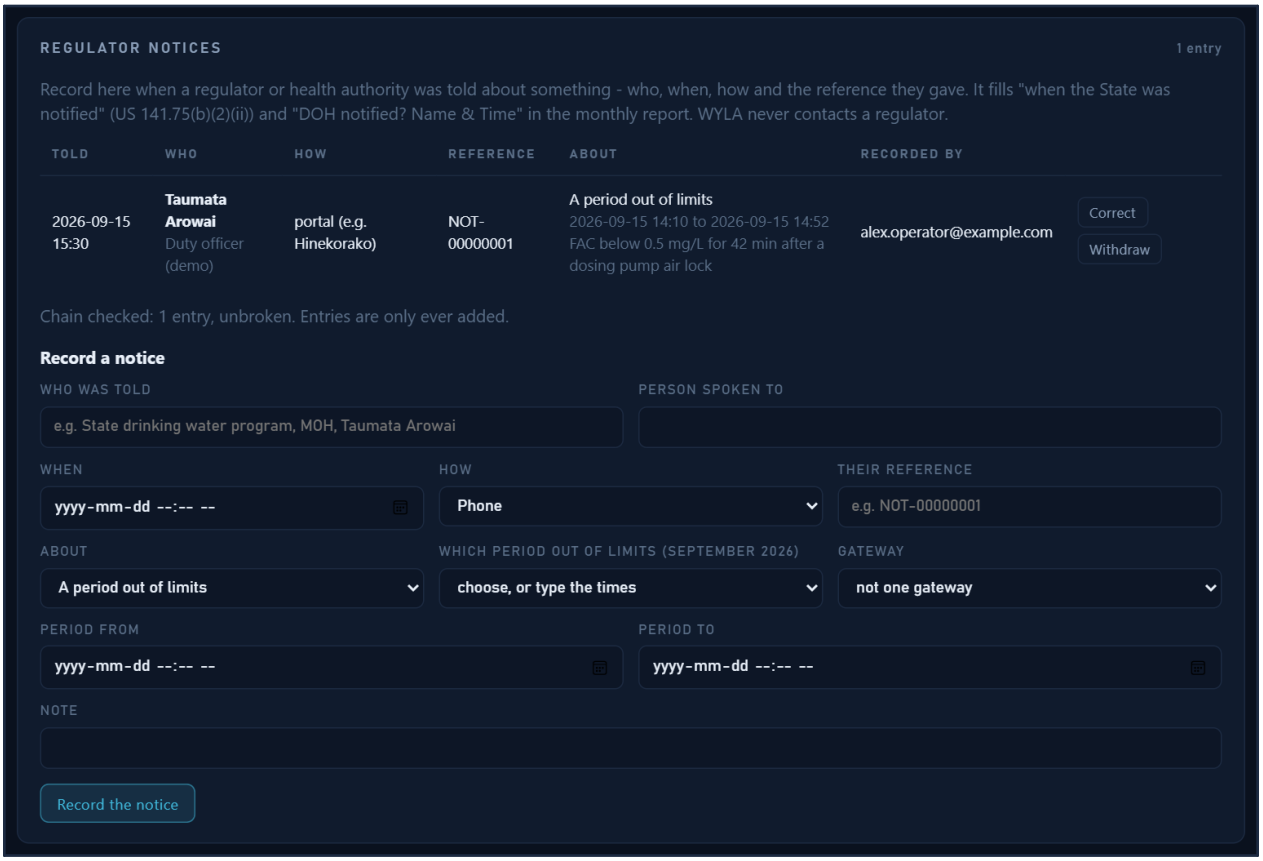
Who may sign: owners always may; an operator named by an owner; a viewer cannot.

Recording a notice to the regulator

When you tell a regulator or health authority about something, by phone, email, portal or in person, record it in the **Regulator notices** panel. The monthly report then shows, next to the period it concerns, when and how the regulator was told. US rules (40 CFR 141.75(b)(2)(ii)) and Washington's monthly form ask for exactly that. Operators, installers and owners can record notices. The log has the columns **Told**, **Who**, **How**, **Reference**, **About** and **Recorded by**.

1. Under **Record a notice**, fill in **Who was told** (for example the State drinking water program, the MOH or Taumata Arowai) and, if you like, **Person spoken to**.
2. Set **When** (this computer's time; it cannot be in the future) and **How**: Phone, Email, Portal (e.g. Hinekorako), In person, Form or Other. Add **Their reference** if they gave you one, such as *NOT-00000001*.
3. Choose what it was **About**: A period out of limits, A data gap, An alarm or Something else. For a period out of limits, **Which period out of limits** lists the month's periods; picking one fills in the gateway and the times. Otherwise choose the **Gateway** and type **Period from** and **Period to**.
4. Add a **Note** if needed and press **Record the notice**.

> **Corrections and withdrawals**
> Entries are only ever added. **Correct** opens the form with the entry's values and needs **Why is it corrected?**; **Withdraw** needs **Why is it withdrawn?**. The old entry stays, struck through. The panel ends with *Chain checked: N entries, unbroken.*



Regulator notices: one notice recorded through Hinekorako, and the Record a notice form.

Evidence export

When Taumata Arowai (or an auditor) asks for your records for a period: **Reports** page > **Evidence export**, choose the first and last day (last month by default; at most 400 days) and press **Download the evidence export (zip)** (the account owner only). Built on 8 November 2026 and not yet deployed.

- Inside, README.txt lists the folders - records, lab, logbook, documents, reports, notifications, audit - and manifest.json gives each file's SHA-256, so anyone can check nothing was changed.
- WYLA does not send it to anyone; you give it to the regulator. People named in the records are part of the records.
- Over 200 MB the page says *Pick a shorter period*: export it in two parts.

Not in the report yet

These are planned for later and are **not available yet**:

- **The NZ Hinekorako export.** WYLA cannot yet produce the file layout Taumata Arowai's Hinekorako system takes. For now, enter your figures in Hinekorako yourself, using the signed PDF and CSV.
- US State monthly operating report layouts (for example Texas, Washington and Pennsylvania forms).
- Annual summaries (Ontario, Alberta, British Columbia, New Zealand).

- Laboratory and distribution results, chemicals used, and volumes from a flow totaliser.

28 HINEKORAKO UPLOAD FILE

The Excel file you upload to Hinekorako, filled from your records and checked before you download it. It is Taumata Arowai's own template with your answers written in; nothing else in the workbook is changed. WYLA never uploads it: you check it, sign it in WYLA, download it and upload it to Hinekorako yourself, with your own login. Menu: **Records > Hinekorako upload file** (the Hinekorako upload file module, in Cloud Compliance Plus). Built on 8 November 2026 and not yet deployed. The first upload is a pilot with WYLA watching (see **The first upload**).

Before the first file: your copy of the template

Sign in to Hinekorako, open Reporting and download the Rules template (and, for a level 2 or 3 supply, the Annual Assurance template). In WYLA, open **Documents** and add each as **Hinekorako template (your copy)**, with the version printed in cell B2 (1.1A or 1.1B). WYLA checks at upload that the file is the template (its sheets, version, tables and labels) and refuses any other workbook. If the page says *this copy differs from the one WYLA tested*, the file still works - check it in Excel before you upload.

Which file for which period

The page lists the reports your level must make, the next deadline first: level 1 one file a year; level 2 a file each quarter (monitoring) and one a year (assurance - the Annual Assurance template); level 3 a file each month and one a year. The Schedule shows each deadline, and its **Do it** for a quarter or a year opens this page at that period. Press **Prepare** (the account owner only). A period not ended yet can be prepared, but the file says so: prepare it again after the period ends.

Needs your decision

At the top: what WYLA could not judge (days with incomplete data, a result the laboratory must explain, a total coliforms sample), what only you can answer (the assurance and G rows), and what is missing from your records (the Supply ID, a component, a sample's point, the blank template).

Who uploads it

Name, email and Date Submitted must be the person who will upload the file (the template's "person submitting this report"). The email starts as yours; type the name.

Rules Hinekorako asks about

Each rule and component with WYLA's proposal and what it found. Choose TRUE or FALSE and, for FALSE, how many periods were not complied (1 up to the number shown). **Does not apply - leave it out** needs a reason; the rule's lab samples leave the Samples sheet with it (a sample must have its rule in the rules table). It is listed under **Left out of the file**, with **Put it back**: the rule and its samples come back as WYLA proposed them, also after Prepare again. A row prefilled from Your rules says *check it*. Press **Save your answers**: each save is a new draft version.

Lab samples in this file

The Samples sheet: each sample with the laboratory's sample ID, its date at the site, the determinand as Taumata Arowai's list writes it and the list's unit. pH has no unit in that list, so a pH sample's unit is left empty, whatever the laboratory wrote (*pH units*) - there is nothing to correct on the Lab page. A total coliforms sample, or a result the laboratory must explain, has its own TRUE / FALSE. Field tests are not written to the Samples sheet (they have no sample ID).

The check before download

Red items are what Hinekorako would refuse or flag - fix each one (the item says where: sheet, row and rule). Amber items are what Taumata Arowai has not yet said, or what WYLA cannot check (that you choose the same supply in Hinekorako): read them and tick **I have read these**.

- A component of the wrong type for the rule (or a letter O typed for a zero).
- TRUE with non-compliant periods, or FALSE with none.
- A sample without a unit - except pH: Taumata Arowai's list gives pH no unit, so its unit is left empty and one amber item says so (the guidance also says a unit is required; Taumata Arowai has not yet confirmed which holds for pH).
- A sample ID WYLA made - put the laboratory's own.

Sign and download

Read the statement (*I have checked this file against our records. I will upload it to Hinekorako myself, with my own login. WYLA has not submitted it.*), tick it and press **Sign** with your passkey. Only the account owner signs, with their own login: WYLA staff and WYLA support may help prepare the file but cannot sign it (nor any report WYLA makes for the regulator). Then **Download**, upload the file to Hinekorako, and press **Record the upload** so the Schedule shows the deadline done. Each file has its own name with the supply, the period and its version (for example XYZ901_2026-10-01_2026-12-31_quarter_WYLA-...-v1.xlsx); a corrected file gets the next version - Hinekorako needs a different name for each report of the same period. When WYLA support has checked a report before its deadline, the page says *WYLA checked this report on <date>* (and what needs doing, if anything).

Changing it later

Prepare again or save answers: a new version, which must be signed again before download. Every version is kept. Signing a version adds its signed copy to the history as an entry of its own, so the library may store the signed version 5 as entry 6; the file name, cell B5 and the evidence export all say *v5*, the version you signed (the evidence export's README names the stored entry).

The first upload (the pilot)

1. Prepare the period on this page and work through Needs your decision.
2. Check the file on the page until no red item is left; read the amber ones and tick them.
3. Sign it in WYLA.
4. Download it and open it in Excel to look it over.
5. Upload it to Hinekorako with your own login, choosing the same supply.
6. Write down exactly what Hinekorako says.
7. Press Record the upload in WYLA.
8. A few days later, look at Hinekorako's summary table for the period.

If Hinekorako refuses the file

Write down the message word for word and send it to WYLA support. Do not change the file in Excel and upload it again: Hinekorako keeps the latest upload. Prepare a corrected version in WYLA instead.

29 REGULATOR NOTIFICATIONS

Some events have to be reported to the regulator quickly: immediately, within an hour, within 24 hours or by the end of the next business day. When something WYLA already records is one of these events, WYLA opens a **notification case** at the top of the Reports page. The case shows what happened, who to tell and how, a **draft** of what the notice should say, and a **deadline clock** for each notice the regulation asks for. WYLA reminds your own people as the deadlines approach. You make the notice, then record that you did.

> **WYLA never contacts a regulator**
> WYLA drafts the notice, starts the clocks, reminds your own people and records what you say you did. No message ever goes to an authority. Reminders go only to your site's call-out list or its red-alarm recipients. You must make every notice yourself, the way the regulation asks.

Turning notifications on

Notifications follow the **Jurisdiction** in the site's regulatory profile (previous chapter). Until it is set, the **Notifications** panel only asks you to set it. Once it is set, the profile shows a **Notifications** block with two kinds of box:

- **Who to tell** — a contact (name, phone, email) for each authority of that jurisdiction: **Medical Officer of Health** and **Spills Action Centre** (Ontario), **State drinking water program** (US), **Director / AEP contact** and **Health authority** (Alberta), **Drinking water officer** (British Columbia), **Taumata Arowai contact** (New Zealand), **Authority to notify** (Saskatchewan).
- **Values the regulation leaves to your site** — for Ontario, **The free chlorine analyser is in the distribution system (Sch.16-3 para 4)**, **The turbidity analyser is on a filter effluent line (Sch.16-3 para 6)** and **Combined chlorine reading (tag, Sch.16-3 para 5)** for a chloraminated system; for the US, **State-specified minimum residual, mg/L (Ground Water Rule)**.

> **No defaults, and nothing backdated**
> None of these values has a default. Until one is set, the notice that needs it is not watched for, and the panel says why. WYLA opens cases only for events after the profile first named the jurisdiction, never for older ones.

What WYLA watches for

The table at the foot of the Notifications panel, **What WYLA watches for at this site**, lists every notice for your jurisdiction with the columns **Notice** (with its clause), **Source** and **Here**. **Here** shows **watched**, **not watched** with the reason, or *opened by hand*. The source chip says how sure the trigger is:

SOURCE	MEANING
regulation	The regulation's own trigger and deadline
guidance	A threshold from official guidance, not the regulation itself
your judgement	The clause is clear, but whether WYLA's signal is that event is your call. WYLA opens the case so it is considered; close it with a reason if it is not notifiable
by hand	WYLA cannot detect it; you open the case and the same clocks run

The notices in brief

WHERE	WHAT OPENS A CASE	DEADLINES
New Zealand	A day not met by an NZ rule set (your judgement); the UV lamp out while water flowed (your judgement; see **NZ Schools on Their Own Supply**); an E. coli positive recorded on **Lab samples** (your judgement; see **Lab Samples**). By hand: an interruption of supply over 8 hours; water that is or may be unsafe	As soon as practicable, through Hinekorako; interruption: within 24 h of its start
United States	Chlorine entering distribution below 0.2 mg/L, or turbidity above 5 NTU (filtered surface water or GWUDI); ground water below the State minimum and not restored in 4 h. By hand: another failure to comply	End of the next business day, and whether restored within 4 h; turbidity: consult within 24 h; other: within 48 h
Pennsylvania	Any period out of limits of the UV, chlorine or C.t calculation (your judgement)	Within 1 hour
Ontario	Free chlorine below 0.05 mg/L in two readings 15 min apart (distribution); the combined-chlorine and filter-turbidity equivalents; UV off specification for 10 minutes in a row (guidance); chlorine or C.t below the Procedure	Immediately by phone or in person to the MOH and the Spills Action Centre; in writing within 24 h; resolution summary within 7 days
Alberta	Disinfection failure: a UV, chlorine or C.t period out of limits (your judgement)	Immediately by phone; written report within 7 days
British Columbia	As Alberta	Immediately; in writing within 24 h
Saskatchewan	As Alberta	Immediately

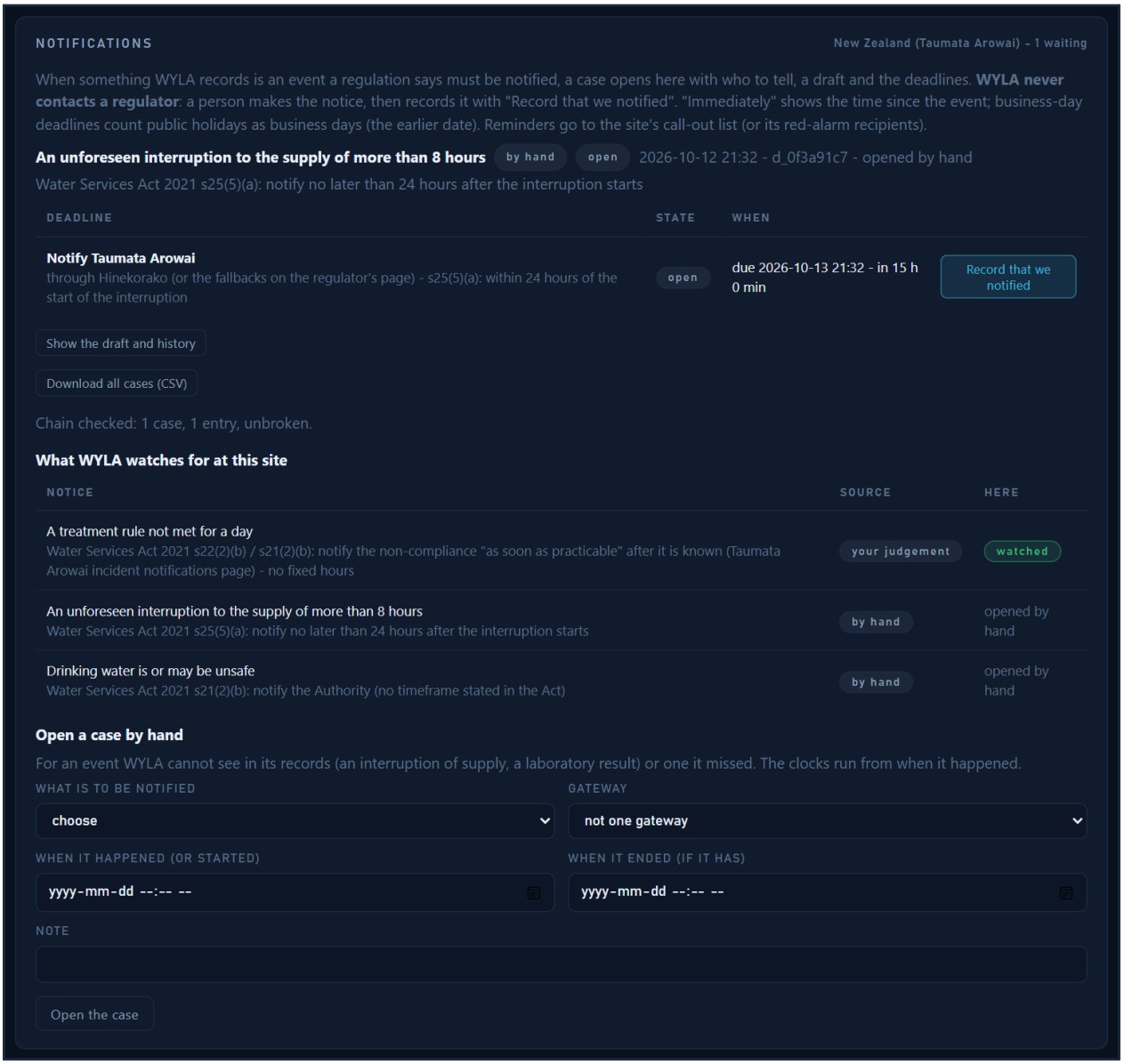
What never opens a case
A data gap never opens a case: a gap is not evidence the water was untreated, though the draft says how many minutes had no data. WYLA cannot detect laboratory results (except an E. coli positive typed into Lab samples at an NZ site), an interruption of supply, your own judgement that water may be unsafe, or an event whose data reached WYLA more than 3 days late. Open those cases by hand.

A notification case

Each open case is a box with its title, the source chip, a state chip, the event time and the gateway, and the clause. Its table of deadlines has the columns **Deadline** (with how and the clause), **State** and **When**, and a **Record that we notified** button. The **When** column counts down live, for example *due 2026-10-13 00:00 - in 5 h 10 min*, *OVERDUE by 2 h 0 min*, or for an immediate notice *immediately - 1 h 5 min since the event*.

STATE	MEANING
open	The deadline has not come yet
due soon	A quarter or less of the time is left
OVERDUE	The deadline passed with no notice recorded
not recorded yet	An immediate notice not recorded yet
met / late	A notice was recorded before / after the deadline
recorded	An immediate notice was recorded; it shows how long after the event
not started	A resolution deadline waits until you record the resolution
case closed	The case was closed

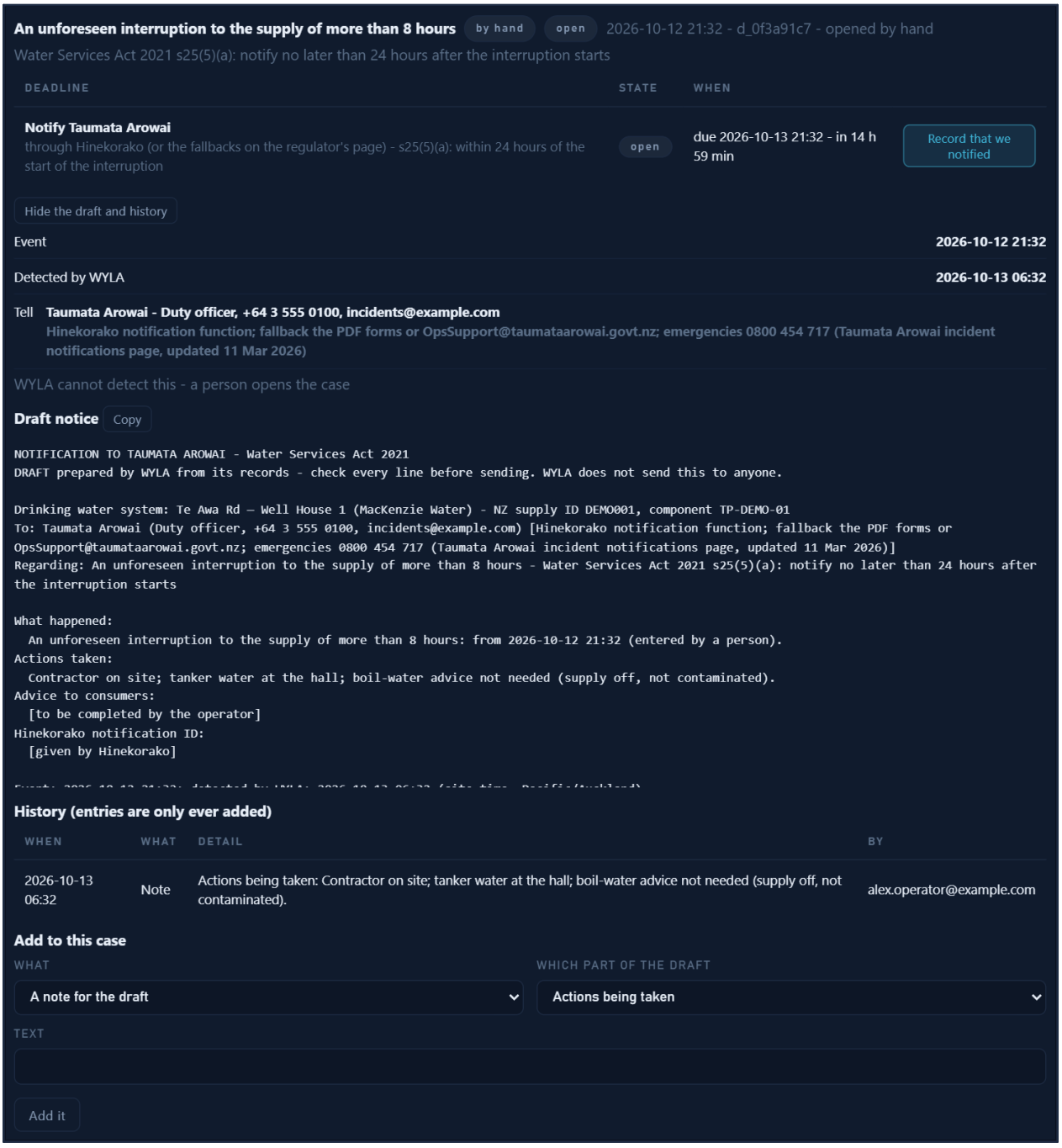
How the clocks count
Every clock starts at the event, when the regulation's condition was met, not when the data reached WYLA; the draft shows both. "Immediately" is shown as time since the event, never as time left. Business days are Monday to Friday in the site's time, with public holidays counted as business days, which gives the earlier date. "End of the next business day" is midnight, site time; the regulator's office may close sooner. A further event of the same kind on the same gateway within 24 hours joins the open case.



The Notifications panel: a case opened by hand with its deadline counting down, and what WYLA watches for at this site.

The draft notice

Press **Show the draft and history**. The case shows **Event**, **Detected by WYLA**, **Restored**, **Resolved** and **Closed** where they apply, and **Tell**: each authority with the contact from your profile, or *no contact in the regulatory profile*. Under **Draft notice** is the text, laid out the way the regulation asks the notice to read, with the evidence filled in and your blanks marked. Press **Copy** to copy it, then complete and send it yourself. The **History (entries are only ever added)** table lists everything since, with the columns **When**, **What**, **Detail** and **By**.



A case opened: who to tell, the draft notice with its blanks marked, the history and Add to this case.

Making and recording the notice

1. Tell the authority yourself, in the way the deadline names (for example by phone to the MOH, or through Hinekorako).
2. Press **Record that we notified** next to that deadline. The **Record that we notified** form opens in the Regulator notices panel, already filled in with the authority, the way of telling, the case and the deadline. **Not now** closes it.

3 Check who you told, when and how, and add the reference they gave you.

4 Press **Record the notice**. The deadline now shows **met** or **late**, or for an immediate notice **recorded** with how long after the event it was made.

- If you used a different way from the one the clause names (email instead of phone, for example), the notice still counts and the clock says so.
- To fix a mistake, correct or withdraw the notice in the Regulator notices log.

Adding to a case

Under **Add to this case**, choose **What** and press **Add it**:

- **A note for the draft** — choose **Which part of the draft**: Actions being taken, Corrective action (e.g. Ontario Schedule 17 / 18), Cause, Public notice / advice to consumers, or Other note; then type the **Text**.
- **The condition ended (restored)** — with **When**.
- **Resolved** — with **When** and **The action taken and its results**. This starts a resolution deadline, such as Ontario's 7 days.
- **Close the case** — a **Reason (kept with the case)** is required, for example *not notifiable*. **Re-open the case** also needs a reason.

Opening a case by hand

For an event WYLA cannot see, such as a laboratory result or an interruption of supply, or one it missed, use **Open a case by hand** at the foot of the panel. Choose **What is to be notified** and the **Gateway** (or *not one gateway*), set **When it happened (or started)** and, if it has ended, **When it ended**, add a **Note** and press **Open the case**. The clocks run from when it happened.

Reminders and the banner

WYLA reminds the people on the site's **call-out escalation list** (the Call-outs page), on their own channels: step 1 when a deadline starts, step 2 when a quarter of its time is left (at least 15 minutes and at most 24 hours before), and step 3 when it passes, marked OVERDUE. For an immediate notice, step 1 is reminded at the event and each further step after its own wait. A site with no escalation list reminds the people who get its red alarms. Reminders stop once a notice is recorded or the case is closed, and each one is listed in the case's history as *Reminder sent*.

While a notice is overdue, to be made now or due soon, every page of the console shows a banner, for example *Regulator notice: 1 overdue*. It reminds you that WYLA does not notify the regulator, and links to the Reports page.

Closed cases, the CSV and the monthly report

Show N closed cases lists closed cases. **Download all cases (CSV)** saves one row per case and deadline. The cases and their entries are only ever added to and are chained; the panel shows *Chain checked: N cases, N entries, unbroken*.

Section 9 of the monthly report lists every case whose event or deadline falls in the month, with each deadline, when and how the notice was recorded, and the result: **met**, **LATE**, **not recorded**, **made after N min** (an immediate notice) or **case closed**.

30 SCHEDULED EMAIL REPORTS

Send reports by email, on a schedule, to people outside WYLA - your contractor, the council, the Ministry of Education / NZ School Property Agency, a school board - with your own logo and details. You choose the sites, the people, when it goes and what goes in. A report that must be signed (the Monthly Compliance Report) is sent **automatically once it is signed, exactly as signed, and never unsigned**. Everything else is an information copy, and says so on every page and in every email.

Who and where

Open **Scheduled emails** in the menu (after **Reports**). Only your account **owner** (or WYLA) sees it. It has three tabs: **Your schedules**, **Sent log** and **Report branding**. **Setup** also has a **Report branding** link for owners.

> **Switching it on**
> In the console from 3 November 2026. Scheduled email reports is in the Cloud Compliance and Cloud Compliance Plus plans (see **Features and Plans**); an organisation that had WYLA before then gets it when WYLA adds it to the plan. It does not start on at a site with a preset: your owner switches it on in **Setup** > *the site* > **Features**. Until then the page says it is not switched on.

Making a schedule

Press **New schedule** and fill in:

1. **Name** - for example "Monthly report to the contractor" (up to 120 characters).
2. **Sites** - **All my sites** (a site added later is included), or tick the sites you want.
3. **Recipients** - press **Add recipient** for each person: their **Email**, and if you wish their **Name** and **Organisation**. Up to 50 people. People outside your organisation will see these sites' data, and the page says so.
4. **When** - **Weekly, on a day**; **Monthly, on a day** (the 1st to the 28th); **Monthly, when the month closes** (the 11th, after the 10 days WYLA allows for late data from a gateway that was offline); or **When the regulator report is signed**.
5. **At (your time)** - the hour it goes, in your organisation's time zone (7:00 to start with).
6. **Delivery** - **PDF attached** (a report over 10 MB goes as a link instead), or **Link** (no sign-in needed, works for 30 days).
7. **What goes in** - tick the sections (below).
8. **Cover message (optional)** - up to 1000 characters, at the top of the email and the first page.

9 Press **Save schedule**. New outside recipients are told straight away (see **Recipients are told first**).

> **Limits**
> 50 recipients a schedule, 20 schedules and 500 emails a day for your organisation. An email over the daily limit is kept and tried again later.

What goes in

A section shows **switched off for these sites** and cannot be ticked when the part of WYLA it comes from is off at every site you chose. At a schedule with several sites, a section is left out only for the site where it is off.

SECTION	WHAT IT SHOWS	NEEDS
Summary	Each site's state, open alarms, data gaps	-
Daily pass / fail	Each day's result against the site's rule set, and what was not met	Compliance calculations
Alarms	Each alarm raised, and how long it lasted	-
Trends	Each recorded reading: lowest, highest and mean over the period	-
Data gaps	Start, end, length and cause of each gap (a gap whose records the gateway dropped during a long outage is marked lost at the gateway)	-
Lab results	E. coli and total coliforms, positives, the next sample due	Lab sample register
Inspections	Done and due (the logbook)	Inspection logbook
Calibration	Checks done	Calibration log
Consumables and lamp hours	Life left of each consumable, the lamp hours	-
The signed Monthly Compliance Report	Monthly schedules only: attached exactly as signed	Regulator reports
Programme report (every site)	The monthly programme report for the schedule's sites, as one more PDF (weekly schedules get a weekly one)	Many-sites overview

What a report never carries
Only the sites' data. No list of your users, no alarm recipients, and no names of who acknowledged an alarm or entered a result. The phone and email in the header are the ones you type in **Report branding**. One exception, from 5 November 2026: under each site's heading a report prints the site address and the people and organisations your owner typed in for that site on the **Reports** page and left ticked **Print on reports** - role, name, organisation, phone and email, never the note (chapter **Regulator Reports**, **People and organisations of a site**). Nothing is taken from your user list or your alarm recipients. Only add people who expect to be named.

Which days a report covers

- **Weekly**: the 7 days before the day it is sent.
- **Monthly** (on a day, or when the month closes): the calendar month before.
- A schedule made part-way through starts with the next report, not one already due. A report more than 31 days late (for example after a long outage) is not sent at all.

Signed reports: sent once signed, exactly as signed

With **When the regulator report is signed**, each new signed version of the Monthly Compliance Report at the schedule's sites - corrections included - is emailed within minutes of the signature. WYLA sends the stored PDF exactly as signed: before each send it checks the file's fingerprint (SHA-256) against the one kept at signing. A monthly schedule that ticks **The signed Monthly Compliance Report** attaches the month's report only once it is signed; until then the report says it is not signed yet.

Never unsigned, never changed
An unsigned report is never sent. If a signed file no longer matches its fingerprint, nothing is sent: the Sent log shows **Refused**, the schedule turns yellow and the owner gets an email. Ask WYLA straight away. Someone added after a signature gets the next signed report, not that one. The email is a copy for the people you chose; your report to Taumata Arowai or your State still goes the usual way (**Regulator Reports**).

Recipients are told first, and can stop

When you save a schedule, each new outside recipient gets one email first: **You have been added to reports from** *your organisation* **by** *you*, what the reports are about, and how to stop them. No report goes to an address before that. Someone who is already a user of your organisation is not told. Each recipient shows a state:

STATE	MEANING
To be told	Saved; the first email has not gone yet (it is tried again on the next pass)
Receiving	Told; gets every report

STATE	MEANING
Stopped	The person used the stop link, with when

> **Stop sending me these**
> Every email ends with **Stop sending me these**. It needs no sign-in: the link opens a page with a button, and the button stops that address for that schedule (mail programs' own unsubscribe button works too). A stopped address stays stopped. To send to it again, take it off (**Remove**), save, add it again and save - and it is told again. Only do that if the person asked.

Send a test to me, Preview PDF, Stop and archive

- **Send a test to me** - the report as it would go now, to you only (marked TEST). Once a minute per schedule; it counts in the 500 a day.
- **Preview PDF** - the same report, downloaded to your computer; nothing is sent.
- **Stop and archive** - nothing more is sent from the schedule. Its Sent log is kept.

> **Paused**
> A schedule shows **Paused** (with the reason) when Scheduled email reports is switched off at every site it covers. It is kept, and starts again when the module is switched back on.

The Sent log

Sent log lists every email from every schedule: **Sent** (when), **Schedule**, **What** (Report, Signed report, You have been added, Test to me, Not-sent notice), **Period**, **To**, **Result** and the **Attachment SHA-256**. Nothing in it can be changed or removed, and it is kept 10 years. Each email also goes in the audit log.

RESULT	MEANING
Sent	The email service accepted it. It does not prove somebody read it
Retrying (1 of 3)	It failed and is tried again, 3 times, 20 minutes apart
Failed - owner told	The last try failed: whoever made or last changed the schedule gets an email, and the schedule shows yellow
Not sent	Held back, for example over the 500-a-day limit; tried again later
Refused	A signed report that no longer matched its fingerprint: nothing was sent

Report branding

On the **Report branding** tab (or **Setup > Report branding**):

1. **Logo** - choose a PNG or JPEG, up to 500 KB and 2000 x 2000 px. WYLA redraws it when it is uploaded and keeps only the picture (hidden details such as a photo's location are dropped). SVG and other kinds of file are refused. **Remove the logo** takes it off.
2. Details - **Supplier or school name**, **Address**, **Supply ID (Hinekorako, PWSID or DWS number)**, **Contact person**, **Phone**, **Email**.
3. To brand one site differently, pick it in the list (marked **override**): a site fills in only what it sets, the rest comes from your organisation's details.
4. Check the **First page preview**, or press **Preview PDF**, then **Save branding**.

> **Where the branding shows**
> Your logo top left and your details top right of every page of a scheduled report; the email shows your details as text. The signed Monthly Compliance Report keeps WYLA's layout, exactly as signed.

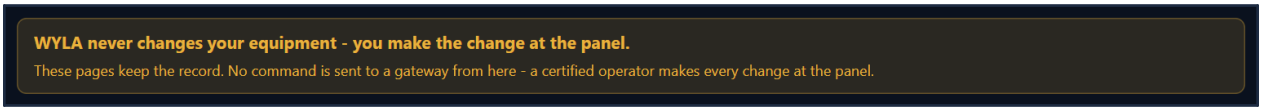
If nothing is being sent

- The page says the server has no public address set: no stop link can be made, so WYLA sends nothing until WYLA sets it. Tell WYLA.
- The schedule shows **Paused**: switch Scheduled email reports on at its sites.
- The schedule shows yellow: open the **Sent log** for the reason, check the address, and save the schedule again.
- A recipient shows **Stopped**: they used the stop link.

31 OPERATOR CERTIFICATES AND CONTROL CHANGES

WYLA is a monitor. It does not start, stop or adjust your equipment. But the rules expect a record of every adjustment to the treatment process: who made it, why, and that they were certified to make it. Two console pages keep that record. **Operators** holds your operators' certificates. **Changes** holds, for each site, who has **control permission** and every **assisted change**: planned in WYLA, made by a certified operator **at the panel**, confirmed in WYLA and, where the gateway reads the setting, checked in the readings.

WYLA never changes your equipment - you make the change at the panel
The Changes page opens with this banner, and the Operators page repeats the line. Nothing on these pages sends anything to a gateway or to your equipment.



The banner at the top of the Changes page.

Who can do what

YOUR ROLE	OPERATORS PAGE	CHANGES PAGE
Viewer	See the certificates	See permissions and changes; download the log
Operator or installer	Record, correct and withdraw your own certificate	With control permission at the site: propose and cancel changes, and confirm them where the operator-in-charge rule allows (see Who confirms a change)
Owner	Record, correct, verify and withdraw anyone's certificate; send the privacy notice	Set the plant class; give and withdraw control permission; designate and withdraw operators in charge; propose and cancel changes
WYLA administrator	Record, correct and verify on your behalf	Read only: can never hold or give control permission. Can suspend control (see WYLA control suspension)

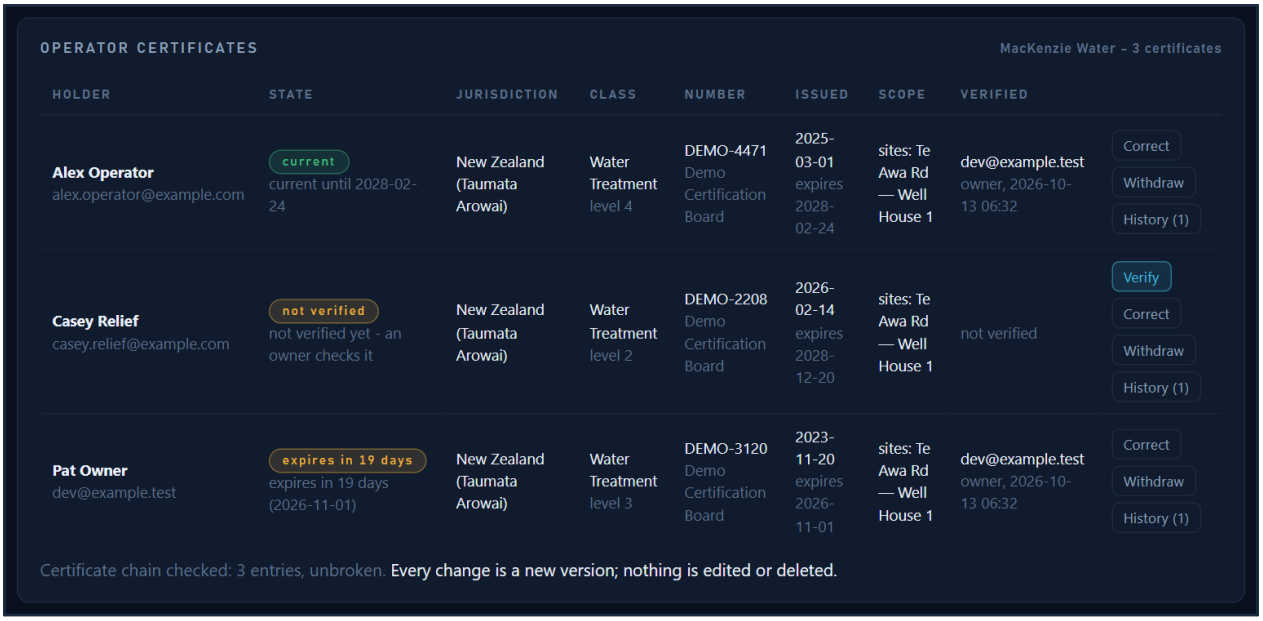
WYLA staff can never control your plant
A WYLA platform administrator, WYLA's own account, a WYLA staff email address and a support view of your account (a customer view) can never be given control permission, give it, or propose or confirm a change. This is enforced by the software, not just by policy. WYLA support can still read these pages to help you. The one thing WYLA can do is take control away: see WYLA control suspension.

Operator certificates

Click **Operators** in the menu. The first panel explains the rule: a person may be given control permission at a site only while they hold a **current, verified** operator certificate for the site's jurisdiction. The certificates are the customer's own, so the page covers every site.

The **Operator certificates** table has the columns **Holder** (with their email, or *alarm recipient* or *not a WYLA user*), **State**, **Jurisdiction**, **Class** (and level), **Number** (and issuing body), **Issued** (and expiry), **Scope**, **Verified** (by whom and when) and the buttons **Verify**, **Correct**, **Withdraw** and **History (N)**. Under it: *Certificate chain checked: N entries, unbroken. Every change is a new version; nothing is edited or deleted.*

STATE	MEANING	COUNTS FOR PERMISSION?
current	Verified and in date	Yes
expires in N days	Verified, expiring within 30 days	Yes
not verified	Recorded, but nobody has checked it yet	No
expired	Past its expiry date	No
withdrawn	Withdrawn, with a reason	No

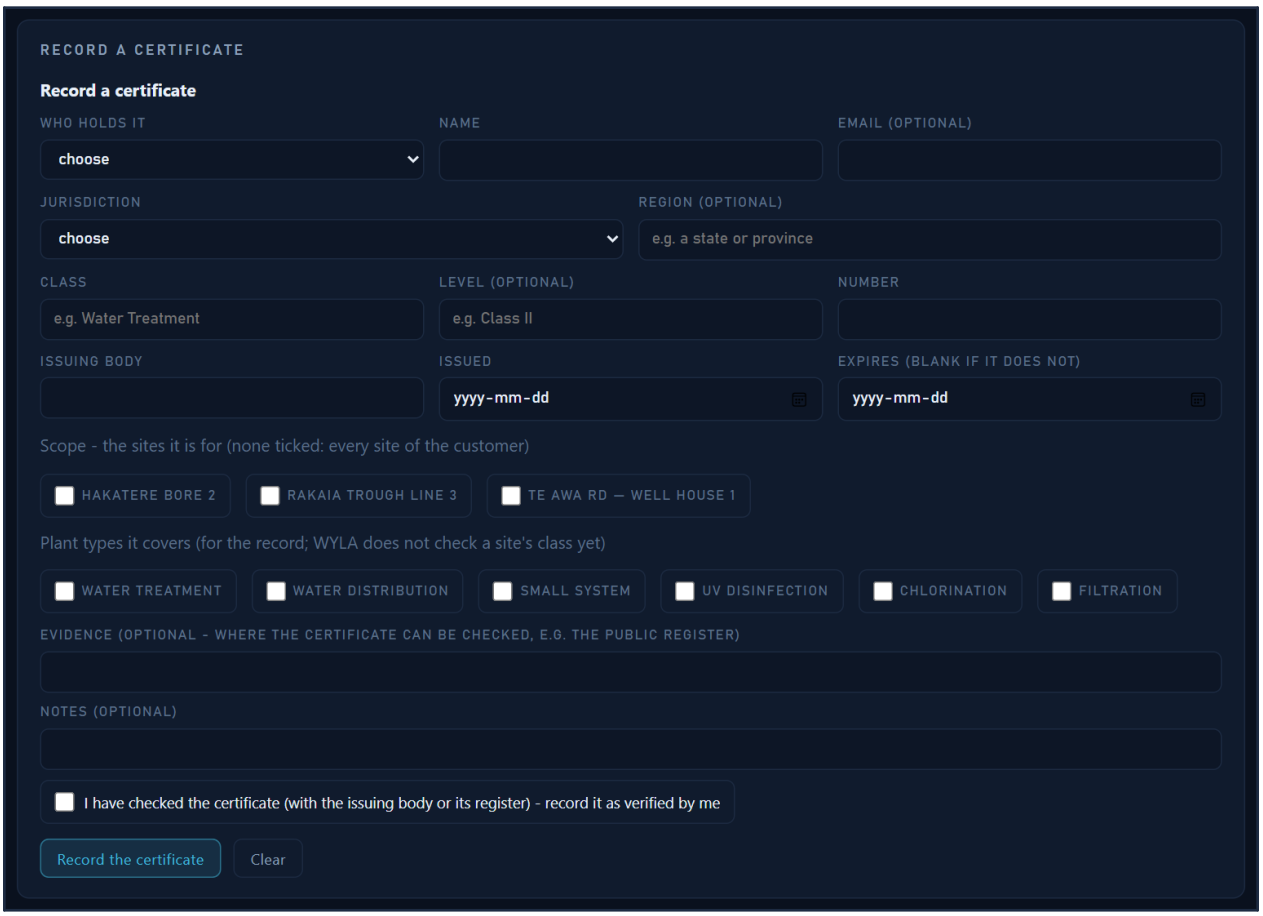


Operator certificates: one current and verified, one not verified yet (with Verify), one verified and expiring in 19 days.

Recording a certificate

An owner records anyone's certificate. An operator or installer records their own: their email is filled in and fixed, and the certificate stays *not verified* until an owner checks it.

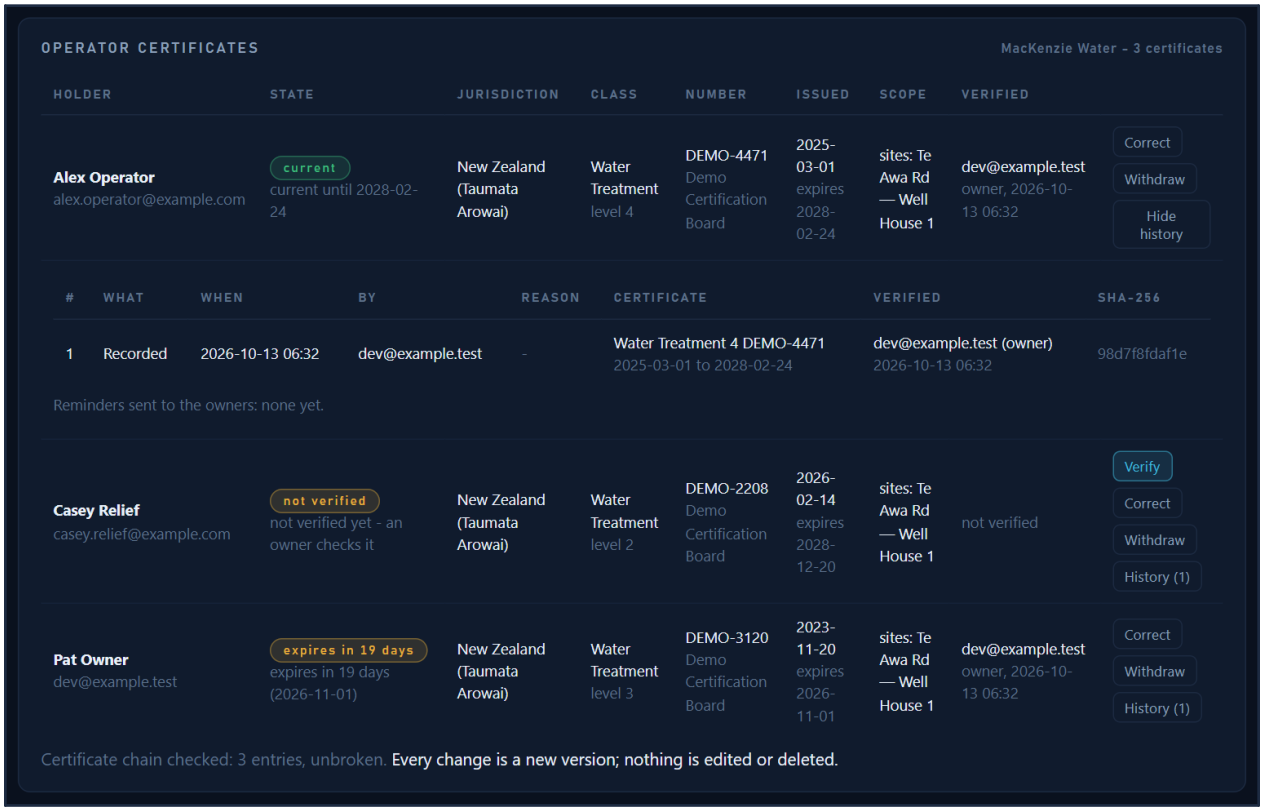
1. In **Record a certificate**, an owner chooses **Who holds it**: a WYLA user of the customer (this fills in the **Name** and **Email**), or **Someone else (not a WYLA user)**, whose email is optional. An operator just checks the **Name**.
2. Choose the **Jurisdiction** that issued it (the same list as the regulatory profile) and, if useful, a **Region (optional)** such as a state or province.
3. Enter the **Class** (e.g. Water Treatment), **Level (optional)** (e.g. Class II), **Number** and **Issuing body**. All but the optional ones are required.
4. Set **Issued** and **Expires (blank if it does not)**. The issue date cannot be in the future, and the certificate cannot expire before it was issued.
5. Under **Scope**, tick the sites it is for; with none ticked it covers every site of the customer. The **Plant types it covers** (Water treatment, Water distribution, Small system, UV disinfection, Chlorination, Filtration) are kept for the record; WYLA does not check them against a site yet.
6. Optionally add **Evidence** (where it can be checked, e.g. the public register) and **Notes**.
7. An owner who has checked the certificate with the issuing body or its register can tick **I have checked the certificate … - record it as verified by me**.
8. Press **Record the certificate**. **Clear** empties the form.



Record a certificate, as an owner sees it.

Verifying, correcting and withdrawing

- **Verify** (owner or WYLA administrator) — records that you checked the certificate with the issuing body or its register, with your name, role and the time. Only a verified certificate can support control permission.
- **Correct** — opens **Correct a certificate (the old version is kept)** with its values. Change what was wrong, fill in **Why is it corrected? (kept with the new version)**, which is required, and press **Save the correction**. A correction **drops the verification**: the certificate is *not verified* again until an owner verifies it (an owner correcting it can tick the checked box at the same time).
- **Withdraw** — for a certificate that was not renewed, was surrendered or was recorded in error. **Why?** is required; press **Withdraw it**. Any control permission that relies on it stops at once.
- **History (N)** — every version, oldest first: **#**, **What** (Recorded, Corrected, Verified, Withdrawn), **When**, **By**, **Reason**, **Certificate**, **Verified** and **SHA-256**, then the reminders sent to the owners.



A certificate's history: each version with who entered and verified it, and its fingerprint.

Expiry reminders

WYLA emails the customer's **owners** 30 days before a certificate expires, and again once it has expired. Each reminder is sent once per certificate and expiry date, and is listed in the certificate's history. Reminders never go to a regulator.

A certificate is valid up to and including its expiry date. From the next day it shows **expired**, and any control permission that relied on it is **suspended** that day, without anyone having to act. Record the

renewed certificate (or correct the expiry date) and have an owner verify it; the permission then works again.

Certificate holders who do not use the console

When you record a certificate for someone who is not a console user of your customer (**Someone else (not a WYLA user)**, with an email address), WYLA sends that person **one short privacy-notice email**: who holds their details (you, using WYLA as your monitoring service), what is held and why, and a link to the privacy notice. Their row then shows *privacy notice sent* and the time.

For holders recorded before the notice existed, an owner sees a **Send privacy notice** button on the row. It sends the same email, once per person and address; nothing is sent to earlier holders by itself. See **Privacy notice for people who never sign in** in the Alarm Call-out chapter.

The Changes page and its tabs

Click **Changes** in the menu; it shows the site chosen in the menu. Under the banner are three tabs:

- **Permission and changes** — the **Plant class**, **Control permission**, **Operators in charge** and **Assisted changes** panels, described in this chapter.
- **Shift log** — the record of each shift: its changes, its end-of-shift equipment status, notes and sign-offs. See Shift Log and Change Record.
- **Change record** — owners only: every change WYLA knows of to the site's monitoring system, for your engineer. See Shift Log and Change Record.

Plant class

The rules in Ontario, the United States, Alberta and British Columbia say an operator's certificate must be of the plant's class or higher. The **Plant class** panel holds the site's class. Only an **owner** of the site's customer can set it, never WYLA staff, because it decides who may control. Everyone else sees it read only. Its heading shows the class, or *not set*.

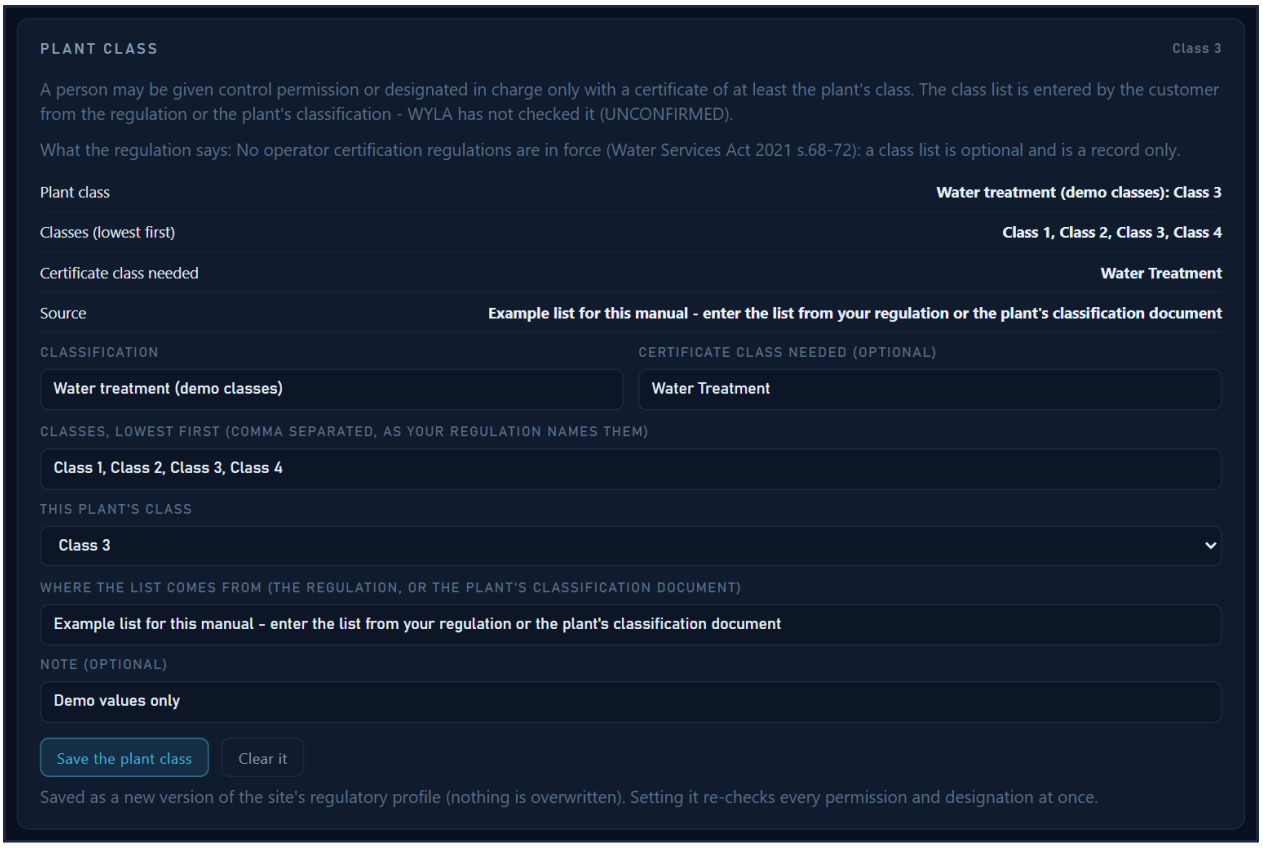
WYLA has no class lists built in. Every view says so: *The class list is entered by the customer from the regulation or the plant's classification - WYLA has not checked it (UNCONFIRMED).* Under it, **What the regulation says** gives what WYLA knows for the site's jurisdiction. For Ontario, for example, the overall responsible operator holds a certificate of the subsystem's class or higher. For New Zealand, no operator certification regulations are in force, so a class list is optional and a record only.

1. Set the site's jurisdiction first (Reports > Regulatory profile). Without it the class cannot be saved.
2. Enter the **Classification** (the kind of plant and system of classes) and, if your regulation names one, the **Certificate class needed (optional)**, e.g. Water Treatment.
3. Type the **Classes, lowest first (comma separated, as your regulation names them)**, e.g. Class I, Class II, Class III, Class IV.

4 Choose **This plant's class** from the list.

5 Fill in **Where the list comes from**: the regulation, or the plant's classification document. It is required. Add a **Note (optional)** if useful.

6 Press **Save the plant class**. **Clear it** removes the class.



The Plant class panel as an owner sees it: the class in force, the UNCONFIRMED line, what the regulation says, and the form. The class list in this test site is an example only.

- **How a certificate is matched** — where a certificate class is named, the certificate's class must say the same. Its level (or, without one, its class) must be on the list at or above the plant's class. Labels match by what they say: *Class III*, *class 3* and *III* are the same. Nothing else is guessed.
- **Setting it re-checks everyone at once** — the class is saved as a new version of the site's regulatory profile (nothing is overwritten). Every control permission and every designation at the site is checked again straight away. Any whose certificate falls short is **suspended**, with the reason, just as an expired certificate suspends it.
- **With no class set** — permissions and designations still work, and the page says *plant class not set - certificate class not checked*. A certificate is still checked for the site's jurisdiction, scope, expiry and verification.
- A class saved for another jurisdiction than the profile's now counts as not set. Saving the regulatory profile on the Reports page keeps the plant class.

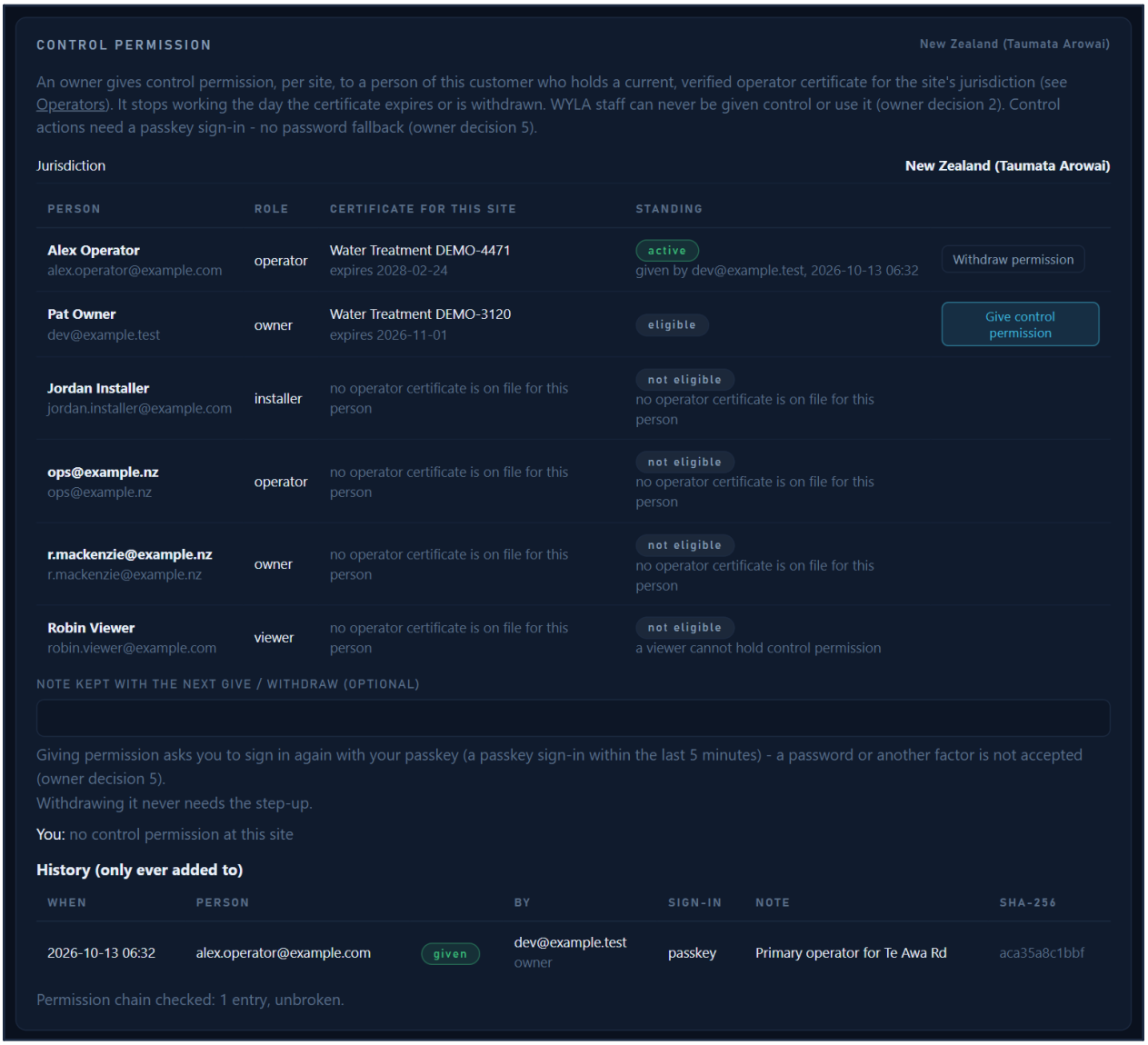
Control permission

The **Control permission** panel shows the site's **Jurisdiction**, taken from its regulatory profile. If there is none, a yellow line says nobody can be given permission until an owner sets it under Reports > Regulatory profile.

The table has the columns **Person**, **Role**, **Certificate for this site** and **Standing**:

STANDING	MEANING
active	Holds control permission, and the certificate behind it is current
suspended	Was given permission, but it does not work now; the reason is shown (for example the certificate expired, or *suspended by WYLA*)
eligible	Could be given permission
not eligible	Cannot be given permission; the reason is shown (for example no certificate for this site's jurisdiction)

The rules for control permission
Permission is per site, and **only an owner** gives it. It goes only to a person of your own customer with the operator, installer or owner role who holds a **current, verified** certificate for the site's jurisdiction whose scope includes the site and, once the plant class is set, of at least the plant's class. A viewer cannot hold it. It is **suspended** automatically when the certificate expires or is withdrawn, or the person stops being a user. WYLA staff can never hold or give it.



Control permission at a test site: one person active, one eligible, and the others not eligible with the reason.

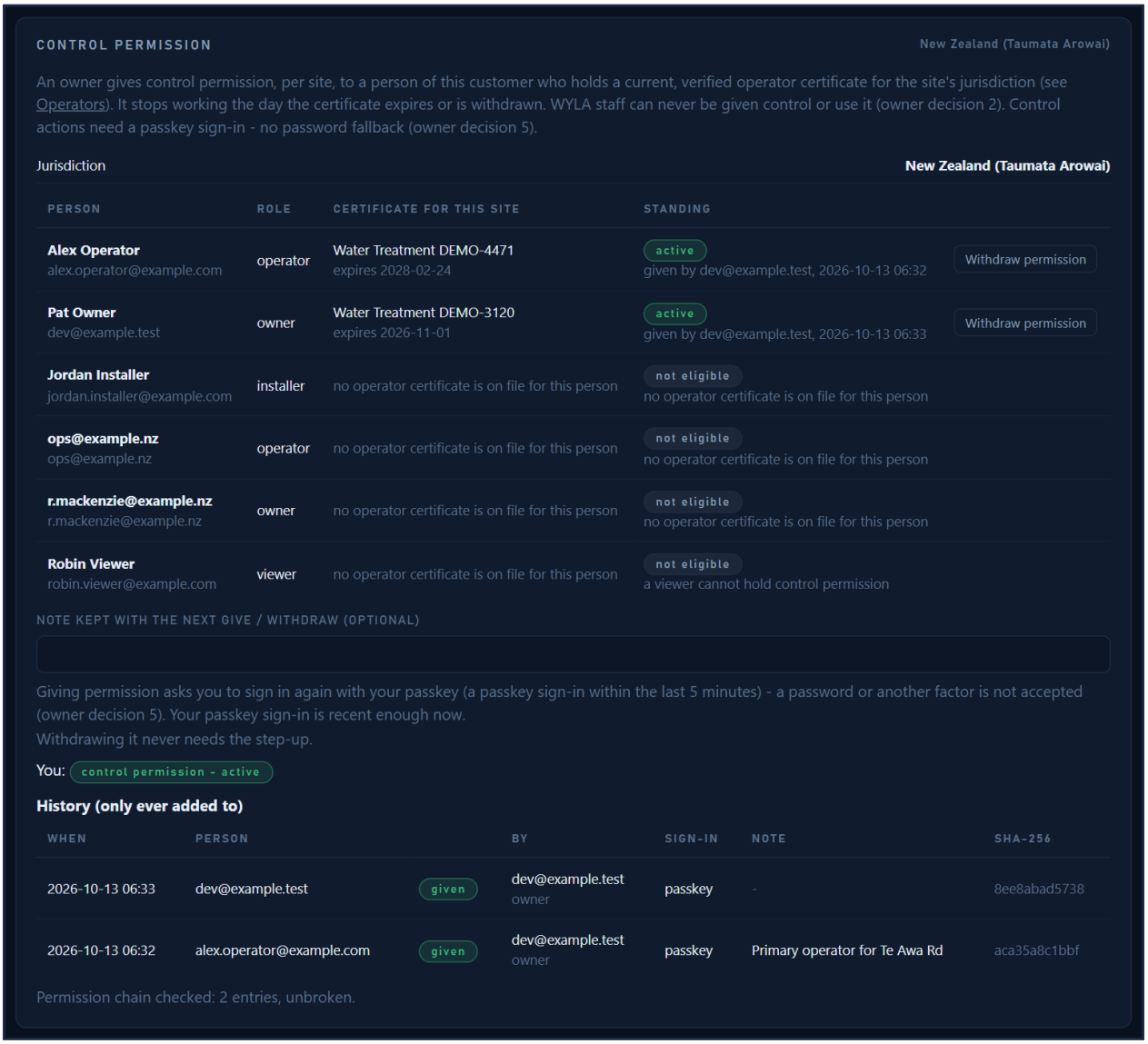
Giving and withdrawing permission

1. Optionally type a **Note kept with the next give / withdraw**.
2. Press **Give control permission** on the person's row (it appears only for an eligible person).
3. Sign in again with your passkey when the window asks. The permission is given and the person's standing shows **active**.

- **Withdraw permission** takes it away at once and **never** needs the passkey step: taking control away is never harder than giving it.
- Each person sees their own standing on the line headed **You**, for example *control permission - active*.

- The **History (only ever added to)** table lists every give and withdraw with **When**, **Person**, given or withdrawn, **By**, **Sign-in** (the sign-in method), **Note** and **SHA-256**, and ends with *Permission chain checked*.

> **A fresh passkey sign-in for every control action**
> Giving permission, proposing a change and confirming a change each need a passkey sign-in within the last 5 minutes. A password, or any other second factor, is not accepted for control. Withdrawing permission and cancelling a proposal do not need it. See Signing in to the Cloud Console.



After giving permission: both people active, and the history showing each give with its passkey sign-in.

Operators in charge

The **Operators in charge** panel records who is responsible at the site, for the rules that ask for a named person. Its heading counts the active designations. There are two roles:

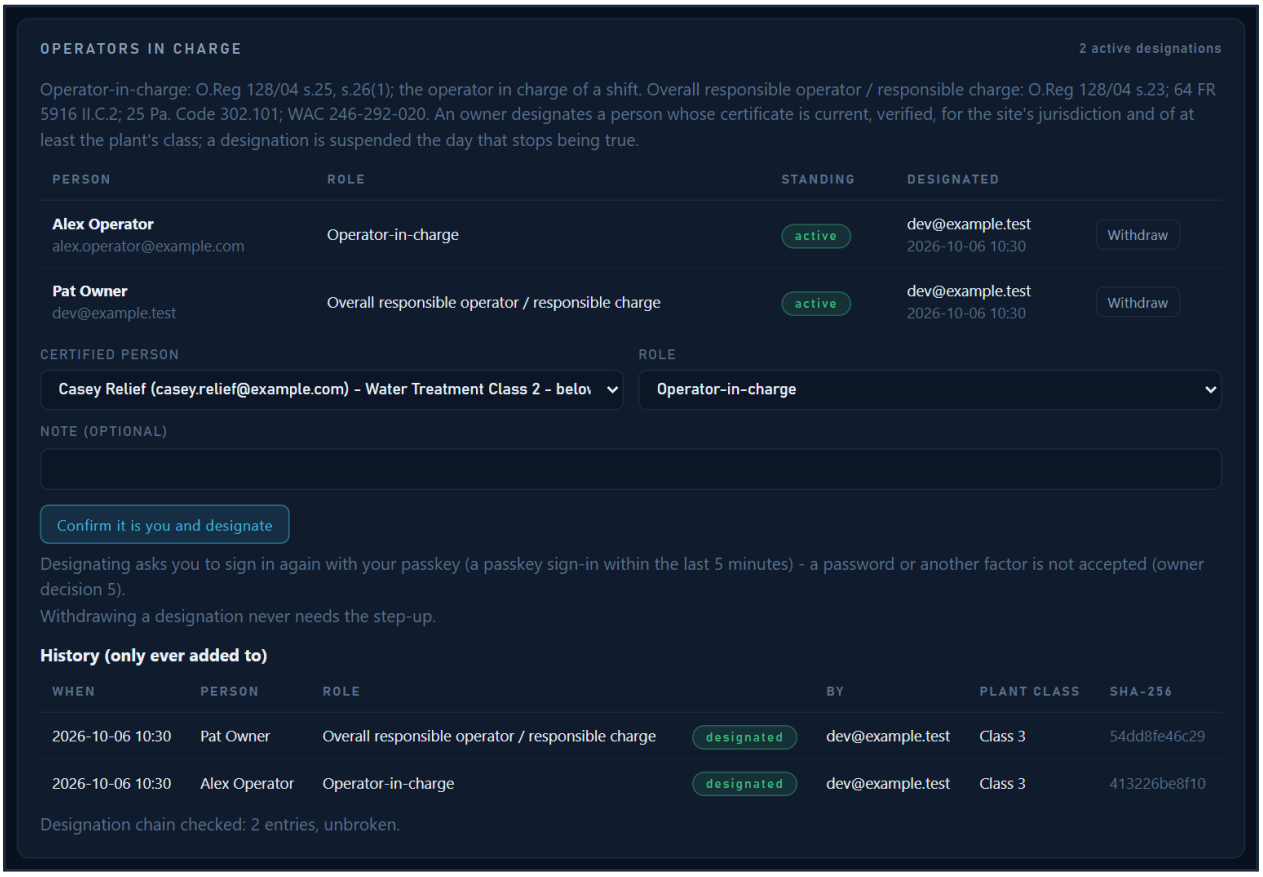
- The table shows each designated **Person**, their **Role**, their **Standing** (**active**, or **suspended** with the reason) and **Designated** (by whom and when). One person may hold both roles.
- Only an **owner** of the site's customer designates, and only a person whose certificate is current, verified, for the site's jurisdiction, in scope and of at least the plant's class. A designation is suspended the day that stops being true.
- **Operators-in-training are refused** as operator-in-charge at an Ontario site: a certificate whose class or level says operator-in-training (or OIT) cannot be designated (O.Reg 128/04 s.25).
- When a change is confirmed as done at the panel, WYLA records the designations the person held at that time and the rule that applied. Where the rule applies (always in Ontario; elsewhere once the owner has designated anyone), **only an active operator in charge may confirm**: see Who confirms a change.

ROLE	WHO IT IS	RULES IT RECORDS
Operator-in-charge	The operator in charge of a shift	O.Reg 128/04 s.25, s.26(1)
Overall responsible operator / responsible charge	The person in overall charge of the plant	O.Reg 128/04 s.23; 64 FR 5916 II.C.2; 25 Pa. Code 302.101; WAC 246-292-020

Designating and withdrawing

1. Under the table, choose the **Certified person**. The list shows each certificate holder with their class and level, and marks a certificate that is *below the plant's class*.
2. Choose the **Role**: **Operator-in-charge** or **Overall responsible operator / responsible charge**. Add a **Note (optional)** if useful.
3. Press **Confirm it is you and designate** and sign in again with your passkey when the window asks (a passkey sign-in within the last 5 minutes).

- **Withdraw** on a person's row ends the designation at once. It never needs the passkey step.
- The **History (only ever added to)** table lists every designation and withdrawal with **When**, **Person**, **Role**, designated or withdrawn, **By**, the **Plant class** at the time and **SHA-256**, then *Designation chain checked: N entries, unbroken.*
- A designated person can add notes and sign-offs to the shift log even without control permission (see Shift Log and Change Record).



Operators in charge: an operator-in-charge and an overall responsible operator, the designate form (the person chosen has a certificate below the plant's class) and the history.

An assisted change, step by step

The **Assisted changes** panel shows the propose form to an owner and to anyone with active control permission at the site. Anyone else sees why they cannot propose. The heading counts the changes awaiting local action.

1. **Propose.** In **Propose a change**, choose the **Gateway** and the **Equipment** (or **Other equipment**, then name it). Choose the **Setting** from the list, or *describe it instead (free text)* and give a **Unit (optional)**. Enter the **Present value (optional)**, the **New value** and **Why is it needed?**, then press **Confirm it is you and record the proposal** and sign in again with your passkey.
2. **Awaiting local action.** The change appears with the chip **awaiting local action** and the words *Awaiting local action - make the change at the panel, then confirm it here*. Its **Read-back** line says whether WYLA will look for the new value.
3. **Make the change at the panel** yourself, on the equipment, following the maker's instructions.

4 **Confirm.** Press **Done at the panel...**, check **When it was made** and the **Value set**, add a **Note (optional)**, and press **Confirm it is you and record it as done**, with your passkey. Only a certified operator with control permission in force at the site can confirm, and where the operator-in-charge rule applies, only the site's active operator-in-charge or overall responsible operator (see Who confirms a change). An owner without a certificate cannot.

5 **Read-back.** Where the gateway reads that value, WYLA looks for the new value in the readings, from 2 minutes before the time the change was made until 30 minutes after it, and records the result.

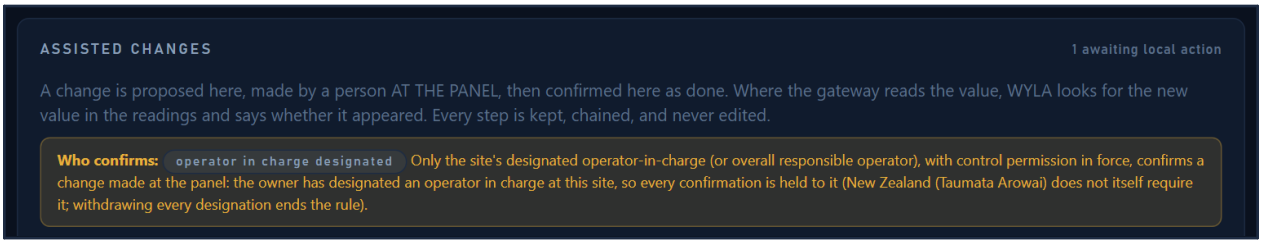


A change awaiting local action. WYLA does not read this setting, so it will need checking at the panel.

Who confirms a change

Confirming a change as done at the panel records that a treatment setting was changed. Since 13 October 2026 WYLA holds that confirmation to the site's **operator in charge** wherever the rule applies. The **Assisted changes** panel says which rule applies, in words, on a line headed **Who confirms:**.

SITE	WHO MAY CONFIRM	THE LINE SAYS
In Ontario	Only a person with control permission in force **and** an active operator-in-charge or overall responsible operator designation at the site. Until an owner designates one, no change can be confirmed (O.Reg 128/04 s.25, s.26(1))	*operator in charge required by regulation: Only the site's designated operator-in-charge (or overall responsible operator), with control permission in force, confirms a change made at the panel ...*
Elsewhere, once the owner has designated anyone	The same: permission in force and an active designation	*operator in charge designated: ... the owner has designated an operator in charge at this site, so every confirmation is held to it*
Elsewhere, nobody designated	Any certified operator with control permission in force at the site	*No operator in charge designated - any certified operator with control permission in force at this site confirms a change made at the panel.*



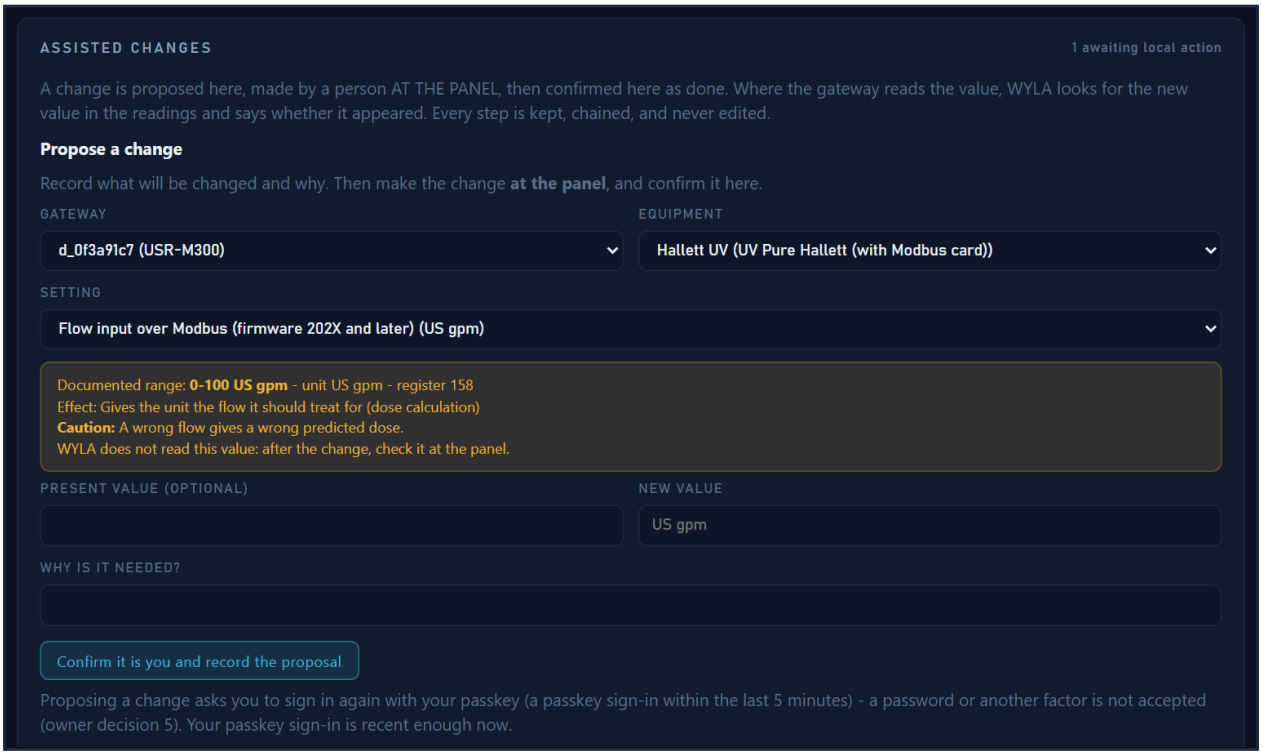
The Who confirms line at a New Zealand test site where the owner has designated an operator in charge.

- **Outside Ontario the owner opts in by designating someone.** Once anyone has been designated at the site, every confirmation is held to the operators in charge.
- **A designation that lapses does not relax the rule.** If the person's certificate expires or falls below the plant's class, they cannot confirm until it is put right, and nobody else can either. Only the owner withdrawing every designation at the site ends the rule, and that is itself recorded.
- **A person who may not confirm sees what is missing**, for example *You cannot confirm a change here - missing: a designation as operator-in-charge or overall responsible operator at this site*. The missing items can be control permission at the site, control permission in force (with why it is suspended), a designation, or an active designation (with why it is suspended). A refused confirmation lists the same items.
- **Proposing and cancelling are unchanged.** An owner, or anyone with active control permission, can still propose a change, and the change waits for the operator in charge to confirm it.

The documented range

When you pick a setting, a box shows its **Documented range** from the equipment maker's register map, its unit and register, its **Effect**, any **Caution**, and whether WYLA reads the value back. A new value outside the documented range is **refused**, never trimmed to fit: *... is outside the documented range ... - WYLA does not record a change outside what the vendor documents*. A setting described in free text has no register map, so no range is checked and it is not read back.

If you confirm a value different from the one proposed, or one outside the range, a yellow warning says so; it is recorded as it was made.



Propose a change: a UV unit's setting chosen, with its documented range, effect and caution.

Read-back results

Some settings can be changed at the panel but never reach WYLA in the readings, for example the EMEC controller's setpoints and alarm values. For those the result is always *WYLA does not read this setting: check it at the panel*.

CHIP	MEANING
awaiting local action	Proposed; not made at the panel yet
checking the readings	Confirmed; WYLA is still looking for the new value
seen in the readings	Verified: the new value appeared in the readings
not seen in the readings	The new value was not seen within the window: check the panel. The last reading is shown
made - not read back	Made at the panel, but WYLA does not read this setting: check it at the panel
cancelled	Not made; the reason is shown

Cancelling a change

While a change is awaiting local action, the person who proposed it, an owner, or anyone with active control permission can press **Cancel…**. **Why is it not being made?** is required; press **Cancel the change**, or **Keep it** to leave it open. Cancelling never needs the passkey step. The cancelled change stays in the log with the reason.

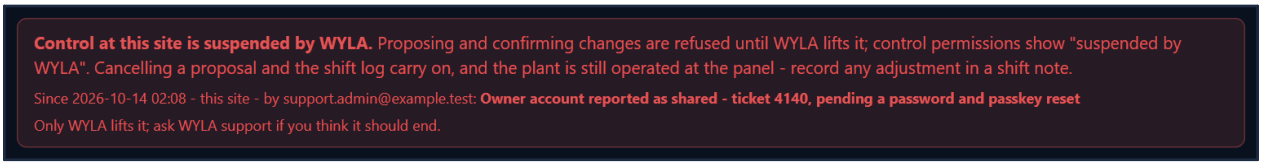
WYLA control suspension

WYLA can **suspend all control** at one site, or at every site of a customer, in one action and with a reason. It exists for the times WYLA has reason to doubt the way control is being used through the console: an owner account that may have been stolen or shared, a certificate reported false, or a security incident. Only a WYLA platform administrator can suspend, and suspending sends nothing to any gateway: it only stops the Changes page being used to propose and confirm changes.

While a suspension is in force, every tab of the Changes page carries a red banner: **Control at this site is suspended by WYLA.** It goes on to say that proposing and confirming changes are refused until WYLA lifts it, and it lists each suspension in force: since when, for this site or every site of the customer, by whom, and why. It ends: *Only WYLA lifts it; ask WYLA support if you think it should end.*

- **Refused:** proposing and confirming a change. They are refused straight away, before any passkey is asked for, with the time, scope and reason of the suspension. The Assisted changes panel says *Control here is suspended by WYLA: no change can be proposed or confirmed until WYLA lifts it. A proposal can still be cancelled.*
- **Shown:** every control permission at the site shows *suspended by WYLA*, *until WYLA lifts the suspension*, and your own line reads *control permission - suspended by WYLA*.
- **Unaffected:** cancelling a proposal, the shift log (notes and sign-offs), the records and downloads, and the plant itself. The plant is still operated at the panel: record any adjustment in a shift note.

> **Only WYLA lifts it - your owner cannot**
> A platform administrator lifts the suspension, with a reason; the customer's owner cannot. If an owner could lift it, it would be useless in exactly the case it is for: a compromised owner account. It costs you little while it lasts, because WYLA never writes to the plant, and your owner can still withdraw anyone's control permission. If you think a suspension should end, ask WYLA support.
>
> Suspending takes control away; it never gives WYLA control. WYLA staff still can never propose, confirm, be given or give control.



The banner while WYLA has suspended control at a test site. The reason and names are examples.

For WYLA administrators: suspending and lifting

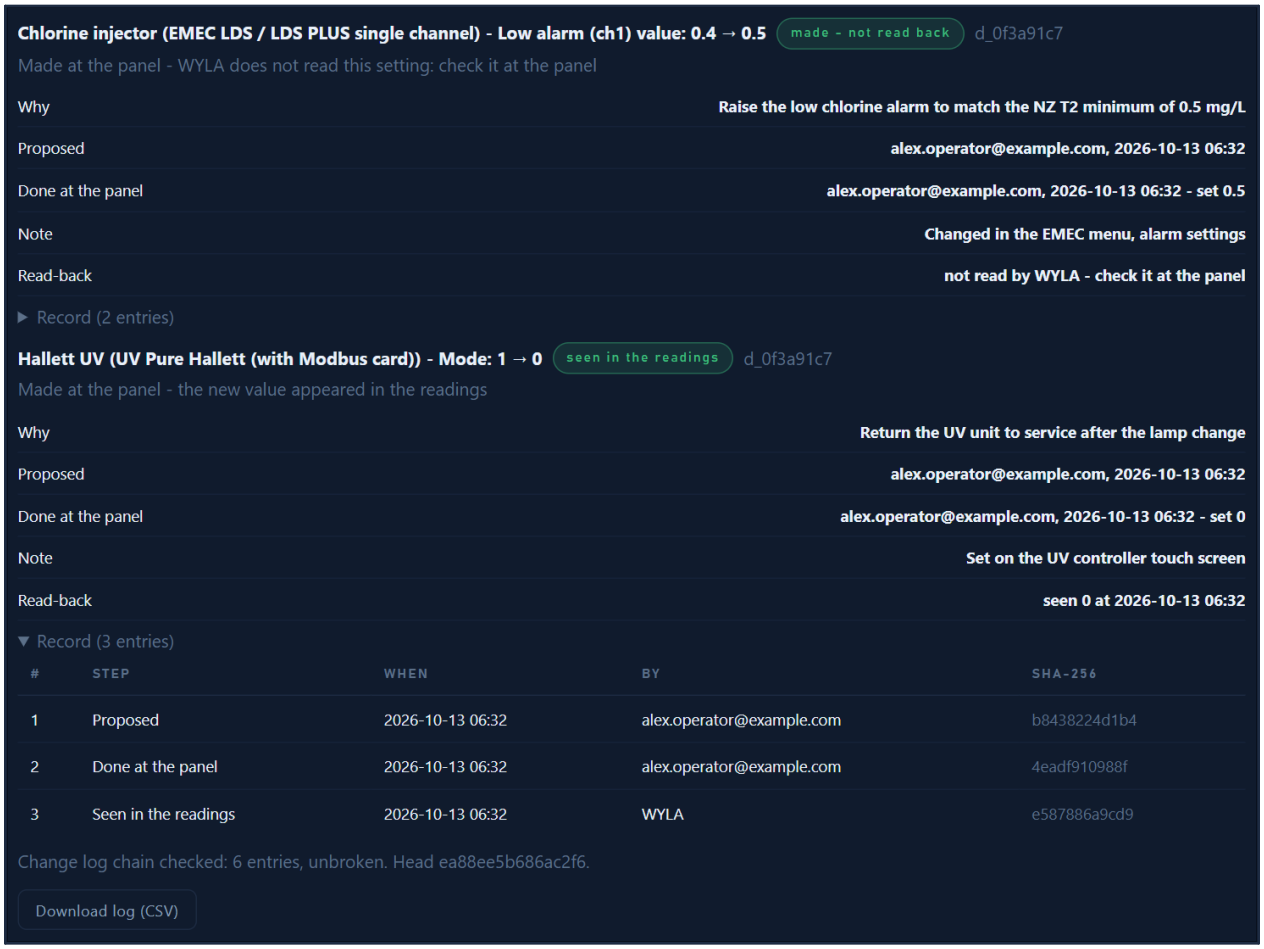
The **WYLA control suspension** panel at the top of the Changes page is shown to platform administrators only. Under **Suspend**, choose **This site only** or **Every site of the customer**, fill in **Why?** and press **Suspend control**. It needs no passkey: taking control away is never harder than giving it. Each suspension in force has **Why may control be used again?** and **Lift the suspension**; a reason is required. The **History (only ever added to)** table lists every suspension and lift with when, where, by whom, why and its

SHA-256, and ends with the chain check. Suspensions are only ever added to, chained, and written to the customer's audit log.

The control log

Every step of every change is kept in the site's control log: **Proposed**, **Done at the panel**, **Cancelled**, **Seen in the readings** and **Not seen in the readings**, each with when, by whom and a SHA-256 fingerprint. Open **Record (N entries)** under a change to see them. The log is **append-only**: nothing in it can be edited or deleted, and each entry is chained to the one before. The panel shows *Change log chain checked: N entries, unbroken.* with the chain's head. A red line means the log no longer checks out; tell WYLA support.

- **Download log (CSV)** — every step for the site, for your own records or your regulator.
- **The monthly report** — the Monthly Compliance Report has a **Changes made at the panel** section, and the CSV zip a `changes_made.csv` file: when it was proposed, the equipment and setting, from and to, why and by whom, who made it at the panel and when, and the read-back or result, with the log's chain head. A month with no changes says so.



Two confirmed changes: one WYLA does not read, one seen in the readings with its record of steps; the chain line and Download log (CSV).

32 SHIFT LOG AND CHANGE RECORD

Two more tabs on the **Changes** page keep the records an operator and an engineer are asked for. The **Shift log** gives, for each shift, the changes recorded, what WYLA saw change in its readings, the alarms, the **equipment status at the end of the shift**, and the operators' notes and sign-offs. The **Change record** lists every change WYLA knows of to the site's monitoring system, for your engineer to review. Like the rest of the Changes page, neither tab sends anything to a gateway or to your equipment.

Who can do what

TASK	WHO
See the shift log and download its CSV	Everyone who can see the site
Set the shift schedule	An owner of the site's customer
Add notes and sign shifts off	A certified operator with active control permission at the site, or its active operator-in-charge or overall responsible operator
See and download the change record	Owners (and WYLA administrators, read only)

No passkey for notes and sign-offs
A note or a sign-off is a record, not a control action, so it does not ask for a passkey sign-in. The person signed in is recorded as its maker. WYLA staff and support views of your account can never add to the shift log.

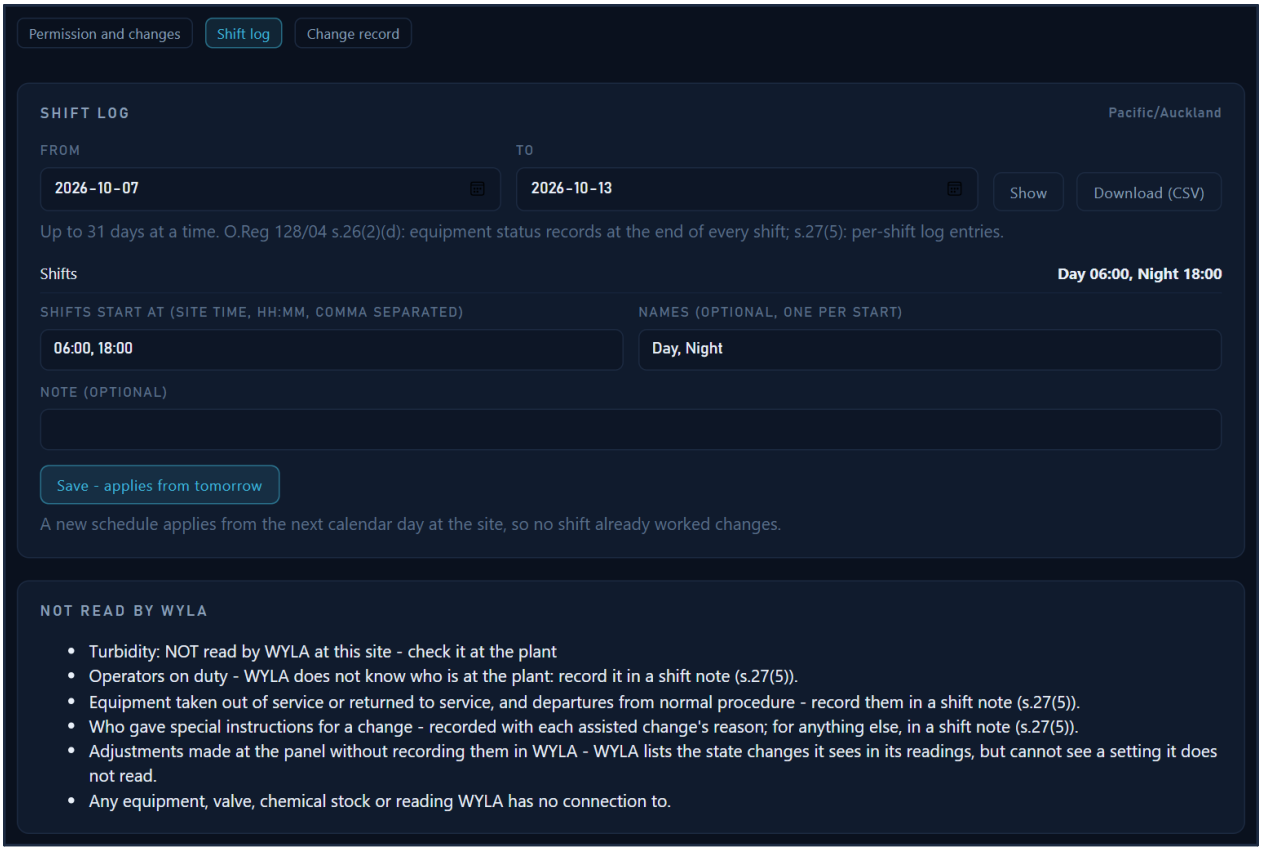
The shift schedule

Open **Changes** for the site chosen in the menu and press the **Shift log** tab. The **Shift log** panel shows the site's time zone, the date range and the line **Shifts** with the schedule in force today. Until an owner sets one, a site has **one shift per calendar day (00:00 to 00:00)**.

1. An owner types when the shifts start, in **Shifts start at (site time, HH:MM, comma separated)**, e.g. 06:00, 18:00. One to six shifts a day, each at a different time.
2. Optionally give **Names (optional, one per start)**, e.g. Day, Night: one name for every shift, or none. Add a **Note (optional)** if useful.
3. Press **Save - applies from tomorrow**.

- A new schedule applies from the **next calendar day** at the site, so no shift already worked ever moves. Until then the panel shows the next schedule and the day it starts.

- A shift ends where the next one starts. Every schedule saved is kept, chained, and listed in the change record.



The Shift log tab: the date range, Download (CSV), the schedule (Day 06:00, Night 18:00) with the owner's form, and what WYLA does not read at this site.

Choosing the shifts to show

Set **From** and **To** (site days) and press **Show**. The tab opens on the last 7 days and shows up to 31 days at a time. The **Shifts** panel counts the shifts and lists them newest first. Each shift's heading gives its name, start and end, and a chip: **running** (the shift now), **signed off by** and the people who signed it off, or **not signed off**.

What each shift shows

- **Changes recorded in this shift** — every step of the control log in the shift, with **When**, **Step** (Proposed, Done at the panel, Cancelled, Seen in the readings, Not seen in the readings), **What**, **Value**, **By** and **Why**. With none: *None recorded in WYLA*.
- **State changes WYLA saw in its readings** — each change WYLA saw in a treatment, mode or yes/no reading (for example a UV unit going from treating to not treating), from and to, chipped **recorded in WYLA** when a change confirmed in this shift explains it, or **not recorded in WYLA**. This is the only trace WYLA can give of a change made at the panel without it.

- **Alarms raised in this shift** — each alarm with its code, message and when it cleared (or *not cleared*).
- **Equipment status at the end of the shift** — for each gateway: whether it was **online**, **offline**, **no word** (nothing for 15 minutes, treated as offline) or **unknown**; each key reading (UV dose, intensity, transmittance, treatment and mode, lamp life, chlorine, flow and the gateway's own inputs) as last read at or before the end, with the time it was read; and the alarms active at that moment, acknowledged or not. For the shift still running it shows **Equipment status now**.
- **Notes and sign-offs** — each with a **note** or **signed off** chip, who, when and the text. A sign-off also shows the fingerprint of the status it kept (*status* and a short SHA-256), and *(after the shift)* when it was made more than an hour after the shift ended.

YOU SEE	MEANING
N min before (yellow chip)	The reading is older than 15 minutes at the end of the shift
no reading in the 24 h before	WYLA has no reading of it in the 24 hours before the end of the shift
NOT read by WYLA at this site	WYLA has no connection to this reading here: check it at the plant
A red quality chip	The reading arrived with a quality other than good



A night shift signed off: the UV unit stopped and restarted (not recorded in WYLA), the alarm it raised, the status at 06:00 with an older lamp-life reading and an input with no reading, and the operator's note and sign-off.

What WYLA does not read

WYLA never leaves a blank where it has no reading: it says so. The **Not read by WYLA** panel lists each reading an end-of-shift record is expected to have (UV dose, UV intensity, UV lamp or treatment state, chlorine residual, flow, turbidity) that WYLA does not read at this site, marked *NOT read by WYLA at this site - check it at the plant*. It then lists what WYLA never reads at any site. The same lines are in every CSV.

What the operator must still write in a shift note
WYLA cannot know these, so they are in the record only if the operator writes them in a note:
- the **operators on duty**;
- **equipment taken out of service** or returned to service;
- **departures from normal procedure**;
- who gave **special instructions** (outside an assisted change, whose reason already records it);
- **adjustments made at the panel to settings WYLA does not read**, and anything WYLA has no connection to (other equipment, valves, chemical stock, readings such as turbidity).
A change made at the panel without the Changes page leaves no trace in WYLA when WYLA does not read that setting. Your procedure should send every adjustment through the Changes page, or your paper log.

Adding a note and signing a shift off

1. Find the shift and type in **Note (who is on duty, equipment out of service, departures from normal procedure, instructions given)**.
2. Press **Add the note**. A note can be added once the shift has started, and as many notes as needed.
3. At the end of the shift, check the equipment status shown and press **Sign off: status checked**. Any text in the note box becomes the sign-off's words; without any, it says *End of shift: status checked*.

- The **Sign off** button appears from **2 hours before the shift ends**. Each person signs a shift off once; afterwards the card says *You signed this shift off*.
- A sign-off **keeps the status shown**: the equipment status at the end of the shift, or at the moment of signing when signed before the end, with its SHA-256. A later reading never changes what was signed.
- Notes and sign-offs are only ever added to. They cannot be edited or deleted; write a further note to correct one. The panel ends with *Shift log chain checked: N entries, unbroken*.
- Someone who may not add sees why above the shifts, e.g. *only a certified operator with control permission at this site, or its designated operator-in-charge, adds to the shift log*.

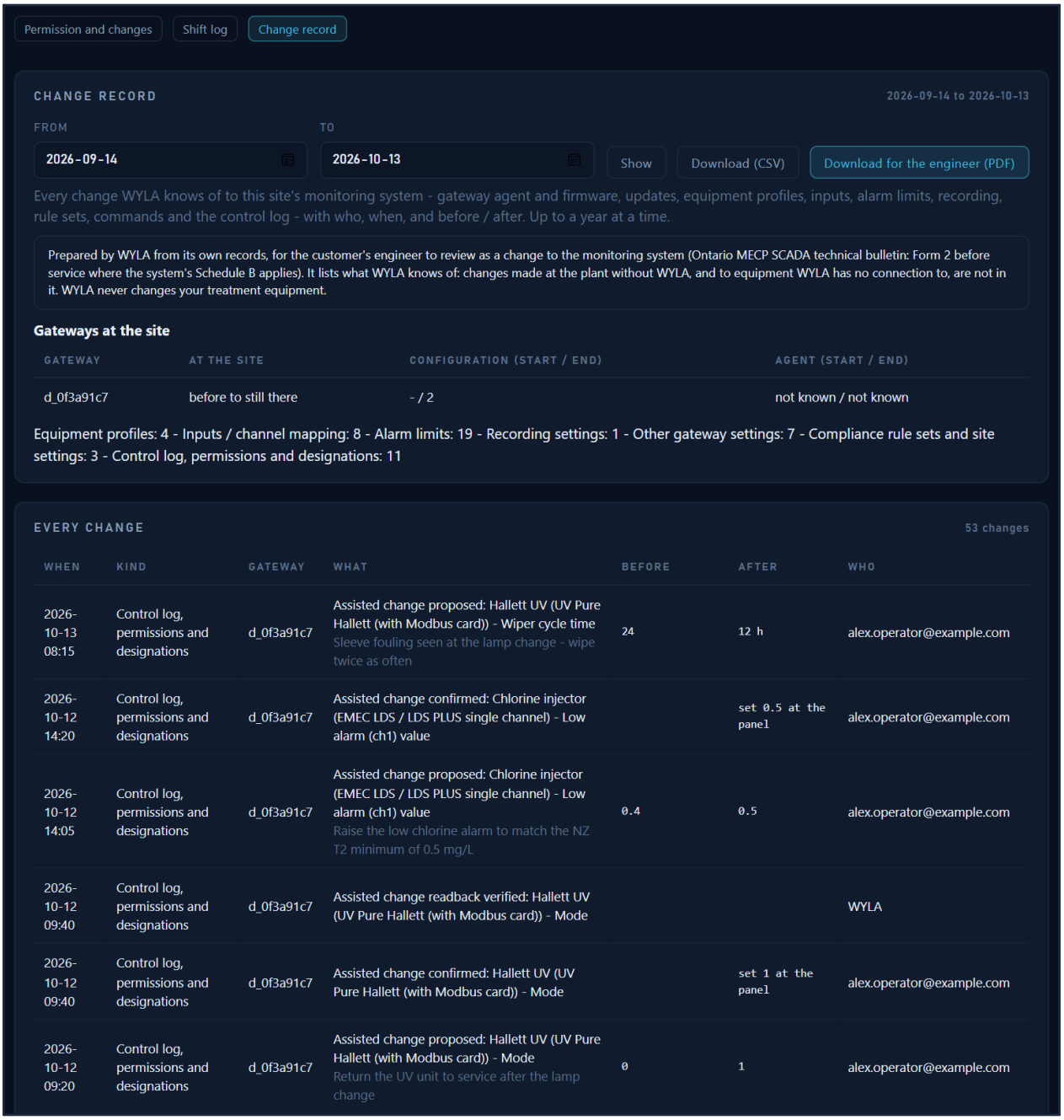
Downloading the shift log

Download (CSV) saves the shifts of the range shown (up to 31 days), one row per item: each change step, state change, alarm, reading at the end of the shift, gateway status, note and sign-off, with what WYLA does not read at this site and what it never reads. Times are in the site's time zone.

The change record

The **Change record** tab is for **owners**. It is built for the customer's engineer, who reviews changes to the monitoring system as alterations to the plant (in Ontario, the MECP SCADA technical bulletin: a Form 2 before service where the system's Schedule B applies). Every record opens with WYLA's own words: *Prepared by WYLA from its own records ... It lists what WYLA knows of: changes made at the plant without WYLA, and to equipment WYLA has no connection to, are not in it. WYLA never changes your treatment equipment.*

1. Set **From** and **To** (site days; the tab opens on the last 30 days and takes up to a year at a time) and press **Show**.
2. Read **Gateways at the site**: each **Gateway**, when it was **At the site**, its **Configuration (start / end)** version and **Agent (start / end)** version. A gateway is reported only for the time it was at this site.
3. Under it, one line counts the changes of each kind. The **Every change** panel lists them newest first with **When**, **Kind**, **Gateway**, **What**, **Before**, **After** and **Who** (the newest 500 on screen; the files have them all).
4. Press **Download for the engineer (PDF)** for the engineer's copy, or **Download (CSV)** for a spreadsheet. The same record is also available as JSON from the console's API.



The Change record tab: the range and downloads, WYLA's note, the gateway at the site, the count per kind and the newest changes.

What the change record covers

Every change WYLA knows of to the site's monitoring system, oldest first in the files, each with when, the gateway, who, and before and after where WYLA has them. Configuration changes say whether the gateway confirmed them (*not confirmed by the gateway* otherwise).

KIND	WHAT IS LISTED
Agent / firmware version	The gateway agent and firmware versions as the gateway reported them, from the start of the range
Agent update sent	Updates sent to the gateway, and each step of a staged rollout
Equipment profiles	Equipment added, changed or removed, before and after
Inputs / channel mapping	Each input's mapping, before and after
Alarm limits	Each alarm limit, before and after
Recording settings	Compliance recording settings, before and after
Other gateway settings	Any other section of the gateway's configuration
Compliance rule sets and site settings	Data-gap rule, calculations, calibration schedule, call-out and the regulatory profile, including the plant class
Gateway record and access	The gateway's record, credentials, passwords and remote access
Other commands	Any other command sent to the gateway
Control log, permissions and designations	Every step of every assisted change, control permissions, designations and shift schedules

The Form 2 and the engineer's review stay yours
The change record is WYLA's side only: what WYLA knows of, from its own records. It does not include changes made at the plant without WYLA, or equipment WYLA has no connection to. Deciding whether a change needs a Form 2, preparing it, and the engineer's review remain the customer's.

33 REGULATIONS THIS HELPS YOU MEET

WYLA keeps a register of the drinking-water, cyber-security and privacy rules it is built to help with, which ones it meets today, and which are still the operator's job. The full register is printed at the back of this manual, in **Appendix: Regulations WYLA Meets**. This chapter tells you what is in it and how to use it.

Where to find it

Turn to **Appendix: Regulations WYLA Meets** at the end of this manual (in the web manual, it is the **A** entry in the chapter list). The appendix is generated from the register document, **REGULATIONS-MET.md** (`platform/docs/REGULATIONS-MET.md` in the WYLA platform documents), each time the manual is built. Its first box shows which Regulatory Fit revision the register was checked against and when it last changed. The register is updated as features go live, so if your copy of the manual is older than the register, ask WYLA support for the current one.

- **New Zealand**, **United States** and **Canada** — which drinking-water rules each WYLA feature helps with, rule by rule.
- **Cybersecurity and privacy** — for example multi-factor sign-in, unique gateway passwords and the encrypted gateway link.
- **Customer responsibilities** — what WYLA cannot do for you, such as sampling, instrument maintenance and reporting to your regulator.
- **Not yet met / planned** — gaps WYLA knows about and is working on.
- **Where the sources disagree** and the register's **change log**.

How to use it

Read the register alongside your own permit, water safety plan or regulator's instructions. Where the register says a rule is met, it names the WYLA feature that does it, and the chapters of this manual show you how to set that feature up for your site. Where it says the rule is a customer responsibility, WYLA can hold the records but the task is yours.

> **Not legal advice**
> The register and this manual describe what WYLA does. They are not legal advice, and they do not change your own duties under your regulator's rules. If in doubt, ask your regulator.

34 AVAILABILITY, SUPPORT ACCESS & YOUR AUDIT TRAIL

How uptime is measured and reported, and — stated plainly rather than buried in a terms document — the circumstances in which WYLA support can see your data, what they can and cannot do, and where you can check for yourself.

How availability is measured

Each site's availability is worked out from when the unit was actually in contact, not from a sample. Two rules are worth knowing because they change the number:

A unit that goes offline and never returns is counted as offline for the whole period. The alternative — stopping the clock at the last message received — would report a unit that has been dead for three days as perfectly available, which is the reading that makes an availability figure worthless.

A newly installed site is only judged on the period it has existed. A site commissioned last week is not marked down for the earlier weeks of the month. The report shows the *coverage* alongside the figure so you can see how much of the period was actually measured.

Planned maintenance can be excluded from the figure where it has been agreed in advance. Local alarms and the stack light are unaffected by any of this — they run on the unit and do not depend on the connection.

When support can see your data

To investigate a fault you have reported, WYLA support can open a temporary view of your account. The rules are fixed in the software, not left to policy:

- **A written reason is mandatory** — typically the support ticket number and the symptom.
- **The session is read-only.** Support cannot acknowledge an alarm, change a setpoint, alter a contact, silence anything or send a command on your behalf. The server refuses those requests outright.
- **It expires by itself** within two hours at most, and support can close it sooner.
- **Every page they open is counted** against the session.

Support access to a gateway

The support view above shows WYLA support your data in the console. It never reaches your gateway. Reaching a gateway itself, its Node-RED editor, its web page or your site network, needs a **support session** for that gateway: opened by your owner or a WYLA administrator, with a reason, for 30 minutes by default and 2 hours at most. It closes by itself, can be closed early, and every session is recorded and shown on the gateway's Connections page. See **Support access: remote access only when needed** in the Connections chapter.

Checking it yourself

Each session is written to **your** audit trail as well as ours, with the support user's name, the reason given, when it started and ended, and how many pages were viewed. That is deliberate: an audit trail you have to ask us for is not much of an audit trail. Ask your service provider or WYLA support for your access log at any time, and query anything on it that you do not recognise.

WYLA support in your account

The temporary view in **When support can see your data** is read-only. When you ask WYLA support for help with something you cannot show them that way, support can also **act in your account as one of your users** for a short time: they pick the user, give a written reason and a length (15, 30 or 60 minutes), and for that time they see exactly what that user sees - the same menu, the same sites (a login limited to some sites stays limited), the same parts of your plan - and can do what that user can do, such as add a logbook entry, acknowledge an alarm or correct an alarm recipient.

• **Everything they do is in your audit log**, under their own name with *(WYLA support) acting as* and the user, for example *Sam Support <ops@…> (WYLA support) acting as pat@…*. The start, the end (stopped, expired, or ended because the user changed) and the reason are there too. Records that carry a person's name, such as a logbook **Done by** or a lab sample's **Taken by**, start with the support person's name, never your user's.
• **Some things always stay with you.** Support cannot sign or re-sign a monthly report, choose who may sign reports, sign a library document, change passkeys or sign-in methods, add or remove users or change their roles, sites or switch a login back on, give or withdraw control permission or an operator-in-charge designation, or record an operator certificate. The server refuses these, and the console shows the button greyed with the sentence: *This stays with the customer: WYLA support cannot sign reports, change sign-in security, add users or change roles, or grant control permissions while acting in a customer account.*
• **WYLA support never controls your plant**, while acting as a user or otherwise.
• **It ends by itself** at the time chosen, when support stops it, or at once if the user is removed, changes role or is switched off.

Switching it off (owners)

It is allowed unless you switch it off. On the **Users** page an owner finds **WYLA support in your account**: *Allow WYLA support to act in our account: On* (or Off), one sentence saying what it means, a **Switch off** (or **Switch on**) button, and the link **See what WYLA support did in the Audit log**. Switching it off takes effect at once: a session already open ends at its next step, and support can then only use the read-only view. Only your owner can change it, never WYLA support, and the change is in the audit log with who made it.

On the **Audit log** page, tick **WYLA support only** to list only what WYLA support did: the sessions themselves, the switch, and every change made in a session. The downloaded CSV keeps the same columns; a change made in a session shows the note beside the user.

For WYLA staff: Act as customer (Admin > Support)

Admin > Support > Act as customer, beside View as customer. Choose the customer; the form shows its answer (*Allowed by the customer* or *Switched off by the customer*, and **Start** stays disabled when it is off). Choose the user (name - email - role - sites; never a WYLA admin or a switched-off login), write the reason (10 to 500 characters - the ticket and the symptom), choose 15, 30 or 60 minutes (30 by default) and **Start**.

The window then shows a violet bar with a dashed edge: *Acting as Pat Smith (Operator, 2 sites) at Kowhai Orchards - WYLA support - ends 14:30 NZDT - <reason>* and **Stop acting**. The session belongs to that browser window only. Inside it the menu is the user's and the Admin pages are gone; your own name stays on every record. Signing out ends the session as well. One session at a time: stop it before starting another. **Admin > Support** lists every session of both kinds with its requests and writes.

> **Use it only when the customer asked for help**
> Everything you do in the session is in the customer's own audit log under your name, and the customer's owner can switch it off. Use View as customer when looking is enough.

35 HELP: THE MANUAL, TRAINING VIDEOS AND ASKING WYLA

Help in the top bar opens the Help page. It is there for everyone who is signed in: every role, every plan and every site login sees the same page, and nothing on it can be switched off. It has this manual, the training videos, what to do in an emergency, a form to ask WYLA for help or for a feature, and the list of the requests you have sent.

At the top: the manual and emergencies

Open the user manual opens this manual in a new tab; beside it the page says the manual's version, its date and its size. **Go straight to a chapter** unfolds a list of every chapter: click one and the manual opens at that chapter's first page. **Hide the chapters** folds the list away again.

Under it, a yellow box headed **In an emergency** lists what to do first, because a request is not the way to get help fast: stop people drinking water that may be unsafe and put up notices; follow your own emergency plan and phone the person responsible for the supply; tell the people your rules say you must tell (in New Zealand, Taumata Arowai, and for a state school the Ministry of Education); phone the emergency services if someone is ill or in danger (111 in New Zealand, 911 in Canada and the United States). *This form is not an emergency line: do not wait for a reply here.* **Open the Do Not Drink kit** opens the kit for the site (chapter **Do Not Drink Kit**).

Training videos

Under the manual, **Training videos** lists short videos, grouped by subject. Each video shows one job from start to finish on the real console pages, with the steps written on screen in pop-up notes. The videos have no sound, so they can be watched anywhere. Each card has the video's name, a line saying what it shows, its length and a **Watch** button.

1. Open **Help** in the top bar and find the video under **Training videos**.
2. Press **Watch**. The video opens in a pop-up over the page and starts by itself. Use the player's own controls to pause, go back or fill the screen.
3. Under the video, **Open ...** takes you to the console page the video is about, so you can do the job yourself, and **Read about it in the manual** opens this manual at the matching chapter. A button is left out when the video has no matching page or chapter, or when the page is not one your login can open.
4. Press **Close**, press **Esc**, or click outside the pop-up to go back to the Help page.
5. To send a video to someone, press **Copy link** on its card or in the pop-up, then paste the link into an email or a message. The person who opens it does not need a WYLA login (see **Who can watch** below). If the browser does not allow copying, the link is shown at the bottom of the screen so you can copy it by hand.

- A video can also be found from the **Search** box in the top bar: type what you want to do, for example **tank level** or **weekly reminder**, and pick the result under **Training videos**. It opens the Help page and plays that video.
- The first video is **Set a weekly reminder to check the tank level** (just under two minutes). More are added over time; the number at the top right of the list says how many there are.

Who can watch
Everyone who is signed in can watch every video, whatever their role or plan. A video with a **Copy link** button can also be watched by anyone you send its link to, with no sign-in: they see a plain page with the WYLA logo, the video, its title and the other shared videos, and nothing else from the console. A video without the button plays only for people who are signed in. This manual, your sites and your records are never shared by these links. The names and sites shown in the videos are made up.

Asking WYLA for help

The **Ask WYLA for help** form has these fields:

1. Choose what you need and fill in the subject and the note.
2. Check the reply email and the site, and attach any files.
3. Press **Send**. The request is kept first, then emailed to WYLA: support requests to support@wateryoulookingat.com, feature requests to features@wateryoulookingat.com.
4. The page says **Thanks - we have your request**, where WYLA will reply, and whether a copy was emailed to you. **Send another request** opens an empty form.

FIELD	WHAT TO PUT
What you need	**Request support**, **Request a feature** or **Request support and a feature**
Reply to (email)	Filled in with the email you signed in with; change it if WYLA should reply somewhere else
Subject	A line saying what it is about (up to 150 characters), for example *Chlorine reading shows zero*
Note	What happened, when, and what you expected - or the feature you would like and why
Site	The site chosen in the menu, or **Not about one site**
Attach files	Up to 5 files of 10 MB each: PDF, JPEG, PNG, CSV, text, Word or Excel. A screenshot often helps. Each file shows its size; **Leave out** takes it off

What WYLA adds for you
You do not need to type your account details. WYLA adds what it already knows: your customer, its plan and parts, your name, email and role, the site you picked and its gateways (model, versions, status, last seen), how many sites and gateways you have, the time, and your browser's name. Requests are kept for at least 10 years, like WYLA's other records.

Your requests

Under the form, **Your requests** lists every request you have sent: **Sent** (in site time), **Kind**, **Subject**, **Site**, **By**, **Files** and **Status** - **Open**, **In progress** or **Closed**. **View** opens one: what you sent, its files and the **Replies from WYLA** (WYLA also replies by email). **Close** folds it away.

> **When the form is not shown**
> In a read-only customer view the form says requests cannot be sent from it. A WYLA administrator who is not working in a customer sees a message instead of the form: there is no customer to send a request for, and every request is on **Administration > Requests**. The manual and the training videos are on the page in both cases.

36 FEATURES AND PLANS

Not every site needs every part of WYLA. A school caretaker wants alarms, the inspection logbook and lab results; an Ontario operator needs the compliance calculations, the calibration log, regulator reports and the operator register. WYLA decides which optional **modules** your organisation has (your plan). Your owner then decides which of those each **site** uses, starting from a **preset** for the site's regulator. Switching a module off hides it and stops its reminders. It never stops recording.

Two screens, two people

Feature settings live on two screens. The first is set by WYLA for your organisation as a whole; the second is set by your owner for each site.

SCREEN	WHO SETS IT	WHAT IT DECIDES
Admin > **Customers** > *your organisation* > **Features**	WYLA staff only	Your plan: which optional modules your organisation has
Setup > *the site* > **Features**	Your owner (or WYLA staff)	The site's preset, then which of your modules the site uses

Nothing disappeared
When feature settings arrived (November 2026) every existing customer kept every module it already had, so every site looked as it did before. The lab sample register, the logbook, the many-sites overview and scheduled email reports came later: an existing organisation gets them when WYLA adds them to its plan - ask WYLA if they are missing.

What never switches off

These are not modules. No setting on either screen reaches them, at any site:

- One-minute sealed records, data-gap tracking, the daily seals and the archive.
- Alarms and their delivery. Who is alerted, and how, stays on **Contacts** and **My alarms**.
- Live readings, events, trends, the site map, the plant view and maintenance.
- Users, the audit log, gateway setup and connections (by role, as always).

Hidden is not lost
The compliance calculations keep working in the background for every site with a rule set, even while their page is switched off. Switch a module back on and its full history is there.

The modules

A module marked **Coming** is not built yet. WYLA can add it to your plan ahead of time, but it cannot be switched on at a site, or tried, until it is ready. Since 3 November 2026 every module below is built and in the live console.

MODULE	WHAT YOU GET
Text and voice alarms	Text messages and phone call-outs as well as email; the **Call-out** page. Switched off at a site, no text or call goes out for that site's alarms: people who chose text only get them by email, and anyone with no email address is not told
Compliance calculations	Daily pass or fail against the site's rule set, and today's status (the **Compliance** page)
Calibration and grab-sample log	Instrument checks with due dates and reminders; grab samples while an analyser is down (also on **Compliance**)
Regulator reports	Signed monthly reports, regulator notices and IDs (the **Reports** page); with the lab register, the **Do Not Drink kit** (chapter **Do Not Drink Kit**); from 5 November 2026 the site's **People and organisations**, printed on its reports
Scheduled email reports	Reports emailed on a schedule to your contractor, council or board, with your logo; a signed report goes out once signed (chapter **Scheduled Email Reports**). Starts off at a site with a preset - your owner switches it on
Operators and control records	The operator register, the change and control log, assisted changes (**Operators** and **Changes**)
Lab sample register	Monthly E. coli results, "3 clear tests" after a positive, a reminder when a sample is missing (chapter **Lab Samples**); the **Do Not Drink kit**; from 5 November 2026 the lab report and a positive sample's incident record as PDF
Inspection logbook	Filter, tank, lamp and sleeve, and backflow inspections with reminders (chapter **Inspection Logbook**); the plant-room QR code for caretakers (chapter **Plant-room QR Code**); from 5 November 2026 the logbook report as PDF
Scheduled reminders	Friendly emails to the people you choose before a job is due (change the filter, take the E. coli sample), with a **Mark as done** button that needs no sign-in (chapter **Reminders**); also after heavy rain, at the start of term and in the school holidays. Starts on at an NZ school site; at other preset sites your owner switches it on
Many-sites overview	The monthly programme report and, from 5 November 2026, **Compare sites** (one question asked of every site) - in Cloud Compliance Plus, or an add-on. Since 7 November 2026 the **All sites** page itself is for every customer (chapter **All Sites and Per-site Logins**)

MODULE	WHAT YOU GET
Document library and rule checklist	From 7 November 2026: the plans, registers, logs and certificates the NZ Rules ask for, kept as versions that are never edited, with review dates and passkey-signed controlled documents (the **Documents** page); the rule-by-rule checklist of what applies to your supply and what stands behind each rule (**Your rules**); and the Assurance Rule Declaration and the level 1 and 2 monitoring reports built from it (chapter **Documents and Your Rules**). In Cloud Compliance Plus only; starts on at a site with an NZ Rules preset, off at a school on the Acceptable Solution - your owner switches it on
Schedule and to-do list	From 7 November 2026: every job with a due date on one list per site - logbook inspections, lab samples, calibration checks, document reviews, reminders, the regulator's report deadlines, field-test checks and your own tasks - with what is done and by whom, what is overdue and by how long, and a **Do it** that opens the form that makes the record (chapter **Schedule**). In Cloud Compliance and Cloud Compliance Plus; WYLA can add it to Cloud Basic. Starts on at every preset - your owner can switch it off at a site
Remote support	Support sessions you open for WYLA
Data export and API	CSV exports and API keys

Your plan (WYLA staff set this)

On **Admin** > **Customers** > *the customer* > **Features**, a WYLA administrator picks a **Plan**, which fills in the list of modules, and can then switch any single module on or off (the plan then reads **Custom**). The same screen has **Trials allowed**, off unless WYLA switches it on for you (see **Trying a module for 30 days**). Every change on this screen goes in the audit log with who, when, before and after.

PLAN	MODULES
Cloud Basic	Text and voice alarms, remote support, data export
Cloud Compliance	Cloud Basic, plus calculations, the calibration log, regulator reports, the lab register, the logbook, scheduled email reports, scheduled reminders and, from 7 November 2026, the schedule and to-do list
Cloud Compliance Plus	**Every module**, including any WYLA adds later: everything in Cloud Compliance, plus the many-sites overview and its monthly programme report, the document library and rule checklist, and operators and control records
Add-on	Many-sites overview, on top of any plan

> **The plan names**
> From 3 November 2026 the plans carry the names in WYLA's brochure: Cloud Basic (was Monitor), Cloud Compliance (was Compliance) and Cloud Compliance Plus. Nothing changed for an organisation already on a plan. The brochure's fourth level, **Standalone**, is the EM300 with its own SD card and licence (chapter **Standalone EM300**), not a cloud plan. A Compliance + control plan is kept for WYLA's own use and is not sold.

Cloud Compliance Plus: every module, now and later

From 7 November 2026 Cloud Compliance Plus includes **every module WYLA has built, including any built later**. A Plus customer has each new module the day it is ready, with no change to their plan and nothing for WYLA to switch on - whatever list of modules was saved when the plan was chosen.

- To take a module away from one Plus customer, a WYLA administrator moves that customer to **Custom** and switches the module off there (Custom keeps exactly the list it is given).
- Your owner can still switch any module that is not required by the rules **off at a site**, on the site's **Features** screen, exactly as on any other plan.

Setting up a site (owners)

Choose the site in the menu's site picker, open **Setup** and open **Features**.

1. Under **What kind of site is this?** pick the preset for the site's regulator and supply (see **Presets** below). The modules the rules need show **Required by the rules** and are locked on.
2. Switch the other modules on or off. A module your plan does not include shows **Not in plan** and cannot be switched on here; a module not built yet shows **Coming**.
3. Watch the right-hand panel, **Menu this site's users will see**: struck-through items will be hidden for this site.
4. Press **Review and save**. WYLA shows a summary first - which modules turn on or off, and which rule sets the preset suggests - and saves only when you confirm. The change goes in the audit log.

> **A preset suggests rule sets, it does not change them**
> Picking a preset offers to apply its rule sets for the calculations and the calibration log; they change only if you accept. You can still change them later on the Compliance page.

Presets

A preset is a starting point for a type of site: the modules the regulation needs (required) and the ones that start switched on. Text and voice alarms, remote support and data export start on for every preset. **NZ Rules - level 3** moves from the 2022 rules to the 2026 rules on 1 July 2027 by itself. **NZ school - Acceptable Solution** suggests the rule set **NZ Self-supplied Buildings Acceptable Solution 2025** (chapter **NZ Schools on Their Own Supply**). From 7 November 2026 the **schedule and to-do list** starts on at every preset (chapter **Schedule**). The **NZ Rules** presets also start the **Hinekorako upload file** and **Lab results import** on, where your plan has them (Cloud Compliance Plus): no need to find them in Setup > Features. A plan without them does not get them from a preset.

PRESET	REQUIRED (CANNOT BE SWITCHED OFF)	ALSO ON TO START WITH
NZ school - Acceptable Solution (self-supplied building)	None	Calculations, regulator reports, logbook, lab register, scheduled reminders, schedule
NZ Rules - level 1 or 2	Calculations, regulator reports	Calibration log, logbook, lab register, document library (from 7 November 2026), schedule; Hinekorako upload file and lab results import where the plan has them
NZ Rules - level 3	Calculations, calibration log, regulator reports	Logbook, lab register, document library (from 7 November 2026), schedule; Hinekorako upload file and lab results import where the plan has them
Ontario	Calculations, calibration log, regulator reports, operators and control	Schedule
US small system	Calculations, calibration log, regulator reports	Operators and control, schedule
Private or farm (no regulator)	None	Schedule
Custom	None	Every module your plan has

Required modules

Required by the rules means the regulation needs that module at this site, so the owner cannot switch it off. Only WYLA can, and only with a written reason that goes in the audit log - for example a site whose regulator reporting is done by someone else. If you think a required module does not apply to your site, ask WYLA.

Trying a module for 30 days

If WYLA has switched **Trials allowed** on for your organisation, your owner can try a module your plan does not include: on the site's **Features** screen, press the trial button beside it.

- A trial lasts **30 days** and works at every site, as if the module were in your plan.
- Each module can be tried **once** only. A second trial of the same module is refused.
- Only modules that are built can be tried - not one marked **Coming**, and not one you already have.
- When the trial ends the module hides again and its reminders stop. Everything recorded during the trial is kept and comes back if you add the module to your plan.

> **No trial button?**
> Trials are off unless WYLA switches them on for your organisation. Ask WYLA.

The red banner: a module your site's rules need

If a site's preset needs a module your plan does not include - for example an Ontario site on the Cloud Basic plan - the module shows **Needed - not in plan** and the site shows a red banner: the site's rules need it, your plan does not include it, records are still being made, contact WYLA. WYLA sees the same site in its list of customers needing attention.

Nothing is lost meanwhile: recording, data-gap tracking and alarms carry on. The banner clears when the module is added to your plan (or while a trial of it runs).

> **Act on the banner**
> While the banner shows, the page the rules need is hidden at that site - for example no monthly regulator report can be made. Contact WYLA the same day.

When a module is switched off, or your plan changes

When a module is switched off at a site, or leaves your plan:

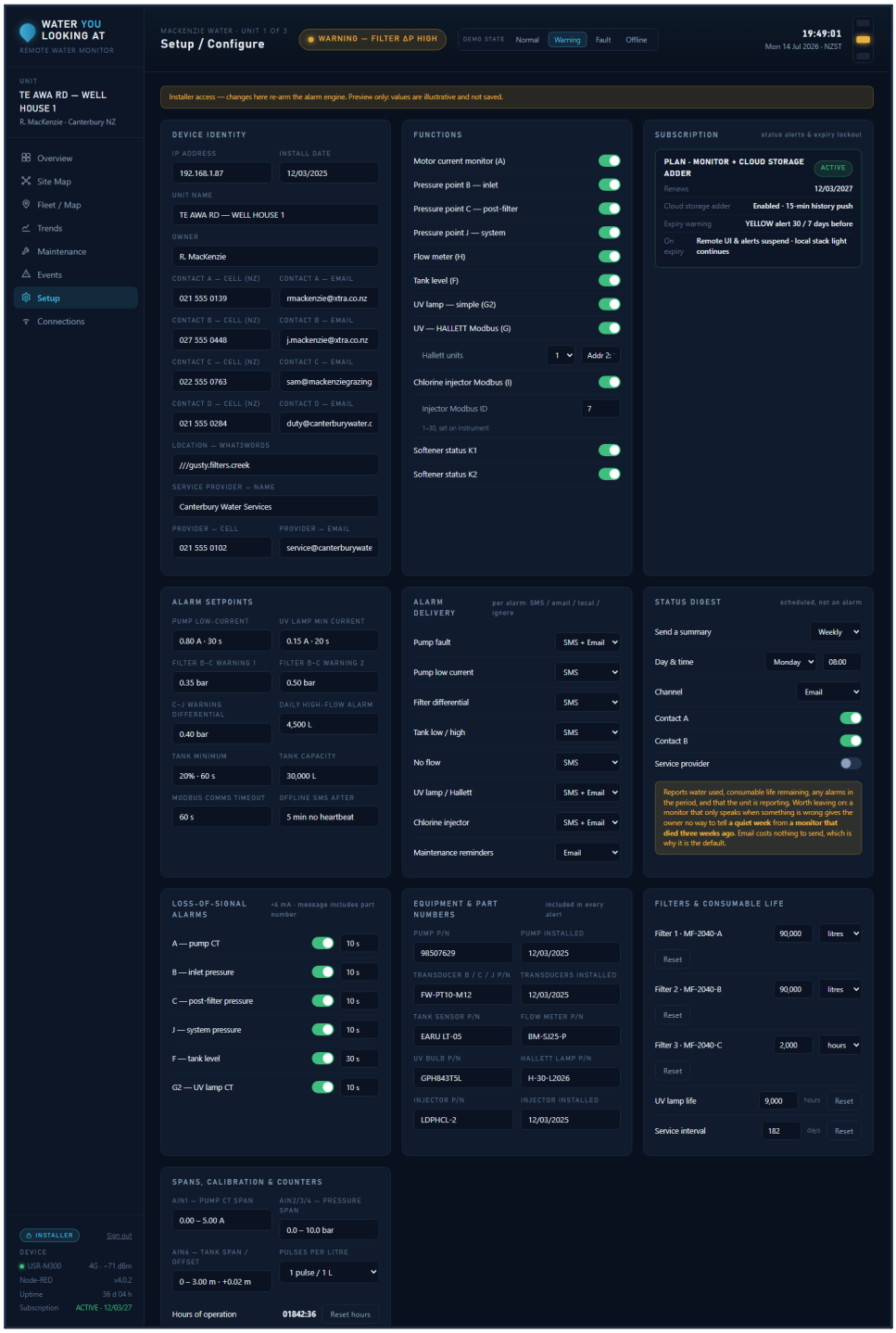
- Its pages stay in the menu, greyed, with a line saying it is off at this site or which plan includes it (since 7 November 2026; chapter **Finding Your Way in the Console**). Opening one says it is not switched on, instead of showing the page.
- Its entry forms and settings are refused and its reminders stop - for example no more calibration-due alarms.
- Everything it recorded stays. Switch it back on, or add it to your plan again, and the full history is there.
- If a site's preset requires it, that site shows the red banner above until it is back.
- In **Setup > Features**, **Review and save** says how many jobs of each part being switched off stop being tracked, how many are overdue and how many are due within 7 days (and, for Scheduled reminders, that the reminder emails stop). After saving, the Schedule and Today say so for 30 days (chapter **Schedule**, *A part switched off at the site*).

37 SETUP / CONFIGURE (INSTALLER)

The Setup page is where an installer commissions a unit. It is password-protected; changes take effect when applied and re-arm the alarm engine. Users cannot see this page.

Device identity

Fields: **IP address**, **Install date**, **Unit name**, **Owner**, **four contacts (A–D)** — each with a cell number in NZ format 02X XXX XXXX plus an email address — the **Service provider** as three separate fields (name, cell, email), and the unit's **location as a what3words address** (easier field entry than latitude/longitude, especially on a phone). In the cloud console, who receives alarms is set on the **Recipients** page; Setup's **Who is told about alarms** panel shows the same answer (see below).



Setup: eight panels — identity, functions, setpoints, alarm delivery, loss-of-signal, equipment part numbers, consumable life, and calibration/counters.

Functions

Toggle switches enable or disable each monitored function: motor current (A), pressure points B, C and J, flow meter (H), tank level (F), UV lamp simple (G2), UV Hallett via Modbus (G) and chlorine injector via Modbus (I). Under the Hallett toggle, a selector sets **0, 1 or 2 Hallett units — two is the default** (the second needs its Modbus address changed on the instrument); under the injector toggle, its **Modbus ID** (1–30, as set on the instrument). Two further toggles enable the **softener status inputs K1 and K2** (normally-open contacts). A disabled function disappears from every user page — the dashboard only ever shows what is actually installed.

Subscription

The monitor is a subscription product. This panel shows the plan, its renewal date, and whether the **cloud storage adder** is enabled (15-minute history push; the unit itself keeps no long-term history). Expiry warnings are sent 30 and 7 days before renewal; on expiry, remote UI and alert delivery suspend while the local stack light continues to operate.

Alarm setpoints

Fields for every threshold and delay: pump low-current level, filter differential Warning 1 and Warning 2, the C–J warning differential, **tank capacity (litres)** and the tank minimum level with its delay (there is no high-level alarm), UV lamp minimum current, daily high-flow point, the Modbus communication timeout, and how long without a heartbeat before an OFFLINE SMS is sent. Delays are configurable so momentary transients don't wake anyone up.

Alarm delivery

Every alarm group has its own delivery selector: **SMS + Email**, **SMS**, **Email**, **Local only** (stack light and UI, no message) or **Ignore**. Groups: pump fault, pump low current, filter differential, tank low/high, no flow, UV lamp / Hallett, chlorine injector, and maintenance reminders.

Status digest schedule

Separate from the alarm table, because a digest is not an alarm. Choose **weekly** (the default), monthly or off; the day and time; the channel; and which contacts receive it.

It is configured away from the alarm settings deliberately. The digest is never rate limited alongside alarms and is never held back by quiet hours — suppressing the proof-of-life to protect a text-message budget would defeat its entire purpose. **Email is the default because it costs nothing to send**, so there is no reason to switch it off.

Reports do not begin until the unit has actually reported at least once, so a site that was never commissioned does not generate weekly notes about an install that never happened.

Loss-of-signal alarms

One row per analog input (A, B, C, J, F, G2), each with an enable toggle and its own delay. A loss-of-signal message automatically includes the affected sensor's part number from the equipment panel.

Equipment & part numbers

Entry fields for the part number and install date of every serviceable device: pump, pressure transducers, tank sensor, flow meter, UV bulb, Hallett replacement lamp and chlorine injector. These values are embedded in alert messages — keep them accurate.

Filters & consumable life

Filters 1, 2 and 3 each have a part number, a life value with a **hours-or-litres** selector, and a **Reset** button for when a new filter is fitted. The UV lamp life (hours) and the service interval (days) are configured and reset the same way.

Spans, calibration & counters

Per-input span and offset: pump CT span, pressure spans, tank level span and offset, and the flow-meter pulses-per-litre selector (1 pulse/L or 1 pulse/10 L). Below the calibration fields, the running **hours-of-operation** counter has a Reset button. **Apply & re-arm** validates and commits the configuration; **Discard** reloads the last saved values.

Review and push: sending the settings

Changes typed into Setup are not sent to the gateway until you press **Review and push**. WYLA first checks them. If something would stop the gateway working - for example an input switched on with no gateway point - nothing is sent, and a red box under the form lists every problem, starting *Not sent*. WYLA never quietly switches an input off for you.

Otherwise the changes are shown **on the page** in a box headed **Check these changes before they are sent to** the site: one line for each change in plain words. A change that switches something off is in red, with the line *it stops being monitored or alarmed*. Changes that make no difference to what the gateway does are folded away under **Other small changes (no effect)**. The box ends with what will happen: the gateway was in touch recently and should apply them within a minute or two, or *The gateway is not connected now - it gets them when it next connects.*

1. Make your changes and press **Review and push**.
2. Read the list of changes. If the box says the settings were saved again by someone else since the page was drawn, the page now shows the latest settings: make your change again.
3. Press **Push these settings**, or **Cancel** to go back and keep editing. If you changed the form after the review, you are shown the review again; nothing unseen is pushed.

4 A message says what happened, for example *Saved as version 7. Sent to the gateway - it applies the settings within a minute or two, and this page says when it confirms them.*

A gateway that is offline
The settings are always saved straight away. When the gateway is not connected the message says so: *Saved as version N. The gateway is not connected now - it gets the new settings when it next connects.* After every push the page reloads the saved settings, so your next change is built on what was saved and a second push cannot undo the first.

Leaving with unsaved changes

If you leave Setup, change tab, choose another site or close the browser tab with changes that have not been pushed, the console asks first - for example *Leave Setup? Your changes to the gateway's settings will be lost - they have not been saved.* Press **Cancel** to stay.

Who is told about alarms

The **Who is told about alarms** panel in Setup shows the same answer as Today and the Recipients page: for **Fault (red)** and for **Warning (yellow)**, the people who would be told and how (email, text, call). Someone who cannot be reached the way they chose is shown with a red **not reached** chip and why, and is not counted. If nobody hears about a fault, the panel says **Nobody will be told about a fault at this site** in red.

Who is told is set on the **Recipients** page, not here. An operator or the account owner has a link to it; an installer reads the answer and is told that operators and the account owner change it. Contacts kept in the gateway's own settings (an older way, normally none) are listed and marked *from the gateway settings*; they are told only about that gateway's alarms.

38 ALARM INPUTS: POWER LOST AND UV UNIT ALARM

Two standard inputs let other equipment's own alarm contacts reach WYLA: a UPS (battery backup) that signals **on battery** when the mains power goes, and the UV unit's own **alarm or shut-off relay** (any make). Both ship switched off; the installer turns one on where the contact is wired.

The two inputs

Both are status inputs with no gateway input chosen. The delay and level can be changed.

INPUT	NAME ON THE SETUP PAGE	DELAY	LEVEL
MAINS	Mains power (UPS on battery)	30 s	Red
UVF	UV unit alarm	10 s	Red

Gateway software
In the live console since 3 November 2026. Gateway software PUSR 1.1.49 and EM300 1.1.73, published 3-4 November 2026, raise these two alarms by name; on older gateway software the inputs work as ordinary status inputs (see **Gateway versions** below).

Switching one on (installers)

1. On the gateway's **Setup** page, tick the input on.
2. Choose the gateway input the contact is wired to.
3. Say how the contact is wired. A contact that **closes on alarm** (normally open): type 0.5 in **High alarm above**. A contact that **opens on alarm** (normally closed): type 0.5 in **Low alarm below**.
4. Save. If the input is on with no gateway input, no contact side, both sides, or a value outside 0 to 1, WYLA shows it under **Not saved** with a **needs a value** message and does not save.

Use normally closed where you can
With a normally closed contact a cut or loose wire also raises the alarm. A normally open contact with a broken wire stays silent.

What you need

- Any UPS with a dry "on battery" or alarm relay, and any UV controller with an alarm or shut-off relay.
- For the power alarm to get out, the gateway, its modem and its power supply must be on the UPS.
- A free digital input. The NZ school kit (since 4 November 2026) is the EM300 with an A0800I card and a D0404R card (4 digital inputs and 4 relays) clipped on after it, so it always has four free inputs: the D0404R's, module 2. The standard setup already names its first two: input 1 (2-DI0) for the UPS and input 2 (2-DI1) for the UV unit, both switched off until you say how the contact is wired (not yet tried on a bench unit with both cards). Clip the A0800I on first and the D0404R after it, or the module numbers change. On a PUSR M300 panel the only free input is DI02, at a site with no water softener; otherwise a digital-input expansion card is needed.
- The UPS itself is not in the kit: it is bought separately.

Gateway versions

Either way the stack light turns red. When a gateway is updated, an open alarm in the old form is cleared and the new one takes over.

GATEWAY SOFTWARE	THE ALARM ARRIVES AS	ALARM TYPE
Before M300 1.1.49 / EM300 1.1.73	"A reading is above / below the limit set for it", named by the input	Other site equipment
From M300 1.1.49 / EM300 1.1.73 (published 3-4 November 2026)	**Mains power is off at the site**	Gateway and sensor wiring (next to "unit unreachable")
From M300 1.1.49 / EM300 1.1.73 (published 3-4 November 2026)	**The UV unit reports a fault - water may not be disinfected**	UV disinfection

When the alarm comes

- **Mains power is off**: check whether the building and the street have power; if the building does, check the plant room's breakers and switches (reset a tripped one once; if it trips again, call an electrician). Until power is back, follow your water safety plan - the UV unit may be off. When power returns, check the UV unit has restarted and its lamp is lit. If the battery runs out first, WYLA also says the unit is unreachable; that clears by itself.
- **The UV unit reports a fault**: follow your water safety plan straight away, read the message on the UV unit, and deal with it as its instructions say or call your UV service provider. **Never bypass the UV unit or force its shut-off valve open.**

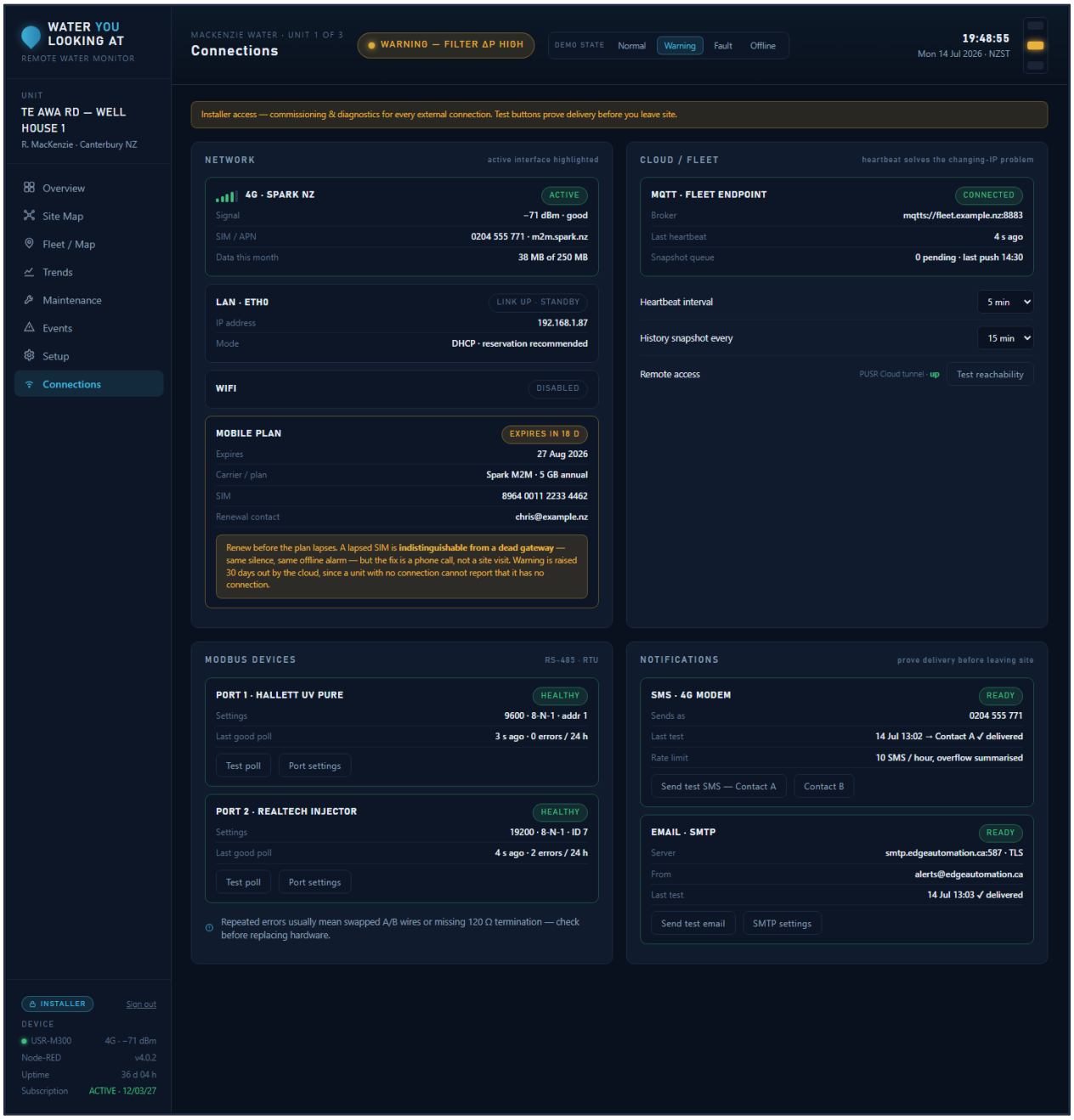
39 CONNECTIONS (INSTALLER)

The Connections page is the commissioning and diagnostics view for everything the monitor talks to: the network, the cloud, the two Modbus devices and the notification channels. Like Setup, it is visible only at installer level. Its test buttons exist so an installer can **prove alert delivery before leaving site**.

Network

One card per interface. The active interface is highlighted — for a 4G unit that card shows live signal bars, signal strength in dBm, the SIM number and APN, and data used this month against the plan. The LAN card shows the current IP address and addressing mode (with a reminder to set a DHCP reservation at the router); unused interfaces show DISABLED.

The connection type the console shows for a gateway (**Wi-Fi**, **4G** or **LAN**) is the one the gateway is really using, read from the gateway itself every 2 minutes, so it follows a change on site (for example a SIM unit that is given a cable). On the EM300 this is from gateway software 1.1.49; before that an EM300 with a modem fitted always showed 4G.



Connections: network interfaces, cloud heartbeat, Modbus port health and notification test sends — the whole commissioning checklist on one page.

Cloud / Fleet

Shows the fleet endpoint (MQTT broker), its connection state, the time of the last heartbeat, and the snapshot queue depth (snapshots queue locally through an outage and drain when the link returns). Configurable here: the **heartbeat interval** (1 / 5 / 15 min) and the **history snapshot interval** (15 min / 60 min / 24 h). A **Test reachability** button verifies the remote-access tunnel.

Modbus devices

One health card per RS-485 port: the Hallett UV on port 1 and the Realtech injector on port 2. Each shows its serial settings and address, the time of the last good poll and the 24-hour error count, with a HEALTHY / FAULT chip. **Test poll** requests the device's registers immediately and reports the result; **Port settings** opens baud/parity/address configuration. A tip on the page notes the two most common field faults: swapped A/B wires and missing 120-ohm termination.

Notifications

The SMS card shows the sending number, the last test result and the rate limit; **Send test SMS** buttons message Contact A or Contact B immediately. The email card shows the SMTP server, the sending address and the last test result, with **Send test email** and **SMTP settings**. Every commissioning visit should end with a delivered test on both channels.

Mobile plan (SIM)

Where the unit uses a mobile connection, a **Mobile plan** card shows the SIM number, carrier and plan, the expiry date, and who to contact for the renewal. The chip turns amber 30 days out and red once the plan has lapsed.

Record the expiry at commissioning. It takes a few seconds and it prevents the single most expensive misdiagnosis this product can cause: **a lapsed SIM is indistinguishable from a dead gateway**. Same silence, same offline alarm, same worried phone call — but one is fixed by renewing a plan and the other by driving to a remote site with a replacement unit. Without the date on file, nobody can tell which it is until they get there.

The warning is raised by the cloud rather than by the unit, for the obvious reason that a monitor with no working connection cannot report that it has no working connection. LAN and WiFi sites have no SIM and show no card.

Expires is shown in the site's time, with the zone named (for example *2027-08-21 13:08 NZST*).

Before the visit: the site's network settings

The setup program brings a gateway online without anything typed on the laptop. It fetches what the office has entered in the WYLA console for the unit's site: the site's **Wi-Fi**, the SIM's APN (**SIM record**, on the Connections page), and, from 20 Oct 2026, the gateway's **internet address** and, if needed, its **LAN address**. A WYLA administrator enters them on the **Provisioning** page: in **Sites**, press **Edit** on the site.

Gateway internet address. Automatic (DHCP) is the default and suits most sites: the site's router gives the gateway an address. Choose **Fixed** when the site's IT gives the gateway a fixed (static) address, and fill in **IP address**, **Subnet mask**, **Gateway** (the site's router), **DNS 1** and, if they gave one, **DNS 2**. Ask the site's IT for these numbers. The setup program fills them in and checks the gateway reaches WYLA before keeping them.

Gateway LAN address (advanced). Leave it blank and the setup program chooses the gateway's own LAN address. Fill in an IP address and subnet mask only when the site needs the gateway's LAN on a particular subnet. Ticking the support VPN option in the setup program replaces it.

The console checks the numbers before saving and says which box is wrong and why: each must be four numbers from 0 to 255 separated by dots (for example 192.168.1.20); the address and the gateway must be on the same subnet and must not be the same; the LAN must not overlap the internet side. The **Sites** list then shows the address under the site's Wi-Fi, for example *Internet Fixed 203.0.113.10 / 255.255.255.0 via 203.0.113.1*. Every change is recorded in the **Audit log** with the old and new numbers.

> **For installers**
> If the site uses a fixed address, check with the office that it is entered before you go. If the setup program cannot reach WYLA with the fixed address, it does not keep it: ask the site's IT to confirm the numbers, have the office correct them, and run the setup program again.

Running the setup program

One setup program, **wyla-setup**, sets up both gateway models WYLA supports: the **PUSR USR-M300** and the **IoTRouter EM300**. It works out which one is cabled to the laptop and runs that model's steps, so the installer does not have to choose. The EM300 is supported by the setup program but not yet offered for sites (see the Specifications chapter).

One installer for both: use 2026.11.4.1393 or later. The installer **WYLA-Setup-Installer-2026.11.4.1393** (signed by Water YOU Looking At) is one program for both gateways, with PUSR gateway software 1.1.51 and EM300 software 1.1.76. It replaces the old PUSR-only installer in place: the same Start menu entry **WYLA Gateway setup** and the same log file, **wyla-setup.log** (Start menu **Setup log**), now for both models. When it starts it looks for the gateway on the cable and says which one it found, for example *PUSR M300 found at 192.168.1.1*, at the top of the window, then runs that gateway's setup. If it finds none, it asks which kind of gateway you are setting up and then searches for it. A laptop that still has the old EM300-only installer can keep it or remove it in Windows **Settings > Apps**.

Do not use an older setup program on a gateway that has its new name. From gateway software 1.1.51 a PUSR gateway answers to its own name, wyla- and the last six characters of its ID (see **Local page**). A setup program older than 2026.11.4.1393 - installer 2026.11.3.1174 and before - may not recognise a gateway that already has its new name. Use 2026.11.4.1393 or later on every gateway; ask WYLA support for it if you do not have it.

What has been checked. Before release, the setup program in this installer was run start to finish on a PUSR gateway on WYLA's bench, from the command line, in the build just before this one: it found the gateway itself and all ten steps passed. The window itself, and a brand-new PUSR gateway on the cable, have not been through this build yet. If a run does not finish, send the **Setup log** to WYLA support.

Cable straight into the gateway. Plug the laptop's network cable into the gateway's **LAN** port (on the EM300, either LAN port). If the gateway is plugged into another gateway or router and the laptop reaches it through that, the setup program stops at step 1, before it changes anything, and says *Plug this laptop's network cable straight into this gateway's LAN port - not into another gateway or router*. Setting a gateway

up through another router is not safe: the setup program may move the gateway's own network to a new address range, and the laptop would lose it part-way through.

Two gateways at once. If the setup program finds both models, it asks which one to set up. Run without anyone at the keyboard, it takes the one on the laptop's cable, and stops if there is not exactly one. When two gateways share one switch, the laptop usually gets an address from only one of them and sees only that one: set gateways up one at a time.

The laptop's own internet. The setup program asks the WYLA cloud about the unit (who owns it, its passwords) over the laptop's own internet connection, not through the new gateway, which may not be online yet. If the laptop's Wi-Fi connects but passes nothing, the setup program notices within seconds and stops relying on it.

On the EM300. The setup program switches off the maker's own cloud service (on at the factory), gives the unit its own web page and Node-RED passwords, and sets up its support tunnel, which stays off until a support session is opened. A password set on the EM300's own web page is lost at its next restart (maker's firmware 2X04), so always let the setup program or WYLA set its passwords. The EM300's firmware is not updated by the setup program. **It only sets up an EM300 on firmware WYLA has tested** (2X04 today): a unit on any other firmware - a newer one from the factory, for example - is stopped before anything on it is changed, with the message "This unit runs firmware ..., which WYLA has not tested". Keep that unit aside and send the setup program's log to WYLA support.

> **For installers**
> Turn the laptop's Wi-Fi off if the site's Wi-Fi is unreliable, and keep one cable from the laptop to the gateway you are setting up. If the setup program says the gateway is behind another router, move the cable; do not work around the message.

Setting the site PIN in the setup program

From setup installer **2026.11.3.1174** (EM300: **2026.11.3.1176**), built 3 November 2026, a PUSR gateway is not finished while its local page still opens with the default PIN. The setup window has a box **Site PIN for the local page**: type the site's PIN, 4 to 8 digits, in both boxes. In the terminal give **--site-pin** (or set **WYLA_SITE_PIN**), or type it when the program asks.

A PIN that is easy to guess is refused before step 1: one digit repeated, digits counting up or down, a short group repeated, and 1234. This is the same rule the console uses.

At **step 2** the program asks WYLA whether the gateway already has a site PIN. If it still opens with the default and you gave none, the run **stops there, before anything on the gateway is changed**: run it again with a site PIN. A gateway that already has one keeps it when the box is left empty.

At **step 9** the program sends the PIN once to WYLA, which keeps only a one-way hash of it and gives the gateway its own WYLA support PIN at the same time. If the gateway is not yet claimed in the console, or WYLA cannot be reached, the run ends with **attention** instead of done: claim the gateway (or get online) and run it again. The PIN is masked in the program's log, and the boxes are cleared as soon as the run starts. **Just check it** reports whether a site PIN is set.

Over the WYLA support VPN, give the PUSR setup program **--device** with the gateway's ID (d_ and six characters): otherwise it reads the gateway's MAC address from the LAN (by ARP), which it cannot do over the VPN.

Today use setup installer 2026.11.4.1393 or later (one program for both gateways, see **Running the setup program**): an older setup program may not recognise a gateway that already has its new network name.

> **For installers**
> Choose the site PIN with the site's owner before the visit and give it to the people on site yourself - never on the enclosure. WYLA cannot show it to anyone afterwards. Gateways set up before 3 November 2026 still open with the default PIN: run the setup program again, or set the site PIN on the gateway's **Connections** page.

Gateway security and updates

Three things protect the link between each gateway and the cloud. WYLA can see all three for every gateway in the console's fleet list.

Gateway software (agent) 1.1.34. WYLA updates the gateway's software from the cloud. Since version 1.1.34, a download that stalls on a weak mobile link is retried by itself, a few times over several minutes, instead of failing. A broken or missing file still fails straight away, and the gateway keeps running its current version. After a power cut or a dropped link, the console now shows the gateway **online** the moment it reconnects, instead of up to five minutes later.

Unique passwords. Each gateway has its own random passwords for its local web page and for Node-RED. They replace the factory password, which anyone on the gateway's network could guess. The passwords are set by the setup program or by WYLA from the console (**Set unique passwords**), and kept encrypted in the cloud. Only a WYLA administrator can see them (**Show passwords**), and every look is recorded in the audit log. If a change fails part-way, the gateway puts its previous passwords back by itself. The gateway's **Passwords** status reads **Unique** when this is done, or **Factory** if it still uses the factory password. Never install an agent older than 1.1.31 on a gateway with unique passwords.

Encrypted link. Gateways send their readings to the cloud over an encrypted connection (TLS), checked against WYLA's own certificate, so nobody in between can read or change them. The gateway's **Cloud link** status reads **Encrypted** when this is working. **Encrypted - NOT verified**, **Falling back** or **Plain** mean the gateway is not on a verified encrypted link yet; tell WYLA support. **Test encrypted link** and **Switch to encrypted** are the tools WYLA uses to move a gateway over. Since 24 October 2026 the cloud accepts only the encrypted connection (port 8883); the site must let outgoing port 8883 through.

Locked down. From gateway software 1.1.44 the gateway closes three ways in that the factory leaves open, and checks every 10 minutes that they stay closed: its web page no longer hands out files without a sign-in, SSH (remote shell) is switched off, and its own MQTT port 1883 is closed to the network. From 1.1.46 it also blocks and stops the web terminal that firmware V1.3.03 0819 adds (port 7681 and /ttydweb). The EM300 gateway switches its SSH off the same way from its software 1.1.55, and from 1.1.63 keeps the two pages its firmware answers without a sign-in (modem, SIM and mobile-network details) off the site

network. From EM300 software 1.1.74 (4 November 2026) this **web guard** catches only port-80 traffic addressed to the EM300 itself: before, a laptop or PLC whose internet ran through an EM300 could not reach any web site on port 80. The unit's own sign-in-free pages stay closed, and only its model, serial and version still answer, for the setup program. Its web page and Node-RED still work as before, behind the gateway's own passwords.

> **For installers**
> Never write a gateway's passwords on the enclosure or in site notes. If you need to sign in to a gateway's own web page on site, ask WYLA support for its passwords.
>
> A factory reset does **not** put the Node-RED password back to admin. The setup program fetches the gateway's own password from the cloud, so the laptop needs internet while it runs. It normally gets it through the gateway: with the laptop's Wi-Fi off and its cable in the gateway's LAN port, the setup program first moves the gateway's own address if it clashes with the site router (for example both on 192.168.1.x), then carries on. If it still says the laptop has no internet, connect the laptop's Wi-Fi to a phone hotspot, keep the cable in, and run it again. Do not factory reset a gateway to get past a password; ask WYLA support.

Support access: remote access only when needed

Each gateway keeps its own tunnel to WYLA's VPN server, so WYLA support can help without a site visit. Since 13 October 2026 that tunnel carries nothing until somebody opens a **support session** for that gateway. Without one, no support login can reach anything through it: not the gateway's Node-RED editor, not its own web page, and not any device on the site's network. This follows the NCSC NZ guidance to allow remote access only when it is needed.

One thing changes on the gateway, for the session only (gateway software 1.1.43): it passes support's connections on to devices cabled to its LAN port as if they came from the gateway itself, so a second unit cabled behind it can be reached and set up without a site visit. It stops when the session ends, by the gateway's own clock, and after any restart. Its readings and alarms go to the cloud over their own encrypted link, which does not use the tunnel, so they keep flowing whether a session is open or not. The tunnel itself stays connected (the **Remote access** panel still shows it); it simply carries nothing until a session is open.

The way in fails closed. If the console's server stops, if the gate on the VPN server stops, or if the VPN server restarts, every gateway is closed again until a session reopens it.

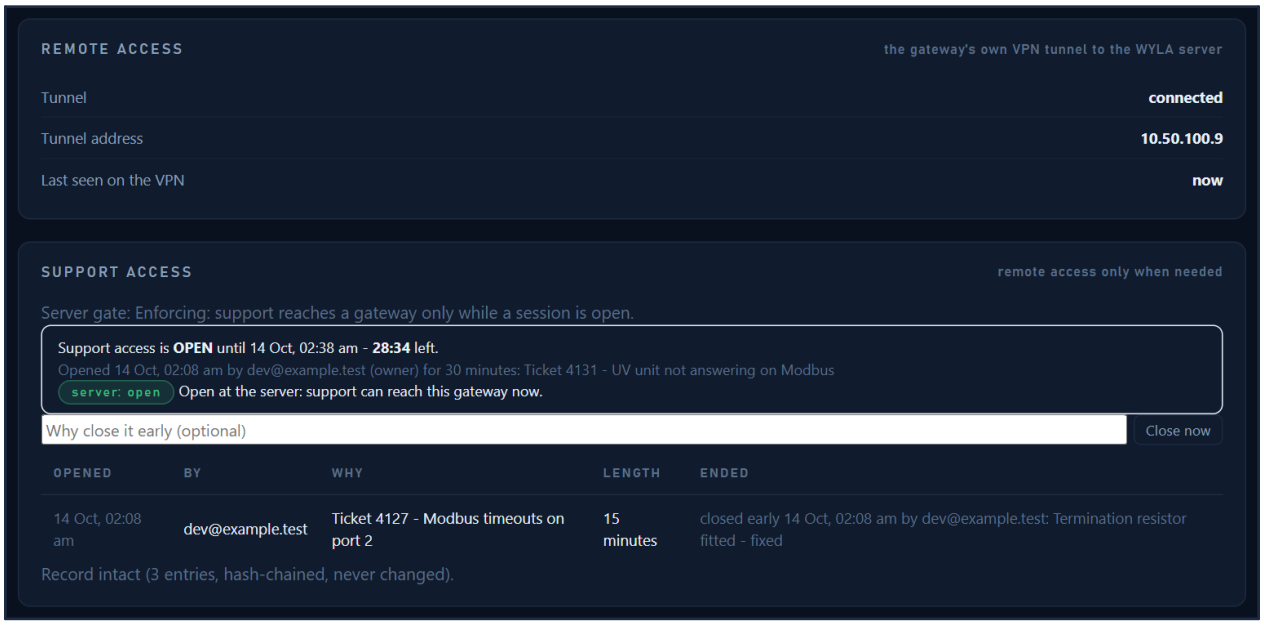
> **A support view of the console is not support access**
> When WYLA support views your account in the console (see Availability, Support Access & Your Audit Trail), they see your data there. That view never reaches a gateway. Reaching the gateway itself always needs a support session.

Opening a support session

The **Support access** panel is on the gateway's **Connections** page, below **Remote access**. Only an **owner** of the gateway's own customer, or a WYLA administrator, can open or close a session. A service company working on a gateway it has been given can see the sessions but not open one. Anyone else sees *An owner of this gateway's customer, or a WYLA admin, opens support access when it is needed.* With no session open, the panel shows the chip **closed** and *Closed: support cannot reach this gateway's Node-RED, its web page or its site network.*

1. Type why support needs in, in *Why support needs in (required)*, for example the support ticket number and the symptom.
2. Choose the length: 15 minutes, 30 minutes, 1 hour or 2 hours. The default is **30 minutes** and the most is **2 hours (120 minutes)**.
3. Press **Open support access** and confirm. The confirm box says what opens: the support logins on the WYLA VPN can reach this gateway's Node-RED, its web page and the devices on its site network, until the time is up.
4. The panel shows *Support access is OPEN until* the end time, with a live countdown of the time left, who opened it, for how long and why. Within a few seconds the line under it reads **server: open** - *Open at the server: support can reach this gateway now.*

- One session per gateway at a time. A second one is refused until the first has closed.
- A gateway without remote access set up has nothing to open; the panel says so.
- The **Server gate** line at the top of the panel says what the gate on the VPN server is doing. Normally it reads *Enforcing: support reaches a gateway only while a session is open.*



A gateway's Connections page: the tunnel connected, a support session open with its countdown, and an earlier session closed early. Names and tickets are examples.

Closing a session

A session **closes by itself** when the countdown reaches 0:00, whatever else is happening; the list then shows it as *ended by itself*. To end it sooner, optionally type why in *Why close it early (optional)* and press **Close now**, then confirm. Closing cuts the way in **at once, including connections already open**: a Node-RED editor open over the VPN loses its connection within seconds. The list shows it as *closed early*, with who closed it and why.

Every session is on the record

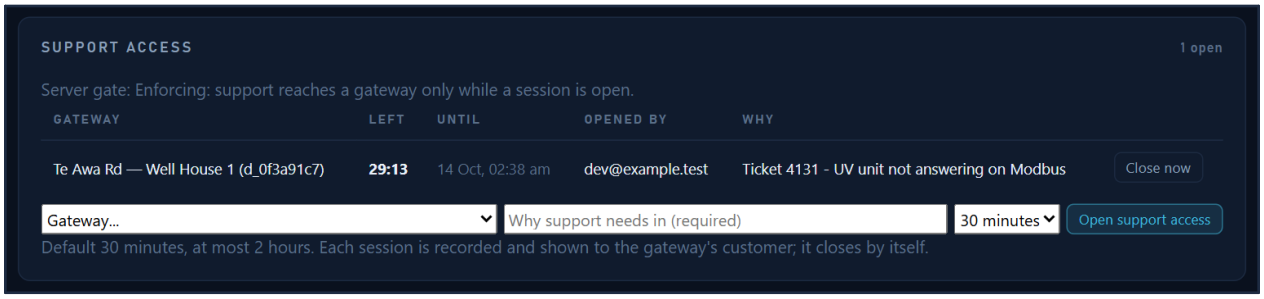
Each step of each session, opened, closed early or ended by itself, is written to an append-only record (nothing in it can be changed or deleted, and each entry is chained to the one before) and to your audit log. The **Support access** panel lists the recent sessions with **Opened**, **By**, **Why**, **Length** and **Ended**, and ends with *Record intact (N entries, hash-chained, never changed).* A red banner instead means the record no longer checks out; tell WYLA support.

Owners and installers see the sessions on the gateway's Connections page, and owners also see each step in the **Audit log**. Ask about any session you do not recognise.

For WYLA administrators: Admin > Fleet

Admin > Fleet has a **Support access** panel for every gateway: each open session with its **Gateway**, the time **Left**, **Until**, **Opened by** and **Why**, each with **Close now**. Under it, choose a **Gateway...**, give the reason and the length and press **Open support access** to open one on any gateway. With none open it says *No support session is open: support reaches no gateway.*

> **Break-glass (WYLA staff only)**
> If the console's server is down and a gateway must be reached, a WYLA administrator can open the way in by hand on the VPN server, for a limited time. It is logged at the server's highest alarm level and, while it lasts, the console shows a red banner: *Break-glass access is open on* the gateway, *until* the end time. Record every use in the support log.



Admin > Fleet: one session open, and the form to open one on any gateway.

WYLA support credentials (Admin > Fleet, WYLA staff)

WYLA support's own PIN for a gateway's local page is **per unit**: the cloud makes 8 random digits for each gateway, never easy to guess and never the site's PIN, and sends the gateway only a one-way hash of it. While a gateway has its own, the fleet-wide support PIN no longer opens it. This needs no gateway release (software 1.1.36 or later already takes it). Proven on a bench unit and given to every PUSR gateway on 3 November 2026; a gateway that was offline then takes its own PIN when it next connects, and until then still opens with the fleet PIN.

On **Admin > Fleet**, **Show passwords** on a gateway now has a **WYLA support credentials** part. It says whether the gateway uses the fleet PIN, its own PIN, or has been put back on the fleet PIN, and offers:

BUTTON	DOES
Give it its own PIN / **New PIN**	Makes the unit a new support PIN; the gateway has it within seconds when online, or when it next connects
Show support PIN	Shows the unit's own PIN, to read before a visit or a session
Back to the fleet PIN	Puts the fleet PIN back on that unit (the unit's own is kept, unused)
Use its own PIN again	Puts the unit's own PIN back in one press
Show master sign-in	For a standalone EM300: its own WYLA master sign-in (chapter **Standalone EM300**)

> **Every look is recorded**
> Only a WYLA administrator sees this part. Each action and each look is written to the customer's **Audit log** with the administrator's name. A shown PIN is forgotten when the window closes. The lamp test on the local page needs the unit's own support PIN once it has one. Never write a support PIN down or send it by email.

Local page: the gateway's own status page on site

From gateway software 1.1.36, each gateway also shows a simple WYLA status page on the site's own network, for the people at the plant: open **http://<LAN IP>:1880/wyla** in a browser on a laptop or phone connected to the site network. It shows the readings and alarms. It is **read-only**: nothing on it can change a setting, silence an alarm or control the plant. It does not need the internet, so it still works when the gateway's mobile link is down.

The page opens with a **PIN**. Until a site PIN is set, the gateway accepts the **default PIN 1234**, which is printed here and so is known to anyone; the **Local page** card says *Default PIN 1234 in use - set a site PIN* in amber until it is replaced. WYLA support also has its own PIN for the page - being made one for each gateway, see **WYLA support credentials** - so you never need to give support the site PIN. Repeated wrong PINs are slowed down by the gateway.

Finding the page's address. The gateway's **Connections** page shows it on the **Local page** card, on up to three lines. **Address on the site network** is the gateway's own address, for a laptop plugged into the gateway. **By name** is the link by the gateway's name, with its .local form beside it (the name is described

next); the card shows it once the gateway's software is new enough to have a name - 1.1.51, or 1.1.76 on an EM300. **Address from the site router** is the link by the address the site's router gave the gateway, for example http://192.168.1.88:1880/wyla, with the time of the gateway's last report beside it, because a router can hand out a different address later. The card shows this line only when the gateway has reported such an address: a PUSR gateway joined to the site's router by cable or Wi-Fi. Use the name or the address from the site router from a computer on the same network as the gateway; if the name does not open the page, use the address. These links only open the gateway's own local WYLA page, not this app. On a Windows laptop plugged into the gateway, the address is usually the **Default Gateway** that **ipconfig** shows (open Command Prompt and type ipconfig).

Opening the page by the gateway's name. From gateway software 1.1.51 (5 November 2026) every gateway has its own name on the site network: **wyla-** followed by the last six characters of its gateway ID, the ID shown in the app and on the gateway's label. The gateway with ID d_fc2dea, for example, is **wyla-fc2dea**. From a computer on the same network, open **http://wyla-xxxxxx:1880/wyla**, or **http://wyla-xxxxxx.local:1880/wyla**, with your gateway's six characters in place of xxxxxx - for the example, http://wyla-fc2dea:1880/wyla. There is nothing to set up on the site's router, and the router's list of connected devices shows the gateway under the same name, so you can tell which one it is. An EM300 has a name in the same way (from its software 1.1.76); its own website is described in the **Standalone EM300** chapter. The gateway takes its name about a minute after it starts and checks it every 10 minutes.

If the name does not open the page, use the address instead (the Local page card, or ipconfig's Default Gateway, as above): the address always works. Some IT departments switch name lookups off on their networks, and then no name of this kind is found. The name has been checked from another device on the same Wi-Fi network as the gateway. From a computer plugged straight into a PUSR gateway's own LAN port it has not been checked yet, so use the address there if the name is not found.

If nobody on site remembers the site PIN. When the gateway is online, an owner simply sets a new one on the Local page card (below). If the gateway has **no internet**, call WYLA support: from gateway software 1.1.50 (5 November 2026), support can sign in on the gateway's own page and give you a new PIN on the spot, with no internet needed. The new PIN must follow the same rule as in the app (4 to 8 digits, not easy to guess, not 1234). Everyone signed in to the page is signed out and signs in again with the new PIN, which works at once; the old one stops working. When the gateway is next online it tells WYLA, which keeps the new PIN as the site PIN - it replaces a PIN set in the app while the gateway was offline - and records it in the **Audit log** as *Local page PIN set on the gateway*. The Local page card then says *Set on the gateway by WYLA support on* the date. Only WYLA support's own PIN shows this on the page; the site PIN does not.

The **Local page** card is on the gateway's **Connections** page, below **Support access**. It shows the page's address once the gateway has reported its LAN address, whether the page is on, and which PIN opens it. Only an **owner** of the gateway's own customer, or a WYLA administrator, can set or change the PIN or turn the page off; anyone else sees *An owner of this gateway's customer, or a WYLA admin, sets the PIN.*

Identify - finding a gateway by its light. On **Setup**, **Identify - flash stack light** makes that gateway's stack light flash for 15 seconds, so somebody standing in front of several gateways can tell which one the app is showing. From gateway software 1.1.52 (1.1.77 on an EM300, 5 November 2026) only the **green** lamp flashes, half a second on and half a second off; the red lamp keeps showing what it showed, so a fault stays visible while the light flashes. The light then goes back to showing the alarms. The button is greyed

out while the gateway is offline, and a request the gateway does not receive within 90 seconds is dropped, so a light never starts flashing long after somebody asked. A flash never carries over a restart of the gateway: before this software a gateway could flash for a while at power-up.

Lamp test (WYLA support only). From gateway software 1.1.38, when WYLA support opens the page with its own PIN it can test the stack light: **Red**, **Yellow**, **Green** or **All off** for **10 seconds**, after which the light goes back to showing the alarms by itself. Only the stack light is touched - no pump, dosing, UV or other output - so it is a check of the lamp, not control of the plant. The site PIN and the default PIN do not show these buttons, and the gateway limits how often they can be pressed. During a test the light shows the test colour, not the alarm state; alarms are still sent as usual. Every test is recorded: the **Local page** card lists the latest ones and the **Audit log** shows each as *Lamp test (local page, support PIN)* with the colour, the address it was pressed from and the time.

1. On the gateway's **Connections** page, find the **Local page** card and press **Set PIN** (**Change PIN** once one is set).
2. Type the new PIN, 4 to 8 digits, in both boxes. The boxes are masked. 1234 is refused: it is the default everyone can look up. From 3 November 2026 a PIN that is easy to guess is refused too: one digit repeated, digits counting up or down, or a short group repeated. The page says why.
3. Press **Save PIN**. The gateway has the new PIN within seconds when it is online, or as soon as it next connects. The card then reads *PIN set* with the date and who set it.
4. Tell the people on site the PIN yourself. WYLA keeps only a one-way hash of it, so it is never shown again - not on the card, not to WYLA support. If it is forgotten, set a new one (with no internet at the gateway, WYLA support sets it on site - see above).

- **Turn off** stops the gateway serving the page at all; **Turn on** brings it back with the same site PIN. Nothing else on the gateway changes either way.
- **Use the default PIN again** removes the site PIN, and the page opens with 1234 again. From 3 November 2026 only a WYLA administrator sees this button (support's way back): a finished gateway keeps a site PIN. To change it, set a new one.
- If the gateway runs software older than 1.1.36, the card says so. The PIN you set is kept and takes effect when the gateway is updated.
- Every change is recorded in the **Audit log** (who, when, what) - never the PIN.

> **For installers: set a site PIN at commissioning**
> A new gateway's local page opens with the default PIN **1234**. Set a site PIN on the Local page card before you sign the site off, and give it to the site's operators, not written on the enclosure. WYLA support has its own PIN and never needs the site's. The setup program (installer 2026.11.3.1174 or later) asks for the site PIN and will not finish a gateway without one (see **Setting the site PIN in the setup program**).

Signing the site off

A site is not finished when it powers up — it is finished when somebody says so. **Sign off commissioning** records who completed the install and when, and moves the site from *unfinished install* to *live*.

Until it is signed off, the site appears on WYLA's stalled-install list, which is deliberate: an unfinished install is a site the owner is paying for that is not protecting anything, and it should be visible until it is fixed. Do not sign off until the unit is reporting, both notification tests have been delivered, every enabled input reads a plausible value, and the gateway's **Local page** has a site PIN instead of the default 1234 (gateway software 1.1.36 or later; see **Local page** above).

If a unit has never reported at all, the cause is almost always one of three things, in this order: no power or no uplink; the SIM or network settings; or **the gateway's I/O service is not offering its points**. The last one catches people out because the unit looks healthy from the outside: on the gateway's page, **Re-scan gateway I/O** should list AI01, AI02, DI01, DI02, DO01 and DO02 (and the expansion card's AI11.. and DO11..). Two things make points missing, and both are now handled for you. First, the I/O expansion card's points only exist once the card is registered on the gateway, and a factory reset forgets it; the setup program registers it. Second, on some older firmware (V1.2.21) the gateway's own Node-RED I/O bridge does not answer; gateway software 1.1.35 or later then reads and drives the I/O through the gateway's web service instead, and the gateway's status shows **I/O via web service**. The setup program (2026.10.20.775 or later) also installs newer gateway firmware that WYLA has published for that model automatically: it can add up to 15 minutes to a setup run, and the gateway must not be unplugged while it installs. From setup program 2026.10.26.1012 the current firmware is V1.3.03 0819 for both models; a gateway still on V1.2.x first gets the full V1.3.03 0526 and then 0819 in the same run (up to 30 minutes). See the Specifications chapter for the standard wiring.

40 STANDALONE EM300 (NO CLOUD)

The IoTRouter EM300 gateway can also run **standalone**: no cloud subscription, its history kept on an SD card inside the unit, its own website on the site network, and alarm emails sent through your own email account. An SD card holding a WYLA standalone licence for that unit is what makes it standalone; without one it is a normal cloud gateway.

Is standalone for this site?

Choose standalone when a site wants its records and alarms on site and no subscription: the unit watches the plant, drives the stack light, keeps one-minute records and emails alarms, all by itself.

Standalone does **not** do what the cloud does for compliance: there are no sealed records or off-site copies, no regulator reports or notification deadlines, no text messages or phone call-outs, and no WYLA app. The records live on one card in one unit. If a regulator expects those, the site needs the cloud.

> **Not yet offered**
> The EM300, and its standalone version, are on the bench only (October 2026). This chapter describes how it works so installers can try it; WYLA says when it is offered for sites.

How the unit decides: cloud or standalone

The unit looks at its SD card when it starts, and again every 30 seconds.

WHEN THE UNIT STARTS WITH...	IT RUNS
No SD card	Cloud, exactly as any WYLA gateway
A card with no licence, or a licence for another unit	Cloud - its website says why
A card with a WYLA licence for this unit	Standalone, within 30 seconds

When the card comes out

A standalone unit **stays standalone** when its card is pulled: the stack light goes red with the alarm **SD card missing**, and the one-minute records wait on the unit itself (up to 7 days, in the same store a cloud gateway uses while offline) and are written to the card when it is back - the unit finds the card again by itself within about a minute. The 15-minute snapshots and alarm events wait in memory only: a power cut while the card is out loses those, never the one-minute records. From unit software 1.1.63 the unit never formats a card that holds files: only a blank or empty card is prepared, so a card put in by mistake keeps its files and is not used. After a wrong card the unit checks for its own card every 10 minutes, so putting the right card back can take up to 10 minutes to show (unit software 1.1.69). A card that is not this unit's raises **SD card is not this unit's**. Only restarting the unit without a card puts it back in cloud mode, so a loose

card never quietly sends a site back to the cloud.

To move a unit back to the cloud: take the card out, restart the unit, and ask WYLA to put the site on a cloud plan.

When the card fills up

The unit warns first and removes history last (unit software 1.1.78 and later). When less than about a tenth of the card (or 1 GB) is free, the alarm **SD card nearly full** (yellow) comes on - **before** anything is removed. Download what you need and free space, or ask WYLA for a larger card prepared for the unit.

Only if the card fills further (below 5 % or 512 MB free, counting room already reusable inside the readings file) does the unit make room by itself: it removes its oldest day of readings (never yesterday's or today's; events and the audit log are kept), about one old day for each new day. The alarm then says so and names the oldest day still on the card. **SD card full** (red) is unchanged: below 64 MB the unit lets go of its small space reserve so readings are still written and the history can still be read and downloaded, but that reserve runs out.

Choosing a card

A **32 GB card holds more than ten years** of records for any site: the one-minute records take about 1.1 MB a day at 8 recorded readings, 1.8 MB at 15 and 3.6 MB at 30 - roughly 4, 7 and 13 GB in ten years. An 8 GB card suits only the smallest sites. Use an **industrial-grade** card: the unit writes to it every minute, all year round.

RECORDED READINGS	A DAY	TEN YEARS
8	about 1.1 MB	about 4 GB
15	about 1.8 MB	about 7 GB
30	about 3.6 MB	about 13 GB

> **The card is the only copy**
> A standalone unit's history exists nowhere but on its card. Download it regularly (**Downloads** on the unit's website, up to 31 days per download) and keep the files with the site's records.

The licence and why a card cannot be copied

The licence is a small file on the card, **wyla/standalone-licence.json**, signed by WYLA. It names the serial number of one EM300. Changing a single character breaks the signature, and a copy of the card in another unit is refused (that unit stays in cloud mode). The website's own files on the card are checked against fingerprints built into the unit's software: a file edited on a PC is never shown, and the unit writes it again.

A WYLA administrator issues the licence (on the gateway's page in the console, **Standalone** panel). Ask WYLA before the visit, giving the unit's ID (d_ and six characters).

Setting a unit up as standalone

Use a **new, empty**, industrial-grade SD card - 32 GB holds more than ten years for any site (see Choosing a card). The EM300 formats an empty card for itself the first time it sees it; a card that holds files is refused and left as it is (unit software 1.1.63 and later), so empty it on a computer first if it has been used.

1. Put the card in the EM300's SD slot and power the unit up.
2. Run the WYLA setup program as usual and tick **This unit runs standalone** (or run it with **--standalone**). Keep the laptop online: the program fetches the licence from WYLA.
3. The program checks the card and the licence before it changes anything, does the usual setup steps, then writes the licence to the card, checks it, and waits until the unit says it is standalone.
4. At the end it shows the unit's website address. Open it on a computer on the site network and sign in as **admin** with the password **123456789** (every new unit starts with this). The website asks at once for a password of your own - at least 10 characters - and shows nothing else until it is chosen; the default then stops working. Give the new password to the site's owner, or add the owner under Users and let them choose theirs.
5. Signed in, open **Email alerts** and set up who is emailed (see below), then **Users** to add the site's people.

No internet at the site: a licence file

The unit itself never needs the internet for its licence - it checks the licence against WYLA's key built into its software. Only getting the licence onto the card does, and a **licence file** takes that to the site instead.

Before the visit, on a computer with internet: open the gateway's page in the WYLA console, and in the **Standalone** panel press **Download** beside its licence. It saves a small file named after the unit and the licence (for example **d_aa9015-sl_aa12884f672c.json**). Copy it to the laptop that goes to site.

At the site: run the setup program, tick **This unit runs standalone**, and under **No internet at the site? Licence file** choose the file (from a terminal: **--cli --licence-file <the file>**). The program checks the file is for this unit and signed by WYLA before it changes anything, then writes it to the card exactly as it would from the cloud.

Without internet the rest of the setup still runs, with three things left for a later visit with internet (or a run of the setup program then): the unit's link to WYLA, its support connection, and its own unique web page and Node-RED passwords, which come from WYLA. The standalone unit works fully on site meanwhile.

> **A licence file is for one unit**
> It names the unit's serial number: another unit refuses it, and changing one character breaks WYLA's signature. Keep it with the site's paperwork; a new one can be downloaded from the console at any time.

Replacing a standalone unit's card

The licence belongs to the unit, not the card, so a new card is made the same way: put a new, empty card in (the unit shows **SD card missing**, then **SD card is not this unit's** once it has formatted it) and run the setup program with **This unit runs standalone** again. It writes the unit's licence to the new card and the unit carries on on it within a minute; the website files, the history database and the space reserve are made on the card by the unit. What lives on the unit itself stays as it was: users and passwords, Email alerts, API keys and the settings changed on the unit.

The history stays on the old card (readings, alarms and the audit log up to the swap): keep it, labelled with the unit's ID and the date, as the record of that period - the old card still works in this unit if it is ever needed. Ask WYLA support if the history must be moved onto the new card.

The local website

The website is at **http://<unit address>:1880/wyla/** on the site network (it is not on the internet). Everyone signs in with their own name and password: at least 10 characters. Five wrong passwords lock that name for 5 minutes. A session ends after an hour unused. A new unit starts with one owner, **admin** / **123456789**, whose password must be changed at the first sign-in.

Finding the unit by its name. From unit software 1.1.76 (5 November 2026) every EM300 has its own name on the site network: **wyla-** followed by the last six characters of its WYLA ID, the ID shown in the app and on the unit's label. The unit with ID d_aa9015, for example, is **wyla-aa9015**. From a computer on the same network - plugged into one of the unit's LAN ports, or on the site network the unit is joined to - open **http://wyla-xxxxxx:1880/wyla/**, or **http://wyla-xxxxxx.local:1880/wyla/**, with your unit's six characters in place of xxxxxx - for the example, http://wyla-aa9015:1880/wyla/. There is no need to know its address and nothing to set up on the site's router. The second form, ending in .local, is the one Macs and phones understand, and it also works on Windows computers. The router's list of connected devices shows the unit under the same name. The unit takes its name about a minute after it starts and checks it every 10 minutes, so just after a restart use its address, or wait a minute. PUSR gateways have a name in the same way (see **Local page** in the Connections chapter).

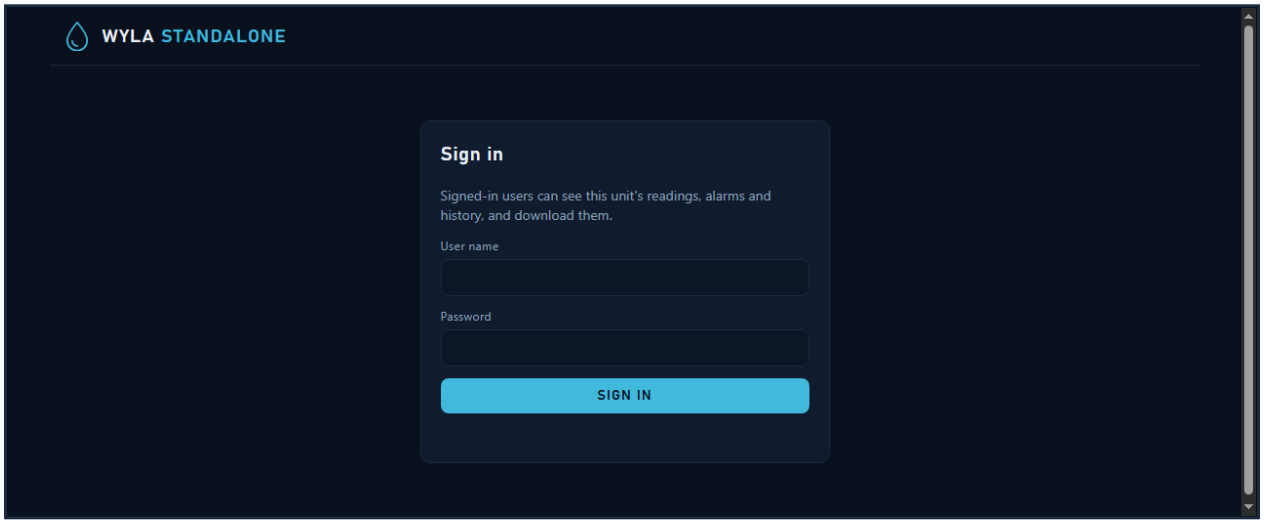
If the name does not open the website, use the unit's address instead: the address always works. Some IT departments switch name lookups off on their networks, and then no name of this kind is found. The name has been checked from a computer on the unit's LAN ports and over Wi-Fi; on a unit joined to the site network by cable it has not been checked yet.

A forgotten password. An owner can give anyone a new password on the **Users** page (**New password**). If the only owner has forgotten theirs, call WYLA support.

WYLA support has its own master sign-in on every standalone unit, so it can help a site that has lost its passwords. It shows as **wyla-master**, and every time it is used is in the Audit log; the Users page says so too.

ROLE	CAN
Viewer	See every page and download the records

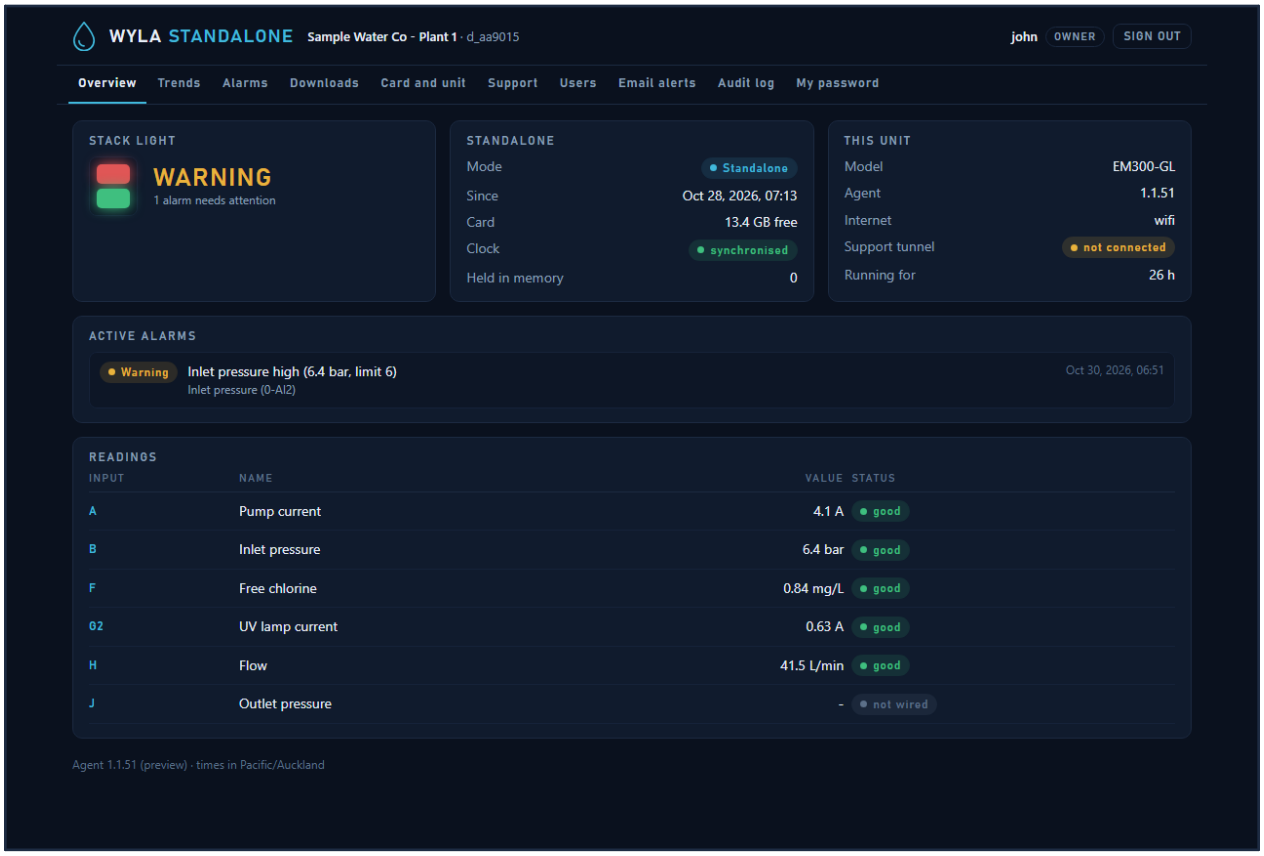
ROLE	CAN
Operator	Also acknowledge alarms
Owner	Also add and remove people, set up email alerts, read the audit log and allow WYLA support



Signing in to a standalone unit's website.

What the website shows

Overview: the stack light, the standalone state (card, clock), the active alarms and every reading. **Trends**: any reading over 6 hours to 30 days, from the one-minute records (or the 15-minute snapshots for inputs that are not recorded). **Alarms**: when each was raised, cleared and acknowledged, and by whom. **Downloads**, **Card and unit**, **Support**, **Users**, **Email alerts**, **Audit log** and **My password**.

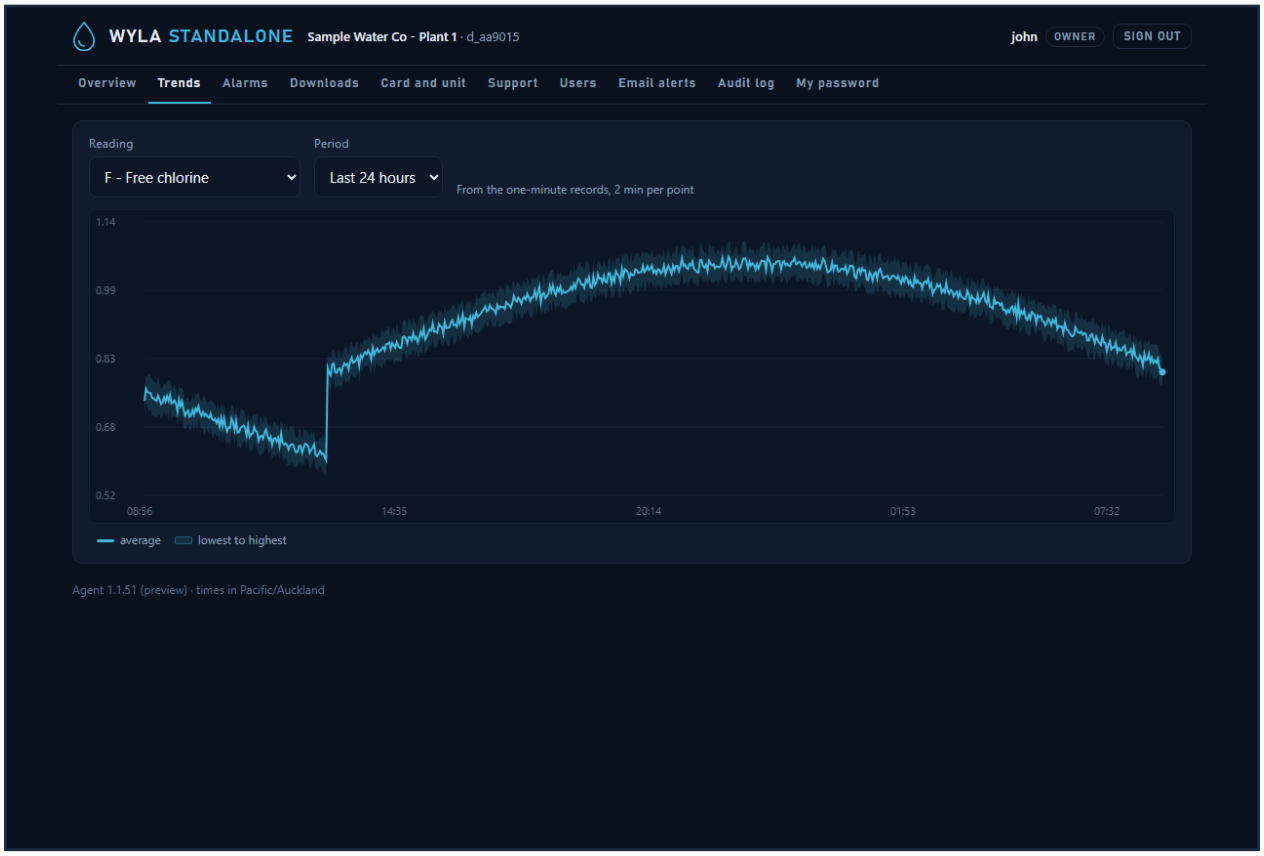


Overview (sample data).

History on the card and downloads

The card holds a small database: the one-minute records, a 15-minute snapshot of every reading, every alarm and an audit log of who did what. Nothing in it can be edited or deleted; only when the card is almost out of room (below 5 % or 512 MB free) is the oldest whole day removed, and that is logged (see When the card fills up). Records are stored in UTC and marked when the unit's clock was not synchronised. The one-minute records are written to the card whether or not the site has an internet link (unit software 1.1.78 and later; before that a unit with no internet held them until a link came).

Downloads gives one-minute records, alarms or (owners) the audit log as a CSV file for any period of up to 31 days, with both UTC and the site's local time.



Trends from the one-minute records (sample data).

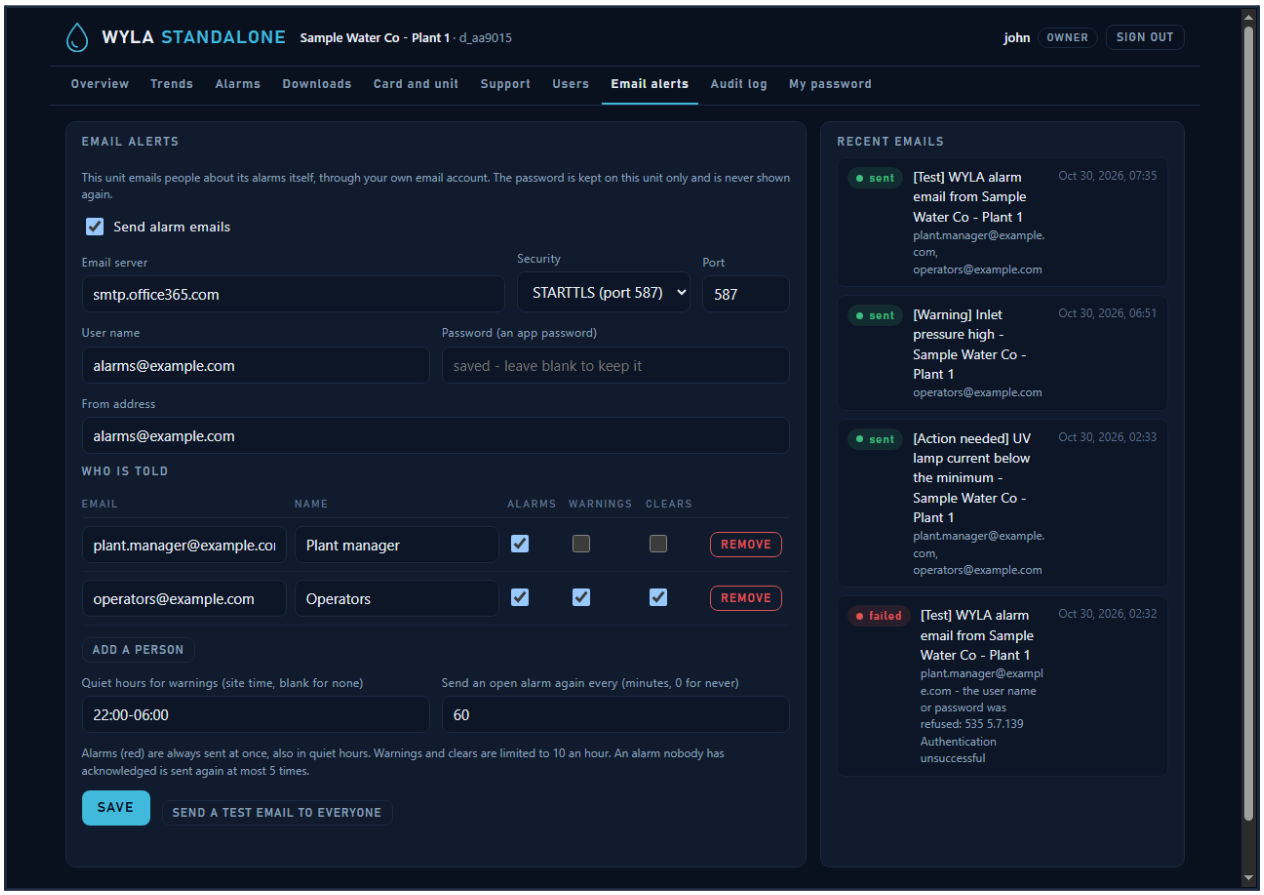
Alarm emails

A standalone unit emails its alarms itself, through your own email account. On **Email alerts** (owners) enter the email server (for Microsoft 365 smtp.office365.com, for Gmail smtp.gmail.com; STARTTLS, port 587), the user name and an **app password** from the email provider, the From address, and who is told about **alarms** (red), **warnings** (yellow) and **clears**. Press **Send a test email** and check it arrives.

The password stays on the unit: it is never shown again and never sent to WYLA. The rules are the cloud's: red alarms go at once, day or night; warnings can wait out quiet hours; repeats within 5 minutes are dropped and warnings are limited to 10 an hour; an alarm nobody acknowledges is sent again (if set, up to 5 times) until an operator acknowledges it on **Alarms**.

The emails look like the cloud's: the WYLA logo, how urgent in words, what happened, what it means, likely causes and what to do, and a button to the unit's own website (it works from a computer on the site network).

> **Using a Google (Gmail) account**
> Google refuses your normal password here - it needs an **app password** (16 letters). In your Google account open **Security** and turn on **2-Step Verification** if it is off (app passwords only appear once it is on). Then open **myaccount.google.com/apppasswords**, name one (for example "WYLA unit"), press **Create**, and paste the 16-letter code into Password on Email alerts. Server smtp.gmail.com, STARTTLS, port 587. The Email alerts page shows these steps as soon as a Gmail address is entered. A work or school Google account may not allow app passwords - ask its administrator.



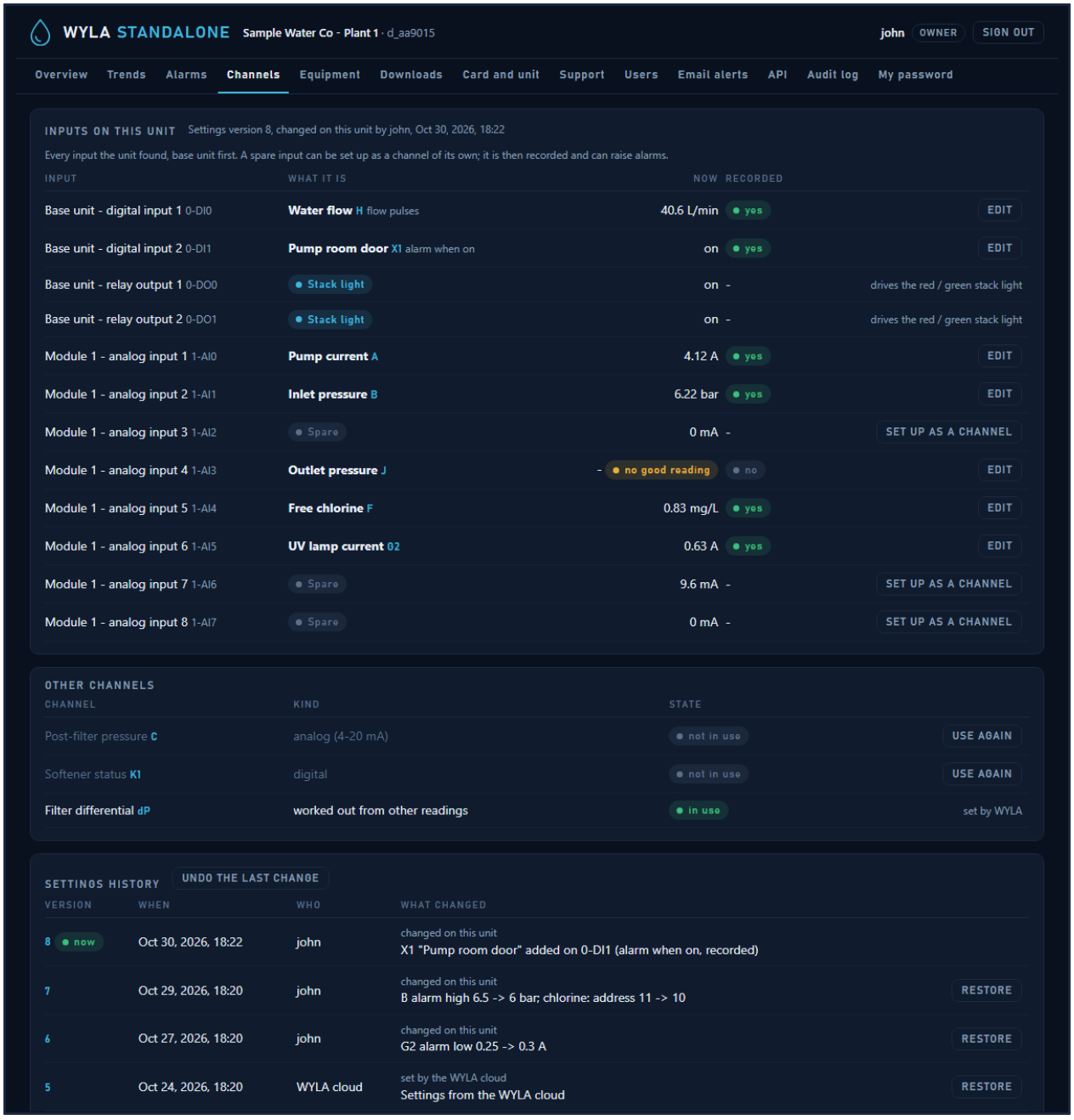
Email alerts (sample data).

Changing the unit's settings: inputs

A standalone unit's settings are changed on its own website - there is no cloud to change them from. Everyone signed in sees them; only an **owner** changes them. **Channels** lists every input the unit found, base unit first, with what each one is, its reading now and whether it is recorded every minute.

Edit a channel to change its name, the input it is wired to, its units and 4-20 mA range, and its alarm high / low limits, delay and level. A **Spare** input can be **set up as a channel** of its own: an analog input with its range and alarms, or a digital input that just shows on / off, alarms when on or when off, counts run hours, or counts flow-meter pulses. A new channel is recorded every minute (on the card, in Trends, downloads and the data API) unless switched off. A spare channel is recorded and alarmed but never counts as a UV, chlorine or turbidity compliance reading. The two relay outputs drive the stack light and are not changed

here.

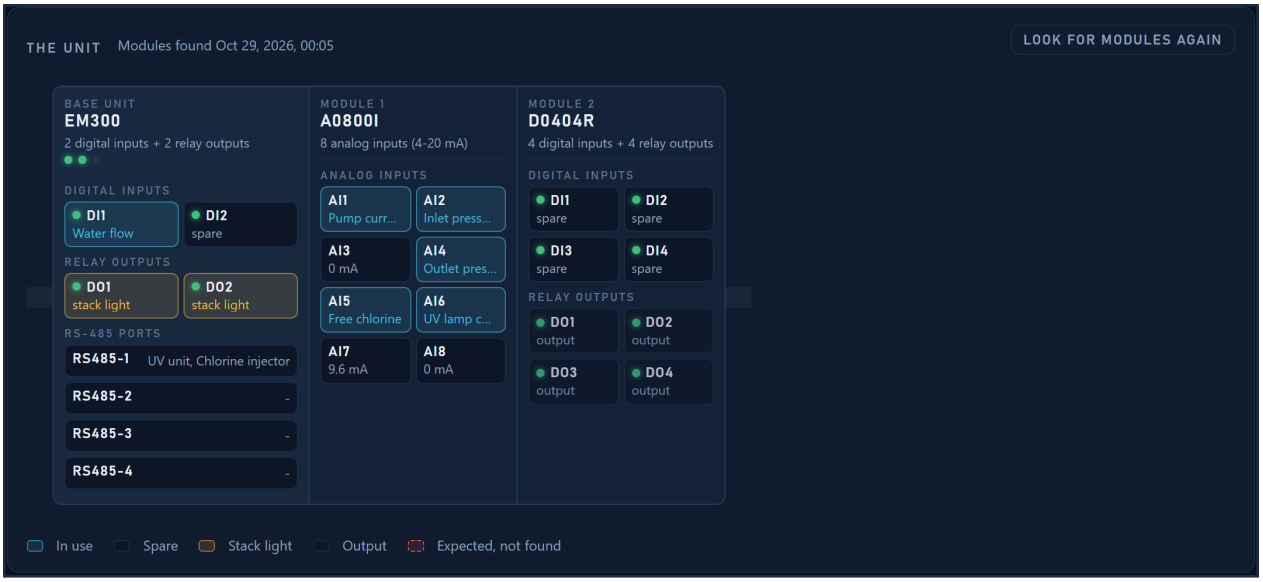


Channels: every input, what it is, its reading and whether it is recorded (sample data).

The unit and its I/O modules

Channels opens with **The unit**: a picture of the EM300 as it is built - the base unit with its two digital inputs, two relay outputs and four RS-485 ports (with the equipment on each), then every I/O module clipped onto its side, in order. Each terminal shows what it is: **in use** (with the channel's name), **spare**, **stack light**, **output**, or **expected, not found** - a channel set to read an input the unit does not have. Owners can press a terminal to edit its channel, or to set a spare input up as a channel.

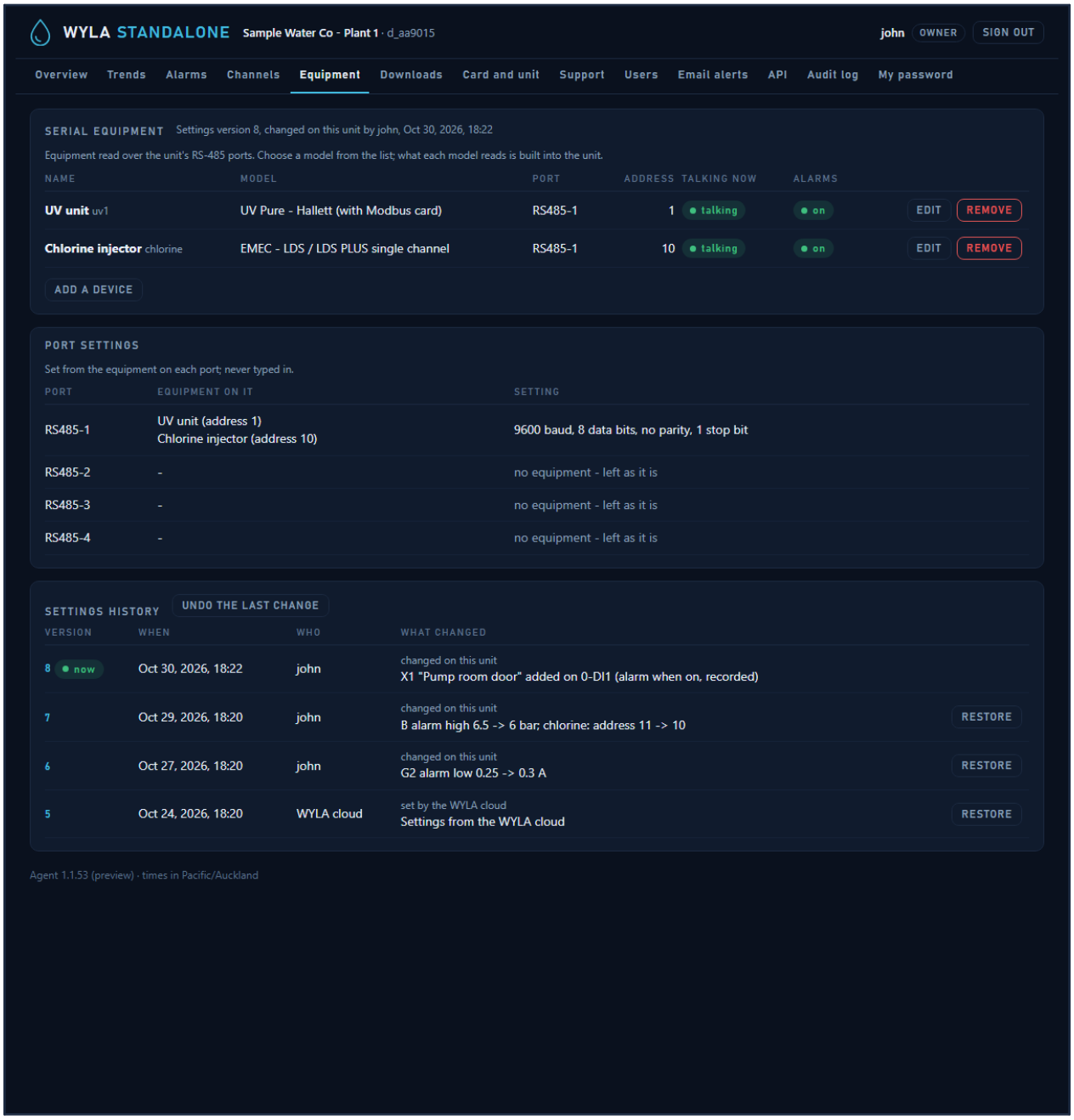
Adding a module needs no setting up: switch the unit off, clip the module on, and switch it back on. The unit finds it when it starts, works out the model from its inputs and outputs, and offers its inputs as spare. **Look for modules again** makes the unit look without a restart. If channels are set to read inputs the unit does not have (for example analog readings expected on module 1 when module 1 is a digital module), a note under the picture says which; edit each channel to the input it is wired to, or fit the module those inputs are on. Outputs on a module are shown but never switched by the unit.



The unit: the base unit, an analog module and a digital module, each terminal in use, spare or an output (sample data).

Changing the unit's settings: serial equipment

Equipment lists the devices read over the unit's RS-485 ports. **Add a device**: choose its model from the list (the equipment WYLA has mapped - what each model reads is built into the unit), then only the **port** it is wired to, its **Modbus address** (the one set on the device itself) and a name. Two devices on one port cannot share an address. The port's speed and framing are set from the models on it, never typed; the page warns when two models on one port want different settings. Equipment not on the list is set up by WYLA support.



Equipment: devices, ports and the settings history (sample data).

Trying a change, keeping it, undoing it

Changes are collected on the page first. **Review changes** shows in plain words what will change, with any warning (for example an alarm switched off or made looser). **Try for 10 minutes** puts them in force at once, and a banner on every page shows the live readings of what changed with **Keep these settings** and **Undo now**. If nobody keeps them in 10 minutes, the unit goes back by itself. Every try, keep, undo and restore is in the **Audit log** with who did it, and the settings history lets an owner put an earlier version back (as a new try). If the unit restarts during a try, it starts on the settings last kept.

When the site has internet, the unit sends WYLA a read-only copy of its settings, so WYLA support sees what the site runs. The WYLA cloud does not change a standalone unit's settings; only a WYLA administrator can, deliberately, and that is recorded on both sides.

1. Change what you need on Channels or Equipment.
2. Press Review changes and read what will change.
3. Press Try for 10 minutes and watch the readings in the banner.
4. Press Keep these settings - or Undo now.

WYLA support for a standalone unit

When the site has internet, the unit keeps its support connection up, but WYLA can only reach it while a support session is open. The owner opens one on **Support**: **Allow WYLA support** for 15 to 120 minutes, with a reason. The unit asks the WYLA cloud, which opens the session and tells the unit; the Support page shows until when. Every session is recorded. Once a day the unit also sends WYLA a small check-in (no readings) so WYLA knows it is alive; a unit not heard from for 3 days is flagged to WYLA.

From unit software 1.1.73: no shared sign-in

With EM300 unit software **1.1.73** or later (published 3 November 2026; 1.1.74 on 4 November) and setup installer **2026.11.3.1176** or later a standalone unit set up by the setup program has **no sign-in shared with other units**:

First sign-in. Instead of the published default password, the setup program makes a 12-character password for this unit (three groups of four) and shows it once at the end of the run. Give it to the site's owner, who still chooses their own at the first sign-in. If the unit's owner has already signed in, a new setup run keeps their users. A unit that never went through the setup program still starts with the default password above.

WYLA support. The unit gets its own WYLA master sign-in (user **wyla-master**), whose password WYLA keeps sealed; the unit holds only a one-way hash, and the fleet master sign-in no longer opens it. WYLA support reads it on **Admin > Fleet** (**Show master sign-in**), and every look is audited. Run with the laptop offline (a licence file), the unit keeps the fleet master until a run with the laptop online. The setup program's **--fleet-master** puts the fleet master back. There is no way yet to give a unit a new master sign-in - a new setup run writes the same one again - so treat every look at it as lasting and never write it down.

Proven on the bench unit on 4 November 2026: the unit's own master signs in, **--fleet-master** removes it (its password is then refused) and a new run puts it back. A new run also replaces a first password made by an earlier run that the owner never used.

Move a standalone unit to the cloud

The readings and alarms the unit's SD card kept while it was standalone come into the WYLA cloud. The unit stays standalone until all of its history is safely in the cloud, then restarts into cloud mode by itself. The card is never wiped: it stays in the unit as the original archive. Before you start, the unit is at its site in Fleet (its history goes to the site it is at), online, and running standalone. Only WYLA support or an owner of the customer can move it. Built on 8 November 2026 and not yet deployed. It needs the unit software release that carries it.

1. Gateway page > **Connections** > **Move to the cloud, with its history** > **Move this unit to the cloud**. The panel shows the records and alarms in the cloud so far and the period they cover.
2. Wait: about 10 KB a second, so as not to swamp a 4G link - a month of one-minute records at 8 readings takes roughly an hour. A power cut or a lost link does not matter: it carries on where it stopped.
3. By file instead (slow or costly link): on the unit's own website, **Downloads > History for the cloud > Download part 1, 2 ...**; in the console choose each file in order - WYLA shows what is in it (unit, serial, period, counts) and stores nothing until you press **Import this file**. The unit then sends only what is left.

- Afterwards, records from the standalone period say *Recorded on the unit while standalone, imported on <date>* in records downloads, the Monthly Compliance Report, the level 1-3 reports and the Hinekorako upload file's notes, and they are sealed on import: on the Compliance page, **Record seals** and the month's day strip show those days as *sealed on import*, the gateway's line says its history *is being imported* and then *was imported on <date>*, and **Check the seal** (operators and up) re-checks every batch. Gaps in the standalone period appear in the gap log; reports can be made for the period.
- A card row dated in the future (the unit's clock ran ahead) is never stored: it is counted among the card rows not stored, as the cloud does with live readings.
- *Stopped - needs WYLA support*: part of the history meets records the cloud already has (for example a unit that was in cloud mode for a while in between). Nothing was replaced; the unit stays standalone (the times in the panel are site time). WYLA support decides, with a reason kept in the audit log: **Take it without the records the cloud already holds** (those records stay exactly as they are; start the move again and the unit carries on where it stopped) or **Abandon this import** (what is already imported stays, labelled; the move is cancelled; a new move starts a fresh import). The panel then says what was decided and when. The unit sends its history in batches; the panel counts them. **Cancel the move** stops it; what is already imported stays, labelled; a new move carries on from there.
- On the unit's website, **Downloads > History for the cloud** is only for moving the unit to the WYLA cloud by file: download each part in turn; the card is not changed.

The unit's settings after the move

A unit that has moved to the cloud keeps running the settings it had while standalone. Nothing changes on it at the switch, and the cloud sends it no settings until someone chooses. The panel **The unit's settings after the move** sits right below the Move panel (gateway page > **Connections**). It appears as soon as the whole history is in the cloud, even before the unit has restarted into cloud mode, so you can choose first. It lists what would change on the unit either way. Anyone who can see the gateway and may change it sees the differences; only an owner of the customer or WYLA support can choose. Built on 8 November 2026 and not yet deployed. It needs EM300 software 1.1.80.

While the choice is waiting, the gateway's **Setup** page, the standard setup, a compliance recording change and a raw configuration command are all refused with the words *Choose its settings first*. A local page PIN or support PIN change is kept and goes out with the settings chosen. During the last part of the move, the unit's own website also refuses changes to settings and to its email alerts, until the move has finished.

1. Read the two lists: **What changes on the unit if you adopt its settings** and **What changes on the unit if you use the cloud's**.
2. If you will adopt, choose under **Recording, if you adopt**: **Record both** (the cloud's compliance readings and the unit's own - recommended, and already selected), **Record only what the cloud records**, or **Record only what the unit records**. If that last choice would stop compliance readings, a red banner names them and you must tick **I understand these readings will not be recorded** before Adopt is accepted. The same banner and tick appear under every choice when the unit no longer has equipment whose readings the cloud records for this site's compliance.
3. Press **Adopt the unit's settings** (its channels, equipment, serial ports and alarm limits stay as they are, and the cloud's latest is kept for everything else) or **Use the cloud's** (the cloud's latest replaces what the unit runs). The page asks first. The choice is kept in the audit log, stored as a new version and sent to the unit once. **Use the cloud's** is not offered when the cloud holds no settings for the unit.
4. Under **People the unit emailed about alarms**, press **Add as a contact** or **Leave out** for each person. **Since the unit moved to the cloud, these people no longer get its alarm emails.** The cloud tells only the contacts you add here, so adding a person is what starts their alarm alerts again. Adding one makes a contact for this site, by email, for the same alarm levels, and sends them the privacy notice once. If the person is already on the customer's **Contacts** list, this unit's site is added to their entry instead, their name, address and alarm levels stay as they are, and the page says so: *Already a contact - now also told about* and the site. If they are switched off on the Contacts page, or the site could not be added, the page says they will not be told. **Leave out** deletes their details from the cloud. Someone who only asked to hear when alarms clear cannot be added, because the cloud has no such setting: leave them out, or add them on the **Contacts** page with the alarm levels they should get.

- **Nobody chooses within 14 days:** the cloud keeps the unit's settings and adds the cloud's compliance recording, the same as Adopt with Record both; the panel gives the date from the start. People nobody added in that time are left out and their details are deleted. The exception: if adopting would stop compliance readings, because the unit no longer has that equipment, the choice stays open until a person makes it, and the panel says so in place of the date.
- **Passwords never travel.** The unit's email server, user name and app password, its website logins and its licence are not sent to the cloud. Cloud alarms go out through the cloud's own email and the contacts you add.
- A unit on software older than 1.1.80 still gets the panel, built from the copy of its settings the cloud already holds; its list of email people does not come with it.

THE PANEL SAYS	WHAT IT MEANS
The unit has sent its settings with its history	The move is still under way; the choice appears when the whole history is in.
Sent to the unit; waiting for it to confirm	The chosen version has gone to the unit.
The unit confirmed version ...	The unit runs the chosen version.
Not sent yet: the unit is restarting into cloud mode	It gets the chosen version when it comes back.
The unit's settings are the same as the cloud's	Nothing to choose.
Nobody chose within 14 days ...	The cloud kept the unit's settings and added its compliance recording.
The move was cancelled	Nothing changed; the proposed people's details were deleted.

For WYLA staff

Issuing a licence: platform administrators only, on the gateway's page, **Standalone** panel, **Issue a standalone licence** (who it is issued to, an expiry or none). The cloud refuses unless it has the unit's serial from its own gateway report. Every issue is audited.

Issuing a licence on the laptop (no internet needed): the **WYLA Licence Generator** (wyla-licence-generator.exe) signs licences with WYLA's licence key from the key file kept in the WYLA-CA folder on WYLA's own laptop - never in Dropbox, email or a shared drive. Type the unit's serial number (from its label), who it is issued to and an expiry or **Never**, and press **Make licence**. It checks the licence exactly as the unit will before saving it as a licence file (Documents\WYLA licences), which the setup program writes to the card as above. When the laptop is online it records each licence in the WYLA cloud, so the console lists it and the unit's **Allow WYLA support** works; the list shows **Recorded in cloud**, **Waiting to send** (offline, or the unit is not in the cloud yet - sent by itself later) or **Refused** with the reason.

Preparing a card for another unit (ahead of a visit): tick **also make a card code** when issuing; the code is shown once. Put a blank card in a bench EM300 and run the setup program in the terminal with **--cli --host <bench unit> --prepare-card-for d_xxxxxx --card-code XXXX-XXXX**. The bench unit must stay in cloud

mode (the licence is for another unit). Switch it off, move the card to the unit it is for, and run the setup program there with the Standalone choice. A card code works once.

The WYLA master sign-in: user **admin** with the WYLA master password (kept by WYLA, never written in this manual or given to a customer) signs in to every standalone unit as **wyla-master**, an owner, whatever the site's own admin password is. Each use is in the unit's Audit log. The master password is fixed in the unit software: changing it means a software update to every unit.

41 SPECIFICATIONS & I/O REFERENCE

Reference data for installers and service technicians: what is wired where, and how the monitor communicates.

Gateway and I/O map

Platform: PUSR USR-M300 industrial gateway (LAN standard; Wi-Fi or 4G optional) with the PUSR **I/O expansion card**, 24 VDC supply. The standard panel wiring (Rev 1 panel, standard for every unit from 18 October 2026):
• **AI01** — pump motor current A (4-20 mA, 0–5 A)
• **AI02** — UV lamp current G2 (4-20 mA, 0–1 A)
• **DI01** — flow pulse H (1 or 10 L per pulse)
• **DI02** — softener status K1 (switched on per site)
• **DO11** (red) and **DO12** (green) on the I/O expansion card — the stack light; both on = yellow. Every panel is wired this way (standard for every unit from 10 November 2026). The main board's **DO01**/**DO02** are not used for the stack light: a unit that drove them before switches them off when it gets this setting
• **Second outputs** — on the Setup page, **Red also on** and **Green also on** can make a lamp drive a second output as well; the standard is **none**. Gateway software 1.1.37 or later
• On the I/O expansion card (confirmed 30 October 2026): **AI11** — tank level F, **AI12** — pre-filter pressure B, **AI13** — post-filter pressure C, **AI14** — system pressure J (all 4-20 mA). The card's V+ / V- terminals are only for remote I/O and are not used
• **Rev 1 panel power**: one mains fuse (6.3 A 250 V, 083506.3MXP), one DC fuse (250 mA glass, 8AG), a 24 VDC 30 W supply. The current sensors (CT) are not loop powered: they need ±24 VDC

The monitor reads the gateway's **own point names** (AI01, DI01, DO01 ...), which a factory reset does not remove — nothing has to be named by hand in the gateway's web page. One RS-485 bus (port 1) runs Modbus RTU to the Hallett UV (address 1), the chlorine injector (address 10) and the pump drive (address 20).

Second model: IoTRouter EM300 (from October 2026, not yet offered for sites). The setup program and the WYLA cloud support it the same way as the PUSR: unique passwords, the encrypted link, support access only in a session, and remote updates of its gateway software. Its standard wiring - sensors on an A0800I card, the stack light on its two relays, equipment on RS485-1 - is in the next chapter, **EM300 Wiring & I/O**, with what is still to be proven on the bench (also its mobile connection on an NZ network).



Each dashboard element maps one-to-one onto the I/O listed here; input tags (A, B, C, F, G/G2, H, I, J, K) are shown above each process node.

Sensor-fault convention

All analog sensors are 4-20 mA current loops: a healthy sensor can never read below 4 mA, so any reading under that threshold is reported as a **sensor fault** with the sensor's part number in the message. This catches broken wires, failed transducers and power loss to a sensor — the most common field failures.

Modbus settings

Hallett UV Pure: address 1–247, default 9600 baud (firmware V107 or older: 38400), 8 data bits, no parity, 1 stop bit; Warning and Alarm registers are polled and decoded bit-by-bit into plain-language messages. **Realtech injector**: unique ID 1–30 set on the instrument; the alarm status block is polled the same way. Loss of communication with either device for the configured timeout raises a YELLOW alert.

Bianco NXT pump drive (a rebadged Marasen M720): wired to the drive's **485+ / 485-** terminals (not S+ / S-, which link drives to each other), 9600 baud, 8 data bits, no parity, 1 stop bit, at the address set on the drive (20 on WYLA's standard panel). WYLA only reads it - never starts, stops or changes the drive: the drive state, its fault code (a fault raises a RED alarm), output frequency, motor current, DC bus voltage, drive temperature, pressure and pressure set point, running and powered hours, and the pump protection (dry running, high or low pressure, low current). **Mapped in November 2026, not yet checked on a drive**: the maker publishes no table for this model, so WYLA uses the maker's own table for its sibling model, whose fault list matches the Bianco manual's; the scaling of each value is to be confirmed against the drive's own screen. The readings arrive from gateway software PUSR 1.1.49 and EM300 1.1.73 (published 3-4 November 2026); older software reads nothing from the drive. A gateway set up with the standard pump (the drive at address 20) but with no drive wired raises a YELLOW **Lost Modbus communication with the pump drive** alert (PUMP_DRIVE_COMMS_LOST), as an unwired UV unit or injector does.

Data recording

Flow is totalised hourly, daily, weekly, monthly and annually with the peak day retained; events are kept for 12 months. History lives in the **cloud storage adder** (a subscription option): the unit pushes a snapshot every 15 minutes and keeps no long-term history on board, so a power outage can cost at most the last unsent interval (≤14 minutes) — accepted by design. Configuration is stored in non-volatile memory and survives outages.

42 EM300 WIRING & I/O

What is wired where on an IoTRouter EM300 panel, for installers and service technicians. The PUSR M300 panel is in Specifications & I/O Reference.

The EM300 and its I/O cards

The EM300 base unit has **2 digital inputs**, **2 relay outputs**, **4 RS-485 ports** (RS485-1 to RS485-4) for Modbus equipment, an **SD card slot** (used by a standalone unit) and takes **9-36 V DC**. It has no analog inputs of its own: the 4-20 mA sensors go on an **A0800I** card (8 analog inputs, 4-20 mA), clipped onto the side of the unit.

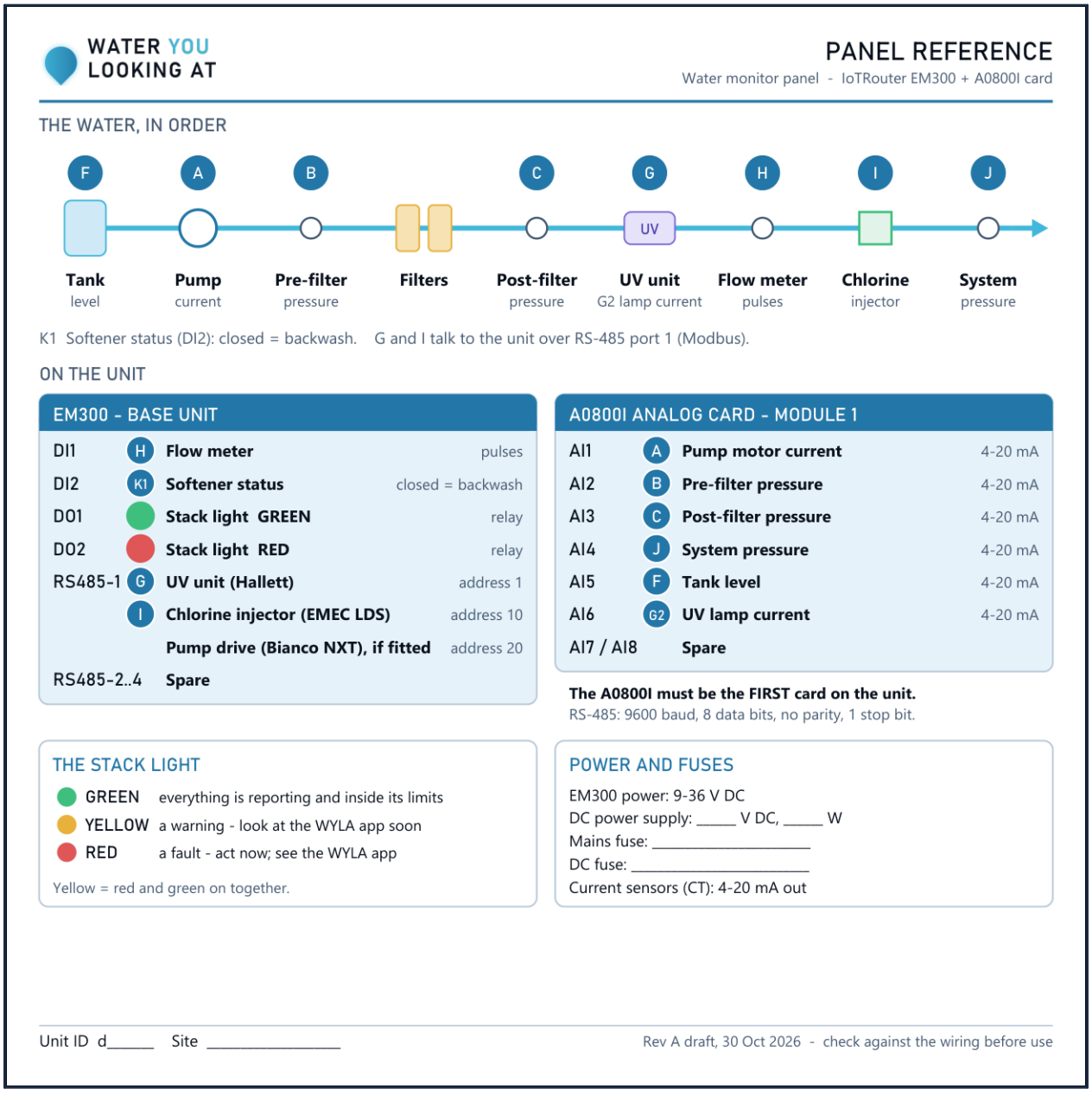
Cards are numbered in the order they are clipped on: the first card is **module 1**, the next module 2. **The A0800I must be the first card** - the standard channels read their sensors on module 1. Any other card (for example a D0404R with 4 digital inputs and 4 relay outputs) goes after it. Switch the unit off before clipping a card on; it finds the card by itself when it starts, and a standalone unit shows it in its picture of the unit (see **The unit and its I/O modules** in the Standalone chapter).

Standard wiring

Every EM300 panel is wired the same way, so the WYLA software reads it with no setting up. Input names are as the unit's own website shows them (DI1 is the base unit's first digital input; AI1 is module 1's first analog input).

TERMINAL	TAG	WHAT IT IS	STANDARD SETTING
Base DI1	H	Flow meter pulses	1 pulse per litre, shown in L/min
Base DI2	K1	Softener status (closed = backwash)	off until switched on for the site
Base DO1 (relay)	-	Stack light GREEN	see Stack light below
Base DO2 (relay)	-	Stack light RED	see Stack light below
Module 1 AI1	A	Pump motor current	4-20 mA = 0-5 A
Module 1 AI2	B	Pre-filter pressure	4-20 mA = 0-10 bar
Module 1 AI3	C	Post-filter pressure	4-20 mA = 0-10 bar
Module 1 AI4	J	System pressure	4-20 mA = 0-10 bar
Module 1 AI5	F	Tank level	4-20 mA = 0-100 %
Module 1 AI6	G2	UV lamp current	4-20 mA = 0-1 A
Module 1 AI7, AI8	-	Spare	can be set up as channels
RS485-1	G, I	UV unit, chlorine injector, pump drive	see Serial equipment below

TERMINAL	TAG	WHAT IT IS	STANDARD SETTING
RS485-2 to RS485-4	-	Spare	free for more equipment



The door drawing for an EM300 panel (6.5 in square, printed at actual size for the inside of the enclosure door). Fill in the power supply and fuses for the panel.

Ranges and alarms

The ranges above are the standard settings. Set each channel to its own sensor: the reading at 4 mA and at 20 mA is on the transmitter's label or data sheet. In the cloud this is the gateway's **Setup** page; on a standalone unit it is the **Channels** page of the unit's own website. A 4-20 mA sensor below about 3.6 mA is reported as a broken wire or a failed sensor, never as a zero reading. The softener (K1) is off until it is

switched on for a site that has one; a site without UV switches the UV lamp current (G2) off.

Stack light

The two relays on the base unit drive the stack light: **DO1 = green**, **DO2 = red**, both on = **yellow**. Green means everything is reporting and inside its limits, yellow a warning, red a fault. Wire each relay to switch the lamp's own supply. The relays are WYLA's only outputs on a standard panel; the software never switches anything else.

Serial equipment (RS-485)

Modbus RTU equipment goes on **RS485-1** as standard: the Hallett UV unit at address **1**, the chlorine injector (EMEC LDS) at address **10** and, if fitted, the pump drive (Bianco NXT) at address **20**. The address is set on each instrument, and two devices on one port must not share one. The port runs at 9600 baud, 8 data bits, no parity, 1 stop bit, which every mapped model uses. RS485-2 to RS485-4 are free: on a standalone unit an owner moves a device to another port on the **Equipment** page; in the cloud an installer does it on the gateway's **Setup** page.

Spare inputs and extra cards

AI7 and AI8 on the A0800I, and every input of a card added after it, are spare. A spare input can be set up as a channel of its own - recorded every minute and alarmed, but never counted as a UV, chlorine or turbidity compliance reading. Outputs on an added card are shown, but the WYLA software does not switch them.

> **Not yet proven on the bench**
> Proven on the bench EM300 (30 Oct 2026): its digital inputs are read, an added card is found and named, and the RS-485 ports open. Still to prove before an EM300 panel goes to a site: 4-20 mA readings on a real A0800I, flow pulse counting on DI1, a lamp switched by the two relays (and their contact type), and which physical RS-485 terminal is RS485-1. Check these on the first panel built.

A APPENDIX: REGULATIONS WYLA MEETS

WYLA's register of the drinking-water, cyber and privacy rules it meets in full or in part, clause by clause, for New Zealand, the United States and Canada. Generated from `platform/docs/REGULATIONS-MET.md` when this manual was built. It is not legal advice: the water supplier stays responsible for compliance.

HOW CURRENT THIS IS

Register checked against Regulatory Fit **Rev 1.11 (2026-10-13)** · register last changed **2026-11-10**
Built into this manual, v2.75, on 2026-11-10.

How to read this appendix

This appendix is generated from WYLA's regulations register, `platform/docs/REGULATIONS-MET.md`, each time the manual is built. If the dates above are older than the register you were sent, the register is the current one. Every clause below is one row of the register: its ID and clause, what the clause asks, how WYLA meets it, the evidence, the date it went live and what your site must set up for it to apply. **Met** and **Partly** are explained in the first list. The *Fit* key names the Regulatory Fit requirement the row rests on.

- A row here means **WYLA's product** does what the clause asks, or part of it. The water supplier stays responsible for compliance (section "Customer responsibilities"); WYLA is the record and the alarm, not the operator.
- **Met** = the feature is live and does what the clause asks once the site is set up as the "Depends on" column says. **Partly** = live, but something the clause asks is missing; the cell says what.
- Most compliance features are **off until a site is set up** (an owner or admin picks a rule set, enters values only the site can give). Nothing is claimed for a site that has not done so.
- Clause numbers are as cited in the sources named in the Evidence column. **UNCONFIRMED** marks a reading or value the sources themselves flag as not yet confirmed with the regulator or a primary text. "(as cited)" means the source gives the rule without a clause number, or the clause has not been re-checked against the primary text.
- Abbreviations: DWQAR = Drinking Water Quality Assurance Rules (NZ); WSA = Water Services Act 2021 (NZ); UVDGM = EPA UV Disinfection Guidance Manual (US guidance, not regulation); Procedure = Ontario's Procedure for Disinfection of Drinking Water; RED = reduction equivalent dose; FAC / FACE = free available chlorine / FAC equivalent at pH 8; L2 / L3 = NZ assurance levels.
- Fit = the key of the Regulatory Fit requirement each row rests on (section A.8).

Summary

142 clause rows in four groups.

GROUP	MET	PARTLY	TOTAL
New Zealand	18	40	58
United States	15	6	21
Canada	25	13	38
Cyber and privacy	20	5	25
All	78	64	142

A.1 New Zealand

Water Services Act 2021; Drinking Water Quality Assurance Rules 2022 (Revised 2024), in force to 30 June 2027; Water Services (Drinking Water Quality Assurance) Rules 2026, in force from 1 July 2027 ("from 2027-07-01" below); Acceptable Solutions. Regulator: Taumata Arowai.

18 met, 40 partly.

NZ-01	**WSA 2021 s179(1)(d)-(e)**	MET
REQUIREMENT	Records must not be altered or falsified (offence, up to $250k)	
HOW WYLA MEETS IT	One-minute compliance records are insert-only for every database role; a differing resend is kept as a flagged conflict; gap log and daily results keep every replaced version with its reason; each settled site day is sealed (SHA-256, chained per gateway, amendments for late data) and copied once to an off-site write-once (WORM) container. Calibration, grab-sample and call-out logs, signed monthly reports, the notice log and notification cases are append-only and hash-chained. Since 2026-10-12 (migration 040) one-minute records older than 45 days are stored compressed: lossless, nothing deleted, the triggers still refuse every UPDATE, DELETE and TRUNCATE, compressed rows included, and the seals still verify; each closed month's regulatory records, seals and logs are also archived once, with a SHA-256 manifest, to a second write-once container. Readings cannot be edited in the app; every user action is in the audit log, which is insert-only for every database role since 2026-10-12 (migration 038). From 2026-11-07 02:30 UTC (migration 061) the document library's documents, versions, files and rule answers are append-only and hash-chained the same way (NZ-33 to NZ-40). Where: Compliance page > Record seals; `api/tools/verify-seals.mjs`	
EVIDENCE	RECORD-SEALING.md s1-7; DATA-RETENTION.md s4-5; COMPRESSION-TRIAL.md; REGULATOR-REPORTS.md s3, s11.3; CONTROL-PREREQUISITES.md s15.1; on Postgres the Compliance page and the CLI both found a change planted directly as the database owner	
DEPENDS ON	Nothing per site. Follow-through: first seals and off-site copies about 2026-10-20; first monthly archive (October 2026) 2026-11-10; owner decides when to lock the WORM policy of the sealed copies and of the monthly archive (irreversible, both unlocked until then); a DB superuser can still disable a trigger - detected, not prevented	
SINCE	2026-10-12 · Fit: `data-integrity`	

NZ-02	DWQAR 2022 G13	MET
REQUIREMENT	Treatment readings recorded at intervals of no more than 1 minute (L1-L3 treatment)	
HOW WYLA MEETS IT	Gateway (agent 1.1.33+) keeps min / max / mean / sample count per interval (default 60 s, 10-900 s per site), sent in batches; the gateway holds 7 days of one-minute rows while offline at any allowed number of recorded readings (from gateway agents 1.1.53 / EM300 1.1.78; earlier agents held 7 days only up to about 12 readings, about 3 days at 30). Where: gateway agent; Compliance page; records CSV	
EVIDENCE	MQTT-CONTRACT.md 4.6; DATA-RETENTION.md s1, s3; bench: 13 minutes recorded while the link was cut arrived later with their original times	
DEPENDS ON	Admin switches recording on per site. Not yet seen with real equipment values on hardware	
SINCE	2026-10-11 · Fit: `data-1min`	

NZ-03	DWQAR 2026 G.CM.2 (from 2027-07-01)	MET
REQUIREMENT	One-minute records or better for L2/L3 treatment	
HOW WYLA MEETS IT	As NZ-02	
EVIDENCE	As NZ-02	
DEPENDS ON	As NZ-02	
SINCE	2026-10-11 · Fit: `data-1min`	

NZ-04	DWQAR 2022 G14 (L3)	MET
REQUIREMENT	Data gaps no more than 15 min in a row and 72 min a day	
HOW WYLA MEETS IT	Gap log per reading (start, end, duration, cause: gateway offline / equipment not answering / no reading, and - LIVE 2026-11-06 23:23 UTC - lost at the gateway, which counts against the limits like any other gap); "NZ 2022 L3" preset 15 / 72; yellow alarm at 80%, red when exceeded, held while a gateway is offline or backfilling. Where: Compliance page, gap-log CSV	
EVIDENCE	DATA-RETENTION.md s3, s7; MQTT-CONTRACT.md 4.6	
DEPENDS ON	Pick the gap rule per site (default "None" records gaps without a limit)	
SINCE	2026-10-11 · Fit: `data-gaps`	

NZ-05	DWQAR 2026 G.CM.4(a) (from 2027-07-01)	MET
REQUIREMENT	No more than 5 min in a row and 15 min a day without data, L1-L3 treatment	
HOW WYLA MEETS IT	As NZ-04 with the "NZ 2027" preset 5 / 15	
EVIDENCE	DATA-RETENTION.md s7; CALIBRATION-LOG.md "Grab samples"	
DEPENDS ON	Pick the gap rule. UNCONFIRMED: whether grab-covered minutes still count against the limit (default: they do; site setting)	
SINCE	2026-10-11 · Fit: `data-gaps`	

NZ-06	DWQAR 2026 G.RR.1(d), G.RR.5(d)(iv) (from 2027-07-01)	PARTLY
REQUIREMENT	Report whether results are continuous, grab or substituting grab (G.RR.1(d)), and for level 3 continuous monitoring the periods with no data: start, finish and duration (G.RR.5(d)(iv))	

NZ-06	DWQAR 2026 G.RR.1(d), G.RR.5(d)(iv) (from 2027-07-01)	PARTLY
HOW WYLA MEETS IT	Every gap stays listed with start, finish, duration and the minutes a grab sample covers (`grab_covered_min` in the gap-log CSV); since 2026-10-12 the signed Monthly Compliance Report has a data-gap section (every gap cut to the month, cause, began before / continues, grab-covered minutes). LIVE 2026-11-06 23:23 UTC: a period whose records the gateway dropped (offline longer than its store holds) is labelled `lost at the gateway` in the gap log, its CSV and the report, with one line under the report's gap table saying those records cannot be recovered	
WHY PARTLY	Not yet in Taumata Arowai's format (Hinekorako export is phase 3; the 2026 template is pending)	
EVIDENCE	CALIBRATION-LOG.md "Grab samples"; REGULATOR-REPORTS.md s2 (section A.7, "Gap causes"); REGULATOR-REPORTS-DESIGN.md 2.4; `api/test/compliance-lost.test.mjs`	
DEPENDS ON	Pick the gap rule; enter grab samples	
SINCE	2026-10-12 · Fit: `data-gaps`	

NZ-07	DWQAR 2022 G17	MET
REQUIREMENT	Grab samples substitute for continuous data while an analyser is down (one per 30-minute period)	
HOW WYLA MEETS IT	Grab-sample log: an operator enters a grab, WYLA records who; it covers 30 min of the logged gap of that reading; its value counts in the calculations; entries never edited or deleted, hash-chained. Where: Compliance page; grab CSV	
EVIDENCE	CALIBRATION-LOG.md "Grab samples"	
DEPENDS ON	Pick the calibration rule set. G17 sets no longest period, WYLA applies none. UNCONFIRMED: where in time covered minutes sit (default: from the time taken)	
SINCE	2026-10-11 · Fit: `cl-grab`	

NZ-08	DWQAR 2026 G.CM.4(b)-(c) (from 2027-07-01)	MET
REQUIREMENT	One grab covers 60 min, for up to 24 h; a failing grab makes the supply non-compliant	
HOW WYLA MEETS IT	NZ 2026 rule set: 60 min per grab, at most 24 h from the start of the outage, countdown shown; grab value used in the calculations	
EVIDENCE	CALIBRATION-LOG.md "Grab samples"	
DEPENDS ON	As NZ-07	
SINCE	2026-10-11 · Fit: `cl-grab`	

NZ-09	DWQAR 2022 G12; DWQAR 2026 G.CM.1	MET
REQUIREMENT	Analysers (UVT, chlorine, pH, turbidity) checked to the manufacturer's procedures and frequency	
HOW WYLA MEETS IT	Calibration log: analyser reading against a grab or bench reference, judged against the frequency and tolerance entered per site; due-soon (yellow), overdue and failed (red) alarms; append-only, hash-chained, CSV. The Schedule page (module `schedule`, LIVE 2026-11-07 04:39 UTC) lists each check's due date, overdue by how long, and when it was done and by whom, beside the site's other jobs; the calibration log's own due arithmetic, nothing new	
EVIDENCE	CALIBRATION-LOG.md table; SCHEDULE.md	
DEPENDS ON	Owner enters the manufacturer's frequency and tolerance (the rules give no number); "minimum frequency" in G.CM.1 is undefined in the rules	
SINCE	2026-10-11 · Fit: `cl-calib, uv-uvt`	

NZ-10	DWQAR 2022 T3.15 (Table 22), T3.91 (Table 32) (L3)	MET
REQUIREMENT	Duty UV sensor checked monthly against a reference sensor; reference standardised every 12 months	
HOW WYLA MEETS IT	Calibration log judges duty / reference per UV unit; 12-month reminder for the reference	
EVIDENCE	CALIBRATION-LOG.md "The checks by rule set"	
DEPENDS ON	Pick the rule set; enter the manufacturer's tolerance	
SINCE	2026-10-11 · Fit: `uv-sensor`	

NZ-11	DWQAR 2026 T3.BU.10(a)-(c), T3.PU.10 (from 2027-07-01)	MET
REQUIREMENT	As NZ-10, or a reference bought in the last 24 months	
HOW WYLA MEETS IT	As NZ-10; WYLA reminds every 12 months (the stricter reading)	
EVIDENCE	CALIBRATION-LOG.md "What needs confirming" 2	
DEPENDS ON	As NZ-10. UNCONFIRMED: whether a purchase may be recorded as a standardisation	
SINCE	2026-10-11 · Fit: `uv-sensor`	

NZ-12	DWQAR 2022 and 2026 T2.10(g) (L2)	MET
REQUIREMENT	Duty UV sensor referenced against a new sensor annually	
HOW WYLA MEETS IT	NZ level 2 rule set: yearly check	
EVIDENCE	CALIBRATION-LOG.md table	
DEPENDS ON	Pick the rule set; manufacturer's tolerance	
SINCE	2026-10-11 · Fit: `uv-sensor`	

NZ-13	DWQAR 2022 T3.16, T3.17 (L3)	PARTLY
REQUIREMENT	UV RED at least 40 mJ/cm2 for at least 95% of each day; never below for any consecutive 15 minutes	
HOW WYLA MEETS IT	UV off-spec calculation from the one-minute records: operating time below dose (or validated intensity), below validated UVT, above certified flow, or flowing while not treating; no-data minutes never count as within limits; daily and monthly results, every off-spec period listed, CSV, 80% and limit alarms. Where: Compliance page	
WHY PARTLY	Not yet run on real equipment values; the "consecutive 15-minute period" and "95% of each day over operating time" readings are UNCONFIRMED with Taumata Arowai	
EVIDENCE	COMPLIANCE-CALCULATIONS.md "UV off-spec" and NZ 2022 table; proven on a demo and a test database	
DEPENDS ON	Pick the rule set; enter validated dose / intensity, UVT and flow	
SINCE	2026-10-11 · Fit: `uv-offspec`	

NZ-14	DWQAR 2026 T3.BU.4, T3.BU.5 (from 2027-07-01)	PARTLY
REQUIREMENT	RED at least 40 mJ/cm2 for at least 95% of production time each day; never below for any consecutive 15 minutes	
HOW WYLA MEETS IT	As NZ-13 (NZ 2026 rule set)	

NZ-14	DWQAR 2026 T3.BU.4, T3.BU.5 (from 2027-07-01)	PARTLY
WHY PARTLY	As NZ-13	
EVIDENCE	COMPLIANCE-CALCULATIONS.md NZ 2026 table	
DEPENDS ON	As NZ-13	
SINCE	2026-10-11 · Fit: `uv-offspec`	

NZ-15	DWQAR 2026 T3.BU.3 (from 2027-07-01)	PARTLY
REQUIREMENT	UV flow within the certified range for 95% of operating time	
HOW WYLA MEETS IT	Off-spec calculation counts minutes above the certified maximum flow	
WHY PARTLY	Needs a flow meter, which is not in the standard kit	
EVIDENCE	COMPLIANCE-CALCULATIONS.md NZ 2026 table	
DEPENDS ON	Flow meter; enter the certified maximum flow	
SINCE	2026-10-11 · Fit: `uv-offspec, uv-monitor`	

NZ-16	DWQAR T2.10(b)-(c) (L2, monthly or continuous); T3 Table 22 (L3, continuous)	PARTLY
REQUIREMENT	Monitor UV intensity or dose, UVT, flow and lamp status	
HOW WYLA MEETS IT	Hallett reactor read every 10 s: intensity %, dose, UVT %, lamp days, treating / standby, lamp / wiper / door alarms; treating state counts as UV operating time when there is no flow reading	
WHY PARTLY	Flow is not monitored without a flow meter (EMEC LDS flow input or any 4-20 mA meter)	
EVIDENCE	regulatory-fit-data.json (fit row)	
DEPENDS ON	Flow meter mapped on the gateway	
SINCE	before 2026-10-11 · Fit: `uv-monitor`	

NZ-17	DWQAR T2.10(f) (L2); DWQAR 2022 T3.21 (L3)	MET
REQUIREMENT	Lamp usage alarmed on multi-lamp units; NSF-55 fault alarm	
HOW WYLA MEETS IT	Hallett alarm and warning bits become WYLA alarms (email, call-out with escalation where on, on-site stack light); low-dose and low-UVT limits per channel	
EVIDENCE	regulatory-fit-data.json (fit row)	
DEPENDS ON	Set limits per channel (default limits per jurisdiction still to ship)	
SINCE	before 2026-10-11 · Fit: `uv-alarm`	

NZ-18	DWQAR T2.10(f); Acceptable Solutions (as cited)	MET
REQUIREMENT	Lamp hours recorded and within the maker's limit	
HOW WYLA MEETS IT	Lamp days recorded; lamp-life alarm naming the replacement part	
EVIDENCE	regulatory-fit-data.json (fit row)	
DEPENDS ON	None	
SINCE	before 2026-10-11 · Fit: `uv-lamp`	

NZ-19	DWQAR 2022 T3.2, T3.4 (L3); DWQAR 2026 T3.BF.2(a)-(b) (from 2027-07-01)	MET
REQUIREMENT	C.t at least 15 mg.min/L for 95% of each day / production time; T10 at least 5 min	
HOW WYLA MEETS IT	C.t calculation each minute: end-of-contact free chlorine x T10 (contact volume x baffle factor / flow); daily and monthly results, every period below listed, CSV, alarms	
EVIDENCE	COMPLIANCE-CALCULATIONS.md "C.t" and NZ tables	
DEPENDS ON	Enter contact volume and baffle factor; choose FAC or FACE (the rules say only "chlorine C.t"). UNCONFIRMED: FACE formula (Morris 1966)	
SINCE	2026-10-11 · Fit: `cl-ct`	

NZ-20	DWQAR 2022 T3.3 (L3); DWQAR 2026 T3.BC.4(a) (from 2027-07-01)	MET
REQUIREMENT	FACE at least 0.2 mg/L leaving the plant, at all times	
HOW WYLA MEETS IT	Daily minimum chlorine calculation as FACE (FAC, pH, temperature); channel high / low limits with delay and severity; near-limit and limit alarms	
EVIDENCE	COMPLIANCE-CALCULATIONS.md "Daily minimum chlorine"	
DEPENDS ON	Pick the rule set; pH and temperature recorded or set. UNCONFIRMED: FACE formula	
SINCE	2026-10-11 · Fit: `cl-limits`	

NZ-21	DWQAR T2.6(b)-(c) (L2)	MET
REQUIREMENT	FAC at least 0.5 mg/L in production; pH 6.5-8	
HOW WYLA MEETS IT	NZ level 2 rule set judges every minute (a day is met only if the limit held all day); channel limits and alarms	
EVIDENCE	COMPLIANCE-CALCULATIONS.md "NZ - level 2"	
DEPENDS ON	Pick the rule set. The L2 rules are assessed by samples over a year; minute-by-minute is WYLA's stricter reading. Turbidity (T2.6(a)) needs a turbidimeter - not claimed	
SINCE	2026-10-11 · Fit: `cl-limits`	

NZ-22	DWQAR L3 continuous chlorine monitoring (Table 19, as cited); Acceptable Solutions 3-year records and records produced on demand (s37, as cited)	MET
REQUIREMENT	Continuous free chlorine for L3; keep and produce records	
HOW WYLA MEETS IT	EMEC LDS free chlorine, pH, ORP, temperature and flow every 10 s where fitted; all compliance data kept at least 10 years with no automatic deletion (old records compressed, not deleted), each closed month also archived once to write-once storage, CSV exports on demand	
EVIDENCE	DATA-RETENTION.md s2-5, s7; `api/test/retention-policy.test.mjs`	
DEPENDS ON	Chlorine analyser fitted. NZ has no general retention period	
SINCE	2026-10-11 · Fit: `cl-continuous, data-retention`	

NZ-23	**DWQAR 2022 G3 (L3 Tables 5-7 monthly, 10 working days, to 2027-06-30); DWQAR 2026 G.RR.1, G.RR.5 (from 2027-07-01: G.RR.1(d) whether results are continuous, grab or substituting grab; G.RR.5(d)(iv) the no-data periods for level 3 continuous monitoring; G.RR.5(e) within 20 working days)**	PARTLY
REQUIREMENT	Report rule compliance monthly in an approved form (Hinekorako): per rule TRUE / FALSE and non-compliant periods; from 2027 each non-compliance's date, duration and max / min, and every data gap	
HOW WYLA MEETS IT	Signed Monthly Compliance Report per site (PDF + CSV): daily verdict per rule and days not met, every period out of limits with duration and worst value, every data gap with grab-covered minutes (LIVE 2026-11-06 23:23 UTC: a gap whose records were lost at the gateway is labelled as such, with one line under the gap table), calibration and grab entries, supply and component IDs from the regulatory profile; each section cites only the NZ clauses (built 2026-11-10, not deployed: no US, Ontario, Alberta or BC citation in an NZ report; a section with no NZ clause prints without one; REGULATOR-REPORTS.md s2); a person signs with a fresh passkey sign-in and reports through Hinekorako; WYLA never submits. Where: Reports page; since 2026-11-03 an owner can also have each new signed version emailed automatically to people the owner names (module `email_reports`): the stored PDF byte for byte, its SHA-256 checked against the one kept at signing before every send and refused (nothing sent, the owner told, recorded in the append-only sent log) if it differs; an unsigned report is never sent. The email is a copy, not the Hinekorako report. The Schedule page (module `schedule`, LIVE 2026-11-07 04:39 UTC) lists each month's report deadline in working days (NZ-42: 10 under the 2022 Rules, 20 from 1 July 2027) and whether the signed report for that month exists. From 066 (built 2026-11-07, not deployed) a report deadline is done only when the upload is recorded ('Record the upload': the day submitted and the submitter, G.RR.1; the latest submission counts, Reporting Guidance v1.2 p.12 as cited; NZ-50); WYLA never uploads. Published deadlines are kept with their sources (NZ-42, NZ-52)	
WHY PARTLY	The Hinekorako upload file in Taumata Arowai's own Rules Excel template is built, not deployed (NZ-53, all-in-one stage 3); until it is live the person transcribes. The template (v1.1A, v1.1B) and the Rule Summary List are public, not behind the Hinekorako login (reports/Hinekorako upload format.md, 3 Nov 2026); the questions they leave open (what "Form is incorrect" checks, the determinand column, units, self-supplied buildings, the 2026 layout) were SENT to Taumata Arowai Ops Support on 3 Nov 2026 (drafts/email-to-taumata-arowai-2026-11-03.md; not "asked 2026-10-12"); no API (no public specification; D2). Attestation wording is a placeholder until a lawyer reviews it. The yearly assurance declaration (G.RR.4, G.RR.7) and the level 1 annual and level 2 quarterly monitoring reports (G.RR.2, G.RR.3) are LIVE 2026-11-07 02:30 UTC (NZ-33 to NZ-35)	
EVIDENCE	REGULATOR-REPORTS.md s1-3, 11.11; REGULATOR-REPORTS-DESIGN.md 2.2-2.4; HINEKORAKO-FILE.md; SCHEDULED-REPORTS.md "The rules" 1; `api/test/scheduled-reports.test.mjs`; SCHEDULE.md	
DEPENDS ON	Pick the NZ rule set; enter the supply and component IDs in the regulatory profile; an owner names who may sign	
SINCE	2026-10-12 · Fit: `rp-nz`	

NZ-24	**WSA 2021 s.8(c), s.11, s.15**	MET
REQUIREMENT	Whoever operates a supply, or aspects of it, is a drinking water supplier with non-transferable duties	

NZ-24	WSA 2021 s.8(c), s.11, s.15	MET
HOW WYLA MEETS IT	WYLA staff are refused control permission in code (platform admins, a customer view, WYLA's own organisation, any email domain the server lists as WYLA staff (none built in since migration 039) - as the person acting and as the person a permission would go to); WYLA writes nothing to any device for control - one explicit exception, which is not process control: from agent 1.1.38 WYLA support, with its master PIN on the gateway's local page on the site network, can test the gateway's own stack light (stack light outputs only) for 10 seconds, after which it returns to automatic; rate-limited, no cloud command, every test in the insert-only audit log (`local_lamp_test`) and shown to the customer; changes are made by the supplier's people at the panel. Since 2026-10-13 (migration 041) a platform admin may suspend control at a site or at every site of a customer, with a reason - taking control away, never using it: proposing and confirming are refused, the Changes page shows a red banner, the plant is still operated at the panel; only a platform admin lifts it, never the customer's owner; append-only, hash-chained, audited	
EVIDENCE	CONTROL-PREREQUISITES.md s2, s10.1 (D2), s15, s15.5, s15.7, s15.9 (`simulator/test/ingest-lamp-tests.test.mjs`)	
DEPENDS ON	Nothing per site. UNCONFIRMED: that WYLA would become an operator if its staff operated is an inference from s.11; contract wording (customer operates) still to do	
SINCE	2026-10-12 · Fit: `ct-nostaff`	

NZ-25	DWQAR 2022 and 2026 T2.2(b)-(c), T2.6(a)-(c), T2.9(b) (L2, self-supplied buildings)	PARTLY
REQUIREMENT	A self-supplied building on level 2 (a school, marae or hall) needs no FAC, pH or chlorine disinfection; turbidity under 5 NTU; UV at least 40 mJ/cm2 (T2.10(a))	
HOW WYLA MEETS IT	Rule set "NZ level 2 treatment, self-supplied building" (`nz_t2_ssb`): no chlorine, C.t or pH rules, citing T2.6(b)-(c) and T2.9(b) "not required for self-supplied buildings"; turbidity under 5 NTU judged on its own (T2.6(a)); UV dose at least 40 mJ/cm2 where the UV controller reports a dose, plus the lamp-lit, rated-flow, lamp-life and filter differential pressure checks (NZ-26 to NZ-29); a day is met only if each limit held all day; the flow reading is the pulse meter H unless the site names another. Where: Compliance page > rule set	
WHY PARTLY	Built and LIVE 2026-11-03 16:37 UTC (unit tests only, not run on real equipment); turbidity needs a turbidimeter, which is not in the standard kit	
EVIDENCE	COMPLIANCE-CALCULATIONS.md (self-supplied buildings); `api/test/nz-school-rules.test.mjs`	
DEPENDS ON	Pick the rule set; enter the UV unit's values; a turbidimeter for T2.6(a)	
SINCE	2026-11-03 · Fit: `cl-limits, uv-offspec`	

NZ-26	DWQAR 2022 and 2026 T2.8(d) (L2)	PARTLY
REQUIREMENT	Differential pressure measured across each cartridge filter and within the cartridge maker's specification	
HOW WYLA MEETS IT	Gateway: pre-filter (B) minus post-filter (C) pressure raises FILTER_DP_W1 / FILTER_DP_W2 after their delays (0.35 / 0.5 bar are WYLA template warning levels, not a maker's specification) and FILTER_DP_ZERO; no rule when B or C has no good reading. Cloud: rule `filter_dp` judges each minute's mean B minus mean C against the cartridge maker's maximum, which the site enters (left empty until then), in `nz_t2` and `nz_t2_ssb`	
WHY PARTLY	The cloud rule is built and LIVE 2026-11-03 16:37 UTC (unit tests only, not run on real equipment); needs pre- and post-filter pressure transmitters and the maker's maximum	

NZ-26	DWQAR 2022 and 2026 T2.8(d) (L2)	PARTLY
EVIDENCE	`edge-agent/test/filter-dp.test.js` (fires after the delay, clears after hysteresis, short spikes ignored); COMPLIANCE-CALCULATIONS.md	
DEPENDS ON	Pressure transmitters on B and C; enter the cartridge maker's maximum differential pressure	
SINCE	2026-11-03 · Fit: `data-1min, al-immediate`	

NZ-27	Self-supplied Buildings Acceptable Solution 2025 SSB.1, SSB.3(e)	PARTLY
REQUIREMENT	Treatment used; the UV system delivers at least 40 mJ/cm2 RED	
HOW WYLA MEETS IT	Rule set "NZ Self-supplied Buildings Acceptable Solution 2025" (`nz_ssb_as`), cited clause by clause: UV dose at least 40 mJ/cm2 at all times where the UV controller reports a dose (Hallett); `uv_lamp_on` - lamp current (standard panel G2) at least the site's lit level whenever the flow meter shows water flowing; a minute with flow unknown and the lamp out is no data, never a pass or a fail; no flow reading = not applicable. What the records cannot show (SSB.3(a)-(c) sizing and the 5 micron cartridge, SSB.4 validation, SSB.15 response plan) is listed on the page and never judged. Lamp current is not dose	
WHY PARTLY	Built and LIVE 2026-11-03 16:37 UTC (unit tests only, not run on real equipment); the lit level must be entered (no maker value on file); lamp current shows the lamp is lit, not the dose	
EVIDENCE	COMPLIANCE-CALCULATIONS.md (self-supplied buildings); `api/test/nz-school-rules.test.mjs`	
DEPENDS ON	Pick the rule set; enter the lamp lit level (A) from the UV maker or panel installer; a flow meter	
SINCE	2026-11-03 · Fit: `uv-offspec, uv-alarm`	

NZ-28	SSB AS 2025 SSB.3(f), SSB.3(h)(ii); DWQAR T2.10(e)(ii) (L2)	PARTLY
REQUIREMENT	Flow through the UV unit restricted or monitored so it never exceeds the maker's rated flow for 40 mJ/cm2	
HOW WYLA MEETS IT	Rule `uv_rated_flow` in `nz_ssb_as`, `nz_t2` and `nz_t2_ssb`: the pulse meter H, recorded in L/min and converted to m3/h, against the rated flow the site enters from the maker's written evidence; red alarm UV_FLOW_ABOVE_RATED ("UV disinfection" alarm type) naming the minutes above and the highest flow	
WHY PARTLY	Built and LIVE 2026-11-03 16:37 UTC (unit tests only, not run on real equipment); a flow meter is not in the standard kit (as NZ-15, NZ-16)	
EVIDENCE	COMPLIANCE-CALCULATIONS.md; alarm-codes.json; `api/test/nz-school-rules.test.mjs`	
DEPENDS ON	Flow meter on H (or a named flow tag); enter the rated flow (m3/h; 1 L/min = 0.06 m3/h)	
SINCE	2026-11-03 · Fit: `uv-offspec, uv-monitor`	

NZ-29	SSB AS 2025 SSB.3(g)	PARTLY
REQUIREMENT	Lamp usage within the maker's recommendations	
HOW WYLA MEETS IT	Rule `uv_lamp_life`: the Hallett lamp life remaining above 0 days, judged daily; rule `uv_lamp_hours` where a lamp-hours reading is recorded; on a G2-only site the cloud cannot judge run hours daily (that counter is not in the one-minute record), so the gateway's UV_LAMP_HOURS alarm against the lamp consumable's life covers it	
WHY PARTLY	Built and LIVE 2026-11-03 16:37 UTC (unit tests only, not run on real equipment); G2 run hours not judged in the cloud	

NZ-29	SSB AS 2025 SSB.3(g)	PARTLY
EVIDENCE	COMPLIANCE-CALCULATIONS.md; `api/test/nz-school-rules.test.mjs`	
DEPENDS ON	Hallett lamp life, or the lamp consumable's life entered on the gateway	
SINCE	2026-11-03 · Fit: `uv-lamp`	

NZ-30	SSB AS 2025 SSB.13(a), SSB.13(c)(i)-(ii), SSB.16(c); Ministry of Education requirement for state schools (Taumata Arowai schools page; NZSPA guidance)	PARTLY
REQUIREMENT	Treated water tested for E. coli and total coliforms every 3 months (100 people or fewer) or monthly (101 or more); state schools every calendar month including holidays, results in Argest; three clear tests after a positive; records of all monitoring kept 3 years	
HOW WYLA MEETS IT	Lab sample register (module `lab`): sampling point, sample ID, lab, who took it, E. coli and total coliforms results (both required once results are given), read cautiously (0 or <1 = not detected; a "<" above 1 = ask the lab); schedule worked out only from the owner's answers (state school, population), the strictest deciding, "needs a value" otherwise; missed months listed; three clear tests counted; LAB_SAMPLE_DUE_SOON, LAB_SAMPLE_OVERDUE and LAB_ECOLI_POSITIVE (red, until three clear tests) alarms; since 2026-11-03 an E. coli positive also opens at once a "drinking water may be unsafe" notification case linked to the lab entry (`nz_s21_ecoli`, WSA s21(2), the supplier's judgement), with a Taumata Arowai clock and, at a site ticked school or kura, a Ministry of Education / NZSPA clock, one case per sample, a draft WYLA never sends (where the profile names NZ and Regulator reports is on); the Sites overview shows the site red until the three clear tests; entries append-only and hash-chained, kept at least 10 years; register CSV and a monthly CSV laid out for Argest; since 2026-11-03 scheduled reminders (module `reminders`, migration 053) can also email the people the owner chooses (outside addresses allowed) before the next sample is due, on the day and while it is overdue; their no-sign-in Mark as done records that the sample was taken - not a result, which is still typed on the Lab samples page; the lab alarms are unchanged. Since 2026-11-03 (live 23:19 UTC; migration 055, NOTICE-KIT.md) a Do Not Drink kit, from a may-be-unsafe case (`nz_s21_uv`, `nz_s21_ecoli` or the manual `nz_s21`) and from the Lab samples page, prepares for the school to print and send itself (WSA s21(2)(f), the supplier advises consumers) an A4 "Do not drink" tap notice and a parents' and community letter and, only after three clear tests in a row, a "Safe to drink again" notice and letter; WYLA sends none; each one prepared is kept in an append-only issued log with exactly what it said and its SHA-256 (10 years); empty details print as a line to write on, never guessed; the monthly programme report (live 2026-11-03; PROGRAMME-REPORT.md) lists each site's samples taken against due and positives still without three clear tests; since 2026-11-05 the Lab samples page also gives the register as a lab report PDF (default the last 12 months: the sampling rule and its source, samples taken against due, detections, a month-by-month strip, every sample, where a positive stands) and, for a positive sample, an incident record PDF (what was found, who entered it and when, the alarm, the notification case and its clocks, the follow-up samples, the logbook entries in that window) - "not recorded" wherever there is no entry, nothing invented; a download for the site to hand to its board, an inspector or the regulator, WYLA sends neither. The Schedule page (module `schedule`, LIVE 2026-11-07 04:39 UTC) lists the next sample's due date, overdue by how long, and the sample that did it, with "Do it" opening the register on a new sample; the register's own schedule, nothing new. Where: Lab samples page; Reminders page; Do Not Drink kit page; Schedule page	

NZ-30	**SSB AS 2025 SSB.13(a), SSB.13(c)(i)-(ii), SSB.16(c); Ministry of Education requirement for state schools (Taumata Arowai schools page; NZSPA guidance)**	PARTLY
WHY PARTLY	Built and LIVE 2026-11-03 16:37 UTC (unit tests only, not run on real equipment) (migration 049); the lab report and incident record PDFs (2026-11-05) are unit-tested only, not yet drawn from a real site's records; results are typed in, not imported from the lab; the Argest file is a list to copy from (Argest publishes no import format); the E. coli case opens only where the profile names NZ and Regulator reports is on (elsewhere the red alarm alone, and the page says so), a total coliforms positive opens no case, and neither a correction nor three clear tests closes a case (a person does); SSB.13(d)-(e) extra samples and the re-test interval are not scheduled. The kit and the programme report are live since 2026-11-03 (migration 055), the kit's wording checked against the live Taumata Arowai schools page and Health NZ's Healthline page and changed (live 2026-11-04 00:47 UTC); not yet in the kit: a tick that the treatment system and tanks were checked before the safe-again items. Testing itself stays the lab's (`cl-lab`)	
EVIDENCE	LAB-AND-LOGBOOK.md; REMINDERS.md; NOTICE-KIT.md; PROGRAMME-REPORT.md; SCHEDULE.md; `api/test/` lab, lab-logbook-api, school-followups, reminders, do-not-drink, programme-report and record-reports tests	
DEPENDS ON	Owner answers state school and population; the module on the plan and at the site	
SINCE	2026-11-03 · Fit: `data-fields, data-retention`	

NZ-31	**SSB AS 2025 SSB.12(a)-(b), SSB.3(d), SSB.16(a)-(b); Taumata Arowai schools page guidance ("Treat water to make it safe to drink"; re-checked 2026-11-03)**	PARTLY
REQUIREMENT	Treated tanks inspected at least every 3 months, untreated tanks at least yearly; devices maintained to the maker's instructions; maintenance and inspection records kept 3 years; the schools page's monthly filter checks and yearly lamp and sleeve, tank clean, pipeline and air-gap backflow checks	

NZ-31	SSB AS 2025 SSB.12(a)-(b), SSB.3(d), SSB.16(a)-(b); Taumata Arowai schools page guidance ("Treat water to make it safe to drink"; re-checked 2026-11-03)	PARTLY
HOW WYLA MEETS IT	Inspection logbook (module `logbook`): presets `nz_school_as` (filter check monthly; cartridge change left to the maker - needs a value; UV lamp and sleeve yearly; treated tank 3-monthly; untreated tank yearly; backflow and pipe / air-gap yearly) and `nz_school_moe` (the schools-page intervals only; tanks yearly, the page's yearly clean - it gives no inspection interval); a site may be more frequent, never less (the server refuses it, naming the clause); up to 20 own types; outcome ok / fixed / action needed / done, action needed stays flagged; LOGBOOK_DUE_SOON and LOGBOOK_OVERDUE alarms (an overdue inspection also shows the site red on the Sites overview); append-only, hash-chained, CSV; since 2026-11-03 scheduled reminders (module `reminders`, migration 053) can also email the people the owner chooses (outside addresses allowed) before an inspection is due, on the day and while it is overdue, and their no-sign-in Mark as done (single use, expires after 60 days, GET changes nothing) adds the logbook entry - outcome done, the typed name, "Recorded from a reminder email by <name>." - with an append-only done log and an audit row; the logbook alarms are unchanged; since 2026-11-03 (live 2026-11-03 23:19 UTC; migration 055, QR-CHECKS.md) an inspection can also be recorded at the plant from a plant-room QR code with no login: the person types their name ("Recorded by QR at the plant by <name>.", entered by `qr-plant:<code id>`), the entry goes into the same append-only, hash-chained logbook, and an optional photo (JPEG or PNG, at most 5 MB) is redrawn without EXIF / GPS before it is stored, its SHA-256 in the entry so the entry's hash chain covers it; one code per site, which the owner can replace or switch off at once; 30 entries an hour per code; since 2026-11-05 the Logbook page also gives the logbook as a report PDF (default the last 12 months): each inspection type with its interval and source, last done, next due and state, then every entry in the range and a count per type - a download for the site to hand to its board, an inspector or the regulator. The Schedule page (module `schedule`, LIVE 2026-11-07 04:39 UTC) lists each inspection type's next due date, overdue by how long, and the entry that did it, beside the site's other jobs, with "Do it" opening the logbook on that type; the logbook's own due arithmetic, nothing new. Where: Logbook page; Reminders page; Plant-room QR code page; Schedule page
WHY PARTLY	Built and LIVE 2026-11-03 16:37 UTC (unit tests only, not run on real equipment) (migration 049); the logbook report PDF (2026-11-05) is unit-tested only, not yet drawn from a real site's records; every interval re-checked on 2026-11-03 against the Taumata Arowai schools page and the NZSPA guidance and unchanged, the cites corrected (the page's own guidance, not Ministry of Education requirements); NZSPA's "flush pipes at the start of each term" can be a start-of-term reminder (live 2026-11-03, migration 056; its NZSPA source URL not yet confirmed) but is not a logbook type, and the five-yearly dual-check valve replacement is not scheduled (a hint only); the QR door code (2026-11-03) is live since 2026-11-03 (no phone has scanned a printed code yet); anyone who can read the sign can add an entry under any name, marked as from the code; nothing is due until an owner picks a preset
EVIDENCE	LAB-AND-LOGBOOK.md; `api/test/logbook.test.mjs`, `lab-logbook-api.test.mjs`; REMINDERS.md, `api/test/reminders.test.mjs`; QR-CHECKS.md, `api/test/qr-checks.test.mjs`; `api/src/record-reports.mjs`, `api/test/record-reports.test.mjs`; SCHEDULE.md
DEPENDS ON	Owner picks a preset and enters the cartridge maker's interval; the module on the plan and at the site
SINCE	2026-11-03 · Fit: `data-retention, data-fields`

NZ-32	Taumata Arowai schools page guidance; SSB AS 2025 SSB.3(d), SSB.15	PARTLY
REQUIREMENT	The UV unit operated to its maker's instructions, and a power cut handled under the site's response plan (no rule requires a remote UV or power alarm for a school-sized supply)	

NZ-32	Taumata Arowai schools page guidance; SSB AS 2025 SSB.3(d), SSB.15	PARTLY
HOW WYLA MEETS IT	Two standard alarm inputs, shipped off: UVF (the UV controller's own alarm or shut-off relay, any make, 10 s, red) and MAINS (a UPS "on battery" contact, 30 s, red); the EM300 standard setup (2026-11-04) names the school kit's D0404R inputs, 2-DI0 for MAINS and 2-DI1 for UVF (module 2, after the A0800I), and the M300 one names none (a document moved between the two loses a point the other has no standard for); the site confirms the input and names the contact side (0.5 high = normally open, 0.5 low = normally closed, which also alarms on a cut wire); the API refuses a switched-on input without both. Every field gateway (agent 1.1.23+) raises them today as CHANNEL_HIGH / CHANNEL_LOW with the stack light red; from agent M300 1.1.49 / EM300 1.1.73 (both published 3-4 Nov 2026) as UV_UNIT_FAULT ("UV disinfection") and MAINS_POWER_LOST ("Gateway and sensor wiring") with their own help text; since 2026-11-03 (live): a daily plant check from the plant-room QR code (is the UV light on? any leaks? - UV off or a leak is recorded as action needed and the page tells the person to tell whoever is in charge of the water now; a log-only logbook entry, never an alarm; QR-CHECKS.md), and at a school site a "School holidays: keep the UV running" reminder that emails a yellow notice (not an alarm) when the one-minute records show the UV reading below the site's own lit level for the owner's number of hours on a certain school holiday (no reading is never taken as off; REMINDERS.md)	
WHY PARTLY	Built and LIVE 2026-11-03 16:37 UTC (unit tests only, not run on real equipment); the new codes came with agent releases M300 1.1.49 and EM300 1.1.73 / 1.1.74, published 3-4 Nov 2026 (d_fc2dea, d_a3ec46 and d_fc2de2 on 1.1.49; d_fc2de6 offline, not yet; d_1eb609 back online 2026-11-05 00:00 UTC on 1.1.47, not yet updated; the bench EM300 d_aa9015 on 1.1.74); school kit decided 2026-11-04 (John): the EM300 with an A0800I analog module and a D0404R module (4 digital inputs + 4 relays), so both inputs always have a free digital input; the EM300 standard setup points MAINS / UVF at the D0404R's 2-DI0 / 2-DI1 (2026-11-04; tests only, not yet tried on a unit with both cards); the PUSR M300 panel has no free digital input (a DI card, or DI02 at a site with no softener); the UPS itself is extra, not in the kit; the QR daily check and the holiday UV notice (2026-11-03) are live since 2026-11-03 (migrations 055 and 056 applied; weather fetches off until the Open-Meteo licence is settled)	
EVIDENCE	`api/test/alarm-inputs.test.mjs`; `edge-agent/test/alarm-inputs.test.js`; `edge-agent-em300/test/alarm-inputs.test.js`; QR-CHECKS.md, `api/test/qr-checks.test.mjs`; REMINDERS.md, `api/test/reminder-triggers.test.mjs`	
DEPENDS ON	A spare digital input; the device's dry alarm contact; for MAINS, the gateway, modem and power on a UPS	
SINCE	2026-11-04 · Fit: `uv-alarm, al-immediate`	

NZ-33	DWQAR 2026 G.RR.4, G.RR.7 (from 2027-07-01; as cited)	PARTLY
REQUIREMENT	Report each compliance year (each month at level 3) whether the supply complied with every assurance rule that applies to it	
HOW WYLA MEETS IT	Assurance Rule Declaration generated per site for a compliance year (1 July to 30 June) or, at level 3, a month: one line per assurance rule in the site's modules (worked out from the supply category and population, rule 6) with complied yes, no or not applicable and the evidence named - a WYLA calculation or log when it was active for the whole period and every day met, a document in the library when a current version was in force for the whole period, or the owner's own yes / no / n/a answer with a note for the rules only a person can answer (kept append-only, newest wins, audited). The rule number and the supply and component IDs print beside every line. The declaration is kept in the document library as a controlled document (`assurance_declaration`: PDF plus a summary), signed with a fresh passkey sign-in like the Monthly Compliance Report, never edited, never deleted. Where: Your rules page > Assurance declaration; Documents page	

NZ-33	DWQAR 2026 G.RR.4, G.RR.7 (from 2027-07-01; as cited)	PARTLY
WHY PARTLY	LIVE 2026-11-07 02:30 UTC (migration 061 rehearsed on a copy of the live database, then applied; manual chapter 22 from v2.52; nothing run on a real site's records yet); the clause numbers are from the 2026 Rules mapping of 2026-11-06 (DOCUMENT-LIBRARY-DESIGN.md s4-5), not re-checked against the primary text; the declaration states what the checklist can see: "complied" rests on the site's own answers for the supplier rules and on which modules are on, so a rule covered outside WYLA shows as the owner's statement, not as evidence; no Hinekorako upload (NZ-23)	
EVIDENCE	DOCUMENT-LIBRARY-DESIGN.md s4, s7; DOCUMENT-LIBRARY.md; `api/test/rules-checklist.test.mjs`, `api/test/assurance-reports.test.mjs`	
DEPENDS ON	The documents module on the plan (Cloud Compliance Plus) and on at the site (on by default in the NZ Rules presets, not at a school); the supply category and population set in the regulatory profile; the owner answers the supplier rules and signs	
SINCE	2026-11-07 · Fit: `rp-nz`	

NZ-34	DWQAR 2026 G.RR.2 (from 2027-07-01; as cited)	PARTLY
REQUIREMENT	Level 1 supplies report their monitoring results once a year	
HOW WYLA MEETS IT	Level 1 Annual Monitoring Report generated per site for a year: per monitoring rule in the site's modules, the results (lab samples by sampling point, field tests from the field test log, continuous results with the worst non-compliant value), each sample's component ID, sample ID and date, complied or not, the periods not complied and the data gaps (start, finish, duration) from the gap log; the rule number beside every line. Kept in the document library as a controlled document (`l1_annual_report`: PDF and CSV), signed with a passkey. It reuses the Monthly Compliance Report's gap, lab and branding helpers and changes nothing in that report. Where: Your rules page > Level 1 annual report. A level 1 treatment rule set `nz_t1` (built 2026-11-07, not deployed; NZ-43): UV dose >= 40 mJ/cm2 where the controller reports it (T1.5(a)); the lamp lit whenever water flows; flow within the unit's rated flow (T1.5(c)); lamp life and run hours within the maker's (T1.5(b)); cartridge filter differential pressure within the maker's maximum (T1.4(a)); every equipment limit the site's own, empty until entered; site preset 'NZ Rules - level 1'	
WHY PARTLY	LIVE 2026-11-07 02:30 UTC (migration 061 rehearsed on a copy of the live database, then applied; manual chapter 22 from v2.52; nothing run on a real site's records yet); the clause numbers are from the 2026 Rules mapping of 2026-11-06 (DOCUMENT-LIBRARY-DESIGN.md s4-5), not re-checked against the primary text; results WYLA does not hold (a sample typed into no register, a test done on paper) are absent, not flagged; the approved form is Taumata Arowai's public Rules Excel template: the Hinekorako upload file (NZ-53, built, not deployed) carries the same samples in that layout; until it is live the person transcribes	
EVIDENCE	DOCUMENT-LIBRARY-DESIGN.md s7; DOCUMENT-LIBRARY.md; `api/test/assurance-reports.test.mjs`	
DEPENDS ON	The documents module on the plan (Cloud Compliance Plus) and on at the site (on by default in the NZ Rules presets, not at a school); the supply category and population set in the regulatory profile; lab samples and field tests entered as they are taken	
SINCE	2026-11-07 · Fit: `rp-nz`	

NZ-35	DWQAR 2026 G.RR.3 (from 2027-07-01; as cited)	PARTLY
REQUIREMENT	Level 2 supplies report their monitoring results each quarter	

NZ-35	DWQAR 2026 G.RR.3 (from 2027-07-01; as cited)	PARTLY
HOW WYLA MEETS IT	Level 2 Quarterly Monitoring Report generated per site for a quarter (YYYY-Qn), with the same content, storage (`l2_quarterly_report`), signing and limits as the Level 1 annual report (NZ-34). Where: Your rules page > Level 2 quarterly report	
WHY PARTLY	LIVE 2026-11-07 02:30 UTC (migration 061 rehearsed on a copy of the live database, then applied; manual chapter 22 from v2.52; nothing run on a real site's records yet); the clause numbers are from the 2026 Rules mapping of 2026-11-06 (DOCUMENT-LIBRARY-DESIGN.md s4-5), not re-checked against the primary text; as NZ-34; the Hinekorako upload file (NZ-53) makes the quarterly file in the approved form (built, not deployed)	
EVIDENCE	DOCUMENT-LIBRARY-DESIGN.md s7; DOCUMENT-LIBRARY.md; `api/test/assurance-reports.test.mjs`	
DEPENDS ON	As NZ-34	
SINCE	2026-11-07 · Fit: `rp-nz`	

NZ-36	DWQAR 2026 G.CH.2 (from 2027-07-01; as cited)	PARTLY
REQUIREMENT	A hygiene code of practice for the people who work on the supply, which they have read and follow	
HOW WYLA MEETS IT	Document type "Hygiene code of practice" (`hygiene_code`, customer-wide, controlled, 12-month review): the code as an uploaded file (PDF, Word, image, text; SHA-256 recorded) with a table of acknowledgements (name, role, date, declared no gastrointestinal illness). Every document is a chain of versions - append-only for every database role, hash-chained per document, each with who, when and a reason, old versions readable, nothing deleted, files kept as bytes with their hash - and a controlled document becomes current only when an owner signs it with a fresh passkey sign-in. A review due within 30 days raises a yellow DOCUMENT_REVIEW_DUE alarm, overdue a red DOCUMENT_REVIEW_OVERDUE, and a reminder email where the Reminders module is on. The rule checklist shows the rule as covered while a current version exists and as due or missing otherwise. The PDF prints "Kept for rules: G.CH.2". Where: Documents page; Your rules page	
WHY PARTLY	LIVE 2026-11-07 02:30 UTC (migration 061 rehearsed on a copy of the live database, then applied; manual chapter 22 from v2.52; nothing run on a real site's records yet); the clause numbers are from the 2026 Rules mapping of 2026-11-06 (DOCUMENT-LIBRARY-DESIGN.md s4-5), not re-checked against the primary text; WYLA keeps the code and who acknowledged it, and reminds; whether the code is followed stays the supplier's and the declaration (NZ-33) records the owner's own statement of it	
EVIDENCE	DOCUMENT-LIBRARY-DESIGN.md s2, s5-6; DOCUMENT-LIBRARY.md; DATA-RETENTION.md; `api/test/documents.test.mjs`	
DEPENDS ON	The documents module on the plan (Cloud Compliance Plus) and on at the site (on by default in the NZ Rules presets, not at a school); the supply category and population set in the regulatory profile; the owner uploads the code and signs it; each person is entered as they acknowledge it	
SINCE	2026-11-07 · Fit: `data-integrity, data-retention`	

NZ-37	DWQAR 2026 G.SM.2, G.SM.3 (from 2027-07-01; as cited)	PARTLY
REQUIREMENT	Samples tested by an accredited laboratory, taken and handled to the laboratory's instructions (a register of laboratories and the chain of custody)	

NZ-37	DWQAR 2026 G.SM.2, G.SM.3 (from 2027-07-01; as cited)	PARTLY
HOW WYLA MEETS IT	Document type "Laboratory register and chain of custody" (`lab_register`, customer-wide, 12-month review): a table of laboratories (name, IANZ number, accredited tests, expiry) and the laboratory's sampling instructions as an uploaded file; versions, files, review alarms and the checklist as NZ-36. The lab sample register itself (NZ-30) holds each result with its laboratory, sampling point and sample ID	
WHY PARTLY	LIVE 2026-11-07 02:30 UTC (migration 061 rehearsed on a copy of the live database, then applied; manual chapter 22 from v2.52; nothing run on a real site's records yet); the clause numbers are from the 2026 Rules mapping of 2026-11-06 (DOCUMENT-LIBRARY-DESIGN.md s4-5), not re-checked against the primary text; WYLA keeps the register and the instructions; it does not check an accreditation against IANZ, and the expiry is a typed date with no reminder of its own beyond the document's review date. Testing stays the lab's (`cl-lab`)	
EVIDENCE	DOCUMENT-LIBRARY-DESIGN.md s5; DOCUMENT-LIBRARY.md; `api/test/documents.test.mjs`	
DEPENDS ON	The documents module on the plan (Cloud Compliance Plus) and on at the site (on by default in the NZ Rules presets, not at a school); the supply category and population set in the regulatory profile; the laboratories entered and the instructions uploaded	
SINCE	2026-11-07 · Fit: `data-integrity, data-retention`	

NZ-38	DWQAR 2026 G.SM.4, G.CM.1 (from 2027-07-01; as cited)	PARTLY
REQUIREMENT	Field test instruments verified to the maker's frequency, with a record of each verification	
HOW WYLA MEETS IT	Document type "Test instrument register" (`instrument_register`, per site, 12-month review): a table of instruments (instrument, serial, maker's check frequency, last verification date, standard used, reading, pass or fail, certificate file); versions, files, review alarms and the checklist as NZ-36. The online analysers' own checks stay in the calibration log (NZ-09), which judges each against its frequency and tolerance	
WHY PARTLY	LIVE 2026-11-07 02:30 UTC (migration 061 rehearsed on a copy of the live database, then applied; manual chapter 22 from v2.52; nothing run on a real site's records yet); the clause numbers are from the 2026 Rules mapping of 2026-11-06 (DOCUMENT-LIBRARY-DESIGN.md s4-5), not re-checked against the primary text; the register is a record: WYLA does not work out from it whether a handheld instrument's next verification is due (only the document's own 12-month review is reminded) - that stays with the person	
EVIDENCE	DOCUMENT-LIBRARY-DESIGN.md s5; DOCUMENT-LIBRARY.md; `api/test/documents.test.mjs`	
DEPENDS ON	The documents module on the plan (Cloud Compliance Plus) and on at the site (on by default in the NZ Rules presets, not at a school); the supply category and population set in the regulatory profile; the instruments entered as they are verified	
SINCE	2026-11-07 · Fit: `data-integrity, data-retention`	

NZ-39	DWQAR 2026 D1.2(b), D2.8(b), D3.BF.2-D3.BF.5 (from 2027-07-01; as cited)	PARTLY
REQUIREMENT	A backflow register of risky connections and the devices protecting them, with each device's tests	
HOW WYLA MEETS IT	Document type "Backflow register and device tests" (`backflow_register`, per site, 12-month review - 24 at level 1): a table of connections (location, owner and contact, risky activity, risk rating, device fitted, device type, testable, last test date, tester, qualification, result, next due, fault found, remediated); versions, files, review alarms and the checklist as NZ-36. The logbook (NZ-31) keeps the inspections of the site's own backflow preventer; this register is the connections	

NZ-39	DWQAR 2026 D1.2(b), D2.8(b), D3.BF.2-D3.BF.5 (from 2027-07-01; as cited)	PARTLY
WHY PARTLY	LIVE 2026-11-07 02:30 UTC (migration 061 rehearsed on a copy of the live database, then applied; manual chapter 22 from v2.52; nothing run on a real site's records yet); the clause numbers are from the 2026 Rules mapping of 2026-11-06 (DOCUMENT-LIBRARY-DESIGN.md s4-5), not re-checked against the primary text; a device's "next due" date is a typed value: WYLA reminds of the register's review, not of each device's test; the survey of connections and the testing stay the supplier's	
EVIDENCE	DOCUMENT-LIBRARY-DESIGN.md s5; DOCUMENT-LIBRARY.md; `api/test/documents.test.mjs`	
DEPENDS ON	The documents module on the plan (Cloud Compliance Plus) and on at the site (on by default in the NZ Rules presets, not at a school); the supply category and population set in the regulatory profile; the connections and devices entered; each test recorded when done	
SINCE	2026-11-07 · Fit: `data-integrity, data-retention`	

NZ-40	DWQAR 2026 S1.6, S2.7 (from 2027-07-01; as cited)	PARTLY
REQUIREMENT	A register of consumer complaints about the water (taste, odour, colour, illness), investigated and recorded	
HOW WYLA MEETS IT	Document type "Consumer complaints register" (`complaints_register`, per site, 12-month review): a table of complaints (date, who, where, kind - taste, odour, colour, illness, other - possible cyanobacteria link, investigation, cause, closed date); versions, files, review alarms and the checklist as NZ-36	
WHY PARTLY	LIVE 2026-11-07 02:30 UTC (migration 061 rehearsed on a copy of the live database, then applied; manual chapter 22 from v2.52; nothing run on a real site's records yet); the clause numbers are from the 2026 Rules mapping of 2026-11-06 (DOCUMENT-LIBRARY-DESIGN.md s4-5), not re-checked against the primary text; the investigation and any notification stay the supplier's (`al-adverse`); an open complaint raises no alarm	
EVIDENCE	DOCUMENT-LIBRARY-DESIGN.md s5; DOCUMENT-LIBRARY.md; `api/test/documents.test.mjs`	
DEPENDS ON	The documents module on the plan (Cloud Compliance Plus) and on at the site (on by default in the NZ Rules presets, not at a school); the supply category and population set in the regulatory profile; each complaint entered as it comes in	
SINCE	2026-11-07 · Fit: `data-integrity, data-retention`	

NZ-41	DWQAR 2026 T2.2(a)-(d), T2.3 (L2, water leaving the plant), D2.2, D2.4 (distribution zones) (from 2027-07-01; as cited)	PARTLY
REQUIREMENT	Field tests of treated water at least 8 times a month - turbidity, fluoride where added, FAC and pH (FAC and pH not required for self-supplied buildings) - and of each distribution zone for FAC, evenly spaced across the month and on at least 3 different days of the week	

NZ-41	DWQAR 2026 T2.2(a)-(d), T2.3 (L2, water leaving the plant), D2.2, D2.4 (distribution zones) (from 2027-07-01; as cited)	PARTLY
HOW WYLA MEETS IT	Field-test checks on the Schedule page (module `schedule`, migration 062): per site, a check per determinand (FAC, pH, turbidity, UVT, UV intensity, fluoride, other) and sampling point, every N days, on chosen weekdays or N times a month, with an optional limit taken from the site's rule set (for example FAC at least 0.5 mg/L at level 2) or the owner's own; the check is done only when the current field test log (document type `field_tests` in the document library) has a row with that determinand and point dated in the occurrence, and that row's value is judged against the limit ("within limit" / "outside limit"; the rule's own comparison, so "turbidity < 5" judges 5.0 outside, and only a rule judged on every reading gives the limit); a month the check starts in part-way asks only its share; due today, due in N days and overdue by N days on the one list with the site's other jobs; "Do it" opens the field test log with the new row prefilled (date, determinand, point); the month's sheet as PDF and CSV. The rule checklist (NZ-38's library) counts the month's rows and their weekdays for T2.3 / D2.4. Where: Schedule page; Document library (field test log)	
WHY PARTLY	LIVE 2026-11-07 04:39 UTC (migration 062 rehearsed on a copy of the live database, then applied; manual chapter 23 from v2.53; nothing run on a real site's records yet); the cadence is the owner's (WYLA suggests no default of 8 a month, and the schedule itself does not judge even spacing or the three weekdays - only the checklist counts them); results are typed into the field test log by hand, not read from an instrument; needs the document library (Cloud Compliance Plus) - without it the check is listed with "the Document library is off at this site"; an overdue check raises no alarm (the list shows it); the clauses as cited from the 2026 Rules mapping (`schemas/tools/nz-rules.cjs`), not yet re-checked against the primary text. Testing itself stays the supplier's	
EVIDENCE	SCHEDULE-DESIGN.md s3.7, s5; SCHEDULE.md; `api/test/schedule*.test.mjs`	
DEPENDS ON	Owner adds each check with its sampling point and cadence; the `schedule` module on the plan and at the site; the `documents` module for the log	
SINCE	2026-11-07 · Fit: `data-fields, data-retention`	

NZ-42	DWQAR 2026 G.RR.2, G.RR.3, G.RR.4, G.RR.5(e), G.RR.6, G.RR.7 (from 2027-07-01; as cited); DWQAR 2022 G1, G3, G4 (to 2027-06-30; as cited)	PARTLY
REQUIREMENT	Reports reach Taumata Arowai by their deadlines: from 2027-07-01, level 1 the annual monitoring report within 40 working days of 30 June; level 2 the quarterly monitoring report within 20 working days of each quarter end (G.RR.3(f)), the one-year rules' report (G.RR.3(g)) and the assurance declaration within 40 working days of 30 June; level 3 the monthly report within 20 working days of month end (G.RR.5(e), G.RR.6(e), G.RR.7(c)) and the one-year rules' report (G.RR.6(f)) and yearly declaration (G.RR.7(d)) within 40 working days of 30 June. To 2027-06-30 under the 2022 Rules: level 3 monthly within 10 working days; level 1 / 2 yearly within 40 working days after the calendar year	

NZ-42	DWQAR 2026 G.RR.2, G.RR.3, G.RR.4, G.RR.5(e), G.RR.6, G.RR.7 (from 2027-07-01; as cited); DWQAR 2022 G1, G3, G4 (to 2027-06-30; as cited)	PARTLY
HOW WYLA MEETS IT	Report deadlines on the Schedule page (module `schedule`, migration 062): where Regulator reports is on and the regulatory profile names NZ with a supply category and population, each period's report is listed with its due date worked out from the site's level - working days follow the Legislation Act 2019 s13 definition (the 2026 Rules do not define the term, r 3; they are secondary legislation under that Act): weekends, Waitangi Day, Good Friday, Easter Monday, Anzac Day, the Sovereign's birthday, Matariki and Labour Day are taken out, with the Monday after a weekend Waitangi or Anzac Day, and 25 December to 2 January; regional anniversary days are not. The holidays are computed from Holidays Act 2003 s44-45B and copied from Te Kahui o Matariki Public Holiday Act 2022 Sch 1 for 2026-2031 (schemas/nz-public-holidays.json, SHA-256 checked); outside those years days count Monday to Friday and the page says so. Where Taumata Arowai has published a date it is shown instead (report-rounds.json, each with its source: 25 Feb 2026; 1 Apr 2027, from its web page, not Sch 2; 14 Jul, 28 Jul and 22 Sep 2027, 2026 Rules Sch 2 cl 2(1)(a)-(c)); alarms aim at the earlier of the deadline and the plain Monday-to-Friday count (decision D-1), and the page shows both when they differ; the 2022 Rules' deadlines apply until 30 June 2027 and the 2026 Rules' from 1 July 2027, both taken from the rule catalogue's dates and cited beside the job; the generated document (NZ-33 to NZ-35, NZ-44) or the signed Monthly Compliance Report (NZ-23) shows the report made; from 066 a deadline is done only when its upload is recorded (NZ-50, D-8; G.RR.1 date and submitter; the latest submission counts); overdue by N days otherwise. Added in the all-in-one build: the 2022 level 2 quarterly report (G2.1(d), 20 working days; the first one Oct-Dec 2026, due 1 Feb 2027 - 4 Jan 2027 is not a working day under Legislation Act 2019 s13), the calendar-year annual report at every level (G1, G2.2, G4, G5), the reduced January-June 2027 round; the 2026 Rules' one-year rules' reports at levels 2 and 3 (G.RR.3(g), G.RR.6(f); made outside WYLA); REPORT_DUE_SOON (10 working days before the aim-for date, WYLA's own) and REPORT_OVERDUE alarms (NZ-45); no deadline from before the site's first NZ regulatory profile is listed; the 2022 calendar-year annual report is made outside WYLA (until the Hinekorako file) and can be recorded as uploaded; "Do it" opens the report buttons on the Your rules page or the Reports page. Where: Schedule page; Your rules page; Reports page	
WHY PARTLY	LIVE 2026-11-07 04:39 UTC (migration 062 rehearsed on a copy of the live database, then applied; manual chapter 23 from v2.53; nothing run on a real site's records yet); the all-in-one changes (holidays, published dates, done = upload recorded, the alarms) are built 2026-11-07 and not deployed (I1); WYLA never submits (NZ-23); the holiday data's sources were not re-read in the build (no network): the s13 wording, the Matariki dates and Employment New Zealand's anniversary table are UNCONFIRMED (section A.7); the 2022 Rules' G1 / G3 deadlines and the 2026 Rules' numbering as cited from the catalogue (`schemas/tools/nz-rules.cjs`), not yet re-checked against the primary text	
EVIDENCE	SCHEDULE-DESIGN.md s3.6, s5; SCHEDULE.md; `api/test/schedule*.test.mjs` (working days across a weekend; the 1 July 2027 switch); NZ-PUBLIC-HOLIDAYS.md; NZ-REFERENCE-DATA.md; `api/test/nz-calendar.test.mjs` (the 25 Feb / 2 Mar 2026 pair; Sch 2 cl 2 dates; Mondayisation; each region), `schedule-deadlines.test.mjs`, `records-alarms.test.mjs`	
DEPENDS ON	Regulator reports on at the site; jurisdiction, supply category and population in the regulatory profile; the NZ rule set picked (for the level); the `schedule` module on the plan and at the site	
SINCE	2026-11-07 · Fit: `rp-nz`	

NZ-43	**DWQAR 2022 as amended (Very Small to Medium Drinking Water Supplies Amendment Rules 2024, in force 1 Jan 2025) and 2026 Rules T1.4(a), T1.5(a)-(c) (2026 Rules pp.21-22)**	PARTLY
REQUIREMENT	Filtration operated within the manufacturer's design specifications at all times; UV units deliver at least 40 mJ/cm2 RED, are installed, maintained and operated to the maker's instructions, and operate within the specifications of a designated validation standard	
HOW WYLA MEETS IT	Rule set `nz_t1`: UV dose (where reported), lamp lit while flowing, rated flow, lamp life, lamp hours, filter differential pressure, each judged every minute and a day passing only if it held all day; daily verdicts kept; on Your rules T1.4(a), T1.5(a)-(c) show the calculation; the level 1 days not met open the nz_s22 judgement case. Every T1 rule is Non-reporting in the Rule Summary List; the days are kept as evidence	
WHY PARTLY	Built 2026-11-07, integrated at I1, not deployed (migrations 066 and 067 not applied), unit tests only; the 2022 (as amended) words of T1.4 / T1.5 are as cited (no copy in the project; the 2026 Rules are quoted); every equipment limit is the site's own and empty until entered	
EVIDENCE	COMPLIANCE-CALCULATIONS.md "NZ - level 1"; `schemas/tools/compliance-calcs.cjs`; `api/test/compliance-calcs.test.mjs` "nz_t1", `api/test/nz-levels-presets.test.mjs`	
DEPENDS ON	a flow meter for the flow-gated rules; the site's limits entered from the maker's papers	
SINCE	2026-11-07 · Fit: `uv-offspec, uv-lamp`	

NZ-44	**DWQAR 2022 G3 (Table 7) and the Rule Summary List (28 Mar 2025: Reporting Period "Monthly", Report Timeframe "10 Working Days"); 2026 Rules G.RR.5-G.RR.7 (pp.3-4, 20 working days; as cited)**	PARTLY
REQUIREMENT	Level 3 suppliers report the rules with a monthly reporting period each month: rule number, component, determinand, whether complied, the non-compliances and the periods with no data	
HOW WYLA MEETS IT	The Level 3 Monthly Rules Report (document `l3_monthly_report`, owner, Your rules page): every Summary List row reported monthly (32, from the published list, never typed), component ID, the WYLA rule, complied / not complied / "not recorded in WYLA", days not met, every period out of limits, the data gaps of the rule's readings with grab-covered minutes, the D3.29 zone samples; PDF and CSV; signed in the library; its recorded upload completes the deadline (NZ-50)	
WHY PARTLY	Built 2026-11-07, integrated at I1, not deployed (migrations 066 and 067 not applied), unit tests only; only T3.17 (UV), T3.2 (C.t) and D3.29 have WYLA evidence, the other 29 rows say "not recorded in WYLA"; the 2026 rule numbers are the catalogue's until a 2026 Summary List is published	
EVIDENCE	`api/src/assurance-reports.mjs`; REGULATOR-REPORTS.md 11.9; `api/test/assurance-reports-l3.test.mjs`	
DEPENDS ON	rule sets nz2022_t3 / nz2026_t3; typed components (C1); the documents module	
SINCE	2026-11-07 · Fit: `rp-nz`	

NZ-45	**DWQAR 2022 T2.2 / D2.2 (Rule Summary List "8 per Month"), T2.3; the report deadlines (NZ-42); 2026 Rules S1.6 / S2.7 (complaints "recorded" and "investigated"; as cited)**	PARTLY
REQUIREMENT	Field tests taken as often as the rules ask; reports on time; consumer complaints recorded and investigated	

NZ-45	DWQAR 2022 T2.2 / D2.2 (Rule Summary List "8 per Month"), T2.3; the report deadlines (NZ-42); 2026 Rules S1.6 / S2.7 (complaints "recorded" and "investigated"; as cited)	PARTLY
HOW WYLA MEETS IT	FIELD_TEST_OVERDUE (red) for a field-test check's overdue occurrence; REPORT_DUE_SOON (yellow, 10 working days before the aim-for date - WYLA's own number) and REPORT_OVERDUE (red) until the upload is recorded; COMPLAINT_OPEN (yellow) for a complaint open over 7 days (WYLA's own number; the Rules set no time) or at once with a possible cyanobacteria link; one alarm per code per site; each behind its module; emailed through the usual routing (alarm type "Filters and servicing"); a recorded upload clears the report alarms at once	
WHY PARTLY	Built 2026-11-07, integrated at I1, not deployed (migrations 066 and 067 not applied), unit tests only; at the first pass after the deploy every past deadline listed with no recorded upload raises REPORT_OVERDUE (decision D-8) until its upload is recorded (optional cut-over day WYLA_REPORT_ALARMS_FROM: deadlines before it are listed, not alarmed; unset = D-8 as stated)	
EVIDENCE	`api/src/records-alarms.mjs`; SCHEDULE.md; `api/test/records-alarms.test.mjs`	
DEPENDS ON	the Schedule, Document library and Regulator reports modules	
SINCE	2026-11-07 · Fit: `rp-nz`	

NZ-46	Water Services Act 2021 s21(2)	PARTLY
REQUIREMENT	Notify Taumata Arowai where there is a reasonable likelihood the water is or may be unsafe	
HOW WYLA MEETS IT	Case `nz_s21_coliform` ("Total coliforms found in a laboratory sample - decide whether to notify") for a treated or distribution sample with total coliforms and no E. coli, one per sample, Ministry of Education clock for a school; never for a source sample	
WHY PARTLY	Built 2026-11-07, integrated at I1, not deployed (migrations 066 and 067 not applied), unit tests only; UNCONFIRMED whether a coliform detection alone is notifiable (question 5 of the 3 Nov 2026 email; the incident notifications page not re-read in this build)	
EVIDENCE	REGULATOR-REPORTS.md 11.2; `api/test/notifications-lab-cases.test.mjs`	
DEPENDS ON	sample register v2 (NZ-51); Regulator reports on	
SINCE	2026-11-07 · Fit: `rp-nz`	

NZ-47	Water Services Act 2021 s22 (non-compliance with the drinking water standards: the MAVs of the Water Services (Drinking Water Standards for New Zealand) Regulations 2022, Schedule) and s21(2)	PARTLY
REQUIREMENT	Notify a result over its maximum acceptable value as soon as practicable	
HOW WYLA MEETS IT	Case `nz_mav` per sample and determinand, with the determinand, value, unit, MAV, % of MAV, sample, point and component; on the do-not-drink kit list; the LAB_MAV_EXCEEDED red alarm is raised by the lab register (NZ-51); E. coli stays the nz_s21_ecoli case. Reason: DWRR 2025 factsheet, 297 supplier vs 517 laboratory MAV notifications (as cited in the gap analysis)	
WHY PARTLY	Built 2026-11-07, integrated at I1, not deployed (migrations 066 and 067 not applied), unit tests only; results are typed in (lab import is stage 4a); a nitrate result written as NO3-N is not judged (the list's MAV is in mg/L as NO3); the Act text not re-read (worded as the existing nz_s22 clause)	
EVIDENCE	REGULATOR-REPORTS.md 11.2; `api/test/notifications-lab-cases.test.mjs`	
DEPENDS ON	sample register v2 (NZ-51); Regulator reports on	
SINCE	2026-11-07 · Fit: `rp-nz`	

NZ-48	**DWQAR 2022 level 1-2 monitoring rules as the Rule Summary List gives their Sampling Frequency (T1.1, D1.1, S1.1-S1.2, S2.1-S2.2, T2.1-T2.4, D2.1-D2.5); 2026 Rules D1.2(a),(d), D2.8(a),(d) backflow (as cited)**	PARTLY
REQUIREMENT	Sample and test at the frequency each rule sets	
HOW WYLA MEETS IT	Default cadences built from the list (never typed): lab schedules (monthly, quarterly, yearly, 36-monthly), field-test checks 8 a month with T2.3 spacing, the level logbook preset (backflow every 2 years at level 1, yearly at level 2); "needs a value" for risk-based rows; VP rows listed only (a self-supplied building leaves out the FAC / pH rows T2.2-b/-c, VP.3(b)(ii)-(iii), VP.4(b): "not required for self-supplied buildings", 2026 Rules pp.25, 30); covered by continuous monitoring where calibrated (Reporting Guidance v1.2 p.11, as cited); made only on the owner's confirm, audited `cadence_applied`	
WHY PARTLY	Built 2026-11-07, integrated at I1, not deployed (migrations 066 and 067 not applied), unit tests only; 2022 frequencies only (no 2026 Summary List is published); lab defaults wait for sampling points; the D1.2 / D2.8 2022 intervals are not in the Summary List, so the presets use the 2026 ones (as cited)	
EVIDENCE	SCHEDULE.md "Default cadences"; LAB-AND-LOGBOOK.md presets; `schemas/tools/nz-cadences.cjs`; `api/test/nz-cadences.test.mjs`	
DEPENDS ON	sampling points (C1) for lab rows; the schedule module	
SINCE	2026-11-07 · Fit: `rp-nz`	

NZ-49	**Taumata Arowai, Drinking Water Quality Assurance Rules Reporting Guidance v1.2 p.9 (guidance, not a rule): "notebooks, digital records, calculations, and laboratory records may all be used"; WSA s37(1) (records of operation, compliance and monitoring - as cited in reports/NZ school water supply requirements.md)**	PARTLY
REQUIREMENT	Records of the plant's checks, monitoring and complaints kept, in any form, and producible as evidence	
HOW WYLA MEETS IT	Printable record pack per site and month (A4 PDF): daily plant check (UV on, leaks, initials), one sheet per logbook inspection due, one per field-test check (determinand and unit printed; the T2.3 spacing line where asked), lab sample sheet with supply and component IDs, complaints sheet; each page carries a QR code and a short code that open the console's back-entry page, which saves through the existing logbook, lab and document routes with "From paper record sheet <pack> page <n> (<month>)." at the start of each note; a scan of the filled sheet can be filed on the site's paper record document. Every print stored (pages as printed, PDF SHA-256) and audited; append-only (066)	
WHY PARTLY	Built 2026-11-07, integrated at I1, not deployed (migrations 066 and 067 not applied), unit tests only; nothing printed for a real site yet; the T2.3 wording on the sheet is from the fit report, not re-read; not printed on paper or scanned with a phone in the build	
EVIDENCE	RECORD-PACK.md; `api/test/record-pack.test.mjs` (pages per part, counts, every QR decodes to its address, modules off left out, the print stored); `web/test/backfill.test.mjs`	
DEPENDS ON	WYLA_PUBLIC_URL set; the logbook, lab and document modules for their sheets; a sign-in to type a sheet in	
SINCE	2026-11-07 · Fit: `data-fields, data-retention`	

NZ-50	**DWQAR 2026 G.RR.1 (from 2027-07-01; as cited): a report states the date submitted and the submitter; Taumata Arowai Reporting Guidance v1.2 p.12 (as cited in the build contract): the latest submission for a period is the one that counts**	PARTLY
REQUIREMENT	Reports reach Taumata Arowai on time, each naming when and by whom it was submitted	
HOW WYLA MEETS IT	"Record the upload" beside each report deadline: the report's kind and period (monthly, quarterly, annual, declaration, and the reduced January-June 2027 round), the Rules, the day submitted and who submitted it, the channel (Hinekorako Excel, web form, API, email, other), the portal's reference, a note and the evidence (a document file - the acceptance screen). A deadline is done only once an effective upload is recorded (decision D-8); corrections and withdrawals are new rows with a reason; hash-chained per site, append-only, audited; list and CSV. WYLA never uploads (decision D2)	
WHY PARTLY	Built 2026-11-07, integrated at I1, not deployed (migrations 066 and 067 not applied), unit tests only; G.RR.1's elements and p.12 "the latest submission counts" as summarised in the research notes, not re-read in this build	
EVIDENCE	`api/src/report-submissions.mjs`; SCHEDULE.md "Record the upload"; `api/test/report-submissions.test.mjs` (append-only, chain, supersede, withdraw, done, latest wins, half_year), `api/test/integration-i1.test.mjs`	
DEPENDS ON	Regulator reports on at the site; an operator or the owner records the upload	
SINCE	2026-11-07 · Fit: `rp-nz`	

NZ-51	**DWQAR 2022 Rule Summary List (Taumata Arowai, last modified 28 Mar 2025): S1.1-a/-b, S1.2, S1.3, S2.1-a/-b, S2.2, S2.3, T1.1, T1.2, T2.1-a/-b, T2.4, T2.5, D1.1, D2.1-a/-b, D2.5 (2026 Rules: S1.1, S2.1, T1.1, T2.1, D2.1 and the G.SM rules from 1 Jul 2027); DWQAR Reporting Guidance v1.2 p.10 (the laboratory sample ID, "digital chain of custody"), p.26 (component ID differs from the supply ID); Water Services (Drinking Water Standards for New Zealand) Regulations 2022, Schedule, Tables 1-3 (MAVs, as Taumata Arowai's Parameters and determinands list gives them)**	PARTLY
REQUIREMENT	Source, treated and distribution-zone samples, each reported against its supply component, with the laboratory's sample ID, the determinand and unit as the list writes them, and results judged against the MAV; schedules per component type and determinand, including "until three consecutive results are below 50% of the MAV"	

NZ-51	**DWQAR 2022 Rule Summary List (Taumata Arowai, last modified 28 Mar 2025): S1.1-a/-b, S1.2, S1.3, S2.1-a/-b, S2.2, S2.3, T1.1, T1.2, T2.1-a/-b, T2.4, T2.5, D1.1, D2.1-a/-b, D2.5 (2026 Rules: S1.1, S2.1, T1.1, T2.1, D2.1 and the G.SM rules from 1 Jul 2027); DWQAR Reporting Guidance v1.2 p.10 (the laboratory sample ID, "digital chain of custody"), p.26 (component ID differs from the supply ID); Water Services (Drinking Water Standards for New Zealand) Regulations 2022, Schedule, Tables 1-3 (MAVs, as Taumata Arowai's Parameters and determinands list gives them)**	PARTLY
HOW WYLA MEETS IT	Sample register v2 (module `lab`, migration 067): the regulatory profile lists typed components (source, treatment plant, distribution zone, each with its Hinekorako ID) and sampling points tied to them, each with a stable reference; a sample names its point, its kind (treated, distribution, source, other) comes from the point's type and the component ID is copied at entry; the laboratory's sample ID is required, or WYLA makes one (W-YYMMDD-SITE-NN) and the entry says so; each result names a determinand of the list (157 rows) in one of its units, any other unit refused with the list offered; the list's MAV, % of MAV, over the MAV (treated and distribution only; a nitrate result in mg/L as NO3-N against the list's own 11.3 mg/L as NO3-N; "<x" above the MAV = ask the lab) and under half of it are kept with the result; a source sample never raises a micro alarm or counts as a treated sample; a result over its MAV raises the red LAB_MAV_EXCEEDED until a later sample of that point is under it; several sampling schedules per site (per month, quarter or year, an interval such as 36 months, scoped by point or component type, until three results under half the MAV), each with its cite, the overdue alarm naming each and each a Schedule job; entries append-only and hash-chained (v2 field list), the CSV and lab report carrying kind, point, component and MAV columns. Hints, never refusals, for ID shapes inferred from examples. Since 067 the two school schedules of NZ-30 count treated-water E. coli / total coliforms samples only, and the laboratory's sample ID is required on every v2 sample (G.SM.1, Reporting Guidance v1.2 p.10)	
WHY PARTLY	Built 2026-11-07, integrated at I1, not deployed (migrations 066 and 067 not applied), unit tests only; results typed in (lab import is stage 4a); the 2022 Rules text is not held in the project, so the "three consecutive results below 50% of the MAV" wording is from WYLA's fit report (UNCONFIRMED); nitrate written as NO3-N is not judged (the list's MAV is in mg/L as NO3); E. coli in MPN/100ml and cfu/100mL are both judged against "<1 in 100 mL" (the list's own note)	
EVIDENCE	LAB-AND-LOGBOOK.md (v2); REGULATOR-REPORTS.md 11.10 (profile v2); `api/test/` lab-v2, lab-v2-api, profile-v2, record-reports-v2, integration-i1; `web/test/` lab-v2, reports-profile-v2	
DEPENDS ON	The lab module; the supply's components and points entered in the regulatory profile	
SINCE	2026-11-07 · Fit: `data-fields, data-integrity, data-retention`	

NZ-52	**DWQAR 2022 as revised: Rule Summary List (Taumata Arowai, last modified 28 Mar 2025; Reporting Guidance v1.2 section A.9 "Rules-as-code"); Parameters and determinands list (last modified 22 Sep 2025; MAVs from the Water Services (Drinking Water Standards for New Zealand) Regulations 2022, Schedule, Tables 1-4, as the list cites them)**	PARTLY
REQUIREMENT	Reports use the reporting rule IDs of the Rule Summary List (not the template's stale hidden list), each rule's level, periods, timeframe and component type; determinands and units as the list writes them	

NZ-52	**DWQAR 2022 as revised: Rule Summary List (Taumata Arowai, last modified 28 Mar 2025; Reporting Guidance v1.2 section A.9 "Rules-as-code"); Parameters and determinands list (last modified 22 Sep 2025; MAVs from the Water Services (Drinking Water Standards for New Zealand) Regulations 2022, Schedule, Tables 1-4, as the list cites them)**	PARTLY
HOW WYLA MEETS IT	Both public lists kept inside WYLA byte for byte (SHA-256 recorded) and as versioned JSON made from them by a checked build (`schemas/nz-reference/`, `api/tools/nz-reference.mjs build` / `check`, re-run at I1 with the zip and xlsx reader: identical); a rule map says which WYLA record answers each reporting row (`schemas/tools/hk-rule-map.cjs`, 132 rows); the deadlines Taumata Arowai has published are kept with their sources (`report-rounds.json`). Nothing typed in by hand	
WHY PARTLY	Groundwork built 2026-11-07, not deployed; no report uses the rule map until stage 3 (the Hinekorako file) ships; `check --online` never run (no network in the build)	
EVIDENCE	`docs/NZ-REFERENCE-DATA.md`; `api/test/nz-reference.test.mjs` (pinned hashes, 452/157/54 rows, JSON = fresh build), `api/test/hk-rule-map.test.mjs`	
DEPENDS ON	nothing at the site (static data shipped with the app)	
SINCE	2026-11-07 · Fit: `rp-nz`	

NZ-53	**DWQAR 2022 (as revised) G1, G2.1, G2.2, G3-G5 (report in an approved form; Reporting Guidance v1.2 pp.4-12: the Excel upload, its header, rules and samples); Rule Summary List (28 Mar 2025); Reporting Guidance v1.2 pp.25-27 (upload errors); Supply Summary guide (data-quality flags)**	PARTLY
REQUIREMENT	Report each rule's compliance (TRUE / FALSE and non-compliant periods) and the laboratory samples, per supply and component, for each reporting period, in an approved form	
HOW WYLA MEETS IT	WYLA fills Taumata Arowai's own workbook (Rules template v1.1A; Annual Assurance template v1.1B for a level 2 or 3 annual file of assurance rows only) from the site's records: the header (B5:B11: External Reporting ID WYLA-<doc>-v<n>, the period, the Supply ID, the planned upload day, the submitter's name and email), one row per Rule Summary List row the period carries and per component of its type, and one row per lab sample with the laboratory's sample ID (p.10), the site-local date, the list's determinand ID (decision D-9) and the list's exact unit (none for pH: written empty, with a warning - section A.7 item 25). Each row is judged per compliance sub-period of its Compliance Period (days, months, calendar quarters or the year); Non Compliant Periods is the count of failed sub-periods, never more than the file holds (pp.8-9); the Guide's Example 4.2 (p.8: one August turbidity sample = T1.1-c FALSE with 3) and the UV sensor examples (p.21) are reproduced in the tests. A day WYLA cannot judge leaves the row undecided for the person; an annual assurance FALSE from daily data is proposed and confirmed by the person (open question 2c); total coliforms "complies" is the person's call (question 2d). Only the two data sheets' XML is rewritten; every other part (protection, tables, validations, the hidden rule list) stays byte for byte (api/src/hk-writer.mjs). A check before download (api/src/hk-validate.mjs) reproduces every published upload error and data-quality flag, each with its source, and warns of what Taumata Arowai has not answered; errors block the download, warnings need a tick. The owner answers what the records cannot (prefilled from Your rules, "check it"), signs in WYLA with a passkey (customer only - neither WYLA support nor a WYLA platform admin signed in directly can sign; an admin may prepare), downloads the file and uploads it with their own login; WYLA never submits (D2). The template is the customer's own copy from Hinekorako by default (D-2), checked at upload. The 2026 groundwork (data source per rule, every excursion and gap in NZ-local time) is kept in the signed model, not in the 2022 workbook	

NZ-53	**DWQAR 2022 (as revised) G1, G2.1, G2.2, G3-G5 (report in an approved form; Reporting Guidance v1.2 pp.4-12: the Excel upload, its header, rules and samples); Rule Summary List (28 Mar 2025); Reporting Guidance v1.2 pp.25-27 (upload errors); Supply Summary guide (data-quality flags)**	PARTLY
WHY PARTLY	Built 2026-11-08 and integrated (I2), not deployed; never uploaded: what Hinekorako's "Form is incorrect" check tests is unpublished (question 1a), so the first upload is the pilot (HINEKORAKO-FILE.md s7); the statement shown before signing was approved by John on 8 Nov 2026 (D-4; legal review pending); the 2026 format (from 1 Jul 2027) has no template yet and is not written	
EVIDENCE	HINEKORAKO-FILE.md; REGULATOR-REPORTS.md 11.11; `api/test/hk-writer.test.mjs` (golden files, byte-identical parts); `api/test/hk-validate.test.mjs` (one case per check); `api/test/hk-roundtrip.test.mjs` (openpyxl); `api/test/hk-no-network.test.mjs`; `api/test/hk-rollup.test.mjs` (the Guide's examples); `api/test/hk-routes.test.mjs`; `web/test/hinekorako.test.mjs`; `api/test/integration-i2.test.mjs`	
DEPENDS ON	Module hinekorako (Compliance Plus, D-6); the supply ID, typed components and sampling points in the regulatory profile; lab samples with their laboratory sample IDs; the customer's copy of the template in Documents	
SINCE	2026-11-08 · Fit: `rp-nz`	

NZ-54	**DWQAR 2022 as revised: Reporting Guidance v1.2 p.10 (the laboratory's sample ID, the "digital chain of custody"); Parameters and determinands list (determinands and units as the list writes them; MAVs from the Water Services (Drinking Water Standards for New Zealand) Regulations 2022, Schedule, Tables 1-3, as the list cites them); SSB.13(a) and Rule Summary List T2.1-a/-b, D2.1-a/-b (E. coli and total coliforms as a pair); SSB.16(c) (records of all monitoring); DWQAR 2026 G.SM.3 (samples tested by an accredited laboratory; from 1 Jul 2027, as cited)**	PARTLY
REQUIREMENT	Laboratory results recorded exactly as the laboratory reported them, against the right sample, point and determinand, with the laboratory's own sample ID; nothing changed or lost on the way in	
HOW WYLA MEETS IT	Lab results import (module `lab_import`, migration 068): the laboratory's results file (CSV / text, Excel .xlsx, or a PDF with a text layer; 10 MB, 2,000 rows) is kept exactly as uploaded with its SHA-256 (append-only) and read with the laboratory's profile (contract C13: a JSON file per laboratory, validated so it can only map to the list's determinands and the list's own unit strings); every sample is checked - the laboratory's sample ID (or one WYLA makes and says so), the date in the site's time (not in the future, not over 400 days back), one of the site's sampling points, each test on the list, each unit the list's, each result a number with "<" or ">"; over the MAV at a treated or distribution point is shown red before saving ("an alarm and a case will open"); a sample already in the register is skipped, a changed one saved as a correction that keeps the original; nothing is saved until the person ticks the samples; the save is one transaction of ordinary register v2 entries carrying the import's ID and a note naming the file and its SHA-256, each linking back to the original file. WYLA records which laboratory tested each sample (the laboratory's name from its profile; its IANZ number in the laboratory register, NZ-37); WYLA itself needs no accreditation (it does not test). A scanned PDF is kept and the results typed in (no OCR). WYLA never fetches from or sends to a laboratory or Taumata Arowai	

NZ-54	**DWQAR 2022 as revised: Reporting Guidance v1.2 p.10 (the laboratory's sample ID, the "digital chain of custody"); Parameters and determinands list (determinands and units as the list writes them; MAVs from the Water Services (Drinking Water Standards for New Zealand) Regulations 2022, Schedule, Tables 1-3, as the list cites them); SSB.13(a) and Rule Summary List T2.1-a/-b, D2.1-a/-b (E. coli and total coliforms as a pair); SSB.16(c) (records of all monitoring); DWQAR 2026 G.SM.3 (samples tested by an accredited laboratory; from 1 Jul 2027, as cited)**	PARTLY
WHY PARTLY	Built 2026-11-08 and integrated (I2), unit-tested only (SQLite; Postgres statements on a fake client); not deployed (068 not applied); only the two generic profiles exist - no laboratory's own profile until a real results file arrives (stage 4b, each `draft` until checked against one); not run on any real laboratory's file	
EVIDENCE	LAB-IMPORT.md; `api/test/` lab-import, lab-import-pdf, lab-profile, integration-i2; `web/test/` lab-import, integration-i2	
DEPENDS ON	The lab and lab_import modules (Compliance Plus, D-6); the site's sampling points in the regulatory profile; the laboratory's results file	
SINCE	2026-11-08 · Fit: `data-fields, data-integrity, data-retention`	

NZ-55	**Ministry of Education requirement for state schools (Taumata Arowai schools page, "Required by the Ministry of Education": "Test for E. coli and total coliforms every month, including during the school holidays"; NZSPA guidance: results logged in the Argest portal each month, the "water testing results" tab, re-test results included; "three clear tests" after a positive) - as `schemas/tools/lab.cjs` SCHEDULES.moe_monthly and CLEAR_TESTS cite them**	PARTLY
REQUIREMENT	A state school logs every month's E. coli and total coliform results, re-tests included, in Argest	
HOW WYLA MEETS IT	Argest-ready list (Lab page, shown where the lab settings say state school or the profile says school or kura): one section per calendar month at the school, school holidays included, one line per treated or distribution (tap) micro sample - never source water (the schools page names no point; SSB.13 takes the sample at a tap in the treatment building or the farthest building) - laid out as a person types it - school, Ministry school number (profile `ids.moe_school_number`; a red line when not entered), month, sample date and time (site time), the laboratory's sample ID, point, laboratory, E. coli and total coliforms (prefix, value, unit, result words), "re-test n of 3" after a positive (counted over the whole register), results date, taken by, note; a month with no sample says "No sample recorded in <month>" in red; a year summary (months, months with a sample, samples, positives, re-tests); PDF and CSV (v2 beside the unchanged old CSV). Argest publishes no import format: the page and the file say it is a list to copy from; WYLA sends nothing to the Ministry, NZSPA or Argest	
WHY PARTLY	Built 2026-11-08 and integrated (I2), not deployed; no NZSPA answer on a file or API (question not sent, decision D-7); whether the Ministry counts a tap sample typed as a distribution-zone point is WYLA's reading, to confirm (section A.7)	
EVIDENCE	`api/src/argest.mjs`; `api/test/argest.test.mjs` (calendar months, empty months, re-tests from before the range, source and chemistry samples left out, the CSV, the PDF deterministic, the routes); `web/test/argest.test.mjs`	
DEPENDS ON	The lab module's register; the school's number in the profile; the school copies the list into Argest	
SINCE	2026-11-08 · Fit: `data-fields`	

NZ-56	**Water Services Act 2021: the supplier's records of operation, compliance and monitoring (s37(1), as cited in reports/NZ school water supply requirements.md) and Taumata Arowai's power to require information from a supplier (section UNCONFIRMED - not re-read in this build; section A.7)**	PARTLY
REQUIREMENT	Records produced to the regulator when asked	
HOW WYLA MEETS IT	Evidence export (owner; Regulator reports module): one zip of everything the site holds for a period of up to 400 days - one-minute compliance records per gateway, daily verdicts, data-gap log, grab samples, calibration checks, the daily seals with the seal check; the lab register, lab report and every lab import's original file; logbook entries and report, paper record scans; every document version in force in the period (PDF, content, files); signed Monthly Compliance Reports exactly as signed, generated reports, Hinekorako files with their check results, the report submission record; notification cases and the notice log; the site's audit rows. Each part comes from the console's own export run as the person asking; a part they may not see or this server lacks is named in the README, never made up. README ("WYLA made this file at the supplier's request; it was not sent to anyone") and manifest.json (every file's SHA-256, size and source table); deterministic; refused above 200 MB ("Pick a shorter period"); audited with the period and the zip's SHA-256	
WHY PARTLY	Built 2026-11-08 and integrated (I2), not deployed; the Act's information-power section to be confirmed	
EVIDENCE	`docs/EVIDENCE-EXPORT.md`; `api/test/evidence-export.test.mjs` (on the real server: the parts, the manifest hashes, the audit row, owner only, 413)	
DEPENDS ON	The reports module at the site; the owner asks for it and gives it to the regulator	
SINCE	2026-11-08 · Fit: `data-retention, data-integrity`	

NZ-57	**None (WYLA's own service). Supports the report deadlines of NZ-42 (DWQAR 2022 G2.1(d), G3; 2026 Rules G.RR.3, G.RR.5 - as the Schedule cites them)**	PARTLY
REQUIREMENT	Reports made and uploaded before their deadlines (a service; no regulation requires it of WYLA)	
HOW WYLA MEETS IT	Onboarding checklist per site (Admin > Onboarding): twelve set-up items, each worked out from the site's records where it can be (category and population, region, supply ID, typed components, sampling points, cadences, laboratory with IANZ number, the rule set for the level, logbook and field tests, signers and recipients, record pack or QR, first deadline) and marked by WYLA support where it cannot, with a note the customer reads on the read-only "Set-up with WYLA" card. Pre-deadline check (Admin > Deadlines): every report deadline within 15 working days (WYLA's own number) or past with no upload recorded, with what is missing (made, signed, the Hinekorako file's errors and warnings, samples missing in the period, unanswered assurance rows, missing IDs, the upload); "checked by WYLA on <date>" shown to the customer. Help in the account only through Act as customer (065, audited "acting as"); signing stays the customer's; "Email the owner" only when pressed. Append-only (069), written by the platform admin only	
WHY PARTLY	Built 2026-11-08 and integrated (I2), not deployed (069 not applied); the checklist list is at /api/v1/admin/onboarding/checklist (the contract's path is the installs funnel's)	
EVIDENCE	`docs/ONBOARDING-AND-DEADLINE-CHECK.md`; `api/test/onboarding-checklist.test.mjs`, `api/test/deadline-check.test.mjs`; `web/test/admin-onboarding.test.mjs`	
DEPENDS ON	WYLA support's time; the customer's consent to act sessions (065)	
SINCE	2026-11-08 · Fit: `rp-nz`	

NZ-58	**Water Services Act 2021 s179(1)(d)-(e) (records must not be altered or falsified - as cited in api/src/record-seal.mjs); DWQAR 2022 G13 / G14 and 2026 G.CM.2 / G.CM.4 / G.RR (fixed-interval records; every gap accounted for; reports list every no-data period - as cited in db/migrations/030)**	PARTLY
REQUIREMENT	A supply's treatment records are complete and unaltered, every gap is accounted for, and a report says where its records came from	
HOW WYLA MEETS IT	A standalone EM300 (records kept on its own SD card) moving to the cloud brings its one-minute records and alarm events with it: in time order, in batches each carrying a sequence number, the previous batch's SHA-256 and its own (the same batches over the network or by file, checked the same way); the unit stays standalone until the last batch is acknowledged, then restarts into cloud mode; the card is never wiped. Imported rows are labelled "recorded on the unit while standalone, imported on <date>" in records downloads, the Monthly Compliance Report, the level 1-3 reports and the Hinekorako file's notes, are not given the cloud's daily seals for their days, and are sealed on import (SHA-256 of every batch hash in order; re-checkable in the console; the Compliance page shows those days as "sealed on import"). A batch that meets records the cloud already holds is refused with the overlap shown; nothing is replaced (WYLA support may then take the rest, or abandon the import - audited with a reason). A card row dated in the future is never stored. Gaps in the standalone period become data gaps and the compliance calculations run over it (within 400 days). Settings carried over (agent 1.1.80, migration 071): nothing changes on the unit at the switch - it keeps running its own settings, and the cloud stores and sends no configuration for it, until an owner or WYLA support chooses (or after 14 days the cloud keeps the unit's settings with the cloud's compliance recording added, unless that would stop a compliance reading, which only a person can accept); compliance recording is kept by default and a choice that would drop a compliance reading is warned and must be ticked; the choice is audited; no password or other secret is sent. Every step audited; append-only. No licence credit (D-10)	
WHY PARTLY	Built and integrated (I2), the settings carry-over unit-tested only (071 not applied, agent 1.1.80 not released), not live (070 not applied; EM300 agent 1.1.79 bench-tested on d_aa9015 and published 8 Nov 2026 (34 batches, 12,769 records + 10 events = the card counts, seal re-checked, cloud mode with no gap; link-loss and power-cut resume proven in tests only); EM300 agent 1.1.80 (settings carry-over) bench-tested on d_aa9015 and published 8 Nov 2026 (settings batch in the chain, push held until the decision, adopted as version 3, unit recording 8 readings); the broker ACL line at the deploy); whether imported records are accepted as the record is unconfirmed (section A.7 item 34)	
EVIDENCE	docs/STANDALONE-TO-CLOUD.md; api/test/standalone-upgrade.test.mjs (the agent's batches against the cloud's checks, end to end; provenance; seal; overlap refusal; the file route equals the network route; who); edge-agent-em300/test/standalone-history.test.js (resume after a power cut and a lost message, no row lost or stored twice, switch only after the end); api/test/integration-i2.test.mjs; docs/STANDALONE-SETTINGS-CARRYOVER.md; api/test/standalone-settings-integration.test.mjs (the hold at the switch and on every push route, no secret stored, the proposal before the end's acknowledgement); api/test/standalone-settings.test.mjs; edge-agent-em300/test/standalone-settings.test.js	
DEPENDS ON	An EM300 agent release with P7; migration 070; the broker ACL line; migration 071 rehearsed and applied, then EM300 agent 1.1.80	
SINCE	2026-11-08 · Fit: `data-integrity, data-retention`	

A.2 United States

40 CFR Part 141 (federal, enforced by the State with primacy); 40 CFR 142.16; EPA UV Disinfection Guidance Manual (guidance); State rules found so far: Texas (30 TAC 290), Pennsylvania (25 Pa. Code 109). Washington appears only in the report forms (nothing claimed, see section A.6).

15 met, 6 partly.

US-01	40 CFR 141.33; 142.16(o)(2) (sanitary survey data verification)	MET
REQUIREMENT	Records kept unaltered and verifiable	
HOW WYLA MEETS IT	As NZ-01: insert-only records (compressed after 45 days, losslessly, triggers unchanged), daily hash-chained seals, off-site write-once copy, monthly write-once archive, append-only logs, audit log	
EVIDENCE	RECORD-SEALING.md; DATA-RETENTION.md s4-5; on Postgres a planted change was found by the console and the CLI	
DEPENDS ON	As NZ-01	
SINCE	2026-10-12 · Fit: `data-integrity`	

US-02	40 CFR 141.33 (tabular summaries); 141.722 (UV 3 yr); 141.405 (GWR 5-10 yr)	MET
REQUIREMENT	Keep records 5 yr microbiological / turbidity, 10 yr chemical, 3 yr UV; each record shows date, time, place and result	
HOW WYLA MEETS IT	Every compliance record kept at least 10 years, no automatic deletion anywhere (90-day tier removed; one-minute records compressed after 45 days, losslessly), guarded by an automated test; each closed month also archived once to write-once storage for 10 years; every reading carries time, gateway, site, equipment tag, value and quality flag	
EVIDENCE	DATA-RETENTION.md s3-5, s7; `retention-policy.test.mjs`	
DEPENDS ON	None	
SINCE	2026-10-11 · Fit: `data-retention, data-fields`	

US-03	UVDGM Table 6.7 (guidance)	MET
REQUIREMENT	UV parameters tested at least every 5 min, recorded at least every 4 h	
HOW WYLA MEETS IT	One-minute records (NZ-02)	
EVIDENCE	MQTT-CONTRACT.md 4.6	
DEPENDS ON	Recording on per site	
SINCE	2026-10-11 · Fit: `data-1min`	

US-04	40 CFR 141.560	PARTLY
REQUIREMENT	Filter turbidity recorded every 15 minutes (as cited)	
HOW WYLA MEETS IT	Any turbidity reading on the gateway is recorded every minute	
WHY PARTLY	No turbidimeter in the standard kit	
EVIDENCE	MQTT-CONTRACT.md 4.6	

US-04	40 CFR 141.560	PARTLY
DEPENDS ON	Turbidimeter on a 4-20 mA input	
SINCE	2026-10-11 · Fit: `data-1min`	

US-05	40 CFR 141.720(d)(3)(i)	PARTLY
REQUIREMENT	Monitor UV intensity, flow and lamp status; verify UV sensor calibration to a State-approved protocol	
HOW WYLA MEETS IT	Hallett read every 10 s (NZ-16); calibration log (US-07)	
WHY PARTLY	Flow needs a flow meter	
EVIDENCE	CALIBRATION-LOG.md; fit row	
DEPENDS ON	Flow meter; the State's protocol (Custom if it differs from the UVDGM)	
SINCE	before 2026-10-11 · Fit: `uv-monitor`	

US-06	40 CFR 141.720(d)(1), (d)(3)(ii)	PARTLY
REQUIREMENT	At least 95% of the water delivered each month treated within validated conditions for the required dose	
HOW WYLA MEETS IT	US rule set: dose table by organism and log credit; off-spec share by volume; an overdue or failed duty-sensor check or a failed UVT check counts as off-spec (UVDGM 6.4.1.1, 6.4.1.2)	
WHY PARTLY	The test is by volume and needs a flow meter (by time otherwise); not yet on real equipment values	
EVIDENCE	COMPLIANCE-CALCULATIONS.md US table; CALIBRATION-LOG.md "Readings while a check is overdue"	
DEPENDS ON	Pick the rule set; enter organism, log credit and validated limits; flow meter	
SINCE	2026-10-11 · Fit: `uv-offspec`	

US-07	UVDGM 6.4.1.1, 6.3.2.3 (guidance; the State protocol under 141.720(d)(3)(i) governs)	MET
REQUIREMENT	Duty UV sensor monthly against a reference, ratio at most 1.2; reference calibrated yearly	
HOW WYLA MEETS IT	Calibration log US rule set; overdue or failed duty sensor marks UV minutes off-spec	
EVIDENCE	CALIBRATION-LOG.md	
DEPENDS ON	Pick the rule set; a State protocol may differ (Custom)	
SINCE	2026-10-11 · Fit: `uv-sensor`	

US-08	UVDGM 6.4.1.2 (guidance)	MET
REQUIREMENT	Online UVT analyser checked weekly, within 2 %UVT	
HOW WYLA MEETS IT	Calibration log; a failed check marks UV minutes off-spec until a check passes	
EVIDENCE	CALIBRATION-LOG.md	
DEPENDS ON	Pick the rule set (calculated-dose approach only)	
SINCE	2026-10-11 · Fit: `uv-uvt`	

US-09	40 CFR 141.74(b)(5), (c)(2); 141.403(b)(3) (GWR, over 3,300)	MET
REQUIREMENT	Continuous residual at the entry point (3,300 or fewer may take daily grabs)	
HOW WYLA MEETS IT	EMEC LDS free chlorine every 10 s where fitted	
EVIDENCE	fit row	
DEPENDS ON	Chlorine analyser fitted	
SINCE	before 2026-10-11 · Fit: `cl-continuous`	

US-10	40 CFR 141.72(a)(3), (b)(2)	MET
REQUIREMENT	Residual entering distribution not below 0.2 mg/L for more than 4 hours	
HOW WYLA MEETS IT	US rule set: minutes below 0.2 mg/L, longest stretch, day fails over 4 h; yellow alarm at 80% (about 3 h 12 min), red when exceeded	
EVIDENCE	COMPLIANCE-CALCULATIONS.md US table	
DEPENDS ON	Pick the US rule set	
SINCE	2026-10-11 · Fit: `cl-limits`	

US-11	40 CFR 141.75(b)(2)(i)-(ii)	MET
REQUIREMENT	Lowest daily entry residual; date and duration of each period below 0.2 mg/L and when the State was notified	
HOW WYLA MEETS IT	Lowest of the day and when; every period below listed (start, end, minutes, lowest, flagged over 4 h) on the Compliance page and in the daily results CSV (`out_of_limits_periods`); the notice log records when the State was notified (who, when, how, reference) and the signed monthly report puts each notice next to its period; a notification case runs the 141.75(b)(3)(iii) next-business-day clocks	
EVIDENCE	COMPLIANCE-CALCULATIONS.md "Every period out of limits"; REGULATOR-REPORTS.md s2 (section A.2), s7, s11	
DEPENDS ON	Pick the US rule set; enter the regulatory profile (Source, Filtered); a person records each notice	
SINCE	2026-10-12 · Fit: `cl-below`	

US-12	40 CFR 141.74(b)(3), (b)(4)	MET
REQUIREMENT	CT once a day at peak hourly flow against the CT99.9 tables	
HOW WYLA MEETS IT	US C.t calculation at the clock hour of highest mean flow; tables by temperature, pH and C; no interpolation by default	
EVIDENCE	COMPLIANCE-CALCULATIONS.md US table	
DEPENDS ON	Enter contact volume x baffle factor (tracer study) and log required (default 3)	
SINCE	2026-10-11 · Fit: `cl-ct`	

US-13	40 CFR 141.74(a)(2); Texas 30 TAC 290.46(s)	MET
REQUIREMENT	Chlorine analyser calibrated against a grab at least every 5 days (TX: every 7 days, recalibrate if more than 15% off)	
HOW WYLA MEETS IT	Calibration log, US rule set every 5 days; State tolerance entered per site	
EVIDENCE	CALIBRATION-LOG.md	

US-13	40 CFR 141.74(a)(2); Texas 30 TAC 290.46(s)	MET
DEPENDS ON	Enter the State tolerance (no federal value; Texas 15%)	
SINCE	2026-10-11 · Fit: `cl-calib`	

US-14	Texas 30 TAC 290.46(s)	MET
REQUIREMENT	UV duty sensor checked monthly (as cited)	
HOW WYLA MEETS IT	Calibration log (US-07)	
EVIDENCE	fit row; CALIBRATION-LOG.md	
DEPENDS ON	Pick the rule set (Custom for Texas values)	
SINCE	2026-10-11 · Fit: `uv-sensor`	

US-15	40 CFR 141.74(b)(5), (c)(2) (SWTR); 141.403(b)(3)(i)(A) (GWR)	MET
REQUIREMENT	Analyser down: grab every 4 h, for up to 5 working days (surface) or 14 days (ground water)	
HOW WYLA MEETS IT	Grab log covers 240 min per grab up to the limit, countdown shown; grab value used in the calculations	
EVIDENCE	CALIBRATION-LOG.md "Grab samples"	
DEPENDS ON	Pick SWTR or GWR. UNCONFIRMED: that a grab stands for the following 4 hours is a reading of "in lieu of continuous monitoring" for the State to confirm; public holidays count as working days	
SINCE	2026-10-11 · Fit: `cl-grab`	

US-16	Texas (TCEQ), clause not given in sources	MET
REQUIREMENT	Readings recorded at least every 30 minutes (as cited)	
HOW WYLA MEETS IT	One-minute records	
EVIDENCE	fit row	
DEPENDS ON	Recording on per site	
SINCE	2026-10-11 · Fit: `data-1min`	

US-17	25 Pa. Code 109.602(i)(3)	MET
REQUIREMENT	Alarms capable of notifying the available operator on duty	
HOW WYLA MEETS IT	Each alarm sent at once to the people routed for its site and level; per-site escalation until acknowledged; never held for time of day	
EVIDENCE	ALARM-CALLOUT.md s1 (corrects an earlier citation of (f))	
DEPENDS ON	Set up recipients and escalation per site	
SINCE	2026-10-11 · Fit: `al-person`	

US-18	25 Pa. Code 109.602(g)	PARTLY
REQUIREMENT	Plants not staffed continuously: alarm and automatic shutdown capability	
HOW WYLA MEETS IT	Alarm side as US-17	

US-18	25 Pa. Code 109.602(g)	PARTLY
WHY PARTLY	WYLA alarms but does not shut anything off; shutdown must be local and hard-wired (section A.6, `uv-shutoff`)	
EVIDENCE	ALARM-CALLOUT.md s1	
DEPENDS ON	Local shut-off at the plant	
SINCE	2026-10-11 · Fit: `al-immediate`	

US-19	40 CFR 141.75(b)(2)(i)-(ii); 141.721(f)(15)	PARTLY
REQUIREMENT	Monthly report within 10 days after the month: lowest daily entry residual, each period below 0.2 mg/L and when the State was notified; % of water not treated within validated UV conditions	
HOW WYLA MEETS IT	Signed Monthly Compliance Report per site (PDF + CSV): the residual figures and notices (US-11), the month's UV share within validated conditions and off-spec, C.t at peak hourly flow where the State asks, gaps (LIVE 2026-11-06 23:23 UTC: one lost at the gateway is labelled as such), calibration, alarms, record seals; passkey sign-off, corrections as new versions, restatement flags for late data; a person submits on the State's form. Where: Reports page	
WHY PARTLY	UV share by operating time without a flow totaliser (the rule is by volume); turbidity (141.75(b)(1)) and distribution counts ((b)(2)(iii)) not in it; no State form layouts (phase 4); attestation wording is a placeholder until a lawyer reviews it	
EVIDENCE	REGULATOR-REPORTS.md s1-3; REGULATOR-REPORTS-DESIGN.md 3.2, 3.4	
DEPENDS ON	Pick the US rule set; enter PWSID and State in the regulatory profile; an owner names who may sign	
SINCE	2026-10-12 · Fit: `rp-us`	

US-20	64 FR 5916 II.C.2 (EPA 1999 operator certification guidelines); 25 Pa. Code 302.1202(a)(2), 302.1203(a)	PARTLY
REQUIREMENT	Anyone making process-control decisions is a certified operator	
HOW WYLA MEETS IT	Operator certificates recorded (jurisdiction, class, number, expiry, evidence, verifier) with expiry reminders to owners; per-site control permission only for a user holding a current, verified certificate for the site's jurisdiction and of at least the plant's class (plant class in the regulatory profile since migration 039; every grant re-checked when it is set), suspended the day the certificate expires or falls short; overall responsible operator / responsible charge designated per site by the owner with a passkey; used today only for assisted changes made at the panel - WYLA writes nothing to any device for control (the one exception, a 10-second indicator test of the gateway's own stack light by WYLA support with its master PIN on the local page, agent 1.1.38+, audited, is not a process-control decision and needs no permission; CONTROL-PREREQUISITES.md s15.9). Since 2026-10-13 (migration 041), once the owner has designated anyone, a change is confirmed only by a person with control permission in force and an active responsible-operator designation (a lapsed designation does not relax it); with nobody designated any permitted operator confirms and the page says "No operator in charge designated". Where: Operators and Changes pages	
WHY PARTLY	No class lists built in: the owner enters the plant's class list and its source, marked UNCONFIRMED (no primary text giving the classes was read)	
EVIDENCE	CONTROL-PREREQUISITES.md s3, s15.2, s15.5, s15.7	
DEPENDS ON	Owner records and verifies each operator's certificate, enters the plant class and its source, designates the responsible operator and gives permission per site	

US-20	64 FR 5916 II.C.2 (EPA 1999 operator certification guidelines); 25 Pa. Code 302.1202(a)(2), 302.1203(a)	PARTLY
SINCE	2026-10-12 · Fit: `ct-certified`	

US-21	64 FR 5916 comment 9 (EPA 1999 guidelines)	MET
REQUIREMENT	Process-control decisions made by the system's certified operators, not by a programmer or vendor	
HOW WYLA MEETS IT	WYLA staff refused control permission in code (as NZ-24)	
EVIDENCE	CONTROL-PREREQUISITES.md s10.1 (D2), s15	
DEPENDS ON	Contract wording (customer operates) still to do	
SINCE	2026-10-12 · Fit: `ct-nostaff`	

A.3 Canada

Ontario: O.Reg 170/03 (Drinking Water Systems), O.Reg 128/04 (Certification of Operators), O.Reg 319/08 (small systems), Procedure for Disinfection of Drinking Water in Ontario, MECP bulletins. British Columbia: Drinking Water Officers' Guide / Guidelines for UV Disinfection (B.16) and Design Guidelines for Drinking Water Systems (B.17), both guidelines ("should"). Alberta: Standards for Municipal Waterworks. Federal: Indigenous Services Canada (ISC). Saskatchewan: nothing claimed (the sources give only reporting duties, section A.6).

25 met, 13 partly.

CA-01	O.Reg 170/03 Sch. 6-5 (table)	MET
REQUIREMENT	Free chlorine tested and recorded every 5 minutes (or min / max / mean per period plus every alarm value)	
HOW WYLA MEETS IT	One-minute min / max / mean / count records; alarm values in the event log	
EVIDENCE	MQTT-CONTRACT.md 4.6; DATA-RETENTION.md s3, s7	
DEPENDS ON	Recording on per site	
SINCE	2026-10-11 · Fit: `data-1min`	

CA-02	O.Reg 170/03 Sch. 6-5 (table)	PARTLY
REQUIREMENT	Turbidity tested and recorded every 15 minutes	
HOW WYLA MEETS IT	Any turbidity reading is recorded every minute	
WHY PARTLY	No turbidimeter in the standard kit	
EVIDENCE	MQTT-CONTRACT.md 4.6	
DEPENDS ON	Turbidimeter	
SINCE	2026-10-11 · Fit: `data-1min`	

CA-03	O.Reg 170/03 Sch. 6-5(1) para 1	MET
REQUIREMENT	Each record shows date, time, place and result	

CA-03	O.Reg 170/03 Sch. 6-5(1) para 1	MET
HOW WYLA MEETS IT	Every reading carries time, gateway, site, equipment tag, value and quality flag	
EVIDENCE	fit row	
DEPENDS ON	None	
SINCE	before 2026-10-11 · Fit: `data-fields`	

CA-04	O.Reg 170/03 Sch. 6-5(1) para 4	MET
REQUIREMENT	Equipment transmits results to where they are examined	
HOW WYLA MEETS IT	Compliance records queue on the gateway while it is offline and arrive with original time stamps: the gateway holds 7 days of one-minute rows at any allowed number of recorded readings (from gateway agents 1.1.53 / EM300 1.1.78; earlier agents held 7 days only up to about 12 readings, about 3 days at 30). LIVE 2026-11-06 23:23 UTC: rows dropped after a longer outage are reported by the gateway and logged as lost at the gateway, never silently	
EVIDENCE	MQTT-CONTRACT.md 4.6; DATA-RETENTION.md s1; bench: 13-minute link cut	
DEPENDS ON	None	
SINCE	2026-10-11 · Fit: `data-sf`	

CA-05	O.Reg 170/03 Sch. 6-5(1.1) paras 1-4; 6-5(1) para 2 ii	MET
REQUIREMENT	Alarm at the test location and where a person is present (and at schools served); a qualified person acts or is dispatched promptly; alarm tests recorded with place, date and time	
HOW WYLA MEETS IT	Limit, equipment-silence, gateway-disconnect, data-gap and compliance alarms; sent at once to routed recipients, escalation until acknowledged; raise / acknowledge / clear times logged; on-site stack light	
EVIDENCE	ALARM-CALLOUT.md s1 (no time in minutes in the rule, so none is a default)	
DEPENDS ON	Route recipients (including any school served) and set escalation waits per site	
SINCE	2026-10-11 · Fit: `al-immediate, al-person`	

CA-06	O.Reg 170/03 Sch. 6-5(1) paras 8-10 (i, iii)	MET
REQUIREMENT	Chlorine analyser within 0.05 mg/L (5% above 1.0); turbidity within 0.1 NTU; manufacturer's frequency, at least monthly for small and seasonal systems	
HOW WYLA MEETS IT	Calibration log, Ontario rule set	
EVIDENCE	CALIBRATION-LOG.md	
DEPENDS ON	Enter the manufacturer's frequency	
SINCE	2026-10-11 · Fit: `cl-calib`	

CA-07	O.Reg 170/03 Sch. 6-5(2)	MET
REQUIREMENT	Residual required for primary disinfection maintained (site value from its CT), judged at all times	
HOW WYLA MEETS IT	Ontario rule set judges the site's required residual every minute; channel limits and alarms	
EVIDENCE	COMPLIANCE-CALCULATIONS.md Ontario table	
DEPENDS ON	Enter the site's required residual. Ontario's "alarm at required level less 0.1 mg/L" is set by hand per channel (template not shipped; clause not given in sources)	

CA-07	O.Reg 170/03 Sch. 6-5(2)	MET
SINCE	2026-10-11 · Fit: `cl-limits`	

CA-08	O.Reg 170/03 Sch. 7 (municipal residential, as cited)	MET
REQUIREMENT	Continuous free chlorine monitoring	
HOW WYLA MEETS IT	EMEC LDS every 10 s where fitted	
EVIDENCE	fit row	
DEPENDS ON	Chlorine analyser fitted	
SINCE	before 2026-10-11 · Fit: `cl-continuous`	

CA-09	O.Reg 170/03 Sch. 1-6 / 2-6; Procedure 6.1.4	MET
REQUIREMENT	UV failure annunciated by alarm	
HOW WYLA MEETS IT	Hallett alarm bits become WYLA alarms with call-out	
EVIDENCE	fit row	
DEPENDS ON	None	
SINCE	before 2026-10-11 · Fit: `uv-alarm`	

CA-10	O.Reg 170/03 Sch. 2-6(3); Procedure 6.1.4	MET
REQUIREMENT	UV sensors checked to the manufacturer's instructions / the approval	
HOW WYLA MEETS IT	Calibration log, Ontario rule set with the site's frequency and tolerance	
EVIDENCE	CALIBRATION-LOG.md	
DEPENDS ON	Enter frequency and tolerance (none in the rules)	
SINCE	2026-10-11 · Fit: `uv-sensor`	

CA-11	O.Reg 170/03 Sch. 1-6(3) (large systems, as cited)	PARTLY
REQUIREMENT	Continuous UV monitoring	
HOW WYLA MEETS IT	Hallett read every 10 s	
WHY PARTLY	Flow needs a flow meter	
EVIDENCE	fit row	
DEPENDS ON	Flow meter	
SINCE	before 2026-10-11 · Fit: `uv-monitor`	

CA-12	O.Reg 170/03 s.13	PARTLY
REQUIREMENT	Records kept 2, 6 or 15 years by type	
HOW WYLA MEETS IT	At least 10 years, no automatic deletion and no retention policy (old one-minute records compressed, never deleted); each closed month's records and logs also archived once to write-once storage for 10 years	

CA-12	O.Reg 170/03 s.13	PARTLY
WHY PARTLY	15-year records: the live database keeps data while the customer is active plus the 10-year floor and the monthly write-once archive keeps each month 10 years, not 15, so WYLA does not claim to be the 15-year archive; record types not yet mapped to s.13 categories	
EVIDENCE	DATA-RETENTION.md s4-5, s7	
DEPENDS ON	Customer keeps its own exports for 15-year records	
SINCE	2026-10-11 · Fit: `data-retention`	

CA-13	O.Reg 128/04 s.27 (incl. s.27(4))	MET
REQUIREMENT	Only authorised log entries, each identifying its maker; not altered	
HOW WYLA MEETS IT	Audit log with the user's identity, insert-only for every role since 2026-10-12 (migration 038); control log insert-only and hash-chained; calibration, grab and call-out entries record their maker, corrections are new entries with a reason; record seals (NZ-01); each month's audit, control, calibration and call-out entries also archived once to write-once storage	
EVIDENCE	CALIBRATION-LOG.md "Never edited"; RECORD-SEALING.md; DATA-RETENTION.md s5	
DEPENDS ON	None	
SINCE	2026-10-12 · Fit: `data-integrity`	

CA-14	O.Reg 128/04 (operator logs 5 yr); O.Reg 319/08 (small systems 5 yr)	MET
REQUIREMENT	Keep logs and records 5 years	
HOW WYLA MEETS IT	At least 10 years, no automatic deletion and no retention policy (old one-minute records compressed, never deleted); each closed month's records and logs also archived once to write-once storage for 10 years	
EVIDENCE	DATA-RETENTION.md s3-5, s7	
DEPENDS ON	None	
SINCE	2026-10-11 · Fit: `data-retention`	

CA-15	O.Reg 128/04 s.26(2)(c)-(d); s.27(5)	MET
REQUIREMENT	Every adjustment logged with an unambiguous identity; equipment status at the end of every shift	
HOW WYLA MEETS IT	Every change made through WYLA's assisted changes is in an insert-only, hash-chained control log per site (who proposed it and why, from / to, who confirmed it was done at the panel with a passkey, read-back seen or not), CSV and a "Changes made at the panel" section in the monthly report. Shift log per site (migration 039): for each shift the control-log entries, the state changes WYLA saw in its readings marked "recorded in WYLA" or not, the alarms raised, and the equipment status at the end of the shift (each key reading with its age, alarms active, each gateway online or offline), readings WYLA does not take marked "NOT read by WYLA"; certified operators' append-only, hash-chained notes and end-of-shift sign-offs keeping the status seen and its SHA-256; CSV for any date range. Every command and setting change in WYLA is in the insert-only audit log with the user. Where: Changes page > Shift log	
EVIDENCE	CONTROL-PREREQUISITES.md s4.1, s15.1-15.2, s15.5	

CA-15	O.Reg 128/04 s.26(2)(c)-(d); s.27(5)	MET
DEPENDS ON	The operator's part (the clause is a duty to record, as in any log book): make every adjustment through the Changes page, or record one made at the panel without WYLA in a shift note (a setting WYLA does not read leaves no trace, s.26(2)(c)); write the s.27(5) items (operators on duty, equipment out of service, departures from procedure, special instructions) and equipment WYLA does not read in a shift note; sign off each shift. Owner sets the shift times (default one shift per day)	
SINCE	2026-10-12 · Fit: `ct-log`	

CA-16	Procedure 3.1.1, 2.1, 2.2, Tables 1-7	MET
REQUIREMENT	CT at all times at least the table value for the logs required (groundwater 2-log virus; surface / GUDI at least 0.5-log Giardia and 2-log virus)	
HOW WYLA MEETS IT	Ontario C.t calculation each minute against Tables 1-7 (lower temperature, higher pH, concentration row at or above C)	
EVIDENCE	COMPLIANCE-CALCULATIONS.md Ontario table	
DEPENDS ON	Enter contact volume and baffle factor (tracer study, or the Procedure's typical values)	
SINCE	2026-10-11 · Fit: `cl-ct`	

CA-17	Procedure 3.2.1; MECP UV technical bulletin (s.16-4)	PARTLY
REQUIREMENT	UV dose at least 40 mJ/cm2 (groundwater); off-spec for a continuous 10 minutes is adverse	
HOW WYLA MEETS IT	Ontario UV rule set	
WHY PARTLY	Not yet on real equipment values (fit row Partly)	
EVIDENCE	COMPLIANCE-CALCULATIONS.md Ontario table	
DEPENDS ON	Pick the rule set; enter validated limits	
SINCE	2026-10-11 · Fit: `uv-offspec`	

CA-18	MECP UV bulletin (as cited)	PARTLY
REQUIREMENT	Monthly UV off-spec summary	
HOW WYLA MEETS IT	Signed monthly report has the month's UV share within validated conditions and off-spec, a daily table and every off-spec stretch; monthly alarm summary	
WHY PARTLY	By operating time without a flow totaliser; the bulletin's own form not confirmed	
EVIDENCE	REGULATOR-REPORTS.md s2 (section A.3); ALARM-CALLOUT.md s7	
DEPENDS ON	Pick the rule set	
SINCE	2026-10-12 · Fit: `al-summary`	

CA-19	MECP SCADA bulletin (municipal residential)	MET
REQUIREMENT	SCADA software changes reviewed as plant alterations (Form 2, engineer review, kept 10 yr)	

CA-19	MECP SCADA bulletin (municipal residential)	MET
HOW WYLA MEETS IT	Release notes and version per gateway; one release for all M300 firmware (agent 1.1.35: where the vendor's Node-RED I/O bridge does not answer, as on firmware V1.2.21, it reads and drives the I/O through the gateway's own web service and reports which path it uses); staged Fleet rollout with automatic rollback. Gateway firmware: the setup program installs newer vendor firmware that WYLA has published for that model automatically (checksum verified, never older, skippable by the installer) and registers a fitted I/O expansion card; the firmware version reported by each gateway is in the change record. Per-site change record for the customer's engineer (migration 039; JSON, CSV, PDF, any period up to a year): agent and firmware versions, updates sent and staged rollouts, configuration versions diffed (equipment profiles, inputs, alarm limits, recording), compliance rule sets and site settings, other commands, the control log, permissions, designations and shift schedules, each with when, who and before / after where held; it states what it cannot hold. Records kept at least 10 years. Where: Changes page > Change record	
EVIDENCE	CONTROL-PREREQUISITES.md s15.5; EQUIPMENT-AND-UPDATES.md	
DEPENDS ON	The customer's engineer reviews each change and the customer files the Form 2 and keeps both 10 years; changes made outside WYLA (the plant's own PLC, HMI or SCADA) stay in the customer's records	
SINCE	2026-10-20 · Fit: `ct-scada`	

CA-20	BC B.16 s.11	PARTLY
REQUIREMENT	Continuous UV monitoring	
HOW WYLA MEETS IT	Hallett read every 10 s	
WHY PARTLY	Flow needs a flow meter	
EVIDENCE	fit row	
DEPENDS ON	Flow meter	
SINCE	before 2026-10-11 · Fit: `uv-monitor`	

CA-21	BC B.16 s.12	MET
REQUIREMENT	Duty UV sensors monthly (ratio at most 1.2); UVT analyser weekly within 2%	
HOW WYLA MEETS IT	Calibration log with Custom values	
EVIDENCE	CALIBRATION-LOG.md "What needs confirming" 7	
DEPENDS ON	Pick Custom and enter the BC values. UNCONFIRMED: secondary source, not offered as a rule set	
SINCE	2026-10-11 · Fit: `uv-sensor, uv-uvt`	

CA-22	BC B.16 s.13	MET
REQUIREMENT	Alarm on UV major / critical faults	
HOW WYLA MEETS IT	Hallett alarms become WYLA alarms with call-out	
EVIDENCE	fit row	
DEPENDS ON	None	
SINCE	before 2026-10-11 · Fit: `uv-alarm`	

CA-23	BC B.16 s.13 (guideline)	PARTLY
REQUIREMENT	Monthly summary of each major or critical UV alarm within 30 days: time, date, duration, reason, volume treated, corrective action	
HOW WYLA MEETS IT	Monthly alarm summary per site, emailed on the 1st and as CSV: raised, acknowledged (who, how), cleared, minutes to acknowledge, call-out attempts, classification note as action taken	
WHY PARTLY	Volume treated during each alarm is not in it (needs a flow totaliser)	
EVIDENCE	ALARM-CALLOUT.md s1, s7	
DEPENDS ON	Choose summary recipients per site; flow totaliser	
SINCE	2026-10-11 · Fit: `al-summary`	

CA-24	BC B.17 s.20.5.1 item .4 (guideline)	PARTLY
REQUIREMENT	SCADA capable of remotely notifying the appropriate individual; unattended plants should have a telephone dialler, cellular or pager system	
HOW WYLA MEETS IT	Email notification and escalation work today; text and voice call-out are built	
WHY PARTLY	Texts and calls are recorded "not sent" until a Twilio account is opened (credentials only, no code change)	
EVIDENCE	ALARM-CALLOUT.md s1-2	
DEPENDS ON	Twilio account and senders where texts or calls are expected	
SINCE	2026-10-11 · Fit: `al-person`	

CA-25	BC B.17 s.20.5.2 (guideline)	MET
REQUIREMENT	Alarms latched until acknowledged; log when each occurred, was acknowledged and cleared	
HOW WYLA MEETS IT	Latching per site (all alarms, by type or by code); raise / acknowledge / clear times for every alarm; append-only call-out log, CSV	
EVIDENCE	ALARM-CALLOUT.md s1, s6	
DEPENDS ON	Switch on "Latch all alarms" at sites that follow B.17	
SINCE	2026-10-11 · Fit: `al-latch`	

CA-26	BC B.17 s.5.10.7, s.20.5.1 (guideline)	MET
REQUIREMENT	Manual overrides kept; remote operation only with an available operator	
HOW WYLA MEETS IT	Monitoring only: the plant's own controls stay in charge	
EVIDENCE	fit row	
DEPENDS ON	None (design rule for future control: local controls always override WYLA)	
SINCE	before 2026-10-11 · Fit: `ct-manual`	

CA-27	Alberta Standards 1.10.3.7	PARTLY
REQUIREMENT	UV monitoring (as cited)	
HOW WYLA MEETS IT	Hallett read every 10 s	
WHY PARTLY	Flow needs a flow meter	

CA-27	Alberta Standards 1.10.3.7	PARTLY
EVIDENCE	fit row	
DEPENDS ON	Flow meter	
SINCE	before 2026-10-11 · Fit: `uv-monitor`	

CA-28	Alberta Standards 1.10.3.7	MET
REQUIREMENT	UV sensors checked monthly against a reference; reference annually	
HOW WYLA MEETS IT	Calibration log with Custom values	
EVIDENCE	CALIBRATION-LOG.md "What needs confirming" 7	
DEPENDS ON	Pick Custom. UNCONFIRMED: secondary source	
SINCE	2026-10-11 · Fit: `uv-sensor`	

CA-29	Alberta Standards 1.10.3.7	MET
REQUIREMENT	C.t (as cited)	
HOW WYLA MEETS IT	C.t calculation with a Custom rule	
EVIDENCE	COMPLIANCE-CALCULATIONS.md	
DEPENDS ON	Custom rule set with the approval's values; contact volume and baffle factor	
SINCE	2026-10-11 · Fit: `cl-ct`	

CA-30	Alberta, clause not given in sources	MET
REQUIREMENT	CT monitoring at 5 minutes or better	
HOW WYLA MEETS IT	One-minute records of chlorine and flow	
EVIDENCE	DATA-RETENTION.md s7	
DEPENDS ON	Recording on per site	
SINCE	2026-10-11 · Fit: `data-1min`	

CA-31	Alberta, clause not given in sources	PARTLY
REQUIREMENT	UV off-spec at most 1% a month and 2% a day	
HOW WYLA MEETS IT	UV off-spec calculation with a Custom rule	
WHY PARTLY	Not yet on real equipment values (fit row Partly)	
EVIDENCE	COMPLIANCE-CALCULATIONS.md	
DEPENDS ON	Custom rule set; validated limits	
SINCE	2026-10-11 · Fit: `uv-offspec`	

CA-32	Alberta (5 yr), clause not given in sources	MET
REQUIREMENT	Keep records 5 years	
HOW WYLA MEETS IT	At least 10 years, no automatic deletion and no retention policy (old one-minute records compressed, never deleted); each closed month's records and logs also archived once to write-once storage for 10 years	

CA-32	Alberta (5 yr), clause not given in sources	MET
EVIDENCE	DATA-RETENTION.md s4-5, s7	
DEPENDS ON	None	
SINCE	2026-10-11 · Fit: `data-retention`	

CA-33	Indigenous Services Canada (federal, First Nations systems), per protocol	MET
REQUIREMENT	Keep records 5 years	
HOW WYLA MEETS IT	At least 10 years, no automatic deletion and no retention policy (old one-minute records compressed, never deleted); each closed month's records and logs also archived once to write-once storage for 10 years	
EVIDENCE	DATA-RETENTION.md s4-5, s7	
DEPENDS ON	None. First Nations systems otherwise not researched	
SINCE	2026-10-11 · Fit: `data-retention`	

CA-34	O.Reg 170/03 s.12(1)1 (as cited)	MET
REQUIREMENT	Daily minimum, maximum and mean of continuous monitoring available for inspection for 2 years	
HOW WYLA MEETS IT	Monthly Compliance Report (preview, PDF, CSV `daily_statistics`) for any month: each day's minimum, maximum and sample-weighted mean per recorded reading; records kept at least 10 years	
EVIDENCE	REGULATOR-REPORTS.md s2 (section A.6); REGULATOR-REPORTS-DESIGN.md 4.1	
DEPENDS ON	Recording on per site; the supplier makes the figures available for inspection	
SINCE	2026-10-12 · Fit: `data-dailyroll`	

CA-35	Alberta Standards 1.11.2.2	PARTLY
REQUIREMENT	Monthly reports compiled: operators in direct charge, analytical results, sampling locations, chemicals, required measurements	
HOW WYLA MEETS IT	Signed monthly report: daily verdicts, daily minimum / maximum / mean per reading, every period out of limits, gaps (LIVE 2026-11-06 23:23 UTC: one lost at the gateway is labelled as such), calibration and grab entries, alarms and notices	
WHY PARTLY	Operators in charge, chemicals and lab results not in it; the submission deadline and form are set per Approval (UNCONFIRMED); annual reports (Alberta 1.11.2.3, Ontario s.11 and Sched. 22, BC) not built	
EVIDENCE	REGULATOR-REPORTS.md s2; REGULATOR-REPORTS-DESIGN.md 4.3	
DEPENDS ON	Approval number in the regulatory profile; an owner names who may sign	
SINCE	2026-10-12 · Fit: `rp-ca`	

CA-36	O.Reg 128/04 s.22, s.26(1); SDWA 2002 s.12(1)	PARTLY
REQUIREMENT	Every operator holds a valid certificate; only the operator-in-charge sets operational parameters	

CA-36	O.Reg 128/04 s.22, s.26(1); SDWA 2002 s.12(1)	PARTLY
HOW WYLA MEETS IT	As US-20: certificate records, expiry reminders, per-site control permission tied to a current verified certificate for the site's jurisdiction and of at least the plant's class; operator-in-charge designated per site by the owner with a passkey (s.25: an operator-in-training certificate is refused); since 2026-10-13 (migration 041) only a person with control permission in force and an active operator-in-charge designation at the site may confirm a change made at the panel (s.26(1)), always in Ontario, and nothing can be confirmed until an owner designates one; a refusal names what is missing; each confirmed change keeps the roles held and the rule applied	
WHY PARTLY	Class lists entered by the customer (UNCONFIRMED); s.26(1) holds for changes confirmed through WYLA - a parameter set at the panel without WYLA is outside it (the operator's shift note, CA-15)	
EVIDENCE	CONTROL-PREREQUISITES.md s4.1, s15.2, s15.5, s15.7	
DEPENDS ON	As US-20 (designate the operator-in-charge)	
SINCE	2026-10-12 · Fit: `ct-certified`	

CA-37	Alberta AR 277/2003 s.14	PARTLY
REQUIREMENT	Plant operated by, or under the direction of, a certified operator	
HOW WYLA MEETS IT	As US-20	
WHY PARTLY	As US-20: class lists entered by the customer (UNCONFIRMED)	
EVIDENCE	CONTROL-PREREQUISITES.md s4.3, s15.2, s15.5	
DEPENDS ON	As US-20	
SINCE	2026-10-12 · Fit: `ct-certified`	

CA-38	O.Reg 128/04 s.1(1)	MET
REQUIREMENT	Anyone who adjusts a process is an operator (and must be certified)	
HOW WYLA MEETS IT	WYLA staff refused control permission in code (as NZ-24)	
EVIDENCE	CONTROL-PREREQUISITES.md s4.1, s10.1 (D2)	
DEPENDS ON	Contract wording still to do	
SINCE	2026-10-12 · Fit: `ct-nostaff`	

A.4 Cybersecurity and privacy

Cyber guidance (US CISA / EPA, NZ NCSC, Canadian Centre for Cyber Security) is mostly guidance for small systems, but enforced for US systems over 3,300 people and expected by buyers. Privacy: NZ Privacy Act 2020, PIPEDA (Canada). The country is in the Clause column.

20 met, 5 partly.

CP-01	US: CISA / EPA Primary Mitigations (May 2025)	MET
REQUIREMENT	No control equipment exposed to the internet	

CP-01	US: CISA / EPA Primary Mitigations (May 2025)	MET
HOW WYLA MEETS IT	Gateways only make outbound connections; no open inbound ports; PUSR vendor cloud switched off on all units. The read-only local status page (agent 1.1.36+) is for the site network: served on the gateway's existing Node-RED port 1880, readings and alarms only, no process control, PIN-protected with wrong PINs rate-limited by the agent; from agent 1.1.38 a session opened with the WYLA support master PIN can also test the stack light (stack light outputs only, 10 seconds then automatic, rate-limited, each test audited) - an indicator test, still only from the site network	
EVIDENCE	fit row; MQTT-CONTRACT.md s4.3, s5.1; CONTROL-PREREQUISITES.md s15.9	
DEPENDS ON	Bench 2026-10-24: the gateway's web page (80) and Node-RED (1880) DO answer from its WAN side - the site network behind the site router, not the internet - behind the gateway's own unique passwords. From agent 1.1.44 SSH (22) and the gateway's own MQTT (1883) are closed, and port 80 no longer hands out files without a sign-in; from 1.1.46 the web terminal that firmware 0819 adds (/ttydweb, ttyd on 7681) is blocked and stopped (it served Node-RED's settings, the VPN key and the cloud login; docs/M300-FIRMWARE-NOTES.md s7). Restricting 80/1880 to the LAN and VPN is still open. EM300 (IoTRouter; bench only since 2026-10-28, none in the field or sold): the setup program switches off its maker's cloud remote management (on at the factory), its mesh service and its own VPN client; but SSH (22, key sign-in only, the maker's OS) still answers on its LAN, and two of its web addresses answer without a sign-in with its serial number, IMEI and SIM number (edge-agent-em300/docs/em300-bench-bringup.md) - to be settled before an EM300 is fielded (both since settled: SSH off from agent 1.1.55, the two addresses kept off the network by the web guard from 1.1.63). Since EM300 1.1.74 (published 2026-11-04) the web guard redirects only port-80 traffic addressed to the unit itself (addrtype LOCAL, with a fallback to the old rule); before, a laptop or PLC whose internet ran through an EM300 could reach no web site on port 80; proven on d_aa9015: the laptop's port-80 traffic gets out, /rpc-api is still refused (403) and sysinfo gives only model, serial and version. EM300 STANDALONE (an SD card with a WYLA licence for that unit; agent 1.1.53, bench only): a local website on the same port 1880 at /wyla/, open only while the unit runs standalone, for the site network - readings, alarms with acknowledge, trends and downloads, its users and email settings, and a request for WYLA support; still no process control, and closed (403) in cloud mode	
SINCE	before 2026-10-11 · Fit: `cy-exposure`	

CP-02	NZ: NCSC NZ OT exposure guidance (Oct 2025)	MET
REQUIREMENT	As CP-01	
HOW WYLA MEETS IT	As CP-01	
EVIDENCE	fit row	
DEPENDS ON	None	
SINCE	before 2026-10-11 · Fit: `cy-exposure`	

CP-03	CA: Cyber Centre alert AL25-016	MET
REQUIREMENT	As CP-01	
HOW WYLA MEETS IT	As CP-01	
EVIDENCE	fit row	
DEPENDS ON	None	
SINCE	before 2026-10-11 · Fit: `cy-exposure`	

CP-04	CA: BC B.17 s.5.10.7 (guideline)	MET
REQUIREMENT	Encrypted, authenticated links	
HOW WYLA MEETS IT	Gateway-to-cloud MQTT over TLS 1.3 on port 8883 with WYLA's own root CA, certificate checked by the gateway (all gateways); per-gateway logins and per-device broker access list; HTTPS; certificate-based VPN	
EVIDENCE	fit row; PLAN-MQTT-TLS.md (plan, see section A.7)	
DEPENDS ON	None. Plain MQTT port 1883 closed to the internet on 2026-10-24 (the Azure rule removed; the broker takes 1883 only from the server itself); the setup program checks the cloud on 8883 over TLS, and from agent 1.1.44 a gateway never falls back to plain. The EM300 agent (1.1.47+, bench only) uses the same link: TLS on 8883, WYLA's root CA checked by the unit. A standalone EM300 (bench only) emails its alarms through the customer's own mail server over TLS 1.2+ (TLS on 465 or STARTTLS on 587, required), the server's certificate checked against the unit's CAs and the host name; a server without STARTTLS is refused before the password is sent (bench 2026-10-29: a self-signed server refused)	
SINCE	2026-10-11 · Fit: `cy-tls`	

CP-05	NZ: NCSC NZ	MET
REQUIREMENT	Encrypted, authenticated links	
HOW WYLA MEETS IT	As CP-04	
EVIDENCE	fit row	
DEPENDS ON	As CP-04	
SINCE	2026-10-11 · Fit: `cy-tls`	

CP-06	US: CISA / EPA Top Cyber Actions (2024); EPA enforcement alert (May 2024)	PARTLY
REQUIREMENT	No default passwords	

CP-06	US: CISA / EPA Top Cyber Actions (2024); EPA enforcement alert (May 2024)	PARTLY
HOW WYLA MEETS IT	Every gateway has its own passwords for its local web page and Node-RED admin (agent 1.1.31+, all three gateways), set from Fleet or the setup program, stored encrypted, audited admin reveal; factory login never used. The gateway's read-only local status page (agent 1.1.36+, `http://<LAN IP>:1880/wyla`: readings and alarms, no process control; from agent 1.1.38 only a WYLA support master PIN session can test the stack light, audited) opens with a site PIN (4-8 digits) set on the gateway's Connections page by the customer's owner or a WYLA admin, kept only as a salted SHA-256 (never the PIN), audited, and pushed to the gateway in its configuration; the console warns while the default PIN is still in use; since 2026-11-03 (cloud side live 2026-11-03, migration 054; the setup program with the Site PIN field built and signed 2026-11-03 in installers M300 WYLA-Setup-Installer 2026.11.3.1174 and EM300 WYLA-EM300-Setup-Installer 2026.11.3.1176, bench-proven on d_fc2dea 2026-11-04 about 00:30 UTC; PER-UNIT-CREDENTIALS.md) the setup program needs a site PIN on an M300 whose local page is still on the default - it stops at step 2, before anything on the gateway is changed - and one weak-PIN rule is applied in the cloud, the setup program and the console (NIST SP 800-63B s5.1.1.2 'repetitive or sequential characters': one digit repeated, a run of consecutive digits, a short block repeated, and 1234 refused); an owner can no longer go back to the default PIN (a WYLA admin rollback only); since 2026-11-05 (M300 agent 1.1.50 published about 02:50 UTC, migration 057 applied live about 02:40 UTC; PER-UNIT-CREDENTIALS.md (a2)) a site whose PIN is forgotten can be given a new one on site with no internet, so a forgotten PIN is never a reason to fall back to a default: only a local page session opened with the unit's WYLA support PIN may set it, under the same rule (4-8 digits, not 1234, not weak, and not the support PIN); everyone is signed out and the gateway uses it at once, keeps only a salted SHA-256 and sends that (never the PIN) until the cloud has stored it as the site PIN, audited it (local_page_pin_set_on_unit, no hash) and sent it back; the on-site change wins over a PIN an owner set while the unit was offline; bench-proven on d_fc2dea 2026-11-05 (weak, default and support PINs refused; the new PIN signs in, the old one and 1234 do not; the cloud applied it 02:43:17 UTC, config v19 acked)	
WHY PARTLY	Known exception: the read-only local page accepts the published default PIN 1234 until a site PIN is set (nothing forces the change), and a WYLA support master PIN that is the same on every unit (see CP-07). The gateway web page and Node-RED passwords are unique per gateway as before; the 2026-11-03 build (a required, non-weak site PIN at commissioning and a per-unit support PIN, CP-07) is live in the cloud, and the new setup program (installers 2026.11.3.1174 / .1176) is bench-proven on d_fc2dea (2026-11-04 about 00:30 UTC: a weak PIN, one digit repeated, refused before step 1; with no PIN it stops at step 2 on a unit still on the default PIN; with a good PIN it sets it, and d_fc2dea now opens only with its site PIN, 1234 refused); left: the field units d_a3ec46, d_fc2de2, d_fc2de6 and d_1eb609 still use the default site PIN until the setup program is run again on them or the owner sets one, and the agent itself still accepts 1234 on a unit whose cloud never sent a site PIN - so it stays Partly until every field M300 has a site PIN	
EVIDENCE	fit row; MQTT-CONTRACT.md s5.1 (migrations 044, 057; `api/test/local-page.test.mjs`, `api/test/local-pin-unit.test.mjs`, `edge-agent/test/local-page.test.js`); PER-UNIT-CREDENTIALS.md; `api/test/unit-secrets.test.mjs`, `edge-agent/test/unit-security.test.js`	

CP-06	US: CISA / EPA Top Cyber Actions (2024); EPA enforcement alert (May 2024)	PARTLY
DEPENDS ON	Gateway passwords: none. Local page: the installer sets a site PIN at commissioning (manual, Connections chapter); fully met once every field M300 has a site PIN and its own support PIN and the setup program that requires a site PIN is in use (installers 2026.11.3.1174 / .1176 from 2026-11-03, PER-UNIT-CREDENTIALS.md; over the support VPN the M300 setup program needs --device d_xxxxxx, since otherwise it reads the MAC by ARP). EM300 (bench only): the setup program gives it its own web page and Node-RED passwords, checked by signing in after a restart and kept through a one-minute power cut (2026-10-28); the setup program stores the web password where the maker's firmware keeps it, because a password set on the EM300's own web page is lost at its next restart (firmware 2X04, reported to IoTRouter 2026-10-28). EM300 standalone local website (bench only; John's decision 2026-10-30, agent 1.1.71): a DEFAULT owner, admin / 123456789, the same on every new unit and printed in the manual, that must choose a password of its own at the first sign-in before any page or action is allowed (the default is then refused; it is shorter than the password rules, so it can never be chosen again) - this meets California SB-327's 'new means of authentication before access' but not a no-default-password rule such as the UK's PSTI, so CP-06 could not be claimed for a standalone unit as built; and a WYLA MASTER sign-in on every standalone unit (user admin with a fixed master password, only its scrypt hash in the agent and in edge-agent-em300/config/standalone-master.json, the password in no file; it signs in as wyla-master, an owner, whatever the site's own password is; every use audited on the card as via master; the Users page tells the site; changing it needs an agent release to every unit) - the same kind of one-for-every-unit credential as the support master PIN (CP-07); named users (owner / operator / viewer), passwords at least 10 characters, scrypt-hashed in a root-only file on the unit (never on the card); 5 wrong passwords lock that name for 5 minutes and 20 on the unit in 10 minutes lock every sign-in; every sign-in, download and change audited on the card Built 2026-11-03 for the EM300 standalone, published 3-4 Nov 2026 (EM300 gateway software 1.1.73, then 1.1.74; setup installer 2026.11.3.1176): a unit finished by the setup program gets a 12-character first owner password made for that unit (still to be changed at the first sign-in) instead of the shared default, and its own master sign-in (wyla-master, a random password sealed in the cloud, only its hash on the unit; the built-in master refused on that unit; rollback --fleet-master). Bench-proven on d_aa9015 (standalone, card in) over the VPN, 2026-11-04 about 00:15-00:30 UTC: the setup run --standalone wrote the unit's own master and wyla-master with the revealed password signs in; --fleet-master removes it and that password is then refused; a re-run restores it; the published default owner password was replaced with one made for the unit (fixed during the bench: a re-run now replaces an unused first password made by an earlier run, where before it said wrongly that the published default was still in place). For a unit finished by the setup program this meets a no-universal-default rule such as the UK PSTI and not only SB-327; still bench only - no EM300 is fielded or sold, so nothing is claimed; a unit that never went through the setup program still starts with the default owner. A forgotten standalone owner password is reset by another owner on the unit's Users page, or WYLA support signs in with the unit's master sign-in revealed on Fleet; the M300's on-site site PIN change (2026-11-05) does not apply to a standalone unit (its report is ignored). Network name (2026-11-05; PUSR agent 1.1.51, EM300 agent 1.1.76): every gateway answers on the site network to wyla-<the six hex of its device id> and gives the router that name, so a PC there opens the local page or a standalone unit's website by name (http://wyla-fc2dea:1880/wyla, http://wyla-aa9015:1880/wyla/ on the bench) - a finding aid, no change to who can sign in. Not proven: a PC on a PUSR LAN port, an EM300's cable uplink (change log 2026-11-05 (4)).
SINCE	2026-10-20 · Fit: `cy-passwords`	

CP-07	NZ: NCSC NZ	PARTLY
REQUIREMENT	Unique credentials per device	

CP-07	NZ: NCSC NZ	PARTLY
HOW WYLA MEETS IT	As CP-06: the gateway web page and Node-RED passwords are unique per gateway; the local page's site PIN is per gateway; since 2026-11-03 (cloud side live 2026-11-03, migration 054; bench-proven on d_fc2dea 2026-11-03 23:45-23:48 UTC and issued to every M300 2026-11-03 23:49 UTC; PER-UNIT-CREDENTIALS.md) the WYLA support PIN is per unit too: the cloud makes each M300 its own (8 random digits, never weak, never that unit's site PIN, sealed in the cloud) and sends the gateway only its salted hash in its configuration, which every agent from 1.1.36 already takes in place of the fleet master (no gateway release needed); shown only to a WYLA admin, each reveal audited on the customer's trail; rollback per unit to the fleet PIN	
WHY PARTLY	Known exception: the local page's WYLA support master (fleet) PIN, one PIN for every unit (a salted hash built into the agent; a platform admin can rotate it for the whole fleet from the cloud), still works on any M300 that has not yet taken its own support PIN; from agent 1.1.38 the support PIN is also the only PIN that can test the stack light (indicator only, 10 seconds, each test audited); until a site PIN is set the default site PIN is the same everywhere (CP-06). Bench-proven on d_fc2dea 2026-11-03 23:45-23:48 UTC: the unit's own PIN opens the local page; after Back to the fleet PIN it is refused; after Use its own PIN again it works; the audit rows hold no PIN digits. Issued to every M300 2026-11-03 23:49 UTC (POST /api/v1/admin/support-pins/issue): d_a3ec46 and d_fc2de2 applied it within a second. Left: d_fc2de6 and d_1eb609 (Chris's 2nd and 3rd units) are offline and keep the fleet PIN until they reconnect and take theirs; a power-cut check (the unit's own PIN still works after a power cut) was not done; not tested on the bench: the fleet PIN refused on a unit with its own PIN (the tester does not know the fleet PIN), and the lamp test opened with a unit's own PIN was not part of the recorded bench. Partly until both offline units have their own PIN and the power-cut check passes. Since 2026-11-05 (agent 1.1.50) the unit's own support PIN also lets WYLA support set a new site PIN on the gateway's local page (CP-06), and the support PIN itself is refused as a site PIN, so the two stay different on every unit. Open gap (bench only, nothing claimed): a standalone EM300's own master sign-in has no rotate route - a setup re-run writes the same one again, so a revealed master stays valid (PER-UNIT-CREDENTIALS.md (c))	
EVIDENCE	fit row; MQTT-CONTRACT.md s5.1; PER-UNIT-CREDENTIALS.md; `api/test/unit-secrets.test.mjs`	
DEPENDS ON	As CP-06	
SINCE	2026-10-20 · Fit: `cy-passwords`	

CP-08	US: CISA 2025	MET
REQUIREMENT	Phishing-resistant MFA for remote access	
HOW WYLA MEETS IT	Passkeys (Windows Hello, a phone or a security key) on the console's Auth0 sign-in: bound to the WYLA sign-in site and the person's device, so phishing-resistant; replaced the one-time-password MFA of 2026-10-11. Signing a compliance report needs a fresh passkey sign-in (a password alone is refused) and the signed PDF names the passkey. Since 2026-11-06 (migration 059) a Microsoft or Google account can be used to sign in, but only after a one-time code emailed to the login's own address has tied that account to the login (the address the account claims is never trusted); such a sign-in never counts as the passkey, so signing a report and every control step still need a fresh passkey sign-in	
EVIDENCE	fit row; REGULATOR-REPORTS.md s4; SIGN-IN-METHODS.md	
DEPENDS ON	Each user enrols a passkey; password fallback remains (decide later whether to require passkeys); Microsoft sign-in appears once the app is registered with Microsoft and switched on in Auth0 (SIGN-IN-METHODS.md s5)	
SINCE	2026-11-06 · Fit: `cy-mfa`	

CP-09	NZ: NCSC NZ	MET
REQUIREMENT	Multi-factor sign-in	
HOW WYLA MEETS IT	As CP-08	
EVIDENCE	fit row	
DEPENDS ON	As CP-08	
SINCE	2026-10-12 · Fit: `cy-mfa`	

CP-10	US: CISA 2025	MET
REQUIREMENT	Segment networks; least privilege	
HOW WYLA MEETS IT	Broker access rules limit each gateway to its own messages; VPN client-to-client off; server firewall lets named support users reach only the gateways they are allowed, and since 2026-10-13 no support login reaches any gateway or site network without an open support session for it (CP-12); in the database each customer reads only its own compliance records through a security-barrier view, and direct reads of the TimescaleDB chunk tables are refused (migration 037, 2026-10-12, closed a path past row-level security)	
EVIDENCE	fit row; COMPRESSION-TRIAL.md status note; REMOTE-ACCESS.md s3	
DEPENDS ON	A new support login needs its own firewall rule	
SINCE	2026-10-11 · Fit: `cy-segment`	

CP-11	NZ: NCSC NZ	MET
REQUIREMENT	Default-deny between networks	
HOW WYLA MEETS IT	As CP-10	
EVIDENCE	fit row	
DEPENDS ON	As CP-10	
SINCE	2026-10-11 · Fit: `cy-segment`	

CP-12	NZ: NCSC NZ	MET
REQUIREMENT	Remote access only when needed, through a secure gateway	
HOW WYLA MEETS IT	Since 2026-10-13 12:55 UTC support reaches no gateway - its tunnel address or its site network - unless a support session is open for that gateway: opened in the console by an owner of the gateway's customer or a platform admin, with a reason and a length (default 30 min, at most 120), shown with a countdown, closed by itself at the end or early (closing cuts connections already open). The VPN server is the secure gateway (jump host): its firewall drops all support traffic to or from every gateway and site network except one with an open session, in front of the per-login rules (each support login reaches only its own sites; gateways cannot reach each other). Each step is an append-only, hash-chained record with audit rows, shown to the customer's people. Fails closed when the API or the gate's helper stops and on a VPN server restart; break-glass on the server is bounded and logged at crit. The gateway's tunnel is outbound-only and carries nothing until a session is open, and its MQTT / TLS link does not use it. One thing changes on a gateway, for the session only (agent 1.1.43, 2026-10-24): the support LAN relay, a firewall rule that makes VPN traffic onto its LAN leave from its own LAN address so a unit cabled behind it can be reached and set up; the cloud sends it when the session opens and closes, the gateway takes it away at the session's end on its own clock and on every restart, and the server gate still decides who gets in (REMOTE-ACCESS.md s8a). Where: gateway's Connections page > Support access; Admin > Fleet	

CP-12	NZ: NCSC NZ	MET
EVIDENCE	REMOTE-ACCESS.md s1-5, s8a (migration 042; `api/test/support-access.test.mjs`, `support-access-gate.test.mjs`); bench-tested on the Wi-Fi and SIM units, then the NZ field unit, then switched on for all gateways (ENFORCE=all)	
DEPENDS ON	Nothing per site. Follow-through (REMOTE-ACCESS.md s2): the tunnel itself stays up - one that is down until requested needs a supported on-demand switch in the PUSR firmware (question drafted; vendor configuration writes ruled out); sessions are per gateway, not per person; no passkey step-up or second person to open one yet; break-glass sessions are not written into the session record automatically (record by hand); root on the server, and the API's Docker access, can bypass the gate. EM300 (bench only, 2026-10-28): its VPN client is set up by WYLA's setup program, left off, and started only for a session (agent 1.1.47+), through the same server gate - unlike the PUSR, its tunnel is down at rest. A standalone EM300 (agent 1.1.53, bench only) keeps its tunnel up whenever it is online, behind the same server gate, and its owner can ask for a session from the unit's local website (Allow WYLA support, 15-120 min, a reason): the cloud opens it through the console's own path (actor local:<user>@<unit>, same ceiling, only for a unit with a licence), audits it, shows it to the customer's people and tells the unit (support_session)	
SINCE	2026-10-13 · Fit: `cy-remote`	

CP-13	US: CISA 2025	MET
REQUIREMENT	Keep and practise manual operation	
HOW WYLA MEETS IT	Monitoring only; the plant's own controls remain in charge	
EVIDENCE	fit row	
DEPENDS ON	None	
SINCE	before 2026-10-11 · Fit: `ct-manual`	

CP-14	NZ: Privacy Act 2020 s11	MET
REQUIREMENT	Storage by a provider is not a disclosure, even overseas	
HOW WYLA MEETS IT	All data in Azure Canada Central, including the backups and the monthly write-once archive (which leaves out alarm contacts, users and sign-ins); alarm email service data in Canada; since 2026-11-03 scheduled email reports go only to the outside addresses a customer's owner names, sent for the customer, and carry site data only - no user list, no alarm recipients, no names of who acknowledged, entered or took anything, and nobody's phone number or email from those lists; one exception since 2026-11-05 (migration 058): the site's address and the people and organisations an owner typed in for that site's reports and left ticked Print on reports (role, name, organisation, phone, email; never the note) print under the site's heading, and the console says beside the form that these print on reports emailed to people outside; scheduled reminders (since 2026-11-03) likewise go only to the addresses an owner names and carry only the job, the site's name, the due date and the owner's note; since 2026-11-03 (live): the plant-room QR door page shows only the site, its customer, its logbook types and the titles of due reminders - nobody's name, phone or email - and its photos are stored with GPS and EXIF removed; a rain reminder sends the weather service (Open-Meteo) only the site's location rounded to 2 decimals and its time zone, no personal information; the Do Not Drink kit sends nothing	
EVIDENCE	fit row; ALARM-CALLOUT.md s5; DATA-RETENTION.md s5; SCHEDULED-REPORTS.md "The rules" 5; REMINDERS.md "The emails" 4; QR-CHECKS.md "How the page is protected"; REMINDERS.md "After heavy rain"; `api/src/site-parties.mjs`, `api/test/site-parties.test.mjs`	

CP-14	NZ: Privacy Act 2020 s11	MET
DEPENDS ON	Who receives scheduled email reports and reminders, and which people a site's reports name, is the customer's decision (its disclosure, IPP 11); the schedule and reminder screens tell the owner what outside recipients will see	
SINCE	before 2026-10-11 · Fit: `pv-cloud`	

CP-15	CA: PIPEDA (accountability)	MET
REQUIREMENT	Accountability for personal information processed by providers	
HOW WYLA MEETS IT	Personal information held in Canada; the SMS / voice provider (Twilio) is not set up, so no phone number or message leaves WYLA	
EVIDENCE	fit row; ALARM-CALLOUT.md s5	
DEPENDS ON	Before switching SMS / voice on for a Canadian customer: tell them texts and calls are processed outside Canada (Twilio US1 / IE1 / AU1). The privacy notice already says so (Twilio named, since 2026-10-12) and the contract clause is drafted (PRIVACY-BREACH-PROCEDURE.md s10, lawyer to review); signing it into contracts remains	
SINCE	before 2026-10-11 · Fit: `pv-cloud`	

CP-16	US: EPA cybersecurity checklist 2.U (App. A of EPA 817-B-23-001, rev. Aug 2024)	MET
REQUIREMENT	Logs collected and protected from tampering	
HOW WYLA MEETS IT	Audit log insert-only for every database role, the owner included (triggers refuse UPDATE, DELETE, TRUNCATE; the app's role holds SELECT and INSERT); deleting a customer no longer rewrites its rows; control, certificate, report, call-out and calibration records hash-chained in their own tables; each closed month's audit log also archived once to write-once storage (first month due 2026-11-10); since 2026-11-07 (built, not deployed) an alarm acknowledged in the console is an audit row ('Alarm acknowledged', who and when, the alarm and its site), alongside silence, un-silence and the real/false mark; in an act-as-customer session it also names the WYLA support person acting and the customer user acted as	
EVIDENCE	CONTROL-PREREQUISITES.md s6, s15.1; DATA-RETENTION.md s5	
DEPENDS ON	None. The audit log itself is not hash-chained; a database superuser could still switch a trigger off	
SINCE	2026-10-12 · Fit: `cy-auditlog`	

CP-17	NZ: Secure by Demand for OT owners (Jan 2025, joint incl. NCSC NZ)	MET
REQUIREMENT	Default-on audit logs; tamper detection	
HOW WYLA MEETS IT	As CP-16	
EVIDENCE	CONTROL-PREREQUISITES.md s6, s15.1	
DEPENDS ON	As CP-16	
SINCE	2026-10-12 · Fit: `cy-auditlog`	

CP-18	CA: Secure by Demand for OT owners (Jan 2025, joint incl. the Cyber Centre)	MET
REQUIREMENT	As CP-17	
HOW WYLA MEETS IT	As CP-16	

CP-18	CA: Secure by Demand for OT owners (Jan 2025, joint incl. the Cyber Centre)	MET
EVIDENCE	CONTROL-PREREQUISITES.md s6, s15.1	
DEPENDS ON	As CP-16	
SINCE	2026-10-12 · Fit: `cy-auditlog`	

CP-19	NZ: Privacy Act 2020 s.112-118	MET
REQUIREMENT	Notify the Commissioner and affected people of a notifiable breach as soon as practicable	
HOW WYLA MEETS IT	Written incident and breach procedure: s.113 factors, NotifyUs, s.117 content, templates; WYLA notifies for its own data; for a customer's data (held for the customer, s.11) WYLA tells the customer within 72 h at the latest, aiming for 24 h (WYLA's commitment, going into contracts), and the customer notifies	
EVIDENCE	PRIVACY-BREACH-PROCEDURE.md s3-5, s9-10	
DEPENDS ON	Deputy privacy officer named before the first customer goes live (John alone until then); contract clauses reviewed by a lawyer and signed	
SINCE	2026-10-12 · Fit: `pv-breach`	

CP-20	CA: PIPEDA s.10.1-10.3; Breach of Security Safeguards Regulations s.2-6	MET
REQUIREMENT	Report breaches with a real risk of significant harm; notify individuals; keep a record of every breach for 24 months	
HOW WYLA MEETS IT	As CP-19 (RROSH test, OPC form, Regulations s.2-3 content); register of every incident, kept 10 years	
EVIDENCE	PRIVACY-BREACH-PROCEDURE.md; PRIVACY-BREACH-REGISTER.md	
DEPENDS ON	As CP-19	
SINCE	2026-10-12 · Fit: `pv-breach`	

CP-21	US: State breach-notification laws (e.g. Cal. Civ. Code 1798.82(b))	MET
REQUIREMENT	A business holding data it does not own tells the owner of a breach (often immediately)	
HOW WYLA MEETS IT	Customer told the same day where US State-defined personal information may have been acquired; facts given under the "Notice of Data Breach" headings	
EVIDENCE	PRIVACY-BREACH-PROCEDURE.md s3.1, s9-10	
DEPENDS ON	Contract clauses signed; each customer's counsel applies its State's law	
SINCE	2026-10-12 · Fit: `pv-breach`	

CP-22	NZ: Privacy Act 2020 IPP 3A (from 2026-05-01), IPP 3	PARTLY
REQUIREMENT	Make people aware when their information is collected, including from their employer	

CP-22	NZ: Privacy Act 2020 IPP 3A (from 2026-05-01), IPP 3	PARTLY
HOW WYLA MEETS IT	Privacy notice at /privacy.html, linked as Privacy in the console; emailed automatically to each new alarm contact with an email address and each new certificate holder who is not a console user (migration 039, audited, once per person and address); people added earlier on an owner's "Send privacy notice"; drafted contract duty and staff paragraph for customers (IPP 3A(3)); scheduled email reports (since 2026-11-03): each new outside recipient is emailed first who added them, for which customer and about which sites, with a stop link; every email has a no-sign-in "Stop sending me these" link (also mail clients' one-click unsubscribe, RFC 8058), opt-outs are kept and shown to the owner, and every send is in the append-only sent log (10 years) and the audit log; scheduled reminders (since 2026-11-03) the same: each new outside recipient is emailed first who added them, a no-sign-in stop link (also RFC 8058) in every email, opt-outs shown to the owner, every send in an append-only sent log and the audit log; since 2026-11-06 the notice also says what is kept when a person signs in with a Microsoft or Google account (which provider, that provider's id for the account, when it was confirmed; never the one-time code)	
WHY PARTLY	The notice's privacy email and postal address are placeholders until the WYLA domain exists (IPP 3A(1)(d)); contacts added before the emails started are reached only through an owner's "Send privacy notice" or the customer; the "you have been added" email to scheduled-report and reminder recipients does not yet link the privacy notice; the plant-room QR door page (live 2026-11-03) asks for the person's name for the logbook entry and does not yet say why or link the privacy notice; the people an owner names in a site's People and organisations (2026-11-05) for printing on its reports are not sent a notice by WYLA - telling them is left to the owner, whom the console tells to add only people who expect it	
EVIDENCE	PRIVACY-NOTICE.md; PRIVACY-BREACH-PROCEDURE.md s3.2, s10; CONTROL-PREREQUISITES.md s15.5; SCHEDULED-REPORTS.md "The rules" 2-4; REMINDERS.md "Recipients"	
DEPENDS ON	WYLA email domain and postal address; each existing customer's owner sends the notice to contacts added since 2026-05-01 or confirms the staff were told	
SINCE	2026-10-12 · Fit: `pv-notice`	

CP-23	CA: PIPEDA Schedule 1 cl. 4.8 / 4.8.2 (openness), 4.3.2	PARTLY
REQUIREMENT	Make information about policies and practices readily available; advise people of the purposes	
HOW WYLA MEETS IT	The privacy notice gives the accountable person, how to get access, the kinds of information held and the providers; purposes in its section A.3; emailed as in CP-22; scheduled-report recipients are told the purpose and who added them, and can stop the emails without signing in (CP-22)	
WHY PARTLY	4.8.2(a) needs the privacy email and postal address (placeholders); 4.3.2 as CP-22	
EVIDENCE	PRIVACY-NOTICE.md	
DEPENDS ON	As CP-22	
SINCE	2026-10-12 · Fit: `pv-notice`	

CP-24	NZ: Privacy Act 2020 s.201; CA: PIPEDA Schedule 1 cl. 4.1	MET
REQUIREMENT	Appoint a privacy officer / designated accountable individual	
HOW WYLA MEETS IT	John Farrugia named privacy officer in the procedure and the notice	
EVIDENCE	PRIVACY-BREACH-PROCEDURE.md s2; PRIVACY-NOTICE.md s1	
DEPENDS ON	Deputy named before the first customer goes live	
SINCE	2026-10-12 · Fit: `pv-breach`	

CP-25	US: CISA 2025 (least privilege); NZ: NCSC NZ (as cited)	PARTLY
REQUIREMENT	Each person reaches only what they need	
HOW WYLA MEETS IT	Per-site logins: an owner limits a user to some sites (`users.site_ids`, Users page > Sites); owners and the WYLA admin are never limited; every route is classified and fails closed (403 site_scope) for a site login, answers for other sites are filtered or 404; writes cannot widen a login's reach; on Postgres, RESTRICTIVE row-level security on sites, devices and events (migration 050); changes audited as `user_sites_changed` with before and after; since 2026-11-03 (migration 052) archiving or deleting a site switches off every login limited only to that site (sign-in refused, 403 login_switched_off, the reason kept, audited `user_switched_off`; an owner switches it on again on the Users page once it has a live site) and takes the site out of several-site logins (audited); owners are never switched off; a role change keeps a login's site list	
WHY PARTLY	Built and LIVE 2026-11-03 16:37 UTC (unit tests only, not run on real equipment); the Postgres policies were checked against a fake client only; a filtered list keeps any element that carries no site, gateway or event field; the Operators register, control suspensions, Users, Audit and the customer-wide alarm summary are refused to a site login, not filtered; alarm delivery through lists an owner puts a site login on is not narrowed by its sites (nor a narrowed login's own My alarms entry when its site is archived); restoring a site switches nobody back on	
EVIDENCE	SITE-SCOPED-USERS.md; `api/test/site-scope.test.mjs`, `site-scope-pg.test.mjs`; `user-switch-off.test.mjs`	
DEPENDS ON	Owner sets each user's sites	
SINCE	2026-11-03 · Fit: `cy-segment`	

A.5 Customer responsibilities

These stay with the water supplier whatever WYLA does. WYLA can make some of them easier (noted), but never takes them over. WYLA's own policy documents are not legal advice (DATA-RETENTION.md s1).

- **Operator certification** - holding certified operators and an operator in charge (Ontario O.Reg 128/04; Alberta; US certification of anyone making process-control decisions). Since 2026-10-12 WYLA records each operator's certificate and ties control permission to a current one of the plant's class, and the owner designates the operator-in-charge per site (`ct-certified`, US-20, CA-36, CA-37); since 2026-10-13 only that person may confirm a change through WYLA in Ontario, and anywhere once the owner designates one. The certificates, the plant's class list and its source, and Ontario s.26(1) for parameters set at the panel without WYLA stay the supplier's.
- **Operating logs and shift records** (Ontario O.Reg 128/04 s.26(2)(c)-(d), s.27(5); CA-15) - WYLA's shift log records what WYLA sees and prompts for the rest, but the operator records every adjustment (through the Changes page, or in a shift note when made at the panel without WYLA), the s.27(5) items (operators on duty, equipment out of service, departures from procedure, special instructions) and equipment WYLA does not read, and signs off each shift.
- **SCADA change review** (MECP SCADA bulletin; CA-19) - WYLA exports the per-site change record; the customer's engineer reviews it, and the customer files the Form 2 and keeps both 10 years.
- **Validated UV reactor** - validation (NSF/ANSI 55 Class A, UVDGM, DVGW, ONORM) is a property of the reactor the supplier buys (NZ DWQAR T1.5, T2.10, T3.15-3.21; US 141.720(d); Ontario Procedure 3.2.1; BC B.16 s.6-7; Alberta 1.10.3.7). WYLA records the validated limits once entered (`uv-validated`).

- **Laboratory testing** - E. coli, chlorate, chemicals and distribution samples (NZ DWQAR; US RTCR, 141.33; Ontario, BC, Alberta schedules). The testing stays the laboratory's and the supplier's (`cl-lab`). Since 2026-11-03 (live 16:37 UTC) WYLA's lab sample register records the results a person types in, works out when the next NZ school sample is due and alarms on an E. coli positive (NZ-30), and since 2026-11-03 opens a "may be unsafe" notification case for an E. coli positive at an NZ site; importing results from a laboratory is optional future work.
- **Submitting reports and signing them** - WYLA never submits to a regulator by itself; reports are prepared for a person to sign and send (REGULATOR-REPORTS.md). CROMERR (40 CFR 3.1(a)) binds persons who submit to EPA and States running authorised programs, not WYLA (APPROVALS-AND-SUBMISSIONS.md s3); a customer that files electronically signs inside the State's system (`rp-esub`).
- **Notifying the regulator** - adverse results, often by phone: Ontario Sch. 16-6 (phone to MOH and Spills Action Centre, written within 24 h); BC s.12(3); Alberta s.11 immediately; US next business day (141.75(b)(3)(iii)), turbidity above 5 NTU within 24 h (141.75(b)(3)(ii)), 1 hour in PA (109.701(a)(3)), public notice Tier 1 within 24 h only for 141.202(a)(5)-(7), most other treatment technique violations Tier 2 within 30 days (141.203); NZ notify Taumata Arowai as soon as practicable (WSA s21-22), interruption over 8 h within 24 h (s25(5)(a)) (`al-adverse`). Since 2026-10-12 WYLA opens a notification case for each notifiable event it records, with a pre-filled draft, deadline clocks and reminders to the site's own people, and records when the notice was made (REGULATOR-REPORTS.md s11); it never contacts a regulator - the notice must come from the supplier. Built and LIVE 2026-11-03 16:37 UTC: a "UV lamp out while water flowed - drinking water may be unsafe" case (trigger `nz_s21_uv`, s21(2), the supplier's judgement) opens for every period the `uv_lamp_on` check fails on `nz_ssb_as`, `nz_t2` or `nz_t2_ssb`, with a Taumata Arowai clock and, where the regulatory profile ticks "school or kura", a Ministry of Education / NZSPA clock (the Taumata Arowai schools page: notify the Authority and the Ministry; no timeframe, so both show time elapsed); the draft `nz_unsafe` covers s21(2)(a), (c)-(d) and (f). WYLA never sends it. The case opens only where Regulator reports is on at the site (on by default in the NZ school preset). Since 2026-11-03 an E. coli positive recorded in the lab sample register opens the same kind of case (`nz_s21_ecoli`, s21(2), the supplier's judgement) at once, linked to the lab entry, one per sample, with the same clocks and draft, on the same conditions (an NZ profile, Regulator reports on). Deciding, closing and notifying stay the supplier's.
- **Safety plans and risk assessments** - NZ WSA s31 drinking water safety plan; US SDWA s1433 risk assessment and emergency response plan (community systems over 3,300; 3,301-49,999: ERP due 2026-12-31); Ontario QMS hazard list including cyber; BC B.17 IEC 62443 risk assessment (`cy-plan`). A WYLA product security sheet and asset list are planned.
- **Private mobile network (APN)** for 4G gateways, per NCSC NZ guidance - a choice made with the SIM supplier (`cy-apn`).
- **Electrical safety** of the power supply and panels at each site (NZ declared medium-risk article; US NRTL listing, UL 508A; Canada SCC-accredited mark) (`ce-electrical`). In Ontario the seller is bound too: O.Reg 438/07 s.5(1) forbids selling or using an unapproved electrical product, so the gateway, its power supply and any WYLA-built panel need approval before WYLA sells them (APPROVALS-AND-SUBMISSIONS.md s4; whether a 12-24 V DC gateway is in scope is NOT CONFIRMED).

- **Setting up each site** so the rows above apply: pick the rule sets (compliance, calibration, gap rule), enter the values only the site can give (validated UV limits, contact volume and baffle factor, required residual, manufacturer's tolerances, State tolerances), set up recipients, escalation and latching, enter grab samples and calibration checks.
- **Records beyond 10 years** (some Ontario s.13 records are 15 years) - keep the exports (DATA-RETENTION.md s7). WYLA's monthly write-once archive keeps each month for 10 years, not 15 (DATA-RETENTION.md s5; CA-12).
- **BC public bodies** - a FOIPPA s.33.1 assessment before texts or calls go through Twilio.
- **Privacy breaches and notices** - the supplier controls the personal information WYLA holds for it (NZ s.11; PIPEDA processing): it decides on and makes notices to the privacy regulator and people affected; WYLA tells it within 72 hours at the latest and drafts the notices (PRIVACY-BREACH-PROCEDURE.md; CP-19 to CP-21). The supplier tells its staff when it gives WYLA their details (IPP 3A; contract clause); WYLA provides the paragraph (PRIVACY-NOTICE.md s10) and emails new contacts itself (CP-22).

A.6 Not yet met / planned

From the Regulatory Fit report (status "can build", "needs hardware") and its order of work.

Order of work (fit report `prio`): items 1-7 done (passwords and VPN segmentation, passkey sign-in, one-minute records and gap log, retention and record sealing, compliance calculations, calibration and grab log, alarm call-out); items 8-10 in progress.

- **Item 8 - regulator-ready reports (in progress; phases 1-2 live):** REGULATOR-REPORTS.md. Phase 1, live 2026-10-12 13:38 UTC (migration 035): signed Monthly Compliance Report per site (PDF + CSV) with passkey sign-off and the notice log (NZ-23, US-11, US-19, CA-34, CA-35). Phase 2, live 2026-10-12 15:22 UTC (migration 036): notification drafts with deadline clocks and reminders (`al-adverse` stays the customer's). Still to build: phase 3 NZ Hinekorako export (waits on Taumata Arowai's template and API specification, asked 2026-10-12); phase 4 US State layouts (TX TCEQ-00105 and 20362, WA 331-440-F, PA SDWA-1); phase 5 annual summaries (Ontario s.11 and Sched. 22, Alberta, BC, NZ); phase 6 electronic submission, only if the owner decides. `rp-nz`, `rp-us` and `rp-ca` are Partly until then.

- **Item 9 - before remote control (in progress; phases 0-1 live 2026-10-12 17:11 UTC, migration 038; control records live 2026-10-13 00:10 UTC, migration 039; oversight live 2026-10-13 12:31 UTC, migration 041):** insert-only audit log (CP-16 to CP-18), operator certificates, per-site control permission with plant-class matching and operator-in-charge designation (`ct-certified` Partly: US-20, CA-36, CA-37 - class lists customer-entered, UNCONFIRMED; since migration 041 only the active operator-in-charge confirms a change - always in Ontario, elsewhere once the owner designates one), WYLA staff blocked from control in code (`ct-nostaff`: NZ-24, US-21, CA-38), assisted changes in an insert-only control log with a shift log and end-of-shift status (`ct-log` Met: CA-15), the per-site change record (`ct-scada` Met: CA-19), WYLA's suspension of control per site or per customer, lifted only by a platform admin (migration 041, NZ-24). WYLA still writes nothing to any device. Still to do before any remote write (CONTROL-PREREQUISITES.md s15.3): on-site "local only" lockout (`ct-localonly`: NZ Health and Safety at Work Act s36, s39-42, UNCONFIRMED in research), local fail-safe shut-off that never depends on the cloud, a second person and a passkey step-up for support sessions on control sites (on-request support access itself is live since 2026-10-13 12:55 UTC, migration 042, CP-12), signed commands, the gateway-side and fleet-wide control switch, the regulator's written agreement.
- **Item 10 - paperwork for sale (in progress):** APPROVALS-AND-SUBMISSIONS.md (2026-10-12). Radio (`ce-radio`): the M300's cellular radio has FCC grant 2ACZO-USR-M300 (2025-09-10); no FCC grant found for its Wi-Fi radio; ISED certification is needed before any sale in Canada (Radiocommunication Regulations s.21); in NZ the supplier needs a signed SDoC with test evidence, ERAC registration and the RCM / R-NZ label before supply (PUSR has said it can provide no RCM / R-NZ paperwork). FCC Covered List (`cy-fcc`: 47 CFR 2.903, component rule effective 2026-10-13): attestations filed with the grant, rule text not read. Electrical (`ce-electrical`): Ontario O.Reg 438/07 s.5(1). CROMERR does not apply to WYLA (`rp-esub`). PUSR and Taumata Arowai were emailed on 2026-10-12; replies pending. Product security sheet still to write. Second gateway model, the IoTRouter EM300 (bench only since 2026-10-28, the setup program and agent support it): IoTRouter publishes CE RED certificates for it (SGS RED-4219); no RCM / R-NZ mark is shown; FCC and ISED not checked; its modem lists LTE band 28 but it has not been tried on an NZ network.

Other open requirements

- `uv-shutoff` - automatic shut-off on UV failure at unstaffed plants (Ontario Sch. 1-6 / 2-6, O.Reg 319/08 s.14(2); Texas 290.46(e)(6)(C), not re-checked per ALARM-CALLOUT.md; PA 109.602(g); Alberta): needs local hard-wired shut-off; WYLA alarms only.
- `cl-turbidity` - turbidity monitoring (NZ L2 / L3; US 141.73, 141.551, 141.560; Health Canada; Ontario filter effluent): rule sets exist (NZ T3.BF.2(c)-(d), T3.BC.4, T3.BU.6; US 141.173, 141.551) but no turbidimeter in the standard kit, so nothing is claimed.

EM300 standalone mode (bench only, nothing claimed)

A standalone EM300 (an SD card holding a WYLA-signed licence that names the unit's serial; agent 1.1.53, cloud migration 046, edge-agent-em300/docs/em300-standalone-design.md) sends the cloud only a daily check-in. It keeps its one-minute records, alarms and an audit log on the card (SQLite; rows refused UPDATE and DELETE; when the card is nearly full the oldest whole day goes, audited), shows them on its local website with CSV downloads, and emails alarms through the customer's own account. No row of this register is claimed for a standalone unit: there are no sealed records or off-site copies, no regulator reports or notification clocks, no SMS or call-out, no data-gap alarms (the cloud's gap job leaves standalone units out), and the records live on one card in one unit. Rows met for gateways are met for an EM300 only in cloud mode, once an EM300 is fielded at all. From EM300 agent 1.1.76 (published 2026-11-05 about 04:10 UTC; 1.1.75 of the same day set the running name only) the unit answers on the site network to the name wyla-<the six hex of its device id> - LLMNR for the name and mDNS for wyla-xxxxxx.local, on its LAN ports and its uplink - and gives the router that name by DHCP from the first request, so a PC on that network finds the standalone website by name, e.g. http://wyla-aa9015:1880/wyla/ or http://wyla-aa9015.local:1880/wyla/. Bench 5 Nov on d_aa9015: both names resolved from a Windows PC on its LAN (192.168.88.1) and from the bench PUSR over Wi-Fi, and the DHCP requests captured over the air carried the name; its cable uplink was not tested (no cable on the bench; the same mechanism). PUSR gateways do the same from agent 1.1.51 (CP-06 Depends on). It claims nothing.

Built and LIVE 2026-11-03 16:37 UTC (NZ school work)

Rows NZ-25 to NZ-32 and CP-25 are Partly until each of these is done; then each is re-rated:

- Deploy: migrations 049 (lab and logbook) and 050 (per-site logins) applied to the live database, rehearsed first on a copy; API restarted (alarm-categories.json is read at start); the ingest image rebuilt so its schemas copy matches. 050 must apply cleanly: sign-in reads `users.site_ids`.
- Postgres: the 050 policies and their speed on events and telemetry checked on the bench copy (EXPLAIN), and the store code of 049 run against a real Postgres (only SQLite was exercised).
- Existing customers: 048's backfill does not include `lab`, `logbook` or `programme`; a WYLA admin adds them where they are sold (FEATURE-SETTINGS.md).
- The `nz_school_as` site preset starts with `calcs` and `reports` on (3 Nov 2026), not required: an owner who switches Regulator reports off at a school stops the "UV lamp out while water flowed" case opening there (the notification job skips the site).
- Done 3-4 Nov 2026: agent releases M300 1.1.49 and EM300 1.1.73, then 1.1.74, PUBLISHED with UV_UNIT_FAULT and MAINS_POWER_LOST (d_fc2dea, d_a3ec46 and d_fc2de2 on 1.1.49; d_aa9015 on 1.1.74). Still open: d_fc2de6 and d_1eb609 are offline and take 1.1.49 when they reconnect; a DI expansion card read on the bench; a UPS chosen for the kit.
- Site values only the site can give: the lamp lit level (A), the UV unit's rated flow, the cartridge maker's maximum differential pressure and change interval.

- Site logins: the control page's certificate-holder leak found in the integration check is fixed (3 Nov 2026; report signers and the change record are owner-only, and owners are never limited). Still open: a filtered list keeps elements with no site, gateway or event field, and lists an owner puts a site login on still deliver alarms for every site on them.
- Done 2026-11-03: the logbook preset intervals re-checked against the Taumata Arowai schools page and the NZSPA guidance - unchanged; the cites now name the page's guidance, not the Ministry (NZ-31, NZ-32).

Built 2026-11-03 (scheduled email reports; school follow-ups) - migrations 051, 052

Unit tests only (api 1380 / web 715 passing on 3 Nov). No status changes rest on them; the notes on NZ-23, NZ-30, NZ-31, CP-14, CP-22, CP-23 and CP-25 describe them. To follow through:

- Deploy: migrations 051 (scheduled reports) and 052 (`users.switched_off_*`) applied, rehearsed first on a copy of the live database. 052 must apply cleanly: sign-in reads the new columns.
- Postgres: the store SQL of 051 and 052 (casts, partial unique indexes, the archive transaction) run on a real Postgres - so far checked against fake clients only.
- Email: one Send a test to me with a PDF attached through Azure Communication Services and the stop link used from a real mailbox (attachments and the unsubscribe headers have run on the console driver only); `WYLA_PUBLIC_URL` set (without it nothing is sent).
- Existing customers: a WYLA admin adds `email_reports` where it is sold (051 changes only the column default); at preset sites the owner switches it on (FEATURE-SETTINGS.md).
- Privacy (CP-22): link the privacy notice from the "you have been added" email.
- The signed Monthly Compliance Report does not yet carry the customer's logo inside the signed content (SCHEDULED-REPORTS.md "Known gaps").
- John to decide: whether the E. coli case is `judgement` or `confirmed`; whether to schedule NZSPA's term-start pipe flush and the five-yearly dual-check valve replacement as logbook types.

Built 2026-11-03 (scheduled reminders) - migration 053

Unit tests only (api 1404 of 1405 with 1 skipped / web 721 passing on 3 Nov). No status changes rest on them; the notes on NZ-30, NZ-31, CP-14 and CP-22 describe them (REMINDERS.md). To follow through:

- Deploy: migration 053 applied, rehearsed first on a copy of the live database; its store SQL and the `telemetry_raw` counter query run on a real Postgres (checked against a fake client only).
- Email: one reminder through Azure Communication Services to a bench mailbox, its Mark as done and stop links used from that mailbox, and a logbook-tied done seen in the logbook; `WYLA_PUBLIC_URL` set (without it nothing is sent).
- Existing customers: a WYLA admin adds `reminders` where it is sold (053 changes only the column default).

- Privacy (CP-22): link the privacy notice from the reminders' "you have been added" email too.
- Retention: put `reminder_sends` and `reminder_completions` on the PROTECTED list and in DATA-RETENTION.md.

Built 2026-11-03 (per-unit credentials; QR checks and the notice kit; weather and term reminders; programme report; plant view) - migrations 054, 055, 056

Unit tests only (api 1481 of 1482 with 1 skipped / web 747 / M300 agent 421 / EM300 agent 326 passing on 3 Nov); nothing deployed, no migration applied, nothing run on real equipment. No status changes rest on them; the notes on NZ-30, NZ-31, NZ-32, CP-06, CP-07, CP-14 and CP-22 describe them. Update 2026-11-04: migrations 054, 055 and 056 have since been applied (cloud side live 2026-11-03 23:19 UTC, as the rows say), and the per-unit PINs were proven on bench units on 3-4 Nov (below). To follow through:

- Deploy: migrations 054 (`gateway_unit_secrets`), 055 (QR codes, plant photos, the Do Not Drink kit and its issued log) and 056 (reminder schedules) applied, each rehearsed first on a copy of the live database; their store SQL run on a real Postgres (checked against fake clients only); `WYLA_SECRETS_KEY` and `WYLA_PUBLIC_URL` set.
- CP-06 / CP-07 (PER-UNIT-CREDENTIALS.md). Done: the per-unit support PIN bench-proven on d_fc2dea (2026-11-03 23:45-23:48 UTC: its own PIN opens the local page, refused after Back to the fleet PIN, works again after Use its own PIN again; no PIN digits in the audit rows) and issued to every M300 at 23:49 UTC (d_a3ec46 and d_fc2de2 applied it within a second); the setup program with the Site PIN field built and signed (installers M300 2026.11.3.1174, EM300 2026.11.3.1176) and bench-run on d_fc2dea (2026-11-04 about 00:30 UTC: a weak PIN refused before step 1, no PIN stops at step 2 on a unit on the default, a good PIN set and 1234 then refused); over the support VPN the M300 setup program needs --device d_xxxxxx (it reads the MAC by ARP otherwise). EM300: gateway software 1.1.73 / 1.1.74 published and the unit master and first owner password bench-proven on d_aa9015 (2026-11-04); still bench only, nothing claimed. Left: d_fc2de6 and d_1eb609 take their support PIN when they reconnect; a power-cut check of a unit's own support PIN; a site PIN on d_a3ec46, d_fc2de2, d_fc2de6 and d_1eb609 (a setup re-run or the owner). Then CP-06 and CP-07 can be re-rated for the M300 fleet. Done 2026-11-05: a site PIN can be set on the gateway itself by WYLA support with no internet (M300 agent 1.1.50, migration 057, bench-proven on d_fc2dea; PER-UNIT-CREDENTIALS.md (a2)), so a site that forgets its PIN is given a new one on the spot. Still open: a route to rotate a standalone EM300's own master sign-in (a setup re-run writes the same one again).
- NZ-31 / NZ-32 (QR-CHECKS.md): a printed sign scanned with an iPhone and an Android phone; a daily check with a photo, an inspection and a reminder done recorded from it; a replaced code refused. Photos may show sideways (the EXIF orientation is dropped).
- NZ-30 (NOTICE-KIT.md). Done 2026-11-03, live 2026-11-04 00:47 UTC: the notice and letter wording checked against the live Taumata Arowai schools page, its E. coli one-pager and Do Not Drink notice, and Health NZ's Healthline page, and changed (research_notes/Do Not Drink kit wording check/findings.md; the handwashing line is said as Taumata Arowai's). Still open: a tick that the treatment system and tanks were checked before the safe-again items are offered.

- Reminders (056, REMINDERS.md): Open-Meteo's commercial licence settled before a paying customer uses rain reminders (the free API is non-commercial); the Taumata Arowai "after weather events" and NZSPA term-start flushing sources confirmed (needs a value today); school term dates after 2027 added from the Ministry's page.
- CP-22: the QR door page says why it asks for a name and links the privacy notice.
- Retention: put `plant_photos` and `dnd_notices` on the PROTECTED list and in DATA-RETENTION.md.
- Not evidence for any row: the plant view (PLANT-VIEW.md) is one more page that shows the live readings and alarms; the monthly programme report (PROGRAMME-REPORT.md) reports what the lab register, logbook and alarms already hold, and its site colour is WYLA's own rule (confirmed by John 2026-11-03, no uptime threshold); the Demo School (simulated) customer (DEMO-SITE.md; live since 2026-11-04 00:41 UTC: customer t_demo_school, gateway d_5c1700, its own container wyla-demo-school, no people, lists or emails; extended in code on 2026-11-04 to ten simulated sites, gateways d_5c1700 … d_5c1709 in that one container, not yet live) is simulated - **its values and records must never be cited as evidence for any row**.

Built 2026-11-05 (people and organisations of a site; Compare sites; record reports as PDF) - migration 058

Unit tests only (`api/test/site-parties.test.mjs`, `same-as-signed.test.mjs`, `site-compare.test.mjs`, `record-reports.test.mjs`, `sample-reports.test.mjs`; `web/test/site-parties.test.mjs`); nothing run on real equipment or a real site's records. No status changes rest on them; the notes on NZ-30, NZ-31, CP-14 and CP-22 describe them. To follow through:

- Deploy: migration 058 (`sites.parties`) applied to the live database, rehearsed first on a copy, and the site people's store SQL run on a real Postgres. Whether this is done was not confirmed when this entry was written.
- NZ-30 / NZ-31: one lab report, one incident record and one logbook report drawn from a real site's records and read through by a person. None has been handed to an inspector or a regulator yet.
- CP-22: the people an owner names for a site's reports are not told by WYLA; say so in the privacy notice (PRIVACY-NOTICE.md), or tell them.
- Signed reports: the Monthly Compliance Report's header carries the site's address and people from now on; a version signed before they were added keeps its header as signed and is not marked changed (`api/test/same-as-signed.test.mjs`).
- Archive: `sites.parties` is not in the monthly write-once archive (it copies only a site's id, customer, name and created date).
- Not evidence for any row: Compare sites (`api/src/site-compare.mjs`) counts alarms WYLA already holds, across a customer's sites; a power outage is only recorded where a UPS contact is wired to the gateway, and the page says so.

Built 2026-11-06 (records lost at the gateway) - migration 060, LIVE 2026-11-06 23:23 UTC

LIVE 2026-11-06 23:23 UTC (migration 060 applied at the API restart, rehearsed first on a copy of the live database (wyla_migtest, dropped after); the ingest image rebuilt; backups ~/backups/wyla-pre060-20261106-232214.dump + files-pre060-20261106-232214.tar). Unit tests (`simulator/test/ingest-lost-records.test.mjs`, `api/test/compliance-lost.test.mjs`, `web/test/compliance-lost.test.mjs`) plus the Postgres rehearsal; agents PUSR 1.1.53 / EM300 1.1.78 published 23:38 UTC; on every online gateway from 7 Nov 2026 ~00:10 UTC (bench d_fc2dea, d_aa9015; d_fc2de2, d_1eb609, d_1eb60f); the two offline units take it when they return; not yet seen on hardware: a real outage longer than the queue, then the report; the standalone no-internet case. No status changes rest on it; the notes on NZ-02, NZ-04, NZ-06, NZ-23, US-19, CA-04 and CA-35 describe it.

What it is. A gateway holds its one-minute records while it is offline; offline for longer than its store holds, it drops its OLDEST rows. Until now the cloud was never told: the stretch stayed a `gateway offline` gap and nothing said the data was gone for good. Now the gateway's status heartbeat reports the run (start, end, row count), the cloud keeps it (`compliance_lost_periods`, one row per gateway and run, never deleted) with an audit-log entry when a run is first reported and each time it grows, and the gap log gives those periods a fourth cause, `lost at the gateway`. The Compliance page shows the cause with its meaning and lists the runs; the gap CSV, the signed Monthly Compliance Report (one line under its gap table) and the scheduled report say the records cannot be recovered. A lost gap counts against the site's gap limits like any other; the alarm holding rules are unchanged. A report signed before the gateway reported the loss is flagged "restatement needed".

To follow through:

- Deploy, cloud BEFORE gateways: migration 060 applied (rehearsed first on a copy of the live database; it sets no lock_timeout, so run it while the ingest is briefly stopped), the API restarted, the ingest image rebuilt so its copy of `status.schema.json` knows the new fields, the web files. A gateway agent that sends the new fields to a cloud whose ingest does not know them has its whole heartbeat refused, and would read as offline. Done 2026-11-06 23:23 UTC in that order.
- The gateway side (agents 1.1.53 / EM300 1.1.78: the 7-day queue at any number of readings, and the report of dropped rows) is built separately; the rows' "from gateway agents 1.1.53 / EM300 1.1.78" is true of a gateway only once it runs that agent. Not seen on hardware yet: a real outage longer than the queue, then the report.
- A run is only as good as the gateway's own account of it: the cloud labels the periods with no record inside the run the gateway reported, and cannot tell a row that was dropped from a period in the same run when the gateway was switched off and recorded nothing. A run it cannot believe (from before 2020, ending in the future, spanning more than 400 days - as far back as the gap job looks - or more than its rows could cover at the longest recording interval, or more rows than its column holds) is refused and audited, never labelled from.
- Archive: `compliance_lost_periods` is not in the monthly write-once archive yet (the gap log, which is, carries the cause; the audit log carries every report).

- Postgres: the new statements (ingest and API) are checked for shape by the unit tests only; run them on a real Postgres in the deploy rehearsal.

Built 2026-11-06 (document library, rule checklist, assurance reports) - migration 061, LIVE 2026-11-07 02:30 UTC

Built 2026-11-06; LIVE 2026-11-07 02:30 UTC (migration 061 rehearsed on a copy of the live database - applied twice, every route exercised on Postgres through a staged API, cross-tenant reads refused, append-only triggers proven - then applied at the API restart; backups ~/backups/wyla-pre061-20261107-022946.dump + files-pre061-*.tar; module switched on for Test Customer and the Demo School). Rows NZ-33 to NZ-40 stay Partly until a real site has used them for a period and the manual chapter is published (2.52); then each is re-rated. The notes on NZ-01 and NZ-23 describe it. Design: DOCUMENT-LIBRARY-DESIGN.md; feature doc: DOCUMENT-LIBRARY.md.

What it is. The new module `documents` in the Cloud Compliance Plus plan (and `control`; on by default in the NZ Rules presets, not at a school): (1) a catalogue of every General, level 1, 2 and 3 rule of the 2026 Rules as data, with what evidence satisfies each (`schemas/tools/nz-rules.cjs`); (2) a per-site "Your rules" checklist that works out the modules that apply from the supply category and population (rule 6) and shows, rule by rule, whether a WYLA calculation or log covers it (only while that feature is on at the site), a document covers it, it is due or missing, or the owner has answered it (append-only `rule_answers`, audited); (3) a per-site document library of sixteen types (sampling plan, plant record, backflow register, complaints register, cyanobacteria, instrument register, training, hygiene code, field tests, laboratory register, varying-population periods, safety plan, source register, watermain repairs, storage record, chemical schedule) - every document a chain of versions, append-only for every database role and hash-chained per document, files kept as bytes with their SHA-256 (15 MB each; PDF, JPEG, PNG, CSV, text, Word, Excel), old versions readable, nothing deleted, controlled documents current only when signed with a fresh passkey sign-in, review dates with yellow / red alarms and reminders; (4) three generated, controlled reports kept in the library: the Assurance Rule Declaration (NZ-33), the Level 1 annual (NZ-34) and the Level 2 quarterly (NZ-35) monitoring reports. Site-limited logins may read and add for their site, never sign.

To follow through:

- Deploy: migration 061 applied (rehearsed first on a copy of the live database), the API restarted (alarm-categories.json is read at start; two new codes DOCUMENT_REVIEW_DUE / _OVERDUE), the web files; the Postgres statements of the new store methods were checked on SQLite only - run them on a real Postgres in the rehearsal (RLS as 049 / 050; append-only triggers; no DELETE for wyla_app).
- The rule catalogue was mapped from the 2026 Rules text on 2026-11-06 and is not yet re-checked clause by clause against the primary text; the clause numbers in NZ-33 to NZ-40 carry "(as cited)" until it is.
- Existing customers: 048's backfill does not include `documents`; a WYLA admin adds it where Plus is sold (FEATURE-SETTINGS.md). The regulatory profile gains `category`: an owner sets it (and the population) before the checklist shows anything.

- The declaration and the reports have not been generated from a real site's year; the approved form for G.RR.2 / G.RR.3 is not known (NZ-23).
- Archive: `documents`, `document_versions`, `document_files` (bytes included) and `rule_answers` are added to the monthly write-once archive SPEC; the first archive to carry them is the first month after deploy.
- The manual chapter is written after the build; the sample pack (`api/tools/make-sample-reports.mjs`) gains a sample backflow register, sampling plan and assurance declaration when time allows.

Built 2026-11-07 (Schedule page) - migration 062, LIVE 2026-11-07 04:39 UTC

Built 2026-11-07 by three builders to one contract (docs/SCHEDULE-DESIGN.md; feature doc: docs/SCHEDULE.md), reviewed twice and fixed; LIVE 2026-11-07 04:39 UTC (migration 062 rehearsed on a copy of the live database with a staged API, then applied; backups ~/backups/wyla-pre062-20261107-043929.*); clicked through on the live console (a weekly chlorine check made, Do it opened the field test log prefilled); nothing run on a real site's records yet. New rows NZ-41 (field-test checks) and NZ-42 (report deadlines), both Partly; notes on NZ-09, NZ-23, NZ-30 and NZ-31 (the Schedule page lists their due dates).

What it is. The new module `schedule` ("Schedule and to-do list") in every Compliance plan (`compliance`, `compliance_plus`, `control`; not Cloud Basic) and on by default at every preset, required by none. One page per site that READS the schedules the other modules already keep - logbook types, lab samples, calibration checks, document reviews, reminders, and the regulator's report deadlines (NZ-42) - and lists every job with a status (due in N days, due today, overdue by N days, done on a date by a person) and a "Do it" that opens the form that makes the record; nothing is ticked without a record behind it. It adds two things of its own, in `schedule_tasks` with an append-only `schedule_completions` (RLS as 053 and 050; audited): custom tasks (once, every N days, weekly, monthly, yearly; "Mark as done" with a note, or done by a linked document version) and field-test checks (NZ-41). The month's sheet as PDF and CSV; a per-site column (overdue count, longest overdue) on the Sites overview. Site-limited logins see and complete jobs for their own sites and get a scoped overview; no new alarm anywhere - the sources' own due / overdue alarms stand, and an overdue custom task raises nothing.

To follow through:

- Deploy: migration 062 (rehearse first on a copy of the live database; RLS and the append-only triggers on Postgres were checked on SQLite only), the API restart (the routes are registered in `api/src/server.mjs` beside the document routes), the web files; then re-rate NZ-41 and NZ-42 once a real site has used them for a period.
- Existing customers: 048's backfill does not include `schedule`; a WYLA admin adds it where a Compliance plan is sold (FEATURE-SETTINGS.md); a site on a preset has it on by default once the customer has it.
- Working days are Monday to Friday with no public holidays: a deadline in a holiday week shows early. Add the Taumata Arowai / NZ public holidays only if the regulator's counting is confirmed.

- The 2022 Rules' G1 / G3 deadlines and the 2026 Rules' G.RR.2-G.RR.7 are as the catalogue cites them (`schemas/tools/nz-rules.cjs`), not yet re-checked against the primary text; neither is T2.2 / T2.3 / D2.2 / D2.4.
- Archive: `schedule_tasks` and `schedule_completions` go into the monthly write-once archive SPEC and DATA-RETENTION.md (builder A); the first archive to carry them is the first month after deploy.
- The manual chapter (the coordinator) and the SCHEDULE column in the Sites overview's CSV (none yet).

Built 2026-11-07 (act as customer) - migration 065, not deployed

Built 2026-11-07 by three builders and an integrator to one contract (docs/ACT-AS-CUSTOMER-DESIGN.md), unit tests only (SQLite, and the Postgres statements on a fake client); migration 065 not applied; nothing deployed; nothing tried in a browser or against a live server. No row changes status. Access control and audit (CP-10, CP-11, CP-16 to CP-18, CP-25) and the privacy notice (CP-22, CP-23) are affected; see the change log.

What it is. A WYLA platform admin may act in a customer's account as ONE of its users (any role up to owner, never a WYLA admin; a site-limited login stays limited to its current sites) for 15, 30 or 60 minutes, with a written reason (10-500 characters). It is allowed unless the customer's owner switches it off (`tenants.support_act_allowed`, default true; switching it off ends an open session). The admin's email stays on every record, and every audit row written in the session carries `actor_note` ("<admin> (WYLA support) acting as <user>") and `support_session_id`; the start, the end and the switch are on the customer's own audit log. Server-side and whatever a route does, any support session (view or act) is refused (403, one sentence) for: signing or re-signing a monthly report, who may sign, signing a library document, sign-in methods, adding or removing users or changing roles, sites or switch-on, control permissions and designations, operator certificates, and the consent switch. WYLA staff still never control a plant in an act session (decision 2). The session ends at the next request when the user is removed, changes role or is switched off. View as customer is unchanged (read-only).

To follow through:

- Deploy: migration 065 BEFORE the new API code (the audit insert writes the two new columns), rehearsed first on a copy of the live database; the RLS and the insert-only grants on Postgres were checked against a fake client only.
- Try it once on the live console with a test customer: start, a logbook entry, a refused report signature, the owner's switch ending the session, the customer's audit log narrowed to WYLA support.
- Decisions to confirm with John: a site-limited user's sites are read at each request (not the list saved at the start); switching consent off ends an open session; the four customer-only actions were widened to who may sign, library-document signing, designations and certificates; control stays refused in an act session.
- docs/PRIVACY-NOTICE.md is at version 3 (section A.5); the placeholders of CP-22 remain.

Built 2026-11-07 (all-in-one build stage 1 and the sample register v2, integration I1) - migrations 066, 067, not deployed

Built 2026-11-07 by six packages to one contract (`docs/ALL-IN-ONE-BUILD-PLAN.md`; packages P0a calendar, P0b zip and xlsx, P0c reference data and rule map, P1a rules / deadlines / alarms / cases, P1b record pack and submissions, P2 sample register v2, plus the small fixes S) and integrated by I1 (`docs/all-in-one/INTEGRATION-I1.md`): unit tests only (SQLite, and the Postgres statements on a fake client); migrations 066 and 067 not applied; nothing deployed; nothing tried in a browser or against a live server. New rows NZ-43 to NZ-52, all Partly; notes on NZ-23, NZ-34, NZ-42 and CP-16.

Notes on rows already claimed (each row is at its size limit, so the note is kept here):

- NZ-30: since the sample register v2 (migration 067), a site whose regulatory profile lists sampling points records each sample at its point, with its kind, component ID and the laboratory's sample ID; the two school schedules count treated-water E. coli / total coliforms samples only (never a source or chemistry-only sample); see NZ-51.
- NZ-37 (G.SM rules): the laboratory's sample ID is required on every sample of the register v2 (G.SM.1; Reporting Guidance v1.2 p.10); where the laboratory gave none, WYLA makes one on request and the entry says so (NZ-51).
- NZ-51 (browser check of the local copy, 2026-11-07): a schedule of the site's own or from the Rules is met only by a sample with a result for its determinands - a sample still awaiting results is shown as "awaiting results" and no longer makes a yearly schedule "up to date" for a year; a sample with no sampling point recorded (entered before the register v2) never meets a schedule for a point or a component type ("point not recorded", with a correction to set it). The two school schedules (NZ-30) are unchanged.
- NZ-41 / NZ-49: a field-test check's month is the whole calendar month at the site: its first month asks its share of the month (said on the Schedule and on the printed sheet), every later month the full number, and readings typed in from the paper sheet count by their own dates, those before the check was made included.
- NZ-51 / NZ-35 / NZ-42 (second browser check of the local copy, 2026-11-07): a sample carrying only some of a schedule's determinands still does not meet it - a schedule's determinands are the suite the Rules ask of one sample (S2.1's yearly source sample of seven), so part-samples are not added together - and the Lab page and the Schedule now say "N samples have only some of the determinands (missing: ...)" with "Add results"; a sample sent to the laboratory with its determinands named keeps them while its results are awaited (the entry's `rule.awaited_dets`, chained), and "Add results" offers them. A source sample above a determinand's MAV is not an exceedance (MAVs are drinking-water limits; no LAB_MAV_EXCEEDED, no MAV case) and is worded "Source water: 5x the drinking-water MAV - treatment must remove it" on the page and in the reports. The Level 1 and Level 2 monitoring reports label each sample with the rules its kind of water and determinands serve (T2.1 treated, D2.1 distribution, S2.1 source; from the Hinekorako rule map), judge each lab rule on its own samples only, write one CSV row per determinand result with its unit and MAV, and leave the rules cell empty with "point not recorded" for a sample whose point is not on the supply's list; the Level 3 report lists under D3.29 only zone samples carrying its determinand.

- NZ-49: the record pack's QR address believes a forwarded host (X-Forwarded-Host / -Proto) only when it is on an allow-list - `WYLA_PUBLIC_URL`'s host, else the new optional `WYLA_ALLOWED_HOSTS`, else only the request's own non-loopback Host (before, any loopback caller could choose the printed address); otherwise the print is refused naming `WYLA_PUBLIC_URL` (RECORD-PACK.md, `deploy/.env.example`).
- NZ-51 / NZ-30 / NZ-33 / NZ-34 / NZ-35 / NZ-42 (third browser check of the local copy, 2026-11-07, verify-aio-ab3): one classification of a sample (`api/src/lab.mjs` `sampleClassOf`) for the Lab register, the sampling schedules, the Schedule page and the reports. A sample entered before sample types (no sampling point recorded) is "point not recorded" for every schedule that names a point or component type and for every report rule, and is never matched to a point by its free-text name (the Level 2 report had called such a kitchen-tap sample a zone sample); the two school schedules (NZ-30) still count it as the treated-water sample they always did, until its point is set. The Lab page says under each sample which schedules it counts for, and the correction form warns before saving when the point picked changes that ("This sample will no longer count for <schedule>; that schedule will show Overdue for <month>"): a distribution or source sample never counts for the two school schedules. The Schedule page's done lab rows name the schedules and rules the sample actually counts for (no longer the lab settings' clause on every row) and take "Next due" from those schedules. The Assurance Rule Declaration and the Level 1 / Level 2 monitoring reports count a rule only the owner can answer and has not as "Not answered", on its own - never inside "Not complied" - on the front page, in the stored document's content (`not_answered`) and at the end of the CSV (`summary` rows). Determinand names in sentences are separated by "; " (one of the list's names is "Nitrate, short-term").

To follow through:

- Deploy: 066 and 067 together, BEFORE the API code, each rehearsed on a copy of the live database first (the SQL was read for Postgres validity at I1 but never run on a Postgres); then each `@verify`; set `WYLA_PUBLIC_URL` (the record pack's QR codes use it; without it they use the address the console was opened at - `deploy/.env.example`). The monthly archive script now names `record_packs`, `report_submissions` and `lab_schedules` and refuses to run until they exist.
- Decision D-8 at deploy: every past report deadline with no recorded upload shows REPORT_OVERDUE at the first pass. Record the past uploads first, or limit the alarm to deadlines after the deploy day (John).
- T2.9-b at a self-supplied building: the contract drops only T2.2-b/-c and T2.6-b/-c (D-3); T2.9(b) chlorine disinfection is "not required for self-supplied buildings" (2026 Rules p.26). Kept, falling to the person, until John decides.
- The holiday data, the Employment New Zealand anniversary table (the test fixture is hand-typed, NOT RETRIEVED), the s13 wording and the Matariki dates to be re-read from their sources before deploy.
- The 2022 Rules' wording of T1.4 / T1.5, D1.2 / D2.8 and the "three below half the MAV" rules, and the incident notifications page: no copy in the project; re-read when one is.

Built 2026-11-08 (all-in-one build wave C, integration I2) - migrations 068, 069, 070, not deployed

Built 2026-11-08 by five packages to the same contract (`docs/ALL-IN-ONE-BUILD-PLAN.md`; P3a Hinekorako roll-up, person step and page, P3b Hinekorako writer, check and docs, P4 lab results import, P6 the package and schools, P7 standalone unit to cloud with its history) and integrated by I2 (`docs/all-in-one/INTEGRATION-I2.md`): unit tests only (SQLite, and the Postgres statements on fake clients); migrations 068, 069 and 070 not applied; nothing deployed; nothing tried in a browser or against a live server; no EM300 agent release. New rows NZ-53 to NZ-58, all Partly; NZ-23, NZ-34 and NZ-35 updated. The modules `hinekorako` and `lab_import` are built, in Compliance Plus only (decision D-6).

Notes on rows already claimed (each row is near its size limit, so the note is kept here):

- NZ-53 (writer and check, P3b): five fixture files (level 1, 2 and 3; a self-supplied school's quarter and year) pass the check, open in openpyxl with the right cells and are byte-identical to the template outside the two filled sheets. The B11 example-address hyperlink of the template is removed from the Email cell. Template source both ways; the customer's copy by default (D-2), refused at upload when it is not the template (sheets, B2 version, tables, labels; no macro or link); shipping waits on question 1e and John.
- NZ-53 (roll-up, P3a): samples carry the laboratory's sample ID (p.10), the site's date, the list's exact unit (C5) and the list ID as determinand (D-9); source samples are TRUE (p.10). Field tests are not written to the Samples sheet (they have no sample ID); each T2.2 / D2.2 row carries an open item saying so. With more than one component of a type, each gets the same proposal and an open "decide" item (readings are not split by component).
- NZ-30 / NZ-51 (the sample register): results may now be imported from the laboratory's file (NZ-54); imported samples are ordinary register entries with `import_id`, and the original file is kept. From the all-in-one build (P6): the Ministry's monthly results can be downloaded as an Argest-ready list (PDF or CSV, a list to copy from) - see NZ-55.
- NZ-37 (G.SM.2 / G.SM.3): the import keeps the laboratory's file and its sample IDs (the chain of custody evidence); the laboratory's accreditation stays in the laboratory register.
- CP-22 / CP-23 (privacy notice v4): version 4 of the privacy notice (laboratory results, laboratory files, the Hinekorako file's uploader name and email, the evidence export; Privacy Act 2020 IPP 3) is drafted in PRIVACY-NOTICE.md as an unpublished block, waiting on decision D-5. Status unchanged (Partly); the published notice and `api/src/privacy-notice.mjs` are unchanged.
- The EM300 standalone row (section A.6, "EM300 standalone mode"): from the P7 release a standalone unit can move to the cloud with its card's history (docs/STANDALONE-TO-CLOUD.md); no licence credit (D-10). Status unchanged.

- NZ-58: the Monthly Compliance Report says which records of its month were imported from a standalone unit and their import seal (content key `standaloneImports`, only when there is one; the PDF's Record integrity section and a `standalone_imports.csv`). Since the wave C review fixes (2026-11-08) the level 1-3 reports say so too (PDF section and a `standalone_import` CSV row), the Hinekorako file's notes carry the sentence beside every rule judged from records (`basis.imported`, and `groundwork_2026.standalone_imports` in the signed model), and the Compliance page's Record seals show the covered days as "sealed on import". A card row dated more than 10 minutes ahead is never stored (the live ingest's own rule); a refused import is decided by WYLA support (take the rest without the overlapping records, or abandon it), audited with the reason.

Fixes after the wave C browser check (2026-11-08, folder verify-wave-c; INTEGRATION-I2.md section 10; unit tests only; nothing deployed; no migration changed; no status changes):

- NZ-53: pH is written with an empty unit and is valid (section A.7 item 25); "Does not apply - leave it out" takes the rule's samples off the Samples sheet with it (no HK-E15) and "Put it back" undoes it; signing a `hinekorako_file` - and any generated report (assurance declaration, level 1-3 reports) - is refused to a WYLA platform admin signed in directly as well as in support sessions (preparing stays allowed; the monthly report already refused it, maySign); the evidence zip names the Hinekorako file by the version signed (`v<shown>.xlsx`), the README naming the stored entry.
- NZ-54: a correction of an imported sample keeps its `import_id` (the original file stays linked); a blank-result row is listed visibly as left out; "pH units" is kept as no unit.
- NZ-55: treated and distribution samples counted (section A.7 item 33); the panel's summary follows the months chosen.
- NZ-58: the Compliance page words a standalone unit from its import ("being imported" / "imported on <day>") and the day strip shows imported days "sealed on import"; the Move panel gives the refusal in site time and the decision taken.
- The NZ Rules level 1-3 presets switch `hinekorako` and `lab_import` on by default where the plan has them (Plus): the deploy precondition on `WYLA_REPORT_ALARMS_FROM` below now covers NZ Rules sites too.

To follow through:

- Deploy: 068, 069 and 070 BEFORE the API code, each rehearsed on a copy of the live database first (read for Postgres validity at I2, never run on a Postgres; 070 adds three columns to the compressed `compliance_records` hypertable and replaces `compliance_records_scoped` - rehearse both), then each `@verify`; the broker ACL's two `record/history` lines with 070; the monthly archive script now names the seven new tables and refuses to run until they exist.
- At the deploy, a Compliance Plus customer's sites without an NZ Rules preset (no preset, or the school preset) have `hinekorako` and `lab_import` on at once (the modules are on by default where a site's preset does not list its own defaults); the Schedule then lists the 2022 Hinekorako files of those sites (decision D-8 applies to past ones). Before the API with the two modules built starts, the live `.env` has `WYLA_REPORT_ALARMS_FROM` set to I1's deploy day or later (else the first pass emails a red REPORT_OVERDUE for each past deadline, the 2025 calendar year among them), or the modules are switched off per site first (INTEGRATION-I2.md section A.4).

- CP-22 / CP-23: privacy notice v4 is published (PRIVACY-NOTICE.md steps, `api/src/privacy-notice.mjs`, privacy.html, the PDF) before or with the deploy that turns `lab_import` and `hinekorako` on - a lab file can name people and the Hinekorako header holds the uploader's name and email (IPP 3). If D-5 is not approved by then, both modules are switched off per customer at the deploy.
- John: the statement before signing (D-4) APPROVED 8 Nov 2026; the privacy notice v4 paragraph (D-5) APPROVED and published 8 Nov 2026, shipping the template (D-2, after question 1e), the NZSPA question (D-7), and the EM300 agent release with its bench test on d_aa9015.

Held back

Rated Partly in the fit report, but not claimed here: what is in place is not yet enough for any clause to be partly met by a gateway WYLA can sell:

- `cy-fcc` - Covered List attestations were filed with FCC grant 2ACZO-USR-M300, but the rule text was not read and PUSR's Covered List letter is not on file (asked 2026-10-12); EM300 not checked.
- `ce-radio` - only the M300's cellular radio has an FCC grant (2ACZO-USR-M300); no Wi-Fi grant found, no ISED certification, no NZ supplier declaration or label. The EM300 has published CE RED certificates only (section A.6, item 10). Not claimed until a variant is fully covered for a country.

Follow-through on rows already claimed

First record seals and off-site copies about 2026-10-20, the first monthly write-once archive (October 2026) on 2026-11-10, and the owner's lock decision for both write-once containers - the sealed copies and the monthly archive, each irreversible and unlocked until then (NZ-01, US-01, CA-12 to CA-14); once a year, one archived month downloaded and restore-tested (DATA-RETENTION.md s5, s9); lawyer review of the report attestation wording (approved by the owner 2026-11-07 as version 2026-11-07; NZ-23, US-19, CA-35); each site's regulatory profile and notification contacts (US-11, NZ-23); every user enrols a passkey, and the owner decides whether to require passkeys (no password fallback) (CP-08, CP-09); Twilio account when a customer needs texts or calls (CA-24); flow meter in the standard kit (NZ-15, NZ-16, US-05, US-06, CA-11, CA-20, CA-23, CA-27); first real equipment values on a field gateway (NZ-02, NZ-13, US-06, CA-17); deputy privacy officer named before the first customer goes live, lawyer review of the privacy contract clauses (CP-19 to CP-21, CP-24); the WYLA privacy email and postal address in the privacy notice, and each existing customer's owner sending it to contacts added since 2026-05-01 (CP-22, CP-23); a primary text for each jurisdiction's plant and certificate classes (US-20, CA-36, CA-37); support sessions per person, a passkey step-up to open one, break-glass written into the session record, the API's Docker calls behind narrow helpers, and PUSR's answer on an on-demand tunnel (CP-12; REMOTE-ACCESS.md s1-2); watch the first monthly archive run on Admin > Health (since 2026-10-13 it shows the latest run); the gateway's read-only local page (agent 1.1.36+): a site PIN set at commissioning on every gateway and a per-unit WYLA support PIN (both decided and built 2026-11-03; cloud side live 2026-11-03 23:19 UTC; the support PIN issued to every M300 at 23:49 UTC - d_fc2de6 and d_1eb609 take theirs at reconnect - and the setup program that requires a site PIN in installers 2026.11.3.1174 / .1176; the field units still on the default site PIN and what else is left are in "Built 2026-11-03 (per-unit credentials ...)" above), which would make CP-06 and CP-07 Met again; and a decision on restricting a gateway's web page and Node-RED to its LAN and

the VPN (they answer on its WAN side, CP-01); the local lamp test (agent 1.1.38+): a bench check that only the stack light outputs move, that the light returns to automatic after 10 seconds, that the rate limit holds and that a site-PIN or default-PIN session has no lamp buttons, and that each press appears once in the Audit log (NZ-24, US-20, CP-01, CP-07; CONTROL-PREREQUISITES.md s15.9). Before an EM300 is fielded (CP-01, CP-06, CP-12): its SSH is switched off by the agent (1.1.55, bench-proven 2026-10-29); the two web addresses that answered without a sign-in are kept off the network by the agent's web guard and a card with files on it is no longer formatted by the firmware (1.1.62-1.1.63, bench-proven 2026-10-30; from 1.1.74, 2026-11-04, the web guard redirects only port-80 traffic addressed to the unit, so traffic routed through it reaches the internet); a one-minute compliance record and an alarm proven on real equipment through it; a test on an NZ SIM. Before a standalone EM300 is offered: another unit's card on a running unit, and a licence price. Bench 2026-10-30 (d_aa9015, agents 1.1.56-1.1.61) PASSED, after fixes: card out and back, a power cut with the card in, a full card, the battery-backed clock with no internet, and alarm emails through a real mailbox (Gmail: a test, SD card missing and its clear).

A.7 Where the sources disagree (open)

Found while building this register on 2026-10-12 and at later revisions; none changes a status above.

- Resolved in fit Rev 1.8: the seven corrections of REGULATOR-REPORTS-DESIGN.md s5 are taken in (`al-adverse` public notice tiers and the 5 NTU prompt notice; `rp-nz` 20 working days from 2027-07-01 and the Hinekorako API; `rp-us` no federal CT or routine GWR monthly report; `rp-ca` Ontario annual report not filed with the Ministry).
- COMPLIANCE-CALCULATIONS.md "What needs confirming" still says grab samples "cannot be entered yet"; CALIBRATION-LOG.md and the fit report (`cl-grab`) say they are live since 2026-10-11. The register follows the fit report.
- PLAN-MQTT-TLS.md (a plan dated 2026-10-09/10) still says the broker has no certificates and the access list is not enabled live; the fit report (Rev 1.6, `cy-tls`, `cy-segment`) says all gateways are on TLS and broker access rules are in force. The register follows the fit report; the plan document is out of date.
- The fit report rates `cy-fcc` and `ce-radio` Partly (since Rev 1.8 its text names the FCC cellular grant and the attestations filed with it); still held back here (section A.6).
- CONTROL-PREREQUISITES.md s11 also proposes source corrections not yet taken into the fit report: `ct-localonly` NZ HSWA sections now confirmed (s.34, s.36(3), s.38, s.39, s.42, s.43); `ct-manual` / CA-26 BC "s.5.10.7" is s.5.10 item .7; `uv-shutoff` / US-18 Texas 290.46(e)(5)(F), (e)(6)(C) confirmed and PA 109.602(g) applies to surface water / GUDI filtration plants. No status changes.
- REMOTE-ACCESS.md (status line and s9) still says "Not deployed", and CONTROL-PREREQUISITES.md s10.1 D12, s15.3 item 2 and s15.4 still say on-request VPN access is not built; the gate went live for every gateway on 2026-10-13 12:55 UTC (fit Rev 1.11). The register follows the fit report; REMOTE-ACCESS.md s8 itself asks for D12 and s15.3 item 2 to be updated once it is live.
- CONTROL-PREREQUISITES.md s15.8 proposes `ct-certified` as Met once the operator-in-charge confirm rule is live; the fit report (Rev 1.11) keeps it Partly because the plant class lists are entered by the customer and UNCONFIRMED. US-20, CA-36 and CA-37 stay Partly.

- NZ working days (2026-11-07, docs/NZ-PUBLIC-HOLIDAYS.md). Taumata Arowai published the 2025 annual round as due 25 February 2026 (update, February 2026) - 40 weekdays after 31 December 2025 with no holiday taken out - "or 40 working days ... depending on local statutory holidays". The Legislation Act 2019 s13 count, which applies to the 2026 Rules (r 3 has no definition), gives 2 March 2026. For the calendar-2026 round the published 1 April 2027 (40 + 20 working days) matches the Holidays Act 2003 count; the s13 count gives 31 March 2027 (s13(c) ends on 2 January, so the moved 4 January 2027 counts). WYLA shows a published date where there is one, else the s13 count, and aims alarms at the weekday count (decision D-1). UNCONFIRMED, for a person to check: the exact s13 wording (quoted from the builder's copy); whether the 2022 Rules define "working day" (no copy in the project); the Matariki dates 2026-2031 (Sch 1, not re-read); Employment New Zealand's anniversary table (not retrieved - the test fixture is hand-typed); how Taumata Arowai counts (ask Ops Support).
- The 1 Apr 2027 deadline for the calendar-2026 round is on Taumata Arowai's web page "Updates to the Drinking Water Quality Assurance Rules" (updated 19 Jun 2026), not in Schedule 2 of the 2026 Rules; the build contract attributed it to Sch 2 cl 2. UNCONFIRMED first-hand in this build (no network). WYLA takes the published date as the day to aim for too (it includes 20 extra working days on purpose); D-1's "earlier of the deadline and the weekday count" is applied to the deadlines WYLA counts itself.
- Parameter / determinand column (code or full name) and unit case: the template writes `ecol` / `mpn/100mL`, the list `MPN/100ml`, the Guide's screenshot `MPN/100mL`, the S3.6 guidance full names. WYLA keeps the list's strings and flags a converted unit (open question 1c; decision D-9 default: ID).
- `dcca` (D3.22-dcca) should be `dcaa` (Reporting Guidance v1.2 p.27); WYLA keeps the rule ID as published.
- G5 is Level 3 in the Rule Summary List but its Rule Applies names S2, T2 and D2; WYLA follows the Level column. WYLA lists the 2022 calendar-year annual report at level 3 as well (G4 and G5 per Taumata Arowai's Summary of all Tables of changes 2026 pp.7-8 and Reporting Guidance v1.2 p.4 - G3 is the monthly tables 5-7 rule; the published 2025 round covers level 3); the build contract named levels 1 and 2 only.
- T2.9(b) chlorine disinfection "not required for self-supplied buildings" (2026 Rules p.26): the Hinekorako file keeps the T2.9-b row for a self-supplied building until decided (only T2.2-b/-c and T2.6-b/-c are omitted, D-3; INTEGRATION-I1.md decision 2). The varying-population FAC and pH rows VP.3(b)(ii)-(iii) and VP.4(b) carry the same words (2026 Rules p.30): they are Non-reporting, so never in the file, and are left out of a self-supplied building's default cadences (`hk-rule-map.cjs` SSB_VP_NOT_REQUIRED); the 2022 wording of VP.3 / VP.4 is as cited.
- Whether level 2 suppliers report T2 assurance rules for January-June 2027 (Sch 2 cl 2(1)(c) lists none): the reduced round is offered at levels 1 and 3 only. UNCONFIRMED, open question 2e.
- The Rule Summary List is the 2022 Rules' list; no 2026 Summary List is published (question 3a), so the map has only 2022 IDs, `rowsFor()` refuses `rules: '2026'`, and the default cadences are 2022 frequencies.

- The 2022 (as amended) wording of T1.4 / T1.5 is not in the project; the cites quote the 2026 Rules ("as cited"). 2022 T1.5(c) is five Summary List rows (c.i-c.v), so its text differs. D1.2 / D2.8 2022 intervals: the Summary List rows exist (D1.2-a..f, D2.8-a..f) but carry no frequency; the logbook presets use the 2026 intervals.
- Whether a total-coliforms detection alone is notifiable (`nz_s21_coliform`): UNCONFIRMED.
- The 2022 Rules' exact words for S1.3, S2.3, T1.2, T2.5 ("until three consecutive results are below 50% of the MAV") are quoted from `reports/NZ Rules levels 1 to 3 - WYLA fit.md`, not the Rules text; the ID shapes behind the profile hints (supply ID three letters + three digits, plant ID TP + digits) are inferred from examples (medium confidence).
- Reporting Guidance v1.2 p.12 "the latest submission wins", G.RR.1's elements (date submitted, submitter) and the T2.3 wording on the field-test sheet ("evenly spaced across each month", "at least three different days of the week") are taken from the research notes and the fit report; not re-read for this build.
- Level 1 quarterly reporting periods vs G.RR.2: the 2026 Rules give S1.1(a), S1.2(a), T1.1 and D1.1 "Compliance period: 3 months, Reporting period: 1 quarter" (pp.19-22), but G.RR.2 has level 1 report "at the end of the compliance year ... within 40 working days". WYLA schedules the yearly G.RR.2 report only. UNCONFIRMED: whether level 1 quarterly-RP rules are reported each quarter or only at year end (a question for Taumata Arowai).
- G5's "40 days": the Summary of all Tables of changes 2026 (p.8) prints 2022 G5 as "annually within 40 days of the end of each calendar year" (calendar days); the Rule Summary List's G5 row says "40 Working Days". WYLA uses the Rule Summary List's 40 working days. UNCONFIRMED (REGULATOR-REPORTS-DESIGN.md already noted "working days not stated").
- Nitrite in mg/L as NO2-N: the parameter list allows the unit but its Notes give the MAV only "in mg/L as NO2"; no NO2-N figure is derived, so a nitrite result in NO2-N is not judged against the MAV. UNCONFIRMED. (Nitrate in NO3-N is judged against the list's own 11.3 mg/L as NO3-N, Notes for nitr, WSR 2022 Schedule Table 2.)
- External Reporting ID: the template says "(Optional, your own tracking id)"; the Guide's error list says it is required (Reporting Guidance v1.2 pp.25-27). WYLA always fills it (WYLA-<doc>-v<n>); question 1d of the 3 Nov 2026 email.
- What Hinekorako's "Form is incorrect. Please use the correct template" tests is not published, nor whether the in-portal template equals the public v1.1A / v1.1B files or whether a software-filled copy is accepted (question 1a). WYLA fills an unmodified copy and checks sheets, B2, tables and labels (HK-E01); only the pilot upload settles it.
- The Parameters and determinands list gives no unit for pH, but the upload requires a unit on every sample ("Unit is required", Guide pp.25-27). The Guide's field table takes the accepted units from that list ("See the Parameter Determinand list in Section A.9 for accepted units", p.10), so since the wave C browser check (2026-11-08) WYLA writes pH with an EMPTY unit (whatever the register holds, e.g. "pH units"), treats it as valid (no HK-E09) and warns once (HK-W01) that the two disagree; the Lab form and the lab import keep "pH units" or a blank as no unit. Still UNCONFIRMED - question 1c; only the pilot upload settles it.

- The template's B11 links the Email cell to the example address mailto:me@example.com; WYLA removes that link from the filled file (the cell holds the submitter's email). Whether "Form is incorrect" looks at hyperlinks is not known (question 1a).
- An annual-compliance-period row inside a quarterly file (S2.1-b, S2.2-b, D2.5) with no sample yet is reported TRUE with the note "due by 31 December" until the year ends (WYLA's reading of "determine compliance during each compliance period", Guide p.8; not stated by Taumata Arowai).
- A determinand with no MAV in the list (turbidity, pH) gives a sample "complies" TRUE (the Guide's definition p.10 and its own example T1.8-turb TRUE, p.12); total coliforms stays the person's call (question 2d).
- A notification reference is put on a failed sample when the notice log's period lies within 7 days of the sample (WYLA's own window, not a regulatory number).
- Lab import: no real laboratory's results file has been read yet; the generic profiles' column names are WYLA's own first guesses (the person maps every column once and sees every value before saving).
- The Water Services Act 2021 section giving Taumata Arowai the power to require information from a supplier: not re-read in this build (no network); NZ-56 says so. UNCONFIRMED.
- Argest's own format: none published (contract 8.1); the NZSPA question (does Argest accept a file or an API?) needs John's approval to send (D-7) and was not sent.
- Whether a distribution-zone tap sample at a school counts for the Ministry's monthly testing: since the wave C browser check (2026-11-08) the Argest list counts treated AND distribution (tap) samples and never source water (argest.mjs `countsForArgest`): the Taumata Arowai schools page ("Required by the Ministry of Education") names no sampling point, and SSB.13 takes the treated-water sample "from a tap in the treatment building, or the farthest building". The lab schedules (moe_monthly, SSB.13 - lab.mjs `countsAsTreatedMicro`) still count treated samples only; a follow-up. To confirm with NZSPA / the Ministry. UNCONFIRMED.
- Records kept on a standalone unit and imported later (NZ-58): the clauses are cited as the existing code cites them (record-seal.mjs, migration 030), not re-read for this build; whether Taumata Arowai accepts such records as the same record (with their own import seal) has not been asked; the label says exactly what they are.

A.8 Fit report keys

The key each row's Fit column uses, the requirement's text in `drafts/regulatory-fit-data.json` (matched ignoring case, typographic quotes and accents), and its status there (ok / part / build / hw / duty / gap).

KEY	FIT STATUS	REQUIREMENT
`data-1min`	ok	Record treatment readings at least every minute
`data-gaps`	ok	Limit and report periods with no data
`data-sf`	ok	Keep a complete record through connection loss, at the place results are reviewed

KEY	FIT STATUS	REQUIREMENT
data-fields	ok	Each record shows date, time, place and result
data-dailyroll	ok	Daily minimum / maximum / mean available for inspection
data-integrity	ok	Records must not be altered or falsified
data-retention	ok	Retain records for the required period
uv-validated	duty	Validated UV reactor delivering at least 40 mJ/cm2
uv-monitor	part	Monitor UV intensity or dose, UVT, flow and lamp status
uv-offspec	part	Off-spec accounting: dose and UVT within validated limits
uv-alarm	ok	Alarm on lamp failure or loss of dose
uv-lamp	ok	Lamp hours recorded and within the maker's limit
uv-sensor	ok	Check the duty UV sensor against a reference sensor
uv-uvt	ok	Check the online UVT analyser weekly (+/-2%)
uv-shutoff	hw	Automatic shut-off on UV failure, or alarm at a staffed location
cl-continuous	ok	Continuous free chlorine at the end of contact / entry point
cl-limits	ok	Alarm limits for chlorine, pH and turbidity
cl-below	ok	Daily lowest residual and every period below 0.2 mg/L, with a 4-hour clock
cl-ct	ok	C.t / log-credit calculation
cl-calib	ok	Calibrate the chlorine analyser against grab samples
cl-grab	ok	Grab samples when the analyser is down
cl-turbidity	hw	Turbidity monitoring
cl-lab	duty	Laboratory tests (E. coli, chlorate, chemicals)
al-immediate	ok	Alarm immediately on equipment fault, power loss or limit breach
al-person	ok	Reach a person who can act (staffed location, available operator)
al-latch	ok	Alarms latched until acknowledged; log raise, acknowledge and clear times
al-summary	part	Monthly alarm summary
al-adverse	duty	Report adverse results to the authorities, often by phone
rp-nz	part	NZ reporting through Hinekorako
rp-us	part	US monthly operating report and LT2 UV report
rp-ca	part	Canadian annual and periodic reports
rp-esub	duty	Electronic submission rules

KEY	FIT STATUS	REQUIREMENT
ct-certified	part	Only certified or authorised operators may adjust treatment
ct-log	ok	Every adjustment logged with an unambiguous identity
ct-manual	ok	Keep manual control and an operator able to respond
ct-nostaff	ok	WYLA staff never operate a customer's plant
ct-localonly	build	Safe remote start and stop for people on site
ct-scada	ok	SCADA software changes reviewed as plant alterations
cy-exposure	ok	No control equipment exposed to the internet
cy-tls	ok	Encrypted, authenticated links
cy-passwords	ok	No default passwords; unique credentials per device
cy-mfa	ok	Multi-factor sign-in (phishing-resistant preferred)
cy-segment	ok	Segmentation and least privilege
cy-auditlog	ok	Audit logs protected from tampering
cy-remote	ok	Remote access only when needed
cy-apn	duty	Private mobile network (APN) for 4G gateways
cy-plan	duty	Risk assessment and emergency response plan covering automated systems
cy-fcc	part	FCC "Covered List" rules for Chinese-made radio equipment
pv-cloud	ok	Cloud storage of personal information
pv-breach	ok	Breach response and notification
pv-notice	part	Notice when collecting personal information indirectly
ce-radio	part	Radio approval for the gateway (4G / Wi-Fi)
ce-electrical	duty	Electrical safety of the power supply and panels

Register change log

DATE	CHANGE
2026-10-12	Register created from Regulatory Fit Rev 1.6 and the feature docs (COMPLIANCE-CALCULATIONS, CALIBRATION-LOG, ALARM-CALLOUT, RECORD-SEALING, DATA-RETENTION, REGULATOR-REPORTS-DESIGN, MQTT-CONTRACT 4.6). 88 clause rows: New Zealand 17 met / 5 partly; United States 13 met / 5 partly; Canada 21 met / 12 partly; cyber and privacy 13 met / 2 partly; total 64 met / 24 partly. Fit report: 25 ok and 9 part requirements all covered (cy-fcc and ce-radio held back), 17 others listed as customer duties or not yet met. Checker `tools/check_regulations_register.py` added.

DATE	CHANGE
2026-10-12	The user manual (v2.1) now includes this register as a generated appendix, "Appendix: Regulations WYLA meets", read from this file at build time; "Keeping the manual current" added to section A.8. No status changes; counts unchanged (64 met / 24 partly / 88).
2026-10-12	Sign-in moved from Auth0 one-time-password MFA to passkeys: the tenant is on the Free plan, the one-time-password and recovery-code factors are paid "Pro MFA" and the allowance ran out, which broke sign-in. CP-08 (CISA phishing-resistant MFA) Partly -> Met, since 2026-10-12, depends on each user enrolling a passkey with the password fallback still on (decide later whether to require passkeys); CP-09 wording follows CP-08, still Met. Report sign-off now needs a fresh passkey sign-in (REGULATOR-REPORTS.md s4). Checked against fit Rev 1.7 (multi-factor row text updated, status unchanged). Counts: cyber and privacy 13 -> 14 met, 2 -> 1 partly; total 64 -> 65 met, 24 -> 23 partly, 88 rows.
2026-10-12	Checked against fit Rev 1.8. Regulator-ready reports phases 1-2 live (migrations 035, 036): US-11 Partly -> Met (notice log records when the State was notified; next-business-day clocks); new NZ-23 (`rp-nz`, Partly - no Hinekorako export), US-19 (`rp-us`, Partly - State forms, turbidity and distribution counts, UV by time without a totaliser), CA-34 (`data-dailyroll`, Met - daily min / max / mean in the monthly report), CA-35 (`rp-ca`, Partly - Alberta monthly compilation only); NZ-06 and CA-18 reworded, still Partly; `al-adverse` stays a customer duty, WYLA now drafts, runs clocks and reminds. Control prerequisites phases 0-1 live (migration 038): new US-20, CA-36, CA-37 (`ct-certified`, Partly - no operator-in-charge designation or class matching), NZ-24, US-21, CA-38 (`ct-nostaff`, Met), CP-16 to CP-18 (`cy-auditlog`, Met - audit log insert-only); CA-15 (`ct-log`) reworded and kept Partly (no per-shift equipment status record, s.26(2)(d); panel changes made without WYLA not captured); NZ-01 and CA-13 mention the insert-only audit log. CP-10 records the tenant-isolation fix (migration 037: tenant reads through a security-barrier view, chunk-table reads refused). Approvals research (APPROVALS-AND-SUBMISSIONS.md): section A.5 and 6 text updated, `ce-radio` and `cy-fcc` still held back. Section A.7 item 1 resolved (design s5 corrections taken into the fit report), item 5 added. Counts: New Zealand 17 -> 18 met, 5 -> 6 partly; United States 13 -> 15 met, 5 -> 6 partly; Canada 21 -> 23 met, 12 -> 15 partly; cyber and privacy 14 -> 17 met, 1 partly; total 65 -> 73 met, 23 -> 28 partly, 88 -> 101 rows.
2026-10-12	Checked against fit Rev 1.9. Control records live 2026-10-13 00:10 UTC (migration 039; WYLA still writes nothing to any device): CA-15 (`ct-log`) Partly -> Met, since 2026-10-12 - the shift log gives per shift the control-log entries, state changes WYLA saw (recorded in WYLA or not), alarms, end-of-shift equipment status and certified operators' notes and sign-offs; s.26(2)(c)-(d) and s.27(5) are duties to record, and what software cannot see (panel adjustments to settings WYLA does not read, the s.27(5) human items) is the operator's shift note, listed under Depends on and section A.5. CA-19 (`ct-scada`) Partly -> Met, since 2026-10-12 - per-site change record (JSON, CSV, PDF) for the customer's engineer; the Form 2 and the review stay the customer's. US-20, CA-36, CA-37 (`ct-certified`) stay Partly, reworded: operator-in-charge / responsible-charge designation and class matching are live, but class lists are customer-entered (UNCONFIRMED) and s.26(1) is recorded, not enforced. NZ-24 notes the staff email domain is a server setting. Privacy (PRIVACY-BREACH-PROCEDURE.md s14, PRIVACY-NOTICE.md, PRIVACY-BREACH-REGISTER.md): new CP-19, CP-20, CP-21, CP-24 (`pv-breach`, Met) and CP-22, CP-23 (`pv-notice`, Partly - placeholder privacy email and postal address; earlier contacts only through an owner's Send privacy notice), all since 2026-10-12; CP-15 Depends on updated; section A.5 gains operating logs, SCADA change review and privacy bullets; section A.6 item 9 updated, `pv-breach` and `pv-notice` removed from other open requirements. Counts: Canada 23 -> 25 met, 15 -> 13 partly; cyber and privacy 17 -> 21 met, 1 -> 3 partly, 18 -> 24 rows; New Zealand 18 / 6 and United States 15 / 6 unchanged; total 73 -> 79 met, 28 partly, 101 -> 107 rows.

DATE	CHANGE
2026-10-12	Checked against fit Rev 1.10. Storage changes live 2026-10-13 01:39 UTC (migration 040; DATA-RETENTION.md s4-5, COMPRESSION-TRIAL.md, RESTORE.md, RECORD-SEALING.md s7): one-minute compliance records compressed after 45 days (TimescaleDB, lossless, nothing deleted, no retention policy anywhere; append-only triggers still refuse every change on compressed rows; seals still verify; chunk skipping off; tenant isolation through the security-barrier view, the app's role has no privilege on the table); local nightly backups kept 2 days (was 14), off-site copy and weekly restore test unchanged, the restore test now restores the compressed records; new monthly write-once archive (`wyla-archive`, Azure Canada Central, 10 years, unlocked; first month October 2026 due 2026-11-10; alarm contacts, users, sign-ins, impersonation sessions, invoices and secrets left out so they stay deletable). Reworded, statuses unchanged: NZ-01, US-01, CA-13 (`data-integrity`); NZ-22, US-02, CA-12, CA-14, CA-32, CA-33 (`data-retention`) - CA-12 stays Partly, the archive keeps each month 10 years, not the 15 some s.13 records need; CP-14 (`pv-cloud`) and CP-16 (`cy-auditlog`). Section A.5 (records beyond 10 years) and section A.6 follow-through (first archive 2026-11-10, owner's lock decision for both write-once containers, yearly archive restore test) updated. Counts unchanged: New Zealand 18 / 6, United States 15 / 6, Canada 25 / 13, cyber and privacy 21 / 3; total 79 met, 28 partly, 107 rows.
2026-10-13	Checked against fit Rev 1.11. Two deploys on 2026-10-13. (1) Migration 042 and the server-side support-access gate (REMOTE-ACCESS.md), enforcing for every gateway since 12:55 UTC after bench tests on the Wi-Fi and SIM units and the NZ field unit: support reaches no gateway or site network unless a time-limited session (reason, default 30 min, at most 120) is open for it, opened in the console by the gateway's owner or a platform admin, closed by itself or early (cutting open connections), append-only and hash-chained with audit rows, failing closed (API, helper, OpenVPN restart), break-glass bounded and logged at crit; gateways and their MQTT / TLS link untouched. CP-12 (`cy-remote`) Partly -> Met, since 2026-10-13: the requirement is remote access only when needed through a secure gateway, and access now exists only during a session through the VPN server; the tunnel itself stays up (outbound-only, carrying nothing until a session opens), and a tunnel down at rest would need a PUSR on-demand switch (question drafted, vendor configuration writes ruled out); follow-through in Depends on and section A.6. CP-10 (`cy-segment`) reworded (CP-11 as CP-10): no support login reaches a gateway without a session. (2) Migration 041 at 12:31 UTC (CONTROL-PREREQUISITES.md s15.7): confirming an assisted change is held to the active operator-in-charge / overall responsible operator - always in Ontario (O.Reg 128/04 s.25, s.26(1)), elsewhere once the owner designates anyone; WYLA's control suspension per site or customer (admin-only lift, append-only, chained); Admin > Health shows the last monthly archive. US-20 and CA-36 (`ct-certified`) reworded and stay Partly - class lists customer-entered (UNCONFIRMED), and s.26(1) covers only changes confirmed through WYLA (CA-37 as US-20); NZ-24 (`ct-nostaff`) reworded with the suspension (US-21, CA-38 as NZ-24). Section A.5 (operator certification), section A.6 item 9 and follow-through, section A.8 updated; section A.7 items 6 (REMOTE-ACCESS.md and CONTROL-PREREQUISITES.md D12 / s15.3 still say not deployed) and 7 (s15.8 proposes `ct-certified` Met; kept Partly) added. Counts: cyber and privacy 21 -> 22 met, 3 -> 2 partly; New Zealand 18 / 6, United States 15 / 6, Canada 25 / 13 unchanged; total 79 -> 80 met, 28 -> 27 partly, 107 rows.

DATE	CHANGE
2026-10-20	Still checked against fit Rev 1.11 (no new fit revision; `cy-passwords` stays ok there until the next revision re-rates it). The gateway's read-only local status page (agent 1.1.36+, `http://<LAN IP>:1880/wyla`, readings and alarms, no control) and its PIN: the cloud side (migration 044, `PUT/DELETE /api/v1/devices/:id/local-page`, the admin's master PIN route, the Connections page's Local page card; MQTT-CONTRACT.md s5.1) keeps a salted SHA-256 only and pushes it in the device configuration. The page accepts the published default PIN 1234 until a site PIN is set (nothing forces the change) and a WYLA support master PIN that is one PIN for every unit, so, honestly: CP-06 (`cy-passwords`, no default passwords) Met -> Partly and CP-07 (unique credentials per device) Met -> Partly, both since 2026-10-20, the gateway web page and Node-RED passwords claim unchanged and the exception stated in the Status and Depends on columns. CP-01 (`cy-exposure`) notes the page is for the site network only, on the existing Node-RED port, with a bench check that port 1880 is not reachable from the WAN side; still Met. Section A.6 follow-through updated. Counts: cyber and privacy 22 -> 20 met, 2 -> 4 partly; total 80 -> 78 met, 27 -> 29 partly, 107 rows.
2026-10-21	Still checked against fit Rev 1.11. Local lamp test (agent 1.1.38+; CONTROL-PREREQUISITES.md s15.9; MQTT-CONTRACT.md s4.3): a local page session opened with the WYLA support master PIN can test the gateway's own stack light (stack light outputs only) for 10 seconds, then automatic, rate-limited by the agent; each test reaches the cloud in the status heartbeat (`lamp_tests`) and the ingest writes one insert-only audit row (`local_lamp_test`, de-duplicated), shown on the Connections page and in the Audit log. The explicit exception to "WYLA writes nothing to any device" is stated in NZ-24 and US-20 (an indicator test, not process control, so both stay as they were: NZ-24 Met, US-20 Partly for its class lists); CP-01 and CP-06 say "no process control" with the support lamp test (CP-01 still Met: site network only, no new port; CP-06 still Partly); CP-07 notes the one-for-every-unit master PIN is also the PIN that can test the lamp (still Partly). No status changes; counts unchanged (78 met, 29 partly, 107 rows).
2026-10-24	Still checked against fit Rev 1.11. Support LAN relay (agent 1.1.43; REMOTE-ACCESS.md s8a; cmd.schema.json lan_relay): CP-12 now states the one change a support session makes on a gateway - a firewall rule, for the session only, that lets a unit cabled behind it be reached and set up; the server gate is unchanged. No status changes (78 met, 29 partly).
2026-10-24	Still checked against fit Rev 1.11. Gateway hardening (agent 1.1.44, docs/M300-FIRMWARE-NOTES.md s7): the gateway web server no longer serves files without a sign-in (confirmed exposed on the bench first: Node-RED settings and the cloud login), SSH off, the gateway's own MQTT 1883 closed off loopback - on all four gateways. Cloud: plain MQTT 1883 closed to the internet (CP-04 follow-through done). CP-01 bench result recorded: 80/1880 answer from the WAN side, behind unique passwords. No status changes (78 met, 29 partly).
2026-10-26	Still checked against fit Rev 1.11. Firmware V1.3.03 0819 received (not published): it adds a web terminal (ttyd, a root login prompt) on /ttydweb and port 7681; agent 1.1.46 (all gateways) blocks both and stops ttyd (CP-01). No status changes (78 met, 29 partly).

DATE	CHANGE
2026-10-29	Still checked against fit Rev 1.11. Second gateway model, the IoTRouter EM300, supported by the setup program (one program for both models, finds which is plugged in) and its own agent (1.1.47-1.1.49), bench only - none in the field or sold, so no row claims anything for it. Notes added: CP-01 (the setup program switches off the maker's cloud, mesh and VPN client; SSH 22 and two sign-in-free web addresses with serial / IMEI / SIM number still open, to settle before fielding), CP-04 (same TLS 8883 link, root CA checked), CP-06 (own web and Node-RED passwords, kept through a power cut; firmware 2X04 loses a web-page password at restart, reported to IoTRouter), CP-12 (VPN started only for a session, same server gate; down at rest, unlike the PUSR); section A.6 item 10 and Held back (`ce-radio`: CE RED certificates only, no RCM / R-NZ, FCC / ISED not checked, band 28 untried in NZ); follow-through before fielding an EM300. No status changes (78 met, 29 partly).
2026-10-26	Still checked against fit Rev 1.11. Firmware V1.3.03 0819 published for EW and GL to setup programs from 2026.10.26.1012 (build-time order; a V1.2.x unit gets the full 0526 first); both bench units on it; agent 1.1.46 blocks its web terminal. No status changes (78 met, 29 partly).
2026-10-29	Still checked against fit Rev 1.11. EM300 STANDALONE mode built (bench only, agent 1.1.53; cloud migration 046 live 2026-10-29 20:31 UTC): an SD card holding a WYLA-signed licence for the unit (issuing key wyla-sa-1, admin only, audited) makes it keep its records on the card, serve a local website with named users and email its alarms through the customer's own account; the cloud hears a daily check-in, leaves it out of the data-gap job and raises STANDALONE_CHECKIN_MISSED after 3 days. Notes added: CP-01 (the local website, standalone only, no process control), CP-04 (alarm email over TLS with the certificate checked), CP-06 (no default password: one-time setup code, own passwords, lockouts), CP-12 (tunnel up when online behind the same gate; the owner can ask for a session from the unit); section A.6 'EM300 standalone mode' (nothing claimed for a standalone unit) and follow-through. No status changes (78 met, 29 partly).
2026-10-29	Still checked against fit Rev 1.11. EM300 agent 1.1.55 (bench only, d_aa9015) switches the EM300's SSH (port 22, root by the maker's key) off every 10 minutes and after a start, as agent 1.1.44 did on the PUSR; bench: port 22 closed over the support VPN and the LAN while Node-RED still answers. No row claims anything for the EM300.
2026-10-30	Still checked against fit Rev 1.11. EM300 standalone bench tests on d_aa9015 (agents 1.1.56-1.1.59, bench only): a pulled SD card is now detected (it stayed listed after removal) and found again when put back; a full card raises SD card nearly full / full alarms and a space reserve keeps writing and history reading working; a power cut with the card in and the battery-backed clock with no internet passed. Left before a standalone unit is offered: another unit's card, a real-mailbox alarm email, a licence price. No row claims anything for the EM300.
2026-10-30	Still checked against fit Rev 1.11. EM300 standalone alarm emails proven through a real mailbox (Gmail, agent 1.1.60-1.1.61, bench only): the test email, SD card missing and its clear arrived; the emails now carry the cloud's design and alarm help; the Email alerts page and the manual give the Gmail app-password steps. Left before a standalone unit is offered: another unit's card, a licence price. No row claims anything for the EM300.
2026-10-30	Still checked against fit Rev 1.11. EM300 agent 1.1.63 (published; the only EM300 is the bench unit): a web guard on port 80 keeps the firmware's sign-in-free pages (IMEI, SIM, APN settings) off the network - only the unit's model, serial and version still answer, for the setup program - and a card guard stops the firmware formatting a card that holds files. Bench-proven, including after a reboot. No row claims anything for the EM300.

DATE	CHANGE
2026-10-30	Still checked against fit Rev 1.11. EM300 standalone settings on the unit (agent 1.1.65, bench only; cloud migration 047 live 2026-10-30): owners change inputs, set spare inputs up as recorded channels and add mapped Modbus equipment by port and address on the unit's own website; every change is tried for 10 minutes, kept or undone, audited on the card and copied read-only to the cloud (the PIN block never leaves the unit); the cloud refuses to push settings to a standalone unit unless a WYLA admin overrides, audited. A spare channel never counts as a compliance reading. No row claims anything for the EM300.
2026-10-30	Still checked against fit Rev 1.11. Cloud deploy 11:35 UTC. (1) Data-gap alarms (NZ-04, CA-05 `al-immediate`): the gap job judged its newest period against the day that period ENDS in, so the last minute of every site day (23:59-00:00 local) was never judged against its own day - a gap reaching local midnight showed yellow and was cleared without the red alarm or a notification. Fixed (api/src/compliance.mjs: the day of edge - 1 ms) with a regression test pinned at NZ midnight; the gap log and the reports were always complete, only the alarm was affected. Still open, a design decision: gaps of the day before that were not yet judged when the day turned (alarms held over midnight because the gateway was offline or sending its backlog, or the API restarting in the first 10 minutes after midnight) are recorded and reported but not alarmed. Statuses unchanged. (2) A raw admin override of a standalone EM300's settings is numbered like the console's override (no version drift). (3) The console's claim form warns when the typed serial is not the one the unit reports (the first EM300's record had a typed "EM300-01"; corrected to E300DC8922AA9015, audited). (4) EM300 agent 1.1.66-1.1.67 (1.1.67 published; bench only): the standalone website's Channels page shows the unit as built - base unit and every I/O module, each terminal in use, spare, stack light, output or expected-and-not-found - and an owner can look for modules again (audited). No row claims anything for the EM300. Counts unchanged (78 met, 29 partly, 107 rows).
2026-10-30	Still checked against fit Rev 1.11. EM300 (bench only, nothing claimed for it): the setup program (2026.10.30.530) sets up an EM300 only on firmware WYLA has tested (platform/edge-agent-em300/config/em300-firmware.json, 2X04) and on a unit whose Node-RED runs as root, stopping before any change otherwise (CP-01 follow-through: the agent's hardening depends on both, and IoTRouter publishes no firmware notes). Agents 1.1.68-1.1.69 (1.1.69 published): another unit's card, or one with no licence, is never written to and its history and alarms are never read as this unit's; after a wrong card the reader keeps being checked every 10 minutes, so the unit's own card is found without a restart. Card guard proven with a real card holding a file, at power-up and with the power on (the file unchanged); the same card emptied was formatted and flagged "no licence", then with another unit's licence flagged "for another unit" - nothing written to it either time, the website refused its history, and the unit's own card was found again in 21 s with every held reading written. Counts unchanged (78 met, 29 partly, 107 rows).
2026-10-30	Still checked against fit Rev 1.11. EM300 (bench only, nothing claimed for it): a fresh SD card made for the standalone bench unit with the release setup program (2026.10.30.530, Standalone; all 13 steps passed, licence written and read back). That run found a fault, fixed in agent 1.1.70 (published): the settings changed on a standalone unit were put back in force only when a run STARTED standalone, so a run that started in cloud mode (a restart with no card, or a wrong one, in) and then found its own card ran the cloud's older settings; they are now put in force the first time each run is standalone, audited `config_kept_version_in_force`. Nothing was lost (the unit's history file kept them). Counts unchanged (78 met, 29 partly, 107 rows).

DATE	CHANGE
2026-10-30	Still checked against fit Rev 1.11. EM300 standalone sign-in changed at John's request (agent 1.1.71, published; bench-proven on d_aa9015; setup program 2026.10.30.617): a new unit's website has the default owner admin / 123456789, which must choose its own password at the first sign-in before anything else (no setup code any more), and a WYLA master sign-in (admin with a fixed master password, hash only, audited as wyla-master) works on every standalone unit. CP-06's EM300 note rewritten (a universal default is allowed by California SB-327 when changed before access, not by a no-default-password rule; nothing was claimed for the EM300). Counts unchanged (78 met, 29 partly, 107 rows).
2026-11-03	Still checked against fit Rev 1.11. Feature settings per customer and per site LIVE 2026-11-03 14:32 UTC (migration 048 applied, rehearsed first on a copy of the live database; docs/FEATURE-SETTINGS.md, schemas/tools/features.cjs): WYLA sets which optional modules a customer has (plan, with 30-day trials only where WYLA allows them), and each site carries a preset for its regulator whose required modules the customer cannot switch off (NZ Rules L1-2: calculations and reports; L3, US: plus the calibration log; Ontario: plus operators and control) - only a WYLA admin can, with a written reason in the audit log; a required module the plan lacks shows a red banner and lists the customer under Attention. Switching a module off hides it and stops its reminders; it never stops one-minute recording, sealing, alarms (always raised and emailed) or data-gap tracking, and the calculations keep running - the one exception (John, 3 Nov 2026) is Text and voice alarms: off at a site, no texts or calls go out for its alarms, and people who chose text only get them by email. On the day it ships every existing customer keeps every built module, so no row loses its feature. No status changes (78 met, 29 partly, 107 rows).
2026-11-03	Still checked against fit Rev 1.11. NZ school work BUILT and LIVE 2026-11-03 16:37 UTC (migrations 049, 050 rehearsed on a copy of the live database first) (unit tests only; nothing run on real equipment): (1) rule sets `nz_t2_ssb` (level 2 for a self-supplied building: no FAC, pH or chlorine, T2.2, T2.6(b)-(c), T2.9(b)) and `nz_ssb_as` (the Self-supplied Buildings Acceptable Solution 2025, clause by clause; SSB.3(a)-(c), SSB.4, SSB.12, SSB.13, SSB.15, SSB.16 listed, never judged) with lamp-lit, rated-flow (alarm UV_FLOW_ABOVE_RATED), lamp-life and filter differential pressure checks, every equipment limit empty until the site enters it; the `nz_school_as` preset now suggests `nz_ssb_as` and starts with Compliance calculations and Regulator reports on; (2) a "UV lamp out while water flowed" notification case (`nz_s21_uv`) with a Ministry of Education / NZSPA clock for sites ticked "school or kura" (section A.5); (3) the lab sample register and the inspection logbook (migration 049, LAB-AND-LOGBOOK.md); (4) the many-sites overview and per-site logins (migration 050, PROGRAMME-VIEW.md, SITE-SCOPED-USERS.md; the control page's certificate-holder leak to a site login found and fixed in the integration check); (5) standard alarm inputs UVF and MAINS (new codes from agent M300 1.1.49 / EM300 1.1.73, not released; update 2026-11-04: both published 3-4 Nov, see the 2026-11-04 entry). New rows NZ-25 to NZ-32 and CP-25, all Partly until deployed (section A.6, "Built 2026-11-03"); NZ-21 stays Met for the existing level 2 rule set; NZ-15 and NZ-16 unchanged (flow meter). Counts 78 met, 38 partly, 116 rows.

DATE	CHANGE
2026-11-03	Still checked against fit Rev 1.11. Two builds of 3 Nov (unit tests only; migrations 051 and 052). (1) Scheduled email reports (module `email_reports`, Compliance plans; SCHEDULED-REPORTS.md): no regulation requires them, so no new row. NZ-23: the signed Monthly Compliance Report can be emailed automatically once signed, the stored PDF byte for byte with its SHA-256 checked before every send and refused if changed, never unsigned (supports the record-integrity rows; the same rule for every jurisdiction's signed report). Privacy notes: CP-14 (reports go only to the outside addresses an owner names and carry site data only - no user list, no person's phone, no alarm recipients, no names of who acknowledged or entered anything; who receives them is the customer's disclosure, IPP 11), CP-22 and CP-23 (each new outside recipient told first who added them; a no-sign-in stop link in every email, also RFC 8058 one-click; opt-outs kept and shown to the owner; every send in the append-only sent log, 10 years, and the audit log; Partly reason added: the notice does not yet link the privacy notice); the same applies to Canadian (PIPEDA) and US recipients, where no row is claimed. Logo uploads are redrawn (PNG re-encoded, JPEG re-wrapped without EXIF / XMP / ICC), SVG refused. (2) NZ school follow-ups: NZ-30 - an E. coli positive opens a "drinking water may be unsafe" case (`nz_s21_ecoli`, s21(2), judgement) linked to the lab entry, where the profile names NZ and Regulator reports is on; section A.5 updated. NZ-31 and NZ-32 - the logbook intervals re-checked against the Taumata Arowai schools page and NZSPA (unchanged); their clause now cites the page's guidance, not a Ministry of Education requirement (the Ministry's own requirements are the monthly tests, three clear tests, Argest and its safety plan, NZ-30). CP-25 - archiving or deleting a site switches off logins limited only to it and narrows several-site logins (migration 052); the archived-site gap closed. The Sites overview now turns a site red for a compliance day not met (today or yesterday) and for an overdue lab sample, an E. coli result not yet cleared or an overdue inspection - WYLA's own rule, no row. No status changes (78 met, 38 partly, 116 rows).
2026-11-03	Still checked against fit Rev 1.11. Scheduled reminders (module `reminders`, migration 053; REMINDERS.md; unit tests only), in the console from 3 November 2026, in the Compliance plans and on by default in the `nz_school_as` preset: owners set friendly emails before a job is due, on the day and while it is overdue (default 3 days before, 08:00 site time, every 2 days, at most 5 times) to the people they choose, outside addresses allowed; reminders, not alarms. No regulation requires them, so no new row. NZ-31: a logbook-tied reminder's no-sign-in Mark as done (single use, 60 days, GET changes nothing) adds the logbook entry (append-only, chained) with the typed name. NZ-30: a lab reminder's done records only that the sample was taken; the result is still typed on the Lab samples page. Privacy notes: CP-14 (emails carry only the job, the site, the due date and the note, to the addresses an owner names) and CP-22 (new outside recipients told first, a stop link in every email, RFC 8058, opt-outs shown, append-only sent log and audit; Partly reason extended: the notice does not yet link the privacy notice). No status changes (78 met, 38 partly, 116 rows).

DATE	CHANGE
2026-11-03	Still checked against fit Rev 1.11. The later builds of 3 Nov, none deployed (unit tests only; migrations 054, 055 and 056 not applied; nothing run on real equipment). (1) Per-unit credentials (PER-UNIT-CREDENTIALS.md, migration 054): CP-06 - the setup program needs a site PIN on an M300 still on the default (stops at step 2) and one weak-PIN rule (NIST SP 800-63B s5.1.1.2) is applied in the cloud, the setup program and the console; owners can no longer go back to 1234. CP-07 - the cloud issues each M300 its own WYLA support PIN (only the hash on the unit; works on agent 1.1.36+ with no release; admin reveal audited; rollback per unit). Both stay Partly until deployed, bench-proven and issued to every field unit. EM300 standalone (bench only, needs gateway software 1.1.73): a per-unit first owner password and master sign-in in place of the shared ones; nothing claimed. (2) QR caretaker checks (QR-CHECKS.md, migration 055): NZ-31 and NZ-32 - inspections and a daily plant check recorded at the plant from a revocable per-site QR code with no login, under the typed name, with a redrawn photo covered by the entry's hash chain; CP-14 note; CP-22 gap noted (the door page does not yet link the privacy notice). (3) Do Not Drink kit (NOTICE-KIT.md, migration 055): NZ-30 - the tap notice, the parents' letter and, after three clear tests, the safe-again notice prepared for the school to print and send (WSA s21(2)(f)); WYLA sends none; an append-only issued log; wording to be confirmed by John. (4) Weather and term-time reminders (REMINDERS.md, migration 056): after heavy rain (Open-Meteo, the owner's threshold), the start of each school term, and a school-holiday UV notice (NZ-31, NZ-32 notes; CP-14 note). (5) The monthly programme report (PROGRAMME-REPORT.md; NZ-30 note), the plan names Cloud Basic, Cloud Compliance and Cloud Compliance Plus (FEATURE-SETTINGS.md; Compliance + control internal), the plant view (PLANT-VIEW.md), the Bianco NXT drive profile (mapped from the maker's sibling model, not yet read on a drive; readings from the next gateway release) and the simulated Demo School site (DEMO-SITE.md) - no row; the demo's values are never evidence. No status changes (78 met, 38 partly, 116 rows). Update 2026-11-04: deployed, released and bench-proven since - see the 2026-11-04 entry.

DATE	CHANGE
2026-11-04	Still checked against fit Rev 1.11. What became true on 3-4 Nov 2026 (UTC). (1) CP-07: the per-unit WYLA support PIN bench-proven on d_fc2dea 2026-11-03 23:45-23:48 UTC (its own PIN opens the local page; refused after Back to the fleet PIN; works again after Use its own PIN again; no PIN digits in the audit rows) and issued to every M300 at 23:49 UTC (POST /api/v1/admin/support-pins/issue; d_a3ec46 and d_fc2de2 applied it within a second; d_fc2de6 and d_1eb609 are offline and keep the fleet PIN until they reconnect). Stays Partly: the two offline units and a power-cut check are left; the fleet PIN's refusal was not tested (its value is not known to the tester). (2) CP-06: the setup program with the Site PIN field built and signed (installers M300 WYLA-Setup-Installer 2026.11.3.1174, EM300 WYLA-EM300-Setup-Installer 2026.11.3.1176) and bench-proven on d_fc2dea about 00:30 UTC on 4 Nov (a weak PIN refused before step 1; no PIN stops at step 2 on a unit on the default; a good PIN set, after which only the site PIN opens the page and 1234 is refused); over the support VPN it needs --device d_xxxxxx. Stays Partly: d_a3ec46, d_fc2de2, d_fc2de6 and d_1eb609 still use the default site PIN until a setup re-run or the owner sets one. (3) Agent releases PUBLISHED: M300 1.1.49 (d_fc2dea, d_a3ec46, d_fc2de2; d_fc2de6 and d_1eb609 offline, not yet) and EM300 1.1.73, then 1.1.74 (d_aa9015), with the Bianco NXT polling, UV_UNIT_FAULT and MAINS_POWER_LOST (NZ-32 note; stays Partly: no free digital input on the standard panels, no UPS in the kit) and the EM300 per-unit master; a unit with the standard setup's pump (Bianco at address 20) but no drive wired now raises a yellow PUMP_DRIVE_COMMS_LOST, like an unwired Hallett or EMEC. EM300 1.1.74 also fixes the web guard (CP-01 note): only port-80 traffic addressed to the unit itself is redirected (addrtype LOCAL, with a fallback to the old rule); proven on d_aa9015 (port-80 traffic from the laptop gets out, /rpc-api still 403, sysinfo cut to model, serial and version). (4) EM300 standalone per-unit master and first owner password bench-proven on d_aa9015 over the VPN about 00:15-00:30 UTC on 4 Nov (--standalone writes the unit's own master and it signs in; --fleet-master removes it and its password is then refused; a re-run restores it; the published default owner password replaced with one made for the unit; a re-run fault fixed) - CP-06 note; still bench only, nothing claimed for the EM300. (5) NZ-30: the Do Not Drink kit wording checked against Taumata Arowai's schools page and notices and Health NZ's Healthline page and changed, live 4 Nov 00:47 UTC (NOTICE-KIT.md); stays Partly for its other reasons. (6) The programme report's month colour rule confirmed by John on 3 Nov (PROGRAMME-REPORT.md, no uptime threshold) - no row. (7) Demo School (simulated) live on the cloud since 4 Nov 00:41 UTC (t_demo_school, gateway d_5c1700, container wyla-demo-school; no people, lists or emails) - no row; its simulated values are never evidence. Notes rewritten on NZ-30, NZ-32, CP-01, CP-06, CP-07 and in section A.6 (follow-through). No row's own condition for a new status is met, so no status changes (78 met, 38 partly, 116 rows).

DATE	CHANGE
2026-11-05	Still checked against fit Rev 1.11. What became true on 5 Nov 2026 (UTC). (1) CP-06 / CP-07: a site PIN set on the gateway itself (M300 agent 1.1.50 published about 02:50 UTC; migration 057 applied live about 02:40 UTC; MQTT-CONTRACT.md s5.1, PER-UNIT-CREDENTIALS.md (a2)): a local page session opened with the unit's WYLA support PIN may set a new site PIN with no internet (4-8 digits, not 1234, not weak, not the support PIN); everyone is signed out; the gateway reports only a salt and hash (report/v1 reason local_pin) until the cloud's configuration carries local_page.unit_change; the cloud stores it as the site PIN, audits local_page_pin_set_on_unit (no hash) and pushes a new configuration; the on-site change wins over an owner's PIN set while the unit was offline. Bench-proven on d_fc2dea (refusals; new PIN in, old PIN and 1234 out; applied 02:43:17 UTC, config v19 acked). CP-07 also notes an open gap: a standalone EM300's own master sign-in has no rotate route (a setup re-run writes the same one again). (2) EM300 agent 1.1.75 published about 03:20 UTC (d_aa9015, the only EM300): every EM300 names itself wyla-<six hex of its device id> on the site network, found by name from a Windows PC with no router setting (CP-06 Depends on, section A.6 EM300 standalone) - no claim; superseded the same day by (4). (3) One setup program for both gateways, installer WYLA-Setup-Installer-2026.11.4.1304 (signed; PUSR 1.1.50, EM300 1.1.75; UNIFIED-INSTALLER-PLAN.md): built; it then passed a full command-line run on the bench PUSR d_fc2dea over the support VPN (found the PUSR itself, all ten steps OK); superseded by build 1393 in (5) - no row. (4) Network name on both gateways (CP-06 Depends on, section A.6 EM300 standalone; M300-FIRMWARE-NOTES.md s9, em300-firmware-findings.md s9): PUSR agent 1.1.51 and EM300 agent 1.1.76 published about 04:10 UTC and loaded 04:15-04:30 UTC on d_fc2dea, d_a3ec46, d_fc2de2, d_1eb609, d_1eb60f (PUSR) and d_aa9015 (EM300); d_fc2de6 is offline and stays on 1.1.46. Every gateway answers to wyla-<six hex of its device id>: a PUSR sets the name in the firmware's own setting, makes its DHCP client on cable and Wi-Fi give the router that name (PUSR's Wi-Fi program hard-codes USR-M300, so a hook swaps the client; about 2.5 s, same address kept) and answers LLMNR, NetBIOS and mDNS (.local) itself on its LAN port and its uplink; an EM300 now also answers mDNS (.local) and gives the router the name from the first DHCP request. `hardening.network_name = false` switches it off. Proven 5 Nov: d_fc2dea (Wi-Fi uplink) - name, hook, one DHCP client carrying the name, one socket per protocol, group membership on LAN and Wi-Fi - and the bench EM300 on the same Wi-Fi resolved wyla-fc2dea and wyla-fc2dea.local while usr-m300 no longer resolved; d_1eb60f (cable uplink, read-only check after its update) - DHCP client on the cable carries wyla-1eb60f, same address, memberships on LAN and cable, stayed online; d_aa9015 - a Windows PC on its LAN resolved wyla-aa9015 and wyla-aa9015.local, the bench PUSR got LLMNR and mDNS answers over Wi-Fi, and its DHCP Discover and Request captured over the air carried the name. NOT proven: a Windows PC plugged into a PUSR LAN port resolving the name (nothing was plugged in; membership and unit-side tests only), and the EM300's cable uplink (no cable on the bench). A finding aid only - no claim, no change to who can sign in. (5) Setup program: signed installer WYLA-Setup-Installer-2026.11.4.1393 carries PUSR 1.1.51 and EM300 1.1.76 and reads the PUSR model from module_type first, because a renamed PUSR reports its network name in module_name; installers 1174 and older may not recognise a PUSR that already has its wyla- name, so any gateway on 1.1.51 or later needs 1393 or later. Not yet done with 1393: a person running the window at a desktop, and a factory-fresh PUSR on the cable - no row. No status changes (78 met, 38 partly, 116 rows).

DATE	CHANGE
2026-11-05	Still checked against fit Rev 1.11. Later on 5 Nov 2026 (UTC). About 14:00 UTC: installer 1393 run in full on the bench EM300 d_aa9015 over the support VPN (the program found the EM300 itself; 13 of 13 steps, standalone kept, network kept); the bench PUSR d_fc2dea was given new web page and Node-RED passwords from the cloud (CP-06 / CP-07 mechanism, confirmed by the gateway 14:04 UTC, each checked with a fresh sign-in); and the console's Connections > Local page card now also shows the page's link by the gateway's name and by the address the site's router gave it, with the age of that report (cloud deployed 14:06 UTC; no gateway release, no migration; MQTT-CONTRACT.md s5.1) - a convenience, no row. About 15:00 UTC: Identify (the stack light flash that tells gateways apart) reworked after a field report of the light cycling red/yellow/green at power-up - M300 agent 1.1.52 and EM300 1.1.77 (published 15:02 UTC; bench units d_fc2dea, d_a3ec46, d_aa9015 on them): only the green lamp flashes, one write per flash, the red lamp keeps showing a fault, the flash is tied to the current start of the gateway and capped at 60 s; cloud (deployed 14:59 UTC, no migration): the identify command expires after 90 s and the console greys the button for an offline gateway (MQTT-CONTRACT.md s4.4). Bench: a 15 s identify flashed for 15 s and a 600 s request was cut to 60 s on d_fc2dea. Not safety-related and no row. Also proven today: a scheduled email report with its PDF attached delivered to a real mailbox (Test Customer, 14:31 UTC). No status changes (78 met, 38 partly, 116 rows).
2026-11-05	Still checked against fit Rev 1.11. Evening of 5 Nov 2026 (UTC). Three cloud console features built today (unit tests only; migration 058; nothing run on real equipment or a real site's records; whether 058 is applied to the live database was not confirmed when this row was written - section A.6, "Built 2026-11-05"). (1) People and organisations of a site (`api/src/site-parties.mjs`, `sites.parties`): on the Reports page an owner types the site's address and up to 12 people or organisations (role, name, organisation, phone, email, a note, a Print on reports tick); the address and the ticked entries print in the Monthly Compliance Report's header, under the site's heading of scheduled email reports and on the three record PDFs below; the note never prints; nothing is taken from the user list, the alarm recipients or the call-out lists; every save is in the audit log (`site_parties_changed`). A report signed before the details were added keeps its header as signed and is not marked changed (`api/test/same-as-signed.test.mjs`); the report's CSV zip gains site_address in _meta.csv and people_and_organisations.csv. CP-14: the "site data only" note rewritten so it stays true - these are now the only people's details a scheduled report carries, there because an owner typed them in for that purpose; stays Met (who a report names is the customer's decision). CP-22: one more reason it is Partly - the people named are not sent a notice by WYLA. (2) Compare sites (`api/src/site-compare.mjs`, for a customer with the many-sites overview): one ready-made question (power outages, water interruptions, UV treatment, gateway offline or data gaps, lab and inspections, every alarm) asked of every site over up to 366 days, as a sentence, the fifteen sites with the most, the alarms behind it, month by month and every site, with CSV and PDF; refused to a login limited to some sites; its notes say what it cannot show (a power outage only where a UPS contact is wired). It counts alarms WYLA already holds - no row. (3) Record reports as PDF (`api/src/record-reports.mjs`): a lab report and, for a positive sample, an incident record on the Lab samples page (NZ-30 note), and a logbook report on the Logbook page (NZ-31 note) - the SSB.16 records in a form to hand to a board, an inspector or the regulator; "not recorded" wherever there is no entry; WYLA sends none of them. NZ-30 and NZ-31 stay Partly for their existing reasons, plus that these PDFs are unit-tested only. Rows touched: NZ-30, NZ-31 (How, Evidence, Status reason), CP-14 (How, Evidence, Depends on), CP-22 (Status reason); section A.6 gains "Built 2026-11-05". No status changes (78 met, 38 partly, 116 rows).

DATE	CHANGE
2026-11-06	Still checked against fit Rev 1.11. Sign-in with a Microsoft or Google account, confirmed once by an emailed code (migration 059, `api/src/sign-in-methods.mjs`, SIGN-IN-METHODS.md). Why: the sign-in path looked a login up by the email address in the identity provider's token. That is sound for the provider's own accounts (password or passkey) and not for an outside account: Microsoft does not check the address of a work or school account, so anyone with their own Microsoft organisation could have claimed an owner's address (the 2023 "nOAuth" finding). Google sign-in had been switched on in Auth0 from the start and one login used it on 2026-10-24; Google does check its addresses, so the exposure was small. What is true now: an outside account is recognised by the token subject; its provider must be switched on at the server (`WYLA_FEDERATED_PROVIDERS`, unset = none); it opens a login only after an 8-digit code, sent to the address WYLA already holds, has tied it to that login (15 minutes, 5 tries, keyed hash only, never in the notifications list); after that the address it claims is ignored. Limits on asking for a code: 1 a minute and 5 a day per outside account, 5 a day per login, 4 an hour for the whole server. Each tie and removal is in the audit log (`sign_in_method_linked`, `sign_in_method_removed`); the Users page shows which logins use Microsoft or Google; a person can remove their own; removing a login removes its outside accounts. An outside sign-in never counts as the passkey (CP-08, CP-09: status unchanged, Met). The privacy notice names Microsoft and Google sign-in (CP-22: status unchanged, Partly). Not changed: Auth0 is still hosted in the United States (CP-14). Evidence: unit tests with RS256 tokens through the real verifier, and a rehearsal on a copy of the live database (25 checks). Not yet done: a real Microsoft sign-in, which needs the app registered with Microsoft and the connection switched on in Auth0 first. No row changes status; counts stay 78 met / 38 partly / 116.
2026-11-06	Still checked against fit Rev 1.11. Records lost at the gateway: LIVE 2026-11-06 23:23 UTC (unit tests only; migration 060 not applied; nothing run on a real gateway). (1) NZ-02 and CA-04 reworded: "7-day store-and-forward" was true only up to about 12 recorded readings (about 3 days at 30); the rows now say the gateway holds 7 days of one-minute rows while offline at any allowed number of recorded readings from gateway agents 1.1.53 / EM300 1.1.78, and what earlier agents held. (2) When a gateway is offline longer than its store holds it drops its oldest rows; the gateway now reports the run in its status heartbeat, the cloud keeps it (`compliance_lost_periods`, audit-log entries `gateway_records_lost` and `gateway_buffer_dropped`) and the gap log labels those periods `lost at the gateway`, in the Compliance page, the gap CSV, the signed Monthly Compliance Report (one line under the gap table) and the scheduled report; a lost gap counts against the gap limits like any other; a report signed before the loss was reported is flagged for restatement. Notes added to NZ-04, NZ-06, NZ-23, US-19, CA-04 and CA-35; section A.6 "Built 2026-11-06 (records lost at the gateway)" lists what is left, first of all the deploy order (cloud before gateways). (3) NZ-06 and NZ-23: the DWQAR 2026 reporting-rule numbering the register had flagged UNCONFIRMED is as in the 2026 Rules text - G.RR.1(d) whether results are continuous, grab or substituting grab; G.RR.5(d)(iv) the no-data periods (start, finish, duration) for level 3 continuous monitoring; G.RR.5(e) within 20 working days - and the flag is removed from both rows; NZ-06 stays Partly - not yet in Taumata Arowai's format. No row changes status; counts stay 78 met / 38 partly / 116.

DATE	CHANGE
2026-11-06	Still checked against fit Rev 1.11. Document library, rule checklist and assurance reports LIVE 2026-11-07 02:30 UTC (migration 061 rehearsed on a live-database copy then applied; unit tests plus a staged-API run on Postgres; nothing run on a real site's records yet; DOCUMENT-LIBRARY-DESIGN.md, DOCUMENT-LIBRARY.md). New module `documents` in Cloud Compliance Plus (and `control`), on by default in the `nz_rules_l2` and `nz_rules_l3` presets, not in `nz_school_as`. New rows, all Partly, since 2026-11-06, clause numbers as cited from the 2026 Rules mapping: NZ-33 Assurance Rule Declaration (G.RR.4, G.RR.7; `rp-nz`), NZ-34 Level 1 annual monitoring report (G.RR.2; `rp-nz`), NZ-35 Level 2 quarterly monitoring report (G.RR.3; `rp-nz`), NZ-36 hygiene code of practice (G.CH.2), NZ-37 laboratory register and chain of custody (G.SM.2, G.SM.3), NZ-38 test instrument register (G.SM.4, G.CM.1), NZ-39 backflow register and device tests (D1.2(b), D2.8(b), D3.BF.2-5), NZ-40 consumer complaints register (S1.6, S2.7) - the five registers rest on `data-integrity` and `data-retention` (append-only versions, hash-chained, files by SHA-256, kept 10 years); the acts they record stay the supplier's. Notes added to NZ-01 (documents are append-only and hash-chained the same way) and NZ-23 (the declaration and the level 1 / 2 reports). Section A.6 block "Built 2026-11-06 (document library ...)" lists the follow-through (deploy 061, the catalogue not yet re-checked against the primary text, the profile's new category field, the archive SPEC rows, the manual chapter). No fit revision (the fit report's requirements are unchanged; the new rows rest on existing keys). 78 met, 46 partly, 124 rows.
2026-11-07	Still checked against fit Rev 1.11. The Schedule page LIVE 2026-11-07 04:39 UTC (migration 062 rehearsed then applied; unit tests plus a staged-API run on Postgres; nothing run on a real site's records yet; SCHEDULE-DESIGN.md, SCHEDULE.md). New module `schedule` ("Schedule and to-do list") in every Compliance plan (`compliance`, `compliance_plus`, `control`), on by default at every preset and required by none: one list per site of every job WYLA already knows a due date for - logbook types, lab samples, calibration checks, document reviews, reminders and the regulator's report deadlines - with due / today / overdue by N days / done by whom, "Do it" opening the form that makes the record, the month's sheet as PDF and CSV, a column on the Sites overview; plus the page's own custom tasks and field-test checks (`schedule_tasks`, append-only `schedule_completions`). New rows, both Partly, since 2026-11-07, clauses as cited from the catalogue: NZ-41 field-test checks (T2.2, T2.3, D2.2, D2.4; `data-fields`, `data-retention`) - done only by a dated row in the field test log, the value judged against the rule set's or the owner's limit; NZ-42 report deadlines (2026 Rules G.RR.2-G.RR.7 from 2027-07-01; 2022 Rules G1 / G3 to 2027-06-30; `rp-nz`) - working days Monday to Friday without public holidays (said on the page), done when the generated or signed report for the period exists in WYLA, never that it reached the regulator. Notes added to NZ-09, NZ-23, NZ-30 and NZ-31 (the page lists their due dates; their own due arithmetic, nothing new; NZ-30 shortened to stay under the manual's row limit). No new alarm. Section A.6 block "Built 2026-11-07 (Schedule page)" lists the follow-through (deploy 062, the backfill, public holidays, the clause re-check, the archive SPEC rows, the manual chapter). No fit revision. 78 met, 48 partly, 126 rows. Review fixes the same day (unit tests): Mark as done never dated before the task or its occurrence's window; the report deadlines start at the site's first NZ profile, match a document of the period's own type, and the 2022 calendar-year report is listed as made outside WYLA (NZ-42); field-test limits keep the rule's comparison, a part month asks its share, and a done month's rows are not listed twice (NZ-41); a task done by a document counts every version; the month's sheet lists every job overdue now; 062 grants UPDATE on named columns only.

DATE	CHANGE
2026-11-07	Still checked against fit Rev 1.11. Request support / Request a feature built (unit tests only, on SQLite; migration 063 not applied; nothing deployed; no real email sent - the tests use a fake sender; SUPPORT-REQUESTS.md). The console's Help page, for every signed-in user and not a feature module: two check boxes (support, feature), a subject, a note, an optional site and up to five files (10 MB each, the document library's seven types, the bytes checked against the type); the server adds what it knows about the customer and the account (plan and modules, the person's email, name and role, the site's gateways and versions, counts, the browser's user agent), keeps the request first, then emails it to WYLA_SUPPORT_REQUEST_TO / WYLA_FEATURE_REQUEST_TO through the existing sender (attachments only under 7 MB, Reply-To the person); the WYLA admin's list and status change (audited with before and after). No regulation requires it, so no new row and no status change. Privacy: the requests hold personal data (email, name, role, user agent, the note and files); kept at least 10 years in the live database and backups (DATA-RETENTION.md s3), deliberately NOT in the write-once archive (not a regulatory record, so deletable on request like the contact list); RLS by tenant with site scoping; the privacy notice is not yet changed (CP-22: a sentence for 'Someone who contacts us' is recommended). Review fixes the same day (unit tests): at most 20 MB of files per request, one upload in flight per person and two on the server (refused before the body is read), every attempt counted toward 10 an hour, 60 MB of files a day per person and 200 MB per customer, a 32 MB cap on the console's proxy; control characters stripped before storing; UTF-8 multipart file names; partly_sent when only some addresses got the email; the confirmation promises no reply when WYLA was not emailed; the browser's own words labelled apart from the server's facts. The user manual has no Help chapter yet. 78 met, 48 partly, 126 rows.
2026-11-07	Still checked against fit Rev 1.11. Monthly report signing statement APPROVED by the owner (John Farrugia) as version `2026-11-07`, replacing `placeholder-2026-10-12` (api/src/reports.mjs ATTESTATION): "I have reviewed this report. To the best of my knowledge, it is a true and complete summary of the monitoring records held in WYLA for this site for the period shown. Where a value was not measured, or a period of records was lost or is not yet sealed, the report says so. This report does not by itself show that the water supply met every requirement. Responsibility for operating the water supply, and for any submission to a regulator, remains with the supplier." A placeholder wording is never signable on a live server (console review); the approved one is. Each signed report keeps the version and text it was signed under. Lawyer review still pending (section A.6). No status change (78 met, 48 partly, 126 rows).
2026-11-07	Still checked against fit Rev 1.11. Console review fix round 2, integrated (unit tests only, on SQLite; no migration; nothing deployed; docs/review-fix/HOOKS2-P*.md). (1) NZ-30 and the school lab rows: every recorded lab sample now runs the lab pass at once, so a total-coliforms positive raises its yellow alarm when it is recorded (it waited up to 10 minutes) and a clear re-test clears it at once; the "may be unsafe" case still opens only for E. coli detected. Silencing a gateway's alarms no longer silences a lab alarm (LAB_ codes are left out of the silence), so an E. coli or coliform alarm stays until the clear tests. (2) CP-22 / CP-23: a privacy notice whose email did not go (email not set up, or it failed) is no longer counted as sent - Recipients says "privacy notice NOT sent" and the owner can send it again; the audit row already kept the result. (3) Who is told about alarms is one answer on Today, Setup and Recipients for every role, read-only for installers and viewers, and counts the contacts kept in a gateway's own settings (the alarm router tells those only about that gateway's alarms); call-out settings can be copied between a customer's sites; help requests carry WYLA's replies; Admin has an Audit tab across customers. No regulation requires these, so no new row and no status change (78 met, 48 partly, 126 rows).

DATE	CHANGE
2026-11-07	Still checked against fit Rev 1.11. Console review fix round 3, integrated (unit tests only, on SQLite; nothing deployed; docs/review-fix/HOOKS3-B*.md). Migration 064_reminder_weekend.sql (one nullable column, reminders.weekend; apply it BEFORE the new API code, or every reminder save fails on Postgres). Record-keeping rows that cite the Compliance page and the monthly report: Compliance > Results now shows the month day by day (one cell a site day, the worst result over every calculation as a mark and a colour, a dashed outline for a day not sealed yet, each day's summary on hover or tap and as a list) - a view of the existing sealed and unsealed day results, no new record; Compliance > Today and the report's "Every day is sealed" line now say why nothing is recorded or sealed, gateway by gateway (recording switched off, not taken by the gateway yet, never connected, and when the first day will be sealed), where they said "no gateway recorded a day". Events can list every site of the customer at once (each alarm in its own site's time; customer- and site-scoped as before). The readings CSV gains `site_time` and `time_zone` beside the UTC `timestamp` (records portability; later columns move by two). All sites colours a site with jobs overdue or due today yellow, also in its server answer and CSV. Reminders may move a weekend due day to the next working day (off by default; public holidays not known). No status change (78 met, 48 partly, 126 rows).
2026-11-07	Still checked against fit Rev 1.11. Act as customer built (unit tests only, on SQLite and a fake Postgres client; migration 065_support_act.sql not applied; nothing deployed; docs/ACT-AS-CUSTOMER-DESIGN.md; section A.6 block "Built 2026-11-07 (act as customer)"). A WYLA platform admin may act in a customer's account as one of its users for 15, 30 or 60 minutes with a written reason, allowed unless the customer's owner switches it off. What changes for the rows: CP-10 / CP-11 / CP-25 (least privilege) - the session has that user's role and current sites and never more, a site-limited user stays limited, it ends when the user is removed, re-roled or switched off, and the customer-only actions (signing a report or a library document, who may sign, sign-in methods, users, roles and sites, control permissions, designations, operator certificates, the consent switch) are refused on the server in every support session, before the route runs; WYLA staff still never control a plant. CP-16 / CP-17 / CP-18 (audit) - every audit row written in a support session carries who really did it (`actor_note`, "... (WYLA support) acting as ...") and the session id; the start, the end and the owner's switch are on the customer's own audit log; the log stays insert-only; the customer can list only what WYLA support did (`?support=1`, Audit log > WYLA support only). CP-12 is not changed: an act session reaches no gateway (remote access still needs its own support session). CP-22 / CP-23 - the privacy notice is at version 3 with one paragraph on act sessions (section A.5); the placeholders remain. No status change (78 met, 48 partly, 126 rows).

DATE	CHANGE
2026-11-07	Still checked against fit Rev 1.11. All-in-one build stage 1 and the sample register v2, integrated by I1 (unit tests only, on SQLite and a fake Postgres client; migrations 066_record_packs_and_submissions.sql and 067_sample_register_v2.sql not applied; nothing deployed; docs/ALL-IN-ONE-BUILD-PLAN.md, docs/all-in-one/HOOKS-*.md, INTEGRATION-I1.md; section A.6 block "Built 2026-11-07 (all-in-one build stage 1 ...)"). New rows, all Partly (built, not deployed): NZ-43 level 1 rule set nz_t1; NZ-44 Level 3 Monthly Rules Report; NZ-45 records alarms (FIELD_TEST_OVERDUE, REPORT_DUE_SOON, REPORT_OVERDUE, COMPLAINT_OPEN); NZ-46 / NZ-47 total coliforms and MAV notification cases; NZ-48 default cadences per level; NZ-49 paper record pack with QR back-entry; NZ-50 report submission record ('Record the upload'; done = upload recorded, D-8); NZ-51 sample register v2 (typed components, sampling points, required sample ID, exact units, MAVs, several schedules); NZ-52 NZ reference data (Rule Summary List, determinands, published deadlines) and the Hinekorako rule map. NZ-42: NZ public holidays (Legislation Act 2019 s13; Holidays Act 2003 s44-45B; Matariki Act Sch 1) and the published rounds in every deadline, the weekday 'aim for' date (D-1), the 2022 level 2 quarterly and the calendar-year annual report at every level. Notes on NZ-23, NZ-34, CP-16 (alarm acknowledged is audited), and in section A.6 for NZ-30 and NZ-37. Section A.7 items 8-19 (the UNCONFIRMED items of the build). Counts 78 met / 58 partly / 136 rows.
2026-11-07	Review fixes to the all-in-one build (nothing deployed; no status changes). NZ-42: the 2022 level 3 calendar-year report cites G4 and G5 (G3 is the monthly rule; Reporting Guidance v1.2 p.4); the 2026 Rules' deadlines name G.RR.3(f)/(g), G.RR.6(e)/(f) and G.RR.7(c)/(d), with a yearly report for the one-year rules at levels 2 and 3 (made outside WYLA). NZ-51: a nitrate result in mg/L as NO3-N is judged against 11.3 (the list's Notes). NZ-48: a self-supplied building's cadences leave out VP.3(b)(ii)-(iii) and VP.4(b). NZ-45: an optional cut-over day (WYLA_REPORT_ALARMS_FROM) keeps deadlines before it from alarming; unset keeps decision D-8. Section A.7 items 12 and 13 amended, items 20-22 added. Counts unchanged (78 met / 58 partly / 136 rows).
2026-11-07	Fixes after the browser check of the local copy (unit tests only; nothing deployed; no status changes; notes in section A.6, block "Built 2026-11-07 (all-in-one build stage 1 ...)"). NZ-51: a lab schedule is met only by a sample with results for its determinands (an awaited sample shows as awaiting results), and a sample with no sampling point never meets a point-specific schedule. NZ-41 / NZ-49: a field-test check counts the whole calendar month, its first month asks its share, back-entered rows count by their own dates. NZ-44: the Level 3 Monthly Rules Report made again for a month is a new version of that month's document; the CSV leaves an unknown component ID empty. NZ-45: alarm sentences start with a capital. NZ-49: the record pack's QR codes use the console's own address when `WYLA_PUBLIC_URL` is not set; long sheet titles and cites wrap. 78 met, 58 partly, 136 rows.
2026-11-07	Fixes after the second browser check of the local copy (unit tests only; nothing deployed; no status changes; notes in section A.6, block "Built 2026-11-07 (all-in-one build stage 1 ...)"). NZ-51: a sample with only some of a schedule's determinands is named as such ("missing: ..."), still not counted; an awaited sample keeps the determinands it was sent for; a source sample above the drinking-water MAV is worded as source water, with no MAV alarm. NZ-35 / NZ-42: the Level 1 and 2 monitoring reports label each sample with the rules it serves and judge each lab rule on its own samples, one CSV row per result with its unit and MAV, "point not recorded" for a sample with no listed point; the Level 3 report lists only zone samples carrying the determinand. NZ-49: the QR address believes a forwarded host only from an allow-list (`WYLA_ALLOWED_HOSTS`). Wording only elsewhere: preset and logbook-type names instead of keys, pH, "instrument checks".

DATE	CHANGE
2026-11-07	Fixes after the third browser check of the local copy (verify-aio-ab3; unit tests only; nothing deployed; no migration; no status changes; notes in section A.6, block "Built 2026-11-07 (all-in-one build stage 1 ...)"). NZ-51 / NZ-30: one classification of a sample for the Lab register, the schedules, the Schedule page and the reports - a sample with no sampling point recorded is "point not recorded" for every point- or type-specific schedule and report rule and is never matched by its name; the two school schedules still count it as treated until its point is set; the Lab page names what each sample counts for and warns before a correction whose point would stop it counting (for example a school month turning Overdue); the Schedule page's done lab rows name the schedules and rules the sample counts for and take Next due from them. NZ-33 / NZ-34 / NZ-35: "Not answered" is counted on its own, never inside "Not complied" (front page, content, CSV). Determinand names separated by "; ".
2026-11-08	All-in-one build wave C integrated (I2; docs/all-in-one/INTEGRATION-I2.md; unit tests only; nothing deployed; migrations 068, 069, 070 not applied). New rows NZ-53 (Hinekorako upload file, 2022 format), NZ-54 (lab results import), NZ-55 (Argest-ready list), NZ-56 (evidence on request), NZ-57 (set-up with WYLA and the pre-deadline check), NZ-58 (standalone unit to cloud with its history), all Partly (`rp-nz`, `data-fields`, `data-integrity`, `data-retention`); NZ-23 Status and Evidence rewritten, NZ-34 and NZ-35 notes (the approved form is the public template); section A.6 block "Built 2026-11-08 (all-in-one build wave C, integration I2)" with the NZ-30 / NZ-51, NZ-37, CP-22 / CP-23 and EM300 standalone notes; section A.7 items 23-34. Checked against fit Rev 1.11 (no new fit revision).
2026-11-08	Review fixes to wave C (docs/all-in-one/INTEGRATION-I2.md "Review fixes"; unit tests only; nothing deployed; no migration change; no status changes). NZ-58: imported standalone records now labelled in the level 1-3 reports and the Hinekorako file's notes, the Compliance page shows their days as "sealed on import", a card row dated in the future is never stored, a refused import is decided by WYLA support (audited with the reason). NZ-53: a level 2 school site's own 2026-Q4 file proven end to end (check, writer, byte-identical template parts, openpyxl). NZ-56: the evidence export holds the signed Hinekorako upload file itself. Section A.6 follow-through: WYLA_REPORT_ALARMS_FROM before the modules go live; privacy notice v4 (CP-22 / CP-23) published before or with the deploy that turns on lab_import and hinekorako - done 8 Nov 2026 (version 4: laboratory results and files, the Hinekorako file, the evidence export). Checked against fit Rev 1.11 (no new fit revision).
2026-11-08	Fixes after the wave C browser check (verify-wave-c; INTEGRATION-I2.md section 10; unit tests only; nothing deployed; no migration change; no status changes - 78 met, 64 partly, 142 rows). NZ-53: pH written with an empty unit (section A.7 item 25 reworded), leave-out takes its samples, put back, signing refused to a platform admin, evidence file named by the signed version. NZ-54: corrections keep the import, left-out rows shown, "pH units" kept as no unit. NZ-55: tap (distribution) samples counted, source not (section A.7 item 33 reworded). NZ-58: Compliance page words from the import state, sealed-on-import days. Section A.6 wave C block: a notes paragraph.
2026-11-08	Standalone settings carry-over integrated (docs/standalone-settings/INTEGRATION.md; unit tests only; nothing deployed; migration 071 not applied; EM300 agent 1.1.80 not released; no status changes - 78 met, 64 partly, 142 rows). NZ-58: settings carried over - nothing changes on the unit at the switch; compliance recording kept by default and the drop warned; the choice audited; no secret transferred. Evidence and next step updated.

DATE	CHANGE
2026-11-08	Review fixes to the standalone settings carry-over (docs/standalone-settings/INTEGRATION.md "Review fixes"; unit tests only; nothing deployed; no migration change; no status changes - 78 met, 64 partly, 142 rows). NZ-58: compliance readings of equipment the unit no longer has are warned, need the tick on Adopt, and are never stopped by the 14-day default (it stays open for a person).
2026-11-10	Owner's decision: "Only use NZ rules for NZ location." The Monthly Compliance Report cites only the rules of the site's own jurisdiction (unit tests only; nothing deployed; no migration; no status changes - 78 met, 64 partly, 142 rows). Every section citation is tagged with its jurisdiction (api/src/reports.mjs SECTION_CLAUSES, CHANGES_CLAUSES; texts unchanged, none added); a US State's own rule (WA DOH 331-440-F, 25 Pa. Code) only for that State; a section with no citation of the jurisdiction prints with no clause; no jurisdiction set = no regulation cited. An NZ report's Chlorine, Daily statistics and Alarms and notices sections now carry no clause. NZ-23 evidence updated; REGULATOR-REPORTS.md s2. Signed versions keep the clauses they were signed with.

43 REVISION HISTORY

Every published revision of this manual is listed below, newest first. Check the version on the cover against this list to confirm you have the current edition.

v2.75 · 2026-11-10

A person nobody has invited sees the WYLA demo, read-only; an invited email's first sign-in needs a confirmed address.

- **Signing in to the Cloud Console**: **Signed in but not set up yet** becomes **Signed in but not set up yet: the demo** (uninvited sign-ins see Demo School (simulated) as a viewer, the demo bar, every change switched off, visits in the sign-in log, no Users-page login).
- **Signing in to the Cloud Console**: new section **Your first sign-in: confirm your email address** (the **Confirm your email address** screen, the sign-in service's confirmation email or Reset password, checked once; Microsoft and Google accounts unchanged).
- **Signing in to the Cloud Console**: the first time is now **Sign up** with the invited email address (adding someone in WYLA does not make their sign-in login), then the confirmation email; **Reset password** (the sign-in page's own words) is for a forgotten password. The message the Users page gives to send a new person says the same.

v2.74 · 2026-11-10

All sites has a Map view, owners and installers set a site's location, and a monthly report cites only the site's own rules.

- **All Sites and Per-site Logins**: new sections **The map** (List | Map switch, pin shapes and colours, click / double-click / keyboard, sites with no location yet, working without internet) and **Setting a site's location** (owners and installers, Setup > Site location).
- **Compliance reports**, **What the report contains**: from 10 November 2026 each section cites only the clauses of the site's jurisdiction (an NZ site: NZ clauses only, never US, Ontario, Alberta or BC); a section with none prints without one (NZ: Chlorine, Daily statistics, Alarms and notices); with no jurisdiction set the report cites no regulation and says so.

v2.73 · 2026-11-10

The stack light is on the I/O expansion card for every unit: red DO11, green DO12.

- **Specifications & I/O Reference**, **Gateway and I/O map**: the standard stack light is **DO11** (red) and **DO12** (green) on the expansion card, as every panel is wired; the main board's DO01/DO02 are no longer driven (a unit switches them off when it gets the setting), and the second outputs are **none** as standard.

v2.72 · 2026-11-10

Training videos can be shared: Copy link gives a link anyone can watch, with no sign-in.

- **Help**, **Training videos**: new step **Copy link** (on a video's card and in the pop-up); the **Who can watch** box now says which videos have a link, what the person who opens it sees, and that the manual and everything else in the console stay signed-in only.

v2.71 · 2026-11-10

The Help page is now a help library: the manual by chapter, and training videos that the search finds.

- **Help** (chapter renamed **Help: the Manual, Training Videos and Asking WYLA**): the manual's version and **Go straight to a chapter**; new section **Training videos** - the list, **Watch**, the pop-up player and its buttons; and that the whole page is open to every login, whatever its role or plan.
- **Finding Your Way in the Console**, **Searching the console**: a fifth heading, **Training videos**; a result opens the Help page and plays the video.

v2.70 · 2026-11-08

A search box in the console's top bar: pages, things to do, rules and help (built, not yet deployed).

- **Finding Your Way in the Console**: new section **Searching the console** - the box in the top bar, Ctrl+K (Cmd+K on a Mac), the four headings, rule numbers with or without punctuation, everyday words, and that it offers only what the menu would offer you.

v2.69 · 2026-11-08

EM300 software 1.1.80 released: a standalone unit's settings can come with it when it moves to the cloud.

- **Standalone EM300**: moving a unit to the cloud also brings its settings and its alarm email recipients. The unit keeps running its own settings until the owner or WYLA support chooses **Adopt the unit's settings** or **Use the cloud's**. Tested on a bench unit.

v2.68 · 2026-11-08

The console's new address and WYLA's email addresses; moving a standalone EM300: someone already a contact is now told about the unit's site, and the settings panel shows before the unit switches (built, not yet deployed).

- **The cloud console and this edition**: the console is at https://wateryoulookingat.com.
- **Help**: requests are emailed to support@wateryoulookingat.com and features@wateryoulookingat.com. **The privacy notice page**: questions go to privacy@wateryoulookingat.com. **Who gets told**: alarm emails come from alerts@mail.wateryoulookingat.com.
- **Standalone EM300**, **The unit's settings after the move**: adding someone who is already on the customer's Contacts list now adds this unit's site to their entry and says so, or says plainly that they will not be told; the panel appears as soon as the whole history is in, before the unit has restarted into cloud mode.

v2.67 · 2026-11-08

Moving a standalone EM300: the settings panel now says when the unit's people stop getting alarm emails and when adopting would stop compliance readings (built, not yet deployed).

- **Standalone EM300**, **The unit's settings after the move**: the people the unit emailed no longer get its alarm emails after the switch, until you add them as contacts; the tick also applies when the unit no longer has equipment whose compliance readings the cloud records, and that choice then stays open until a person makes it; someone who only asked to hear when alarms clear cannot be added.

v2.66 · 2026-11-08

Moving a standalone EM300 to the cloud now keeps its own settings until you choose (built, not yet deployed).

- **Standalone EM300**: new section **The unit's settings after the move** - the panel below the Move panel, **Adopt the unit's settings** or **Use the cloud's**, the three recording choices and the tick when compliance readings would stop, the 14-day default, and the people the unit emailed about alarms, added as contacts one by one or left out. Nothing changes on the unit at the switch, and no password is sent to the cloud. Needs EM300 software 1.1.80.

v2.65 · 2026-11-08

The statement before signing a Hinekorako file is approved; moving a standalone EM300 to the cloud with its history is released (EM300 software 1.1.79).

- **Hinekorako Upload File**: the statement you tick before **Sign** is the approved wording (8 Nov 2026), no longer marked as a draft.
- **Standalone EM300**: **Move a standalone unit to the cloud** works with EM300 software 1.1.79 - tested on a bench unit: nine days of card history arrived complete and checked, and the unit carried on in cloud mode with no gap.

v2.64 · 2026-11-08

Fixes after the browser check of the all-in-one build, wave C (not yet deployed): pH in the Hinekorako file, leaving a rule out and putting it back, who signs, the Argest list's tap samples, and the standalone move's wording.

- **Hinekorako Upload File**: pH has no unit in Taumata Arowai's list, so its unit is left empty and one amber item says so (no more red item, nothing to fix on the Lab page); **Does not apply - leave it out** takes the rule's lab samples with it, and **Left out of the file** has **Put it back**; only the account owner signs - WYLA staff and support may help prepare the file but cannot sign it; signing adds its own entry, so the evidence export names the file by the version you signed.
- **Lab Samples**: *pH units* (or a blank) is kept as no unit, in the form and the import; a correction of an imported sample keeps its **Original lab file** link; rows of a file left out of an import are listed with their reason; the Argest list counts treated and tap (distribution) samples, not source water, and its summary follows the months you choose.
- **Setup > Features**: the NZ Rules level 1-3 presets start the Hinekorako upload file and lab results import on where the plan has them.
- **Standalone EM300 > Move a standalone unit to the cloud**: the gateway's line on the Compliance page says its history is being imported, then when it was imported; imported days show *sealed on import* on the day strip; a refusal is given in site time and WYLA support's decision is shown.
- **Regulations and Standards Met**: updated from the register (NZ-53 and NZ-55 text; section 6 notes for the browser-check fixes; section 7 items 25 and 33 reworded; a change-log line - 78 met, 64 partly, 142 rows).

v2.63 · 2026-11-08

Review fixes to the all-in-one build, wave C (not yet deployed): imported standalone records labelled in every report and the Hinekorako file, their days shown as sealed on import, and WYLA support's two decisions when a move is stopped.

- **Standalone EM300 > Move a standalone unit to the cloud**: records from the standalone period are labelled in the level 1-3 reports and the Hinekorako upload file's notes too; the Compliance page's Record seals show their days as *sealed on import*; Check the seal is for operators and up; a card row dated in the future is never stored; when a move is stopped, WYLA support either takes the history without the records the cloud already holds or abandons the import, with a reason.

- **Report deadlines** table: the calendar year is made as the Hinekorako upload file where the Hinekorako module is on (Compliance Plus), and the level 2 quarter and level 3 month name the Hinekorako upload file beside their reports.
- **Regulations and Standards Met**: updated from the register (NZ-58 text and status note; section 6 notes for NZ-58, the deploy's report-alarm cut-over and privacy notice v4; a change-log line - 78 met, 64 partly, 142 rows).

v2.62 · 2026-11-08

The all-in-one build, wave C (integrated, not yet deployed): the Hinekorako upload file, the lab results import, the Argest-ready list for state schools, the evidence export, the Set-up with WYLA card and moving a standalone unit to the cloud with its history.

- New chapter **Hinekorako Upload File** (after Regulator Reports): your copy of the template, which file for which period, Needs your decision, who uploads it, the rules and lab samples, the check before download, sign and download (the statement is draft wording until approved), the first upload and what to do if Hinekorako refuses the file.
- **Lab Samples**: new sections **Import a results file** (CSV, Excel or a PDF with text; every sample checked, nothing saved before Save N samples; Original lab file) and **Monthly results for Argest** (a list to copy from, every calendar month, re-tests marked).
- **Regulator Reports**: new section **Evidence export** (one zip of the site's records for a period, with a manifest of SHA-256 hashes; WYLA sends it to no one).
- **Today**: new section **Set-up with WYLA** (the read-only card of set-up items).
- **Standalone EM300**: new section **Move a standalone unit to the cloud** (with its card's history, over the network or by file; labelled and sealed on import; the card is never wiped).
- **Regulations and Standards Met**: updated from the register (new rows NZ-53 to NZ-58; NZ-23, NZ-34 and NZ-35 notes; section 6 block for wave C; section 7 items 23-34 - 78 met, 64 partly, 142 rows).

v2.61 · 2026-11-07

Fixes after a third browser check of the all-in-one build (not yet deployed): one reading of every lab sample across the Lab page, the Schedule page and the reports; a warning before a correction changes what a sample counts for; Not answered counted on its own in the reports.

- **Lab Samples**: new paragraphs **What each sample counts for** (the register names the schedules each sample counts for; a sample entered before sample types is *point not recorded* for the schedules and the reports, never matched by its name, while the two school schedules still count it) and **Before you set a point** (the red warning when the point picked would stop the sample counting, for example a school month turning Overdue); names separated by semicolons; a new result row starts in the determinand's usual unit.

- **Lab Samples**, **Next sample - the status panel**: the next date is the earliest of all the schedules, and the schedules with no sample yet are named.
- **Schedule**, **A job that is done**: a done lab sample names the schedules and rules it counts for and takes Next due from them (or -).
- **Documents and Your Rules**: the declaration and the monitoring reports count **Not answered** on their own, never inside Not complied (front page, stored document, CSV summary rows).
- **Regulations and Standards Met**: updated from the register (note on NZ-51 / NZ-30 / NZ-33 / NZ-34 / NZ-35 / NZ-42; change log - 78 met, 58 partly, 136 rows).

v2.60 · 2026-11-07

Fixes after a second browser check of the all-in-one build (not yet deployed): what a lab sample with only some of a schedule's determinands means, determinands kept while results are awaited, source water above a MAV said plainly, and the monitoring reports' sample rows.

- **Lab Samples**, **Reading the register** and **What meets a schedule**: a source result above the drinking-water MAV says *Source water: 5x the drinking-water MAV - treatment must remove it* (no alarm); an awaited sample keeps the determinands it was sent for and **Add results** offers them; a sample with only some of a schedule's determinands is named (*missing:* ...) and still does not count; correcting only the point keeps the results and units.
- **Documents and Your Rules**: the monitoring reports' CSV has one row per determinand result with its unit and MAV, and each sample names the rules it serves (or says its point is not recorded).
- **Paper Record Sheets**: the address the console was opened at is used only when the server accepts it.
- **Regulations and Standards Met**: updated from the register (notes on NZ-51 / NZ-35 / NZ-42 and NZ-49; change log - 78 met, 58 partly, 136 rows).

v2.59 · 2026-11-07

Fixes after a browser check of the all-in-one build (not yet deployed): what meets a lab sampling schedule, how a field-test check counts its first month, and where the paper record sheets' codes point.

- **Lab Samples**, new paragraph **What meets a schedule**: a sample awaiting results meets no schedule yet (*awaiting results*); a sample with no sampling point recorded never meets a schedule for a point or a component (*point not recorded*, with **Set the point**).
- **Paper Record Sheets**: a field-test check's first month asks its share and the sheet says so; readings typed in for days before the check was made count; each sheet's code holds the console's address as set up, or else the address the console was opened at.
- **Schedule**, **Report deadlines**: the first level 2 quarterly report (October-December 2026) is due 1 February 2027 - 1 January 2027 is a Friday, so the Monday after it is not a working day either.

- **Regulations and Standards Met**: updated from the register (notes on NZ-51, NZ-41 / NZ-49; change log - 78 met, 58 partly, 136 rows).

v2.58 · 2026-11-07

Review fixes to the all-in-one build (not yet deployed): the level 3 calendar-year report cites DWQAR 2022 G4 and G5, and the 2026 Rules' deadline table names every reporting clause, with the yearly report for the one-year rules at levels 2 and 3.

- **Schedule**, **Report deadlines**: the 2022 calendar-year row cites G1 / G2.2 / G4 and G5 (G3 is the level 3 monthly rule); the 2026 rows name G.RR.3(f) and (g), G.RR.5(e), G.RR.6(e) and (f), G.RR.7(c) and (d), with two new rows for the one-year rules' yearly report (made outside WYLA).
- **Regulations and Standards Met**: updated from the register (NZ-42, NZ-45, NZ-48, NZ-51 notes; sources disagree items 12 and 13 amended, 20-22 added - 78 met, 58 partly, 136 rows).

v2.57 · 2026-11-07

The all-in-one Compliance Plus build, stage 1 and the sample register v2 (built and integrated 7 November 2026, not yet deployed): report deadlines that count NZ public holidays and show the published dates, Record the upload, alarms for overdue records, default cadences for your level, the level 1 rule set, the Level 3 Monthly Rules Report, paper record sheets with a code to type them in, sampling points and MAVs on the Lab page, and two new notification cases.

- **Schedule**: **Report deadlines** rewritten (working days as the Legislation Act defines them, the **Aim for** date, published dates, the 2022 level 2 quarterly and the calendar-year report at every level, the reduced January-June 2027 report; done means the upload is recorded); new sections **Record the upload**, **Alarms for overdue records** and **Default cadences for your level**.
- New chapter **Paper Record Sheets** (after the Inspection Logbook): printing, filling in, typing a sheet in from its code, keeping the scan, what WYLA keeps.
- **Compliance Calculations**: new section **NZ level 1 (a small supply, 26-100 people)**.
- **Documents and Your Rules**: new section **The Level 3 Monthly Rules Report**.
- **Lab Samples**: new sections **Sampling points, sample types and MAVs**, **A result over its limit** and **Where WYLA's rule list comes from**.
- **Inspection Logbook**: new section **Presets for supplies on the Rules (levels 1 and 2)**.
- **Regulator Reports**: new section **Components, sampling points and region**.
- **Event Log**, **Actions**: an acknowledgement is in the audit log. **All Sites and Per-site Logins**, **Compare sites**: only for logins that see every site. **Compliance Recording and Data Gaps**: a standalone gateway's days are not sealed and nothing is overdue; the Settings checkbox is **Record readings for compliance**.

- **Regulations and Standards Met**: updated from the register (the 2026-11-07 change-log entry for the all-in-one build: new rows NZ-43 to NZ-52, all partly; notes on NZ-23, NZ-34, NZ-42 and CP-16; sources disagree items 8-19 - 78 met, 58 partly, 136 rows).

v2.56 · 2026-11-07

WYLA support in your account (built 7 November 2026, not yet deployed): when you ask for help, WYLA support can act in your account as one of your users for a short time, with everything they do in your audit log; what always stays with you; the owner's switch; and the admin's Act as customer form.

- **Availability, Support Access & Your Audit Trail**: new sections **WYLA support in your account** (acting as one of your users for 15, 30 or 60 minutes; the audit note; what stays with the customer; never control; when it ends), **Switching it off (owners)** (the switch on the Users page, the link to the audit log, Audit log > WYLA support only) and **For WYLA staff: Act as customer (Admin > Support)** (the form, the customer's answer, the violet bar and Stop acting).
- **Regulations and Standards Met**: updated from the register (the 2026-11-07 change-log entry for act as customer: access control and audit, CP-10/11/16-18/22/23/25 explained; no status change - 78 met, 48 partly, 126 rows).

v2.55 · 2026-11-07

The console review fixes, round 3 (built 7 November 2026, not yet deployed): the month day by day on Compliance, why a gateway is not recording, Events for all sites at once, several sites on one Trends chart, the site's time in the readings CSV, All sites reading the Schedule, done jobs and switched-off parts on the Schedule, and weekend due days on Reminders.

- **Compliance Calculations**: new section **The month day by day** - the calendar at the top of Results, its marks and colours, the dashed outline of a day not sealed yet, each day's summary and **The month in words**.
- **Compliance Recording and Data Gaps**: new section **When a gateway is not recording** - the plain sentence per gateway (recording switched off, not taken yet, no records yet, never connected, no configuration, standalone, and when the first day will be sealed) in place of "No gateways recording here yet".
- **Regulator Reports**: **Ready to sign?** - when nothing is sealed for the month, **Every day is sealed** says why, gateway by gateway.
- **Event Log**: new section **This site or all sites**.
- **Trends & Totals**: new sections **Compare with other sites** (up to four sites on one chart) and **Downloading the readings (CSV)** (the new site_time and time_zone columns; later columns move by two).

- **All Sites and Per-site Logins**, **What the colours mean**: jobs overdue or due today make a site yellow, never No data; the tiles add up to the rows. **Today**, **Your other sites**: the same rule, and **Jobs no longer tracked**.
- **Schedule**: new sections **A job that is done** (Follow-up due / Next due / was due) and **A part switched off at the site**; the CSV's new last column follow_up and the printed month's Follow-up column.
- **Reminders**: new section **On a Saturday or Sunday** (move to the next working day; public holidays not known).
- **Features and Plans**: the Review and save job counts when a part is switched off.
- **Connections**, **Mobile plan (SIM)**: Expires in the site's time. **Finding Your Way in the Console**, **Times are the site's time**: Admin pages in UTC; Every customer in the top bar.
- **Regulations and Standards Met**: updated from the register (the 2026-11-07 change-log entry for round 3; no status change - 78 met, 48 partly, 126 rows).

v2.54 · 2026-11-07

The console as it is from 7 November 2026, 19:26 UTC (the console review fixes): the menu in five groups, a new top bar, one site picker for every page, the new Today page the console opens on, All sites in place of Fleet and the Sites overview, times in the site's time zone, plain alarm names and one set of level names, Setup's Review and push on the page, the approved signing statement and the Ready to sign? list on Reports, and a chapter for the Help page.

- **Finding Your Way in the Console** (new chapter, after **Signing in to the Cloud Console**): the menu in five groups (Today, Sites, Records, People and alerts, Setup) and who sees which page; switched-off parts shown greyed with which plan includes them; the message page for a page your role cannot open or an address that is not a page; one site picker in the menu for every page, remembered after a reload; unsaved-change warnings; the top bar (customer, site, status pill opening the Overview, the alarms waiting chip, the nobody-is-told chip, plant light, role, Help, Sign out); the phone menu; site time with the zone named; alarm names and the levels Fault (red), Warning (yellow) and Information.
- **Today** (new chapter): the tiles, jobs overdue and due today with Do it, alarms waiting, who will be told, your other sites with Switch to this site, the getting-started list and Hide this list.
- **All Sites and Per-site Logins** (was **Sites Overview and Per-site Logins**, now after **Alarm States & Notifications**): the Fleet page and the Sites overview merged into **All sites** (#/fleet and #/programme), for every customer; the Red / Yellow / No data / Green tiles as filters, the Why column, Find, State, Customer and Sort, Show gateway details, one click to open a site, the Schedule column; No data never green. The **Fleet & Map View** chapter is removed.
- **Help: Asking WYLA for Support or a Feature** (new chapter, after **Availability, Support Access & Your Audit Trail**): the manual link and emergency steps, the form (What you need, Reply to (email), Subject, Note, Site, up to 5 files), what WYLA adds, Your requests and replies, and the message a WYLA platform admin sees.

- **Event Log**: the State and Level filters, the columns as they are now, acknowledged by whom and when, silenced until and Un-silence, repeated alarms grouped, Real fault / False alarm with Undo.
- **Setup / Configure (Installer)**: **Review and push** shown on the page, Push these settings / Cancel, the saved settings reloaded after a push, the offline wording ("Saved as version N ... gets the new settings when it next connects"), the unsaved-edit warning, and the **Who is told about alarms** panel.
- **Alarm Call-out**: the **Who gets told** table on Recipients as the one answer used on Today, Setup and the top bar; the per-level grid under Advanced.
- **Regulator Reports**: the site comes from the menu; the month box starts at the site's first month with records; the plain headline (Compliant, Not compliant, Not enough data, Not judged) and the day strip; **Ready to sign?**; months with no records cannot be signed; signed files first, drafts folded away; the signing statement approved as version 2026-11-07 (the text quoted).
- **Lab Samples**: the new yellow alarm **Coliforms found in a lab sample**, raised when the sample is recorded and kept until three clear tests, separate from **A lab sample is due soon**.
- **Introduction**, **System Overview Dashboard**, **Alarm States & Notifications**, **Schedule** (Add a job, Remove this task, the site from the menu), **Documents and Your Rules**, **Compliance Recording**, **Compliance Calculations**, **Calibration**, **Reminders**, **Plant View**, **Operator Certificates and Control Changes**, **Shift Log** and **Features and Plans**: the site from the menu's picker, greyed parts, the new page names.
- **Regulations and Standards Met**: updated from the register (the 2026-11-07 change log entries for the approved signing statement and the console review fixes; 78 met, 48 partly, 126 rows).

v2.53 · 2026-11-07

The Schedule page (new on 7 November 2026, not yet used at a real site): every job with a due date on one list per site - what is done, what is overdue and by how long - in the new chapter Schedule; and Cloud Compliance Plus now includes every module, including any added later.

- **Schedule** (new chapter, after **Documents and Your Rules**): what the page is and why nothing is ticked without a record behind it; the columns and the status chips (overdue by N days, due today, due in N days, upcoming, done on a date by a person), the order of the list and the 30 days a done job stays on it; where the jobs come from (logbook inspections, lab samples, calibration checks, document reviews, reminders, report deadlines, field-test checks, your own tasks) and what makes each one done; the summary chips and the filters Overdue / This week / This month / Done / All; **Do it** and the page each job opens; **Mark as done** for your own tasks only, with a note, never dated before the task existed; **New task** (once, every N days, weekly, monthly, yearly; a linked document type done by a new version); **New field-test check** (determinand, sampling point, how often, the rule set's limit or your own, the field test log in the Document library, within / outside limit); report deadlines in working days (Monday to Friday, public holidays not taken out; the 2022 Rules to 30 June 2027, then the 2026 Rules; the 2022 calendar-year annual report made outside WYLA); **Print this month** and **Download CSV**; the Sites overview **Schedule** column; who can do what; no new alarms; which plans have it; and Things to know.

- **Features and Plans** - **The modules**: the row **Schedule and to-do list**; **Your plan**: Cloud Compliance names the schedule, and Cloud Compliance Plus is now **every module**; **Cloud Compliance Plus: every module, now and later** (new section - John's decision of 7 November 2026: a Plus customer has every built module whatever list was saved; a WYLA administrator moves a customer to Custom to take a module away; an owner can still switch any module off at a site); **Presets**: the schedule starts on at every preset.
- **Regulations and Standards Met**: updated from the register - new rows NZ-41 (field-test checks) and NZ-42 (report deadlines), both Partly, since 2026-11-07; notes on NZ-09, NZ-23, NZ-30 and NZ-31 (the Schedule page lists their due dates); a "Built 2026-11-07 (Schedule page)" block in section 6 and a 2026-11-07 change log entry (78 met, 48 partly, 126 rows).

v2.52 · 2026-11-07

The document library, the rule checklist and the three assurance reports of the NZ Rules (live 7 November 2026, not yet used at a real site): the new chapter Documents and Your Rules, the module in Features and Plans, and the supply category on the regulatory profile.

- **Documents and Your Rules** (new chapter, after **Record Sealing**): what the library is and why versions are never edited (Water Services Act 2021 s179); switching the module on (Cloud Compliance Plus; on by default with the NZ Rules presets, off at a school on the Acceptable Solution); the supply category and population on the Reports page and what levels 1, 2 and 3 and the modules mean (rule 6); the **Your rules** page - the status chips, the evidence column, answering a supplier rule yes / no / not applicable with a note, the prompt when the profile is not set, the line on the Compliance page; the **Documents** page - the groups, New document and Upload a file, the form and table fields, attached files (PDF, JPEG, PNG, CSV, text, Word, Excel; 15 MB each), Open with the versions list and the chain check, New version, Sign version N (the fresh passkey sign-in and the "changed since you opened it" message), Retire, Download PDF and the CSV list; review dates and the alarms **DOCUMENT_REVIEW_DUE** (yellow) and **DOCUMENT_REVIEW_OVERDUE** (red); the organisation-wide documents (training register, hygiene code, laboratory register) and what a site-limited login can do; the Assurance Rule Declaration (a compliance year 1 July to 30 June, or a month at level 3), the Level 1 Annual and Level 2 Quarterly Monitoring Reports - what each holds, rule numbers on every line, kept and signed as controlled documents, never submitted by WYLA; the table of the sixteen document types and the three generated ones with their purpose and rules; and What it does not do.
- **Features and Plans** - **The modules**: the row **Document library and rule checklist**; **Your plan**: Cloud Compliance Plus names it; **Presets**: the NZ Rules presets start it on.
- **Regulator Reports** - the regulatory profile's new **Supply category (NZ Rules)** field.
- **Regulations and Standards Met**: updated from the register - new rows NZ-33 to NZ-40 (the Assurance Rule Declaration, the level 1 annual and level 2 quarterly monitoring reports, the hygiene code, the laboratory register, the test instrument register, the backflow register and the consumer complaints register; all Partly, since 2026-11-06), notes on NZ-01 and NZ-23, a "Built 2026-11-06 (document library ...)" list in section 6 and a third 2026-11-06 change log entry (78 met, 46 partly, 124 rows).

v2.51 · 2026-11-06

Records lost at the gateway: an honest account of what a gateway holds while it is offline (7 days up to 32 recorded readings), and a fourth data-gap cause when an outage outlasts it (gateway software PUSR 1.1.53 / EM300 1.1.78). Standalone EM300: records written to the card without internet, the card warned about before any history goes, and card sizing.

- **Compliance Recording and Data Gaps**: **Records lost at the gateway** (new) - the gateway holds 7 days of one-minute records while offline for a site with up to 32 recorded readings with ordinary names (about 4 days at the extreme of 32 readings with the longest names), and drops the oldest when an outage lasts longer; from gateway software PUSR 1.1.53 / EM300 1.1.78 it tells the cloud which period was dropped, and the cloud labels those minutes *lost at the gateway* in the gap log and the gap CSV (they still count against the gap limits), prints one line under the gap table of the Monthly Compliance Report, writes an Audit log entry (*gateway_records_lost*), and shows *rows lost at the gateway* on the Compliance page status line and as a chip in Admin > Fleet for 30 days; what earlier gateway software held and showed; a run the cloud cannot believe (*gateway_records_lost_refused*); **Messages dropped while offline** on the gateway's page. The gap-cause table, the status line under **Recording settings**, the gap CSV, **What a seal is** (the 7-day wait, stated honestly), **The data gaps section** (the line under the table) and **Corrections and restatements** (a changed gap cause flags a signed month) brought up to date.
- **Scheduled Email Reports** - **What goes in**: the Data gaps section carries each gap's cause, including *lost at the gateway*.
- **Standalone EM300 (no cloud)**: **When the card comes out** - the one-minute records wait on the unit itself (up to 7 days) and are written to the card when it is back; the 15-minute snapshots and alarm events wait in memory, and a power cut while the card is out loses those. **When the card fills up** rewritten - **SD card nearly full** (yellow) now comes on when less than about a tenth of the card (or 1 GB) is free, before any history is removed; only below 5 % or 512 MB free (counting room reusable inside the readings file) is the oldest day of readings removed, about one old day per new day, and the alarm then names the oldest day still on the card; **SD card full** (red) unchanged at 64 MB. **Choosing a card** (new) - a 32 GB card holds more than ten years for any site (about 1.1 MB a day at 8 recorded readings, 1.8 MB at 15, 3.6 MB at 30), 8 GB suits only the smallest sites, use an industrial-grade card, and the card is the only copy of a standalone unit's history, so download it regularly. **History on the card and downloads**: the one-minute records are written to the card with or without an internet link (unit software 1.1.78 and later).
- **Regulations and Standards Met**: updated from the register - NZ-02 and CA-04 reworded (the gateway's offline store, stated honestly), notes on NZ-04, NZ-06, NZ-23, US-19, CA-04 and CA-35 (records lost at the gateway, live from 6 November 2026 with gateway software PUSR 1.1.53 / EM300 1.1.78), the DWQAR 2026 reporting-rule numbering in NZ-06 and NZ-23 confirmed and its flag removed, a "Built 2026-11-06" list in section 6 and a second 2026-11-06 change log entry; no status changes (78 met, 38 partly, 116 rows).

v2.50 · 2026-11-06

Signing in to the cloud console with a Microsoft or Google account, confirmed once by a code emailed to the address of your WYLA login.

- **Signing in to the Cloud Console**: three new sections. **Signing in with Microsoft or Google** - Continue with Google, and Continue with Microsoft where it is switched on; the first time, the Confirm it is you screen emails an eight-digit code (15 minutes) to the address of your WYLA login; why the code is needed. **If the code does not arrive** - the same message whether or not the address is a login; one new code a minute, five a day; only the newest works and five wrong tries cancel it; a code you did not ask for. **Your sign-in methods** - the panel on the My alarms page with Remove; Signs in with on the Users page; the not-switched-on screen; a Microsoft or Google sign-in never counts as your passkey for signing a report or a control change.
- The privacy notice (page and PDF) now says what is kept when you sign in with a Microsoft or Google account: which provider, its id for your account and when you confirmed it; never the code.
- **Regulations and Standards Met**: updated from the register (CP-08, CP-22 and the change log; no status changes, 78 met / 38 partly / 116).

v2.49 · 2026-11-05

Three additions to the cloud console from 5 November 2026: the people and organisations of a site, printed on its reports; Compare sites, one question asked of every site; and the lab register, a positive sample's incident record and the logbook as PDF reports.

- **Regulator Reports**: **People and organisations of a site** (new) - the card on the Reports page with the site address and up to 12 entries (role, name, organisation, phone, email, a note, **Print on reports**); owners change it; where the ticked entries print; the note never prints; only add people who expect it; a report signed earlier keeps its header as signed. **The Reports page**, **What the report contains** (Header) and **Draft files** (site_address in _meta.csv, people_and_organisations.csv) brought up to date.
- **Scheduled Email Reports** - **What goes in**: **What a report never carries** rewritten - the site address and the people an owner ticked **Print on reports** now print under each site's heading; nothing is taken from the user list or the alarm recipients.
- **Sites Overview and Per-site Logins**: **Compare sites** (new) - the ready-made questions, the dates (at most 366 days), the answer (a sentence, the fifteen sites with the most, the alarms behind it, month by month, every site), Download CSV and Download PDF, what the numbers cannot show, and that a login limited to some sites cannot open it.
- **Lab Samples**: **The lab report and the incident record (PDF)** (new). **Inspection Logbook** - **What the page shows**: the logbook report (PDF). Each carries the Report branding, the site address and the people marked for reports.
- **Features and Plans** - **The modules**: the four rows these belong to.

- **Regulations register**: notes on NZ-30 and NZ-31 (the PDF reports), CP-14 (what a scheduled report carries, kept true) and CP-22 (people named on reports are not sent a notice), a "Built 2026-11-05" list in section 6 and a third 2026-11-05 change log entry; no status changes (78 met, 38 partly, 116 rows).

v2.48 · 2026-11-05

Identify (flashing a gateway's stack light to tell it apart) now flashes the green lamp only, never carries over a restart, and is greyed out for an offline gateway (PUSR software 1.1.52, EM300 software 1.1.77).

- **Connections** - **Local page**: **Identify - finding a gateway by its light** (new) - what the button on Setup does, that only the green lamp flashes while the red lamp keeps showing a fault, that the button is greyed out for an offline gateway and a request not received within 90 seconds is dropped, and that a flash no longer carries over a restart.
- **Regulations register**: the 2026-11-05 change log entry extended (Identify reworked; a scheduled email report with its PDF attached proven to a real mailbox); no status changes (78 met, 38 partly, 116 rows).

v2.47 · 2026-11-05

The Connections page now shows three ways to open a gateway's own page: its own address, its name, and the address the site's router gave it.

- **Connections** - **Local page**: **Finding the page's address** rewritten - the card now shows up to three lines: **Address on the site network** (for a laptop plugged into the gateway), **By name** (with the .local form beside it) and **Address from the site router** (with the time of the gateway's last report, because a router can hand out a different address later); which to use, and that these links only open the gateway's own local WYLA page, not this app.
- **Regulations register**: the 2026-11-05 change log entry extended (the setup program run in full on a bench EM300, a bench gateway given new passwords from the cloud, and this card); no status changes (78 met, 38 partly, 116 rows).

v2.46 · 2026-11-05

Every gateway now has its own name on the site network, so its page opens by name (PUSR gateway software 1.1.51, EM300 software 1.1.76), and the one setup program for both gateways is installer 2026.11.4.1393.

- **Connections** - **Local page**: **Opening the page by the gateway's name** (new) - http://wyla-xxxxxx:1880/wyla or http://wyla-xxxxxx.local:1880/wyla from a computer on the same network, where xxxxxx is the last six characters of the gateway ID shown in the app and on the label; the router's device list shows the same name; if the name is not found on a network, the address still works; not yet checked from a computer plugged into a PUSR gateway's own LAN port.
- **Standalone EM300** - **The local website**: the name now comes with unit software 1.1.76, also answers with .local on the end (http://wyla-xxxxxx.local:1880/wyla/) and is given to the router from the unit's first request; what to do if the name is not found; not yet checked on a unit joined to the site network by cable.
- **Connections** - **Running the setup program**: use installer WYLA-Setup-Installer-2026.11.4.1393 or later (one program for both gateways, PUSR 1.1.51 and EM300 1.1.76); an older setup program may not recognise a gateway that already has its new name; what has been checked. The advice to keep using the two older installers is removed. **Setting the site PIN in the setup program** points to the same installer.
- **Regulations register**: the network name notes on CP-06 and in section 6 (EM300 standalone) brought up to date for both gateways, with what is and is not proven, and the 2026-11-05 change log entry extended; no status changes (78 met, 38 partly, 116 rows).

v2.45 · 2026-11-05

What became true on 5 November 2026: WYLA support can give a site a new local page PIN on the gateway itself with no internet (PUSR gateway software 1.1.50), every EM300 has its own name on the site network (EM300 software 1.1.75), and one installer for both gateways (2026.11.4.1304, not sent out yet).

- **Connections** - **Local page**: if nobody on site remembers the site PIN and the gateway has no internet, WYLA support can sign in on the gateway's own page and give a new PIN on the spot; everyone is signed out, WYLA keeps it as the site PIN when the gateway is next online, and the card says *Set on the gateway by WYLA support on* the date; finding the page's address (the card, or ipconfig's Default Gateway).
- **Connections** - **Running the setup program**: one installer for both gateways, WYLA-Setup-Installer-2026.11.4.1304 (PUSR 1.1.50, EM300 1.1.75): it says which gateway it found, asks when it finds none, and replaces the PUSR-only installer in place (same Start menu entry and log); still on the bench, so keep using 2026.11.3.1174 / .1176 until WYLA sends it.
- **Standalone EM300** - **The local website**: the unit's own name, wyla- and the last six characters of its ID (for example http://wyla-aa9015:1880/wyla/ from a Windows computer on the same network); a forgotten password is reset by an owner on Users. **From unit software 1.1.73**: no way yet to give a unit a new master sign-in.
- **Regulations register**: notes on CP-06 and CP-07, section 6 (EM300 standalone; per-unit credentials follow-through) and a 2026-11-05 change log entry; no status changes (78 met, 38 partly, 116 rows).

v2.44 · 2026-11-04

The EM300 standard setup names the school kit's D0404R inputs for the power-cut (UPS) and UV unit alarms.

- **NZ Schools** - **Power cut and UV unit alarm inputs**, What you need: the standard setup now names the D0404R's input 1 (2-DI0) for the UPS and input 2 (2-DI1) for the UV unit, both off until the contact's wiring is set; the A0800I must be clipped on first.

v2.43 · 2026-11-04

The NZ school kit: the EM300 with an A0800I card and a D0404R card, so the power-cut (UPS) and UV unit alarm inputs always have a free input.

- **NZ Schools** - **Power cut and UV unit alarm inputs**, What you need: the school kit's D0404R card gives four free digital inputs; the UPS itself is bought separately; on a PUSR M300 panel only DI02 is free, at a site with no water softener.

v2.42 · 2026-11-04

Sites overview: double-click a site's row to open it on the matching page; the console fixes of 4 November 2026.

- **NZ Schools** - **Opening a site from the overview** (new): double-click Site, State or Why for the Plant view, Last contact for the Overview, Open alarms for the Event log, Compliance today for Compliance, Lab for Lab samples and Logbook for the Logbook, with that site already chosen.
- **Customer selector**: two quick switches no longer mix one customer's sites into another's page; a customer with no gateways shows an empty Sites overview; the gateway list names the gateway when a site has more than one.

v2.41 · 2026-11-04

What became true on 3-4 November 2026: gateway software PUSR 1.1.49 and EM300 1.1.73 / 1.1.74 published, the setup program with the Site PIN box (installers 2026.11.3.1174 and 2026.11.3.1176), per-unit support PINs given to the PUSR gateways, the EM300 web guard fix, and the Do Not Drink kit wording checked.

- **Connections**: **Setting the site PIN in the setup program** is now in installer 2026.11.3.1174 (EM300 2026.11.3.1176); over the support VPN give **--device**; gateways set up before 3 November still open with the default PIN until the setup program is run again or a site PIN is set. **WYLA support credentials**: every PUSR gateway was given its own support PIN on 3 November 2026; one that was offline takes it when it next connects.

- **Standalone EM300**: no shared sign-in from unit software 1.1.73 (published 3 November; 1.1.74 on 4 November) with setup installer 2026.11.3.1176, proven on the bench unit.
- **Security**: from EM300 software 1.1.74 the web guard catches only port-80 traffic addressed to the unit, so a laptop or PLC whose internet runs through an EM300 reaches web sites on port 80 again.
- **Alarm Inputs: Power Lost and UV Unit Alarm**: the new alarm types come with PUSR 1.1.49 / EM300 1.1.73, published 3-4 November 2026.
- **Specifications & I/O Reference**: the Bianco NXT drive readings arrive from PUSR 1.1.49 / EM300 1.1.73; a standard pump with no drive wired raises a yellow pump drive communication alert.
- **Do Not Drink Kit**: the wording was checked against Taumata Arowai and Health NZ on 3 November 2026; the handwashing line is Taumata Arowai's.
- **Regulations register**: notes on NZ-30, NZ-32, CP-01, CP-06 and CP-07 and the follow-through brought up to date; CP-06 and CP-07 stay Partly (field units still on the default site PIN; two offline units still to take their support PIN, and a power-cut check); no status changes (78 met, 38 partly, 116 rows).

v2.40 · 2026-11-03

The plant view, the plant-room QR code for caretakers, the Do Not Drink kit, reminders after heavy rain, at the start of term and in the school holidays, the monthly programme report, the new plan names, and per-unit PINs. Cloud parts in the console from 3 November 2026; the setup program's site PIN, the EM300 sign-ins and the pump drive readings need the next releases.

- **Plant View** (new chapter): the treatment train from source to tap, what each block shows and where it comes from, the colours (red and yellow from the block's alarms, yellow for a device not replying, a loop fault or a UV unit not treating, grey offline or not live, dashed not fitted), and the phone layout.
- **Plant-room QR Code (Caretaker Checks)** (new chapter): making, printing, replacing and switching off the code; the door page with no login (daily check, an inspection, a job that is due, an optional photo redrawn without its location); what goes into the logbook; treat the sign like a key.
- **Do Not Drink Kit** (new chapter): the details the owner fills in once, the tap notice and the letter, safe again only after three clear tests in a row, the record of every notice prepared; WYLA never sends any of it.
- **Reminders**: new section on the three schedules after heavy rain (the owner's mm, Open-Meteo), at the start of each school term (the Ministry's dates, the school's own first day) and "School holidays: keep the UV running" (a yellow notice, not an alarm); the Watching state.
- **Sites Overview and Per-site Logins**: the monthly programme report (PDF and CSV, the colours for a month, WYLA's own rule); **Scheduled Email Reports**: the Programme report section.
- **Features and Plans**: the plans are now Cloud Basic, Cloud Compliance and Cloud Compliance Plus (Standalone is the EM300, not a cloud plan; Compliance + control is internal); the plant view never switches off; the QR code, the kit and the new reminders in the modules table. Plan names updated in **Reminders** and **Scheduled Email Reports**. **NZ Schools on Their Own Supply**: More for schools.

- **Connections**: setting the site PIN in the setup program (next build: refused if easy to guess, stops at step 2 without one, attention when not claimed); easy-to-guess PINs refused on the Local page card and Use the default PIN again for WYLA administrators only; WYLA support credentials on Admin > Fleet (a support PIN per unit, every look audited; no values printed). **Standalone EM300**: no shared sign-in from unit software 1.1.73 (not released).
- **Specifications & I/O Reference**: the Bianco NXT pump drive is mapped (from the maker's sibling model, not yet checked on a drive; readings with the next gateway release).
- **Regulations register**: notes on NZ-30, NZ-31, NZ-32, CP-06, CP-07, CP-14 and CP-22; no status changes (78 met, 38 partly, 116 rows).

v2.39 · 2026-11-03

Scheduled reminders: friendly emails before a job is due, with a Mark as done button that needs no sign-in. In the console from 3 November 2026.

- **Reminders** (new chapter, owners and caretakers): who can do what; setting one up (a job of your own, a logbook inspection or the lab sample); the schedules (every N days, weeks or months counted from when it was last done, fixed dates, after N hours or litres, or when the logbook or the lab register says); the emails (3 days before, on the day at 08:00 site time, every 2 days while overdue, at most 5 times; only the newest; reminders, not alarms); who gets them and new outside people told first; the Mark as done button (no sign-in, works once, 60 days, opening it changes nothing; a logbook reminder adds the logbook entry, a lab reminder records no result); stopping them; History.
- **Inspection Logbook** and **Lab Samples**: emailing someone before an inspection or a sample is due, and what Mark as done records on each page.
- **Features and Plans**, **NZ Schools on Their Own Supply**: the new module, in the Compliance plans and on to start with in the NZ school preset; existing organisations get it when WYLA adds it.
- **Regulations register**: notes on NZ-30, NZ-31, CP-14 and CP-22; no status changes (78 met, 38 partly, 116 rows).

v2.38 · 2026-11-03

Scheduled email reports; the sites overview turns a site red for a day not met and for the lab and logbook; an E. coli positive opens a "may be unsafe" case; logins switched off with their only site. In the console from 3 November 2026.

- **Scheduled Email Reports** (new chapter, owners): schedules to people outside WYLA - sites, recipients, weekly, monthly, when the month closes or when signed, PDF or 30-day link, the sections and why some are greyed out, the cover message; signed reports sent automatically once signed, exactly as signed, never unsigned; new recipients told first and every email with a no-sign-in stop link; Send a test to me, Preview PDF, Stop and archive; the Sent log and what each result means; Report branding (PNG or JPEG up to 500 KB, redrawn on upload, no SVG; a per-site override; the first-page preview).

- **Sites Overview and Per-site Logins**: a compliance day not met (today or yesterday) turns the site red, with the reason; the new **Lab** and **Logbook** columns and the colours they give; the **Yesterday: not met** chip. New sections: when a site is archived or deleted, logins limited only to it are switched off and others lose it; switching a login back on; a role change keeps the sites.
- **Lab Samples**: at a New Zealand site an E. coli positive also opens an **E. coli detected in a laboratory sample - drinking water may be unsafe** case with a draft and clocks (WYLA never sends it), and the page says whether a case opens at your site; the Ministry's three-clear-tests wording quoted exactly.
- **Inspection Logbook**: the preset names now read "the Taumata Arowai schools-page checks"; the filter, UV, tank, backflow and pipe intervals are Taumata Arowai's guidance for schools, not Ministry of Education requirements (re-checked 3 November 2026, intervals unchanged); two checks WYLA does not schedule.
- **NZ Schools on Their Own Supply**, **Regulator Notifications**, **Regulator Reports**, **Features and Plans**: Regulator reports also opens the E. coli case; the new trigger in the notices table; emailing the signed report; the new module in the Compliance plans.
- **Regulations register**: notes on NZ-23, NZ-30, NZ-31, NZ-32, CP-14, CP-22, CP-23 and CP-25; no status changes (78 met, 38 partly, 116 rows).

v2.37 · 2026-11-03

NZ schools: lab samples, the inspection logbook, the sites overview and per-site logins, the school rule sets and two alarm inputs. Live in the console from 3 November 2026.

- **Lab Samples** (new chapter): the sampling schedule from the owner's answers (state school monthly, school holidays included; 3-monthly or monthly by population), recording samples and adding results later, how results are read (clear, positive, ask the lab), three clear tests after a positive, the E. coli alarm and what to do, corrections, and the register and Argest CSVs.
- **Inspection Logbook** (new chapter): the two school presets and their intervals, more often but never less, switching a type off, up to 20 own types, outcomes (action needed stays flagged), the due and overdue alarms, corrections and the CSV.
- **Sites Overview and Per-site Logins** (new chapter): one row per site in red, yellow or green and why, filters and CSV; limiting a user to some sites on the Users page, what a limited user sees and what is still open before schools are kept apart this way.
- **NZ Schools on Their Own Supply** (new chapter): the school preset (it starts with Compliance calculations and Regulator reports on - keep them on), the Acceptable Solution and level 2 self-supplied rule sets, the lamp lit level and rated flow (1 L/min = 0.06 m3/h), the clause list, the rated-flow alarm, the "UV lamp out while water flowed" case (your judgement) and the school or kura tick with the Ministry of Education / NZSPA contact.
- **Alarm Inputs: Power Lost and UV Unit Alarm** (new chapter): the MAINS and UVF inputs, normally open or closed (0.5 high or low), what is needed, gateway versions and what to do.

- **Features and Plans**, **Compliance Calculations**, **Regulator Notifications**: the lab register, logbook and overview are built; the NZ school preset starts with calculations and reports on; the two school rule sets and the UV case added. Existing organisations get the lab register, logbook and overview only when WYLA adds them to the plan.
- **Regulations register**: new rows NZ-25 to NZ-32 and CP-25, all Partly until deployed (78 met, 38 partly, 116 rows).

v2.36 · 2026-11-03

New chapter: Features and Plans - which modules your organisation has and which each site uses.

- **Features and Plans** (new chapter): the two screens (your plan, set by WYLA; each site's features, set by your owner), presets by regulator and the modules they require, 30-day trials (only where WYLA allows them, once per module), what never switches off, and the red banner when a site's rules need a module the plan lacks. In the live console from 3 November 2026. Switching off Text and voice alarms stops texts and calls for that site; people who chose text only get alarms by email.
- **Regulations register**: a dated note that sites carry a preset whose required modules the customer cannot switch off, and that switching a module off never stops recording, alarm emails or data-gap tracking (texts and calls stop where Text and voice alarms is off). No status changes (78 met, 29 partly).

v2.35 · 2026-10-31

Copyright notice: Cutting Edge Integration.

- Page footers and back cover: **© 2026 Cutting Edge Integration. All rights reserved.** The same notice now appears in the console, the standalone unit's website, alarm emails, the setup programs and the Licence Generator.

v2.34 · 2026-10-31

WYLA staff: the Licence Generator makes standalone licences on the laptop.

- **Standalone EM300 (no cloud)**, **For WYLA staff**: **Issuing a licence on the laptop** - the WYLA Licence Generator signs a licence with no internet, checks it as the unit will, saves the licence file, and records it in the WYLA cloud once online.

v2.33 · 2026-10-30

Standalone EM300 with no internet at the site: the licence file.

- **Standalone EM300 (no cloud)**: new section **No internet at the site: a licence file** - Download the licence in the console, choose it under Licence file in the setup program (or --licence-file); the card gets the licence with no cloud.

v2.32 · 2026-10-30

PUSR panel: tank level and pressures on the I/O card's AI11-AI14; EM300 UV lamp current on by default.

- **Specifications & I/O Reference**: the Rev 1 panel's tank level and pressures are on the I/O card - AI11 tank level, AI12 pre-filter, AI13 post-filter, AI14 system pressure (the standard setup since 30 October 2026) - and the panel's fuses and power supply are listed.
- **EM300 Wiring & I/O**: the UV lamp current (G2) is on by default at 0-1 A, the same as on the PUSR; a site without UV switches it off.

v2.31 · 2026-10-30

New chapter: EM300 Wiring & I/O - the standard EM300 panel and its door drawing.

- **EM300 Wiring & I/O** (new chapter): the base unit and its cards (the A0800I first), the standard wiring of every input, relay and RS-485 port with its default range, the stack light, serial equipment addresses, spare inputs, the door drawing, and what is still to be proven on the bench.
- **Specifications & I/O Reference**: the EM300 paragraph points to the new chapter.

v2.30 · 2026-10-30

Standalone EM300: a new unit signs in as admin / 123456789 and asks for a new password; WYLA master sign-in.

- **Standalone EM300 (no cloud)**: a new unit's website has one owner, **admin** / **123456789**, which must choose its own password at the first sign-in (the one-time setup code is gone); WYLA support has a master sign-in on every standalone unit, shown as **wyla-master** and audited (unit software 1.1.71).
- **Regulations register**: the EM300 note on default passwords (CP-06) rewritten; no status changes (78 met, 29 partly).

v2.29 · 2026-10-30

Standalone EM300: replacing a unit's SD card.

- **Standalone EM300 (no cloud)**: new section **Replacing a standalone unit's card** - a new, empty card and the setup program's standalone run again; the history stays on the old card. **Setting a unit up as standalone** now says a card holding files is refused, not erased.
- **Regulations register**: no status changes (78 met, 29 partly).

v2.28 · 2026-10-30

EM300: setup only on tested firmware; a wrong SD card never blocks the unit's own card.

- **Setting up a gateway**: the setup program sets up an EM300 only on firmware WYLA has tested (2X04 today) and stops before changing anything on any other firmware.
- **Standalone EM300**: a card put in by mistake is neither formatted nor used (proven with a real card holding a file, at power-up and with the power on); after a wrong card the unit checks for its own card every 10 minutes (unit software 1.1.69).
- **Regulations register**: no status changes (78 met, 29 partly).

v2.27 · 2026-10-30

Standalone EM300: a picture of the unit and its I/O modules on the Channels page.

- **Standalone EM300 (no cloud)**: new section **The unit and its I/O modules** - the base unit and every module clipped on, each terminal in use, spare, stack light, output or expected and not found; adding a module needs no setting up, and **Look for modules again** finds one without a restart.
- **Regulations register**: data-gap alarms now judge the last minute of each site day against that day; no status changes (78 met, 29 partly).

v2.26 · 2026-10-30

Standalone EM300: the unit's settings - inputs, spare inputs and serial equipment - changed on its own website.

- **Standalone EM300 (no cloud)**: new sections **Changing the unit's settings: inputs** and **serial equipment**, and **Trying a change, keeping it, undoing it** - owners change channels, set spare inputs up as recorded channels, and add mapped Modbus equipment by port and address; every change is tried for 10 minutes, kept or undone, audited, and copied read-only to WYLA.
- **Regulations register**: the standalone notes record that settings changes are owner-only and audited on the card. No status changes (78 met, 29 partly).

v2.25 · 2026-10-30

EM300: the firmware's sign-in-free pages kept off the network; a card with files is never formatted.

- **Security**: from EM300 unit software 1.1.63 the unit keeps the two pages its firmware answers without a sign-in (modem, SIM and mobile-network details) off the site network.
- **Standalone EM300**: the unit never formats a card that holds files - only a blank or empty card is prepared.
- **Regulations register**: the EM300 note under CP-01, CP-06 and CP-12 updated. No status changes (78 met, 29 partly).

v2.24 · 2026-10-30

Standalone EM300: card found again by itself, full card handled and alarmed, branded alarm emails, Gmail steps.

- **Standalone EM300 (no cloud)**: the unit finds its card again within about a minute when it is put back; new section **When the card fills up** - the oldest day is removed to make room, the alarms **SD card nearly full** and **SD card full**, and the space reserve that keeps readings and history working on a full card. Bench only; not yet offered.
- **Alarm emails (standalone)**: the emails now look like the cloud's (logo, what it means, likely causes, what to do, a button to the unit's website); new **Using a Google (Gmail) account** note - the app-password steps. Proven through a real Gmail mailbox on the bench.
- **Regulations register**: the standalone bench tests passed are recorded; still to do before a standalone unit is offered: another unit's card and a licence price. No status changes (78 met, 29 partly).

v2.23 · 2026-10-29

The EM300 switches its SSH off, as the PUSR gateway already does.

- **Security**: from EM300 gateway software 1.1.55 the EM300 switches its SSH (remote shell) off and checks every 10 minutes that it stays off, as the PUSR gateway has done since 1.1.44. Bench only; the EM300 is not yet offered.
- **Regulations register**: the EM300 note under CP-01, CP-06 and CP-12 now says SSH is off; the two web addresses that answer without a sign-in are still with the maker. No status changes (78 met, 29 partly).

v2.22 · 2026-10-29

The EM300 standalone version: no cloud, history on its SD card, its own website and alarm emails.

- **Standalone EM300 (no cloud)**: new chapter - how the SD card and its WYLA licence decide between cloud and standalone, why a card cannot be copied, setting a unit up with the setup program's Standalone choice, the local website and its roles, history and downloads, alarm emails through the customer's own account, WYLA support for a standalone unit, and the staff steps (issuing a licence, preparing a card for another unit). Bench only; not yet offered.
- **Regulations register**: EM300 standalone notes on CP-01, CP-04, CP-06 and CP-12, and a section saying nothing is claimed for a standalone unit. No status changes (78 met, 29 partly).

v2.21 · 2026-10-29

One setup program for both gateway models; the EM300 described.

- **Installation**: new section **Running the setup program** - one program for the PUSR M300 and the IoTRouter EM300; it stops if the gateway is behind another router, asks which gateway when it finds two, and asks the cloud over the laptop's own internet.
- **Connections**: the connection type shown (Wi-Fi, 4G, LAN) is the one the gateway really uses, checked every 2 minutes (EM300 from gateway software 1.1.49).
- **Specifications**: the EM300 as a second model, not yet offered for sites, and what is still to be proven on it.
- **Regulations register**: EM300 notes on CP-01, CP-04, CP-06, CP-12 and radio approvals. No status changes (78 met, 29 partly).

v2.20 · 2026-10-26

Gateway firmware V1.3.03 0819 for both models, through the setup program.

- **Installation**: setup program 2026.10.26.1012 installs firmware V1.3.03 0819 on both models; a gateway on V1.2.x gets the full 0526 first, then 0819, in the same run.
- **Regulations register**: no status changes (78 met, 29 partly).

v2.19 · 2026-10-26

Gateway lock-down covers the web terminal in firmware 0819.

- **Gateway security**: from gateway software 1.1.46 the web terminal that firmware V1.3.03 0819 adds (a root login in the browser) is blocked on port 80 and port 7681, and stopped if it runs.
- **Regulations register**: CP-01 mentions it. No status changes (78 met, 29 partly).

v2.18 · 2026-10-24

Overview: switched-off inputs say Not monitored; the filter tile follows the setpoints.

- **Overview**: an input switched off in the unit's setup shows *Not monitored* instead of its last value; the **Filter differential** tile turns yellow at warning 1 and warning 2.
- **Regulations register**: no change.

v2.17 · 2026-10-24

Gateways locked down; the cloud accepts only the encrypted connection.

- **Gateway security**: from gateway software 1.1.44 the gateway's web page no longer hands out files without a sign-in, SSH is switched off and the gateway's own MQTT port is closed; the gateway checks this every 10 minutes.
- **Encrypted link**: the cloud's plain MQTT port 1883 is closed; sites must allow outgoing port 8883. The setup program checks 8883.
- **Regulations register**: CP-04 follow-through done; CP-01 records the bench result. No status changes (78 met, 29 partly).

v2.16 · 2026-10-24

Support sessions reach devices cabled behind a gateway.

- **Support access**: from gateway software 1.1.43, while a support session is open the gateway passes support's connections on to devices cabled to its LAN port, so a new unit cabled behind a unit already on site can be set up remotely. It stops when the session ends and after any restart.
- **Regulations register**: CP-12 now states this one change on the gateway, for the session only. No status changes (78 met, 29 partly).

v2.15 · 2026-10-24

Switching off an alarm or an input closes its active alert.

- **Overview — The three status colours**: from gateway software 1.1.42, an active alert closes when its alarm, or an input it depends on, is switched off, instead of staying active and keeping the stack light lit. Alerts raised while the gateway is still reconnecting after a restart are kept and sent once it is connected.
- **Regulations register**: no change (alarm handling fix, no status changes).

v2.14 · 2026-10-21

Lamp test from the local page, for WYLA support only, every test recorded.

- **Local page** (Connections): from gateway software 1.1.38, WYLA support, opening the page with its own PIN, can test the stack light - **Red**, **Yellow**, **Green** or **All off** for 10 seconds, then back to automatic. Only the stack light is touched; the site PIN and the default PIN do not show the buttons. Each test is listed on the **Local page** card and in the **Audit log** as *Lamp test (local page, support PIN)* with the colour, the address and the time.
- **Regulations register**: NZ-24 and US-20 now state this one exception to "WYLA writes nothing to any device" - an indicator test, not process control; CP-01, CP-06 and CP-07 mention it. No status changes (78 met, 29 partly).

v2.13 · 2026-10-20

Mirrored stack light outputs: Red also on and Green also on.

- **Specifications & I/O Reference** and the Setup page: a new **Stack light** block shows the red and green lamp outputs and two optional boxes, **Red also on** and **Green also on**: a second output that follows the same colour, e.g. the expansion card's DO11/DO12 alongside the main board's DO01/DO02. A mirror cannot be its own lamp's output or either output of the other colour; *none* or an empty box means no mirror. Needs gateway software 1.1.37 or later; older gateway software ignores it.

v2.12 · 2026-10-20

The stack light moves to the gateway's main board: red DO01, green DO02.

- **Specifications & I/O Reference**: the standard stack light wiring is now **DO01** (red) and **DO02** (green) on the gateway's main board (both on = yellow). The I/O expansion card's DO11/DO12 are open-collector outputs that pull down and cannot power the lamp, found on the Rev 1 panel on 20 October 2026. New units get the new points by default; an existing unit is switched over once its lamp has been rewired.

v2.11 · 2026-10-20

A site's fixed internet address and gateway LAN address, entered before the visit.

- **Before the visit: the site's network settings** (new, Connections chapter): on the **Provisioning** page a WYLA administrator can now give a site a **Gateway internet address** - **Automatic (DHCP)**, the default, or **Fixed** with IP address, subnet mask, gateway, DNS 1 and DNS 2 - and an optional **Gateway LAN address (advanced)**. The setup program fills them in and checks the gateway reaches WYLA before keeping them. The console checks the numbers before saving, the Sites list shows them under the Wi-Fi, and every change is in the Audit log.

v2.10 · 2026-10-20

The gateway's read-only local page and its site PIN; register CP-06 and CP-07 now Partly.

- **Local page** (new, Connections): from gateway software 1.1.36 each gateway shows a read-only WYLA status page on the site network at http://<LAN IP>:1880/wyla, opened with a PIN. The default PIN is 1234 until a site PIN is set; the new **Local page** card says so in amber and offers **Set PIN** (4 to 8 digits, typed twice), **Change PIN**, **Use the default PIN again** and **Turn off** to an owner of the gateway's customer or a WYLA administrator, and reads *PIN set* with the date and who set it. WYLA keeps only a one-way hash; the PIN is never shown again. WYLA support has its own PIN.
- **Signing the site off**: set a site PIN for the local page before signing off.
- **Appendix: Regulations WYLA Meets** regenerated from the register: CP-06 (no default passwords) and CP-07 (unique credentials per device) are now **Partly** - the gateway passwords are still unique per gateway, but the local page accepts the default PIN until a site PIN is set and a support PIN that is the same on every unit (78 met / 29 partly / 107).

v2.9 · 2026-10-20

Gateways on any firmware: I/O through the web service, expansion card registered, automatic firmware upgrades.

- **Setup page** (if a unit has never reported): the I/O expansion card is registered by the setup program (a factory reset forgets it); gateway software 1.1.35 reads and drives the I/O through the gateway's web service when its Node-RED I/O bridge does not answer (firmware V1.2.21), shown as **I/O via web service**; the setup program installs newer gateway firmware published by WYLA automatically (up to 15 minutes; do not unplug the gateway).

v2.8 · 2026-10-19

Setting up a gateway on any firmware: what a factory reset does and does not reset.

- **Gateway security and updates** (installer note): a factory reset does not put the Node-RED password back to admin. The setup program (2026.10.19.645 or later) fetches the gateway's own password from the cloud through the gateway, after moving the gateway's address if it clashes with the site router; if the laptop still has no internet, use a phone hotspot on the laptop's Wi-Fi with the cable still in. Do not factory reset a gateway to get past a password.

v2.7 · 2026-10-19

The Rev 1 panel wiring is the standard I/O for every unit.

- **Specifications & I/O Reference**: the standard wiring is now the Rev 1 panel — AI01 pump motor current (0–5 A), AI02 UV lamp current (0–1 A, on by default with its lamp alarms), DI01 flow pulse, DI02 softener status, and the stack light on the I/O expansion card: DO11 red, DO12 green (both on = yellow). The monitor reads the gateway's own point names, which survive a factory reset. One RS-485 bus on port 1 (Hallett 1, chlorine 10, pump drive 20).
- **Commissioning**: if a unit reads nothing, use **Re-scan gateway I/O**; an empty list means the gateway's I/O service is not answering (seen on firmware V1.2.21) — restart it or update its firmware.

v2.6 · 2026-10-13

Support access only when needed, who may confirm a change, WYLA control suspension; register checked against Regulatory Fit Rev 1.11.

- **Support access** (new, Connections and Fleet): since 13 October 2026 WYLA support reaches a gateway, its Node-RED editor, its web page or its site network only during a support session. An owner of the gateway's customer, or a WYLA administrator, opens one with a reason and a length (30 minutes by default, at most 2 hours); it shows a countdown, closes itself and can be closed early, which cuts any open connection. Every session is recorded and shown on the gateway's Connections page.
- **Operator Certificates and Control Changes** extended: **Who confirms a change** - in Ontario only the site's active operator-in-charge confirms a change made at the panel, and nothing can be confirmed until one is designated; elsewhere the same applies once the owner designates anyone, otherwise the page says "No operator in charge designated"; a person who may not confirm sees what they are missing.
- **WYLA control suspension**: WYLA can suspend assisted changes at a site or for a whole customer, with a reason; a red banner shows on the Changes page while the shift log, the records and the plant itself carry on; only WYLA lifts it, never the owner. Record Sealing: Admin > Health now shows the latest monthly archive run. Four new screenshots.
- **Appendix: Regulations WYLA Meets** regenerated from the register, now checked against Regulatory Fit Rev 1.11: remote access only when needed (CP-12) is now Met; the operator-in-charge rows are reworded and stay Partly (class lists still customer-entered, unconfirmed); segmentation and staff-never-operate rows reworded (80 met / 27 partly / 107).

v2.5 · 2026-10-12

Older records stored compressed and a monthly write-once archive; register checked against Regulatory Fit Rev 1.10.

- **Record Sealing** extended: **Older records, and the monthly archive** - records older than 45 days are stored compressed (nothing deleted or changed, seals still verify); each finished month is archived once to write-once storage on the 10th of the next month (first: October 2026, on 10 November), test-loaded before it is sent.
- What the archive holds (records, gaps, results, seals, calibration, call-out, alarm and audit logs, reports, control records, gateway settings and the names needed to read them), and what it leaves out so it can still be deleted on request: alarm contacts and groups, users, sign-in history and invoices. Admin > Health warns if a month did not archive; Admin > Reliability lists each run.
- **Appendix: Regulations WYLA Meets** regenerated from the register, now checked against Regulatory Fit Rev 1.10: retention and record-integrity rows reworded for compression, the monthly write-once archive and 2-day local backups; no status changes (79 met / 28 partly / 107).

v2.4 · 2026-10-12

Shift log, operators in charge, plant class and the change record for your engineer; privacy notice for people who never sign in; register checked against Regulatory Fit Rev 1.9.

- **Operator Certificates and Control Changes** extended: the Changes page's three tabs; the **plant class** (owner only; the class list is entered by the customer and shown as UNCONFIRMED; setting it re-checks every permission and designation and suspends any that fall short; with no class set the page says "plant class not set - certificate class not checked"); and **operators in charge** (operator-in-charge and overall responsible operator, designated per site by an owner with a passkey, withdrawn without one; operators-in-training refused as operator-in-charge at Ontario sites).
- **NEW - Shift Log and Change Record**: the shift schedule (applies from the next site day; one shift a day by default); per shift the changes recorded, state changes WYLA saw (recorded in WYLA or not), alarms, the end-of-shift equipment status with reading ages, and what WYLA does not read; notes and sign-offs by certified operators (no passkey; sign-off from 2 hours before the end keeps the status shown); CSV up to 31 days; and what the operator must still write in a note.
- **Change record** for the customer's engineer (owners): every change WYLA knows of to the site's monitoring system - versions, updates, equipment, inputs, alarm limits, recording, rule sets, commands and the control log - as PDF, CSV or JSON for up to a year (Ontario MECP SCADA bulletin). The Form 2 and the engineer's review stay the customer's.
- **Alarm Call-out** and **Operators**: the one-time privacy-notice email to new alarm recipients and certificate holders who do not use the console; the owner's **Send privacy notice** button for people added earlier (nothing is sent to them automatically); the sidebar **Privacy** link. Owners should send the notice to earlier contacts or confirm they were told. Designating an operator in charge also needs a fresh passkey sign-in. Seven new screenshots.
- **Appendix: Regulations WYLA Meets** regenerated from the register, now checked against Regulatory Fit Rev 1.9: the Ontario operating log (O.Reg 128/04 s.26(2)) and the SCADA change record now met; privacy breach procedure met, privacy notice partly met (79 met / 28 partly / 107).

v2.3 · 2026-10-12

Regulator reports and notifications are live; new Operator Certificates and Control Changes chapter; register checked against Regulatory Fit Rev 1.8.

- **Regulator Reports** rewritten for the live feature (the placeholder is gone): the regulatory profile per site (jurisdiction, regulator IDs, contacts; every save a new version), the Monthly Compliance Report preview, draft PDF and CSV, signing with a fresh passkey sign-in (a password alone is refused), signed versions and their files, corrections with a reason and "restatement needed", who may sign, the data gaps section, and recording a notice to the regulator. WYLA never submits anything to a regulator; the NZ Hinekorako export is not available yet.
- **NEW - Regulator Notifications**: notification cases opened from WYLA's own records, what WYLA watches for in each jurisdiction, deadline clocks (immediately, hours, next business day), the draft notice to copy, Record that we notified, adding to or closing a case, opening a case by hand, reminders to your own call-out list and the console banner.
- **NEW - Operator Certificates and Control Changes**: the Operators and Changes pages. Recording, verifying, correcting (the verification is dropped) and withdrawing certificates; expiry reminders to owners; per-site control permission given only by an owner to a person with a current, verified certificate, suspended when it expires; WYLA staff can never hold or give it; the assisted change (propose within the documented range, awaiting local action, make it at the panel, confirm with a passkey, read-back); the append-only control log, its CSV and the monthly report's "Changes made at the panel" section. WYLA never changes your equipment.
- **Signing in to the Cloud Console**: control actions also need a passkey sign-in within the last 5 minutes. The introduction now lists the Reports, Operators and Changes pages. Sixteen new screenshots of the Reports, Operators and Changes pages.
- **Appendix: Regulations WYLA Meets** regenerated from the register, now checked against Regulatory Fit Rev 1.8: regulator reports partly met in all three countries, operator certification partly met, insert-only audit log and "WYLA staff never operate your plant" met, daily minimum / maximum / mean and chlorine-below-0.2 periods met (73 met / 28 partly / 101).

v2.2 · 2026-10-12

Signing in to the cloud console now uses passkeys instead of authenticator codes; signing a compliance report needs a fresh passkey sign-in.

- **Signing in to the Cloud Console** rewritten for **passkeys** (Windows Hello, your phone or a security key): first sign-in with your password, then create a passkey when the sign-in page offers it; later sign-ins with the passkey; a new computer or a lost phone; and that signing a compliance report needs a fresh passkey sign-in (a password alone is not enough). New sign-in screenshot.
- The authenticator-app and recovery-code instructions are removed: the console no longer asks for a six-digit code. Your password still works as a fallback.

- **Appendix: Regulations WYLA Meets** regenerated from the register, now checked against Regulatory Fit Rev 1.7: phishing-resistant multi-factor sign-in (CISA) is now Met with passkeys (65 met / 23 partly / 88).

v2.1 · 2026-10-12

New appendix: the regulations WYLA meets, generated from WYLA's regulations register every time the manual is built.

- **NEW — Appendix: Regulations WYLA Meets**: every clause in the register (New Zealand, United States, Canada, cyber and privacy) with what it asks, how WYLA meets it, the evidence, its status and date, and what your site must set up; plus customer responsibilities, what is not met yet, where the sources disagree, and the register's change log.
- The appendix is read from `platform/docs/REGULATIONS-MET.md` when the manual is built, never copied by hand. Its first box, and the cover, show which Regulatory Fit revision the register was checked against and when it last changed.
- **Regulations This Helps You Meet** now points to the appendix.

v2.0 · 2026-10-12

WYLA rebrand, and the cloud console's compliance and call-out features. Eight new chapters; gateway security added to Connections.

- **Rebranded to WYLA.** The manual now uses WYLA's own look: night-navy cover, water-blue accents, the WYLA drop logo and the console's own typefaces. Earlier editions carried another company's branding by mistake. WYLA is its own product, and the wording of older revision entries has been corrected to match.
- **NEW — Signing in to the cloud console**: every sign-in now needs your password *and* a code from an authenticator app. Covers first-time setup, the recovery code, and what to do if you lose your phone.
- **NEW — Compliance Recording and Data Gaps**: one-minute records for each site (**Record every** / **Send every**, **Readings recorded**), the data-gap log, gap rules (NZ 2027, NZ 2022 L3, Ontario, None, Custom) and the CSV downloads.
- **NEW — Compliance Calculations**: rule sets (NZ 2026 L3, NZ 2022 L3, NZ L2, US, Ontario, Custom), UV off-spec, daily minimum chlorine / FACE, C.t, rules on readings, values that only your site can give, the Met / Not met / Not shown results, every period out of limits, and the CSV download.
- **NEW — Calibration and Grab-Sample Log**: instrument checks with due, overdue and failed status, grab samples that cover data gaps, corrections with a reason, and CSV downloads.
- **NEW — Record Sealing**: what the Record seals panel shows, how to check it, what a problem or an amendment means, and the off-site write-once copy.

- **NEW — Alarm Call-out**: phone numbers and channels for each person, escalation steps until someone acknowledges, latching, the monthly alarm summary and the call-out log. Includes the current limit: *SMS and voice calls are not set up - only email is sent* until the text and call provider is configured.
- **NEW — Regulator Reports (coming)**: a marked placeholder. This feature is still being built and is not available yet.
- **NEW — Regulations This Helps You Meet**: a short guide to WYLA's regulations register (`platform/docs/REGULATIONS-MET.md`).
- **Connections** gains **Gateway security and updates**: gateway agent 1.1.34 (update downloads are retried; the console shows a gateway online as soon as it reconnects), unique passwords for each gateway, and the encrypted link to the cloud.
- New screenshots of the cloud console, taken from a local test copy with made-up demonstration data.

v1.1 · 2026-07-31

The weekly report and SIM expiry warning are now implemented; this edition documents the controls as they actually appear.

- **Connections** gains a **Mobile plan** card — SIM number, carrier, plan, expiry date and renewal contact, with a warning 30 days out. Record the expiry at commissioning; it is what prevents a lapsed plan being misdiagnosed as a failed unit.
- **Setup** gains a **Status digest** panel: weekly / monthly / off, the day and time, the channel, and which contacts receive it.
- Screenshots updated to show both.

v1.0 · 2026-07-31

First release edition. Customer decisions of 31 Jul 2026 incorporated: weekly status digest, SIM expiry warnings, two UV units by default, and composite alarms.

- **NEW — Weekly status report**: an optional automatic email or text summarising the week — water used, consumable life remaining, any alarms, and confirmation that the unit is reporting. A monitor that only speaks when something is wrong gives you no evidence it is still working; this is that evidence.
- **NEW — SIM expiry warnings**: the mobile connection is on an annual plan, and the monitor now warns you before it runs out. This matters because **a lapsed SIM looks exactly like a broken unit** — same silence, same alarm — except the fix is a renewal rather than a site visit.
- **Two UV units are now standard.** The default configuration supports two Hallett systems on one monitor; the second needs its address changed at commissioning.

- **Composite alarms are now standard**, not optional: broken pipe, pump failure and leak are inferred from flow and pressure together rather than each reading alone. See the Alarms chapter.
- **Mobile connection is the normal case.** Most sites are remote, so cellular is the expected uplink rather than the fallback.

v0.99 · 2026-07-30

Alarm review (genuine / false), commissioning sign-off, uptime reporting and a plain statement of when support can see your data.

- **NEW — Reviewing alarms** on the Event Log: mark each alarm **Real** or **False**. This is the only way the system can know whether it is crying wolf, and it drives the setpoint changes that stop it.
- **NEW — Commissioning sign-off**: an installer now formally signs a site off once it is reporting correctly. Until then it shows as an unfinished install rather than as a working site.
- **NEW — Availability reporting**: how uptime is measured per site, including why a newly installed site is not judged on the weeks before it existed.
- **NEW — Support access and your audit trail**: WYLA support can open a temporary **read-only** view of your account to help with a fault. It always requires a written reason, it can never change anything, it expires by itself, and **it is recorded in your own audit trail** — not just ours.
- Alarm delivery is now confirmed rather than assumed: the log distinguishes *sent* from *confirmed delivered*, and flags messages the network never acknowledged.

v0.98 · 2026-07-28

Customer feedback of 20–21 Jul 2026 incorporated.

- **Process order**: tank level is now first (Tank › Pump › Filters › UV › Flow › Chlorine › Delivery).
- **Tank**: shown in litres with capacity (installer-entered); high-level alarm removed.
- **NEW — Hallett detail view**: emulates Hallett's own utility screen (treatment, fans, heater, dosage, UVT/UVI, four temperatures, warning, lamp days remaining).
- **K1/K2**: softener status inputs replace the UV/chlorine fault contacts (detail to follow).
- **Contacts**: four cell numbers / email addresses; location entry via what3words.
- **NEW — Subscription**: plan status, cloud-storage adder, expiry warnings and lockout behaviour.
- **Removed**: kWh recording; pump runtime (hours) retained.
- Confirmed by customer: GREEN=OK / YELLOW=warning / RED=fault; pump current 0–5 A; lamp life on elapsed hours.

v0.97 · 2026-07-15

New Site Map page: live signal topology with status-animated connection lines.

- **NEW chapter — Site Map**: every field connection drawn as a node wired to the Node-RED core; line colour and animation show live health (green flowing / yellow warning / red fault / grey idle), and the map reacts to the unit state.
- Site Map is visible to owners and installers — it is a fault-finding view, not configuration.

v0.96 · 2026-07-15

New Connections page: commissioning & diagnostics for every external connection.

- **NEW chapter — Connections (Installer)**: network interfaces with live 4G signal, cloud/fleet heartbeat status, Modbus port health with Test-poll buttons, and SMS/email test sends so delivery is proven before leaving site.
- Connections, like Setup, is visible only at installer level.

v0.95 · 2026-07-15

Design-completeness update: login & access levels, expanded installer Setup, Filter 3, OFFLINE state, energy & hourly charts, responsive layout.

- **NEW — Sign-in screen**: owner vs installer access levels; owner view hides Setup.
- **NEW — OFFLINE state**: fourth demo state showing an unreachable unit (grey banner, no stack lamp, last-seen alert).
- **Setup** expanded to eight panels: IP address, Contact B, split service-provider fields, per-alarm delivery (SMS/email/local/ignore), per-input loss-of-signal enables, equipment part numbers & install dates, Filter 1–3 life (hours or litres), dual-Hallett & injector Modbus settings, hours/kWh resets.
- **Maintenance**: third media filter added to life bars and the equipment register.
- **Trends**: daily kWh chart and hourly-totals chart added.
- **Responsive**: layout now adapts to desktop, tablet and phone (collapsing menu).

v0.9 · 2026-07-15

Preview edition — documents the approved UI design ahead of Node-RED implementation.

- **First draft**: 9 chapters covering every page of the UI preview (Overview, Fleet/Map, Trends, Maintenance, Events, Setup) plus alarm behaviour and I/O reference.

- All screenshots are from the interactive design mockup; live software may differ in minor layout details.
- Setpoints, part numbers and site names shown are illustrative examples, not shipped defaults.



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