

Using VeriComm®

Orenco Systems, Inc.

What We Will Cover

- What is VeriComm?
- The VeriComm panel
- The VeriComm website
- How does it work?

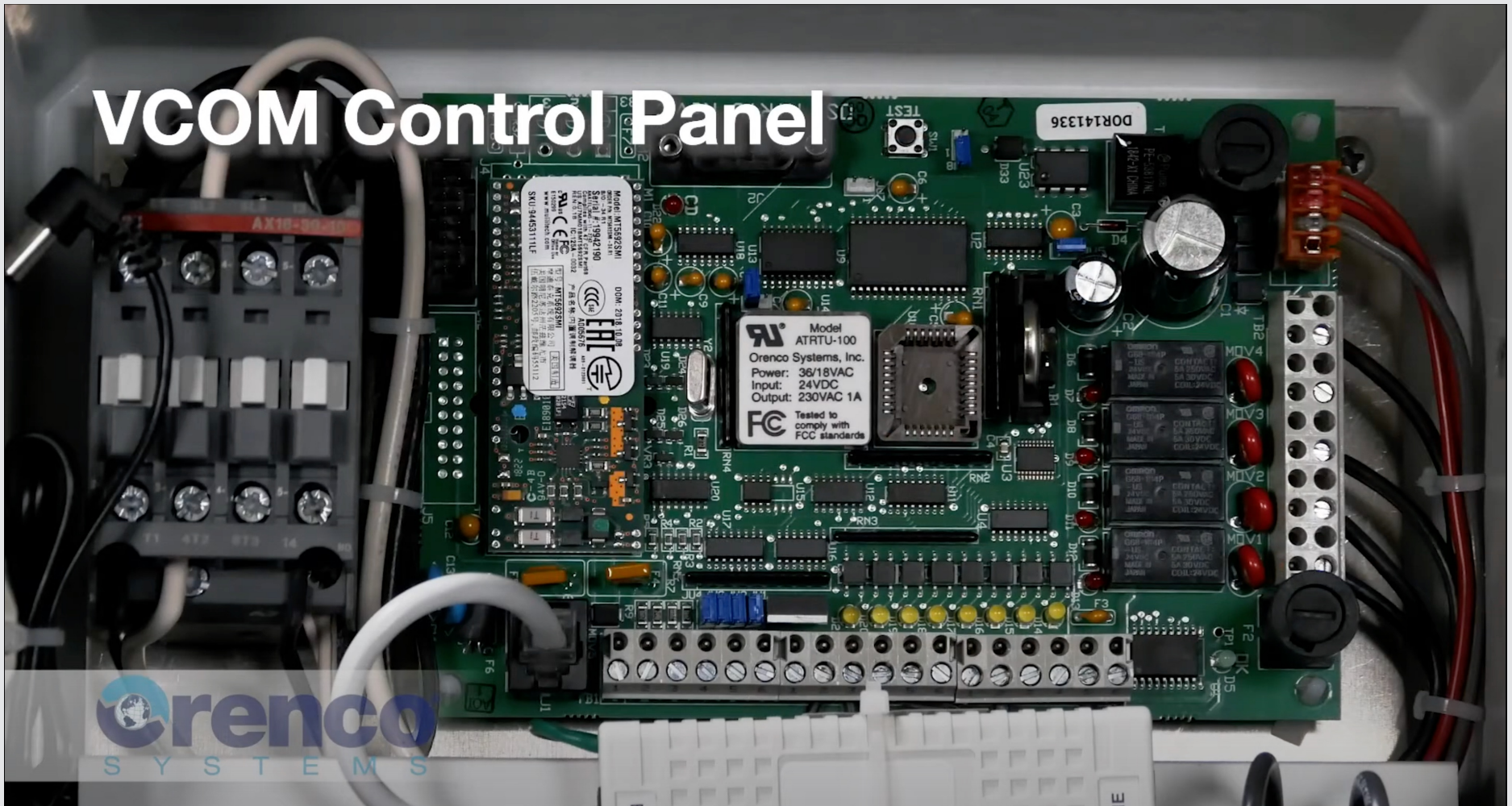
What is VeriComm®

- VeriComm is a two-part program
 - The VeriComm panel
 - At the site
 - Connects to the web
 - Monitors the wastewater system
 - Logs system data
 - The VeriComm website
 - The bridge between the service provider and the panel
 - Communicates with the system operator/service provider
 - Creates reports
 - Tracks all sites the service provider is responsible for

The VeriComm[®] Panel



The VeriComm[®] Board

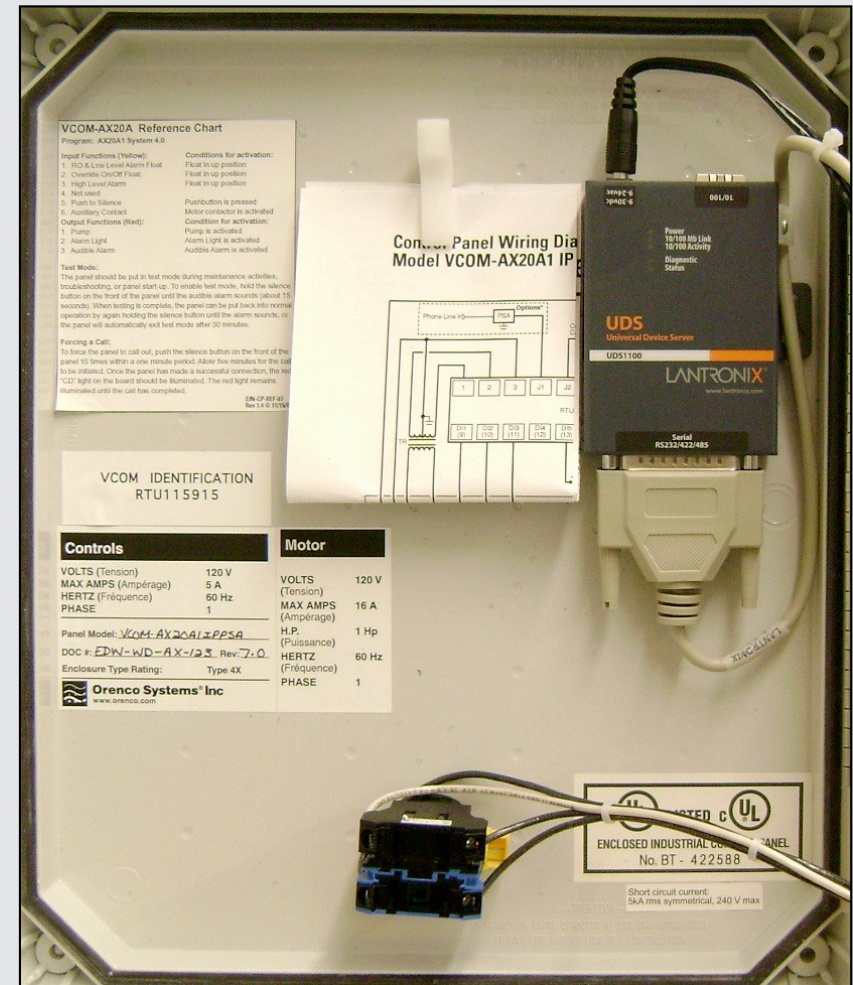


Communication Options

- **Remote communication options**
 - Built in modem
 - IP adapter
 - Future adapter (ex. cellular modem)
- **There are two ways to access panel data in the field**
 - Direct plug-in using your laptop
 - Wireless connection using Bluetooth®

VCOM-IP Panels

- VCOM-AX20B1IP
- VCOM-AX20B1/PTIP(DRIP)
- VCOM-AX20B1UVIBIP
- IP upgrade kit
- IP retrofit kit



VeriComm® Cellular Connection

- Available, but currently custom
- Uses Verizon 4G cellular network

Bluetooth® Overview

- **Kit and Accessories**

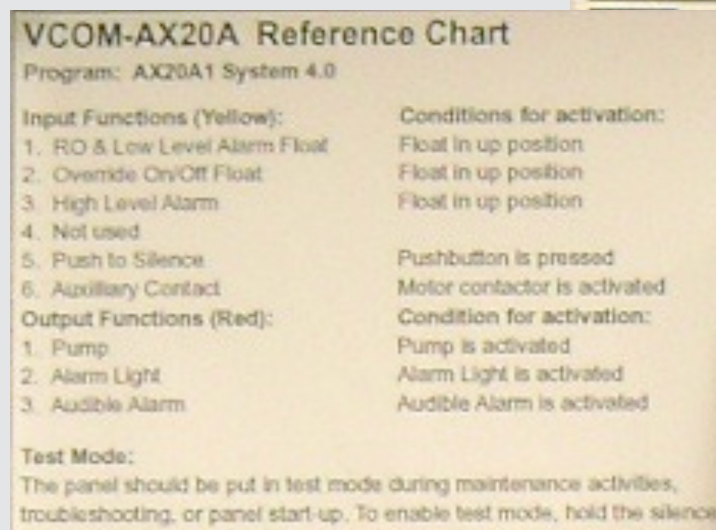
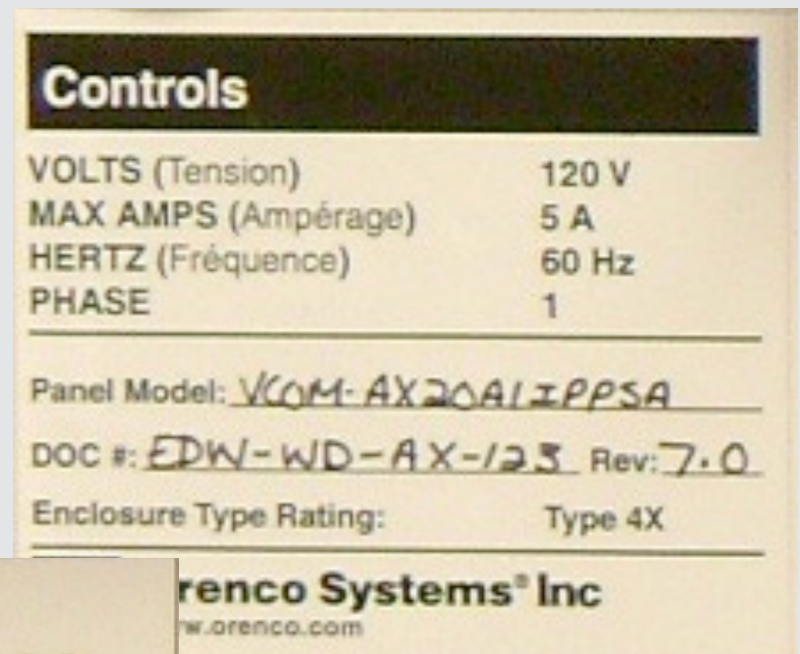
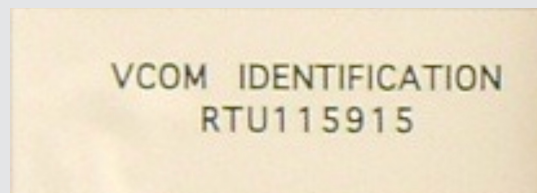
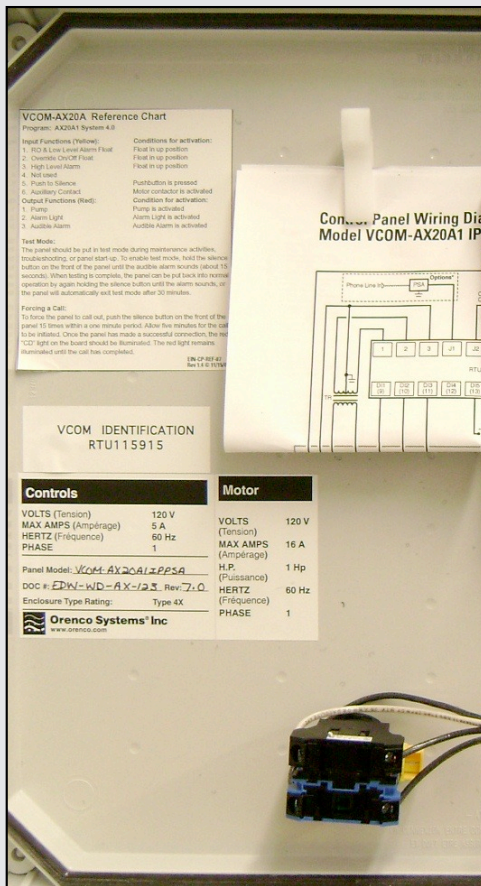
- Bluetooth® Device
- AC Adapter

- **Recommended Hardware**

- Laptop
- Android-based phones and tablets



Important Information



Panel Operation

- Basic control logic
- Advanced control logic
- Data collection and utilization
- Troubleshooting and diagnostic logic
- Communications

What Happens in an Alarm Condition?


- Panel will attempt to communicate to the VeriComm monitoring system via phone or IP connection
- The VeriComm monitoring system notifies the alarm contacts via email
- The panel will attempt to keep the system in as normal a state as possible

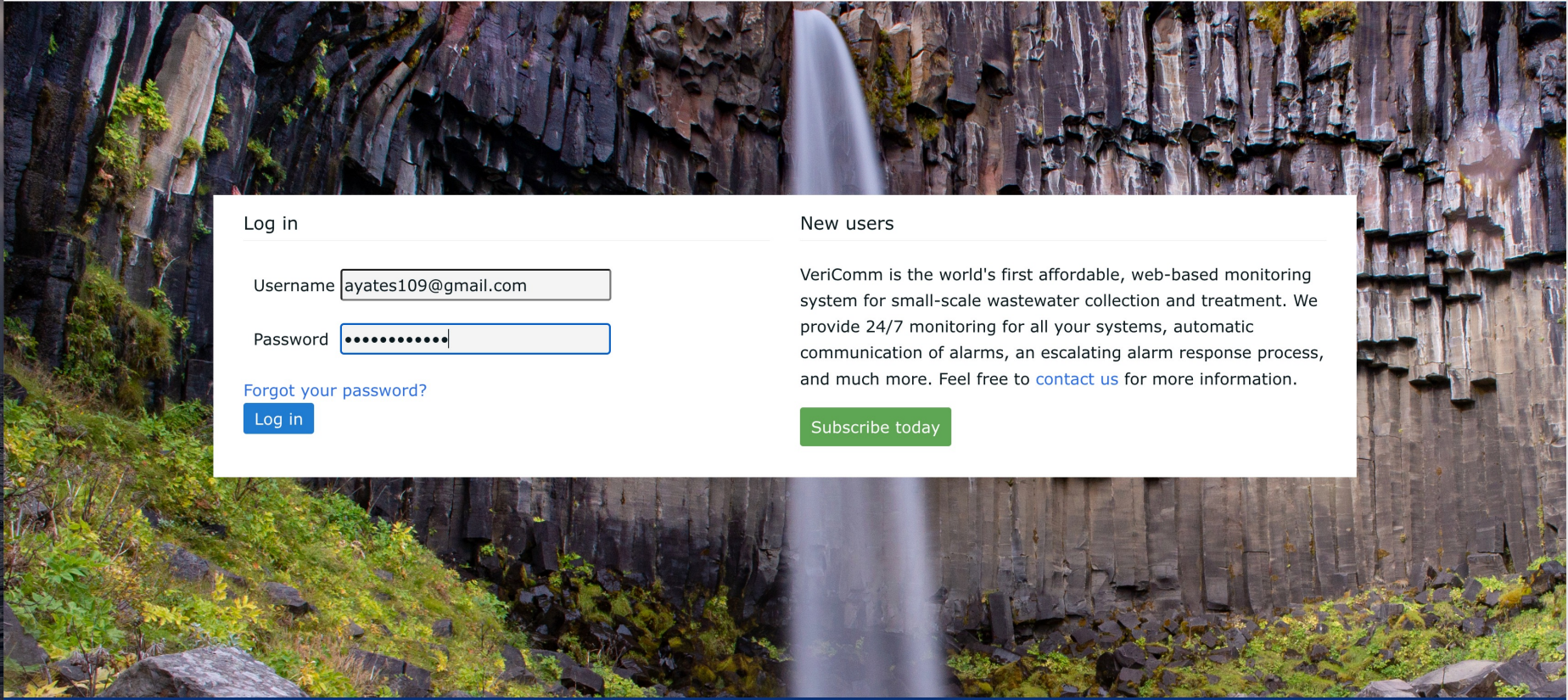
What Happens When a Float Fails?

- The panel will communicate with the VeriComm monitoring system via phone or IP connection
- The VeriComm monitoring system will email the alert contact of the system fault
- The panel will continue to operate normally by utilizing trend data established during the first 30 days of operation

The VeriComm[®] Website

VeriComm[®]
MONITORING SYSTEM





Log in

Username

ayates109@gmail.com

Password

••••••••

[Forgot your password?](#)

Log in

New users

VeriComm is the world's first affordable, web-based monitoring system for small-scale wastewater collection and treatment. We provide 24/7 monitoring for all your systems, automatic communication of alarms, an escalating alarm response process, and much more. Feel free to [contact us](#) for more information.

Subscribe today

Documents

BT VCOM



A digital system by **Orenco Systems, Inc.**

Report Issue

Some Definitions

- Triage Grid
- Site
- Site Group
- Alert
- Alarm
- Permissions
- Notifications
- Call data

Managing Sites

Dashboard
Manage Sites
Reports
Company Settings

Hello Aaron Yates!

Dashboard > Site List

Manage Sites

Sort by

Site status

Site Group

State



Operator


Clear All

| Contact Name | Site Group | Panel Type | Site Call-in | Status |
|--------------------------------------|--------------------|---------------------|-------------------|---------|
| ▶ Aaron | Homeowner | AX20B System R4.6 | 6/6/2020 3:23 AM | Healthy |
| ▶ Aaron - test board | Test site | AX20B System R5.0 | 1/13/2024 7:31 PM | Healthy |
| ▶ IP panel | Orenco test panels | AX20B System R4.5 | 1/8/2019 9:14 AM | Healthy |
| ▶ Test | Orenco test panels | AX20 Mode B | | Healthy |
| ▶ West | Orenco test panels | AX20BUV System R4.6 | 6/21/2019 5:31 AM | Healthy |


Showing 5 Sites

Addressing Alarms and Alerts










[Dashboard](#)
[Manage Sites](#)
[Reports](#)
[Company Settings](#)











 Hello Orenco Nonsubscribed!
 [Log off](#)

11326 Total Sites

 114 Alarms /
  494 Alerts /
  10708 Healthy /
  10 Triaged

Site Triage

Triage Sites

| | Site | Contact | Recent Call | Status | Options |
|---------------------------------|-----------|-----------------------|--------------------|--------|---|
| Discharge Bottom Float Stuck Up | | | | | |
| <input type="checkbox"/> | RTU112203 | Casey & Susan Corills | 11/8/2024 12:26 PM | Alert |   |
| <input type="checkbox"/> | RTU123295 | Antone & Linda Moniz | 11/1/2024 1:01 AM | Alert |   |
| <input type="checkbox"/> | RTU115775 | Bray, Lorraine | 11/7/2024 11:55 AM | Alert |   |
| <input type="checkbox"/> | RTU150984 | | 10/12/2024 2:15 AM | Alert |   |
| Discharge Contactor Failed Off | | | | | |
| <input type="checkbox"/> | RTU136095 | | 11/8/2024 2:05 PM | Alarm |   |
| Discharge High Dose Time | | | | | |

Team Members

| Name ↑ | Number of Sites |
|--------|-----------------|
| | |

Site Groups

| Site Group | Alarms | Alerts | Healthy | Total |
|------------------------------------|--------|--------|---------|-------|
| Washington - Tryways No Service | 1 | 1 | 2 | 4 |
| Washington - no | 8 | 16 | 293 | 317 |

Fault Conditions

Aaron - test board

RTU888887 / Call Schedule: Factory Default

[Orenco Support](#)[Share Link](#)[Timer Wizard](#)[Edit Site Settings](#)[Reports](#)

123 Easy St
Roseburg, OR, 97470

Program: AX20B System R5.0
Main:
Panel: 877-247-1015

Recirculating Pump Failure

First Reported: 6/20/2023 9:18:00 AM

Last Reported: 8/28/2023 12:17:00 PM

[Back](#)[Add Note !\[\]\(248b91fcdac4810ffd15cf33fb6aec6f_img.jpg\)](#)

Description

The recirculating pump appears to have failed.

Fault Cause

The recirculation tank top float moved to the up position. The recirculation pump was started and ran for the entire "Recirc High Level Pump Test" time without the top float dropping.

Recommended Actions

1. Check the condition of the circuit breakers.
2. Check the voltages on the pump terminals inside the control panel.
3. Check the voltages at the splice box.
4. Replace the pump.

Fault Clear


At least one of the recirculation tank floats must be in the down position and it has been at least 5 minutes since the alarm condition started.


Settings Help

To reduce the sensitivity for this alarm, increase the "Recirculating High Level Pump Test" set point.

Operator Communication

VeriComm[®]
MONITORING SYSTEM

 **Orenco**
SYSTEMS



Dashboard Manage Sites Reports Company Settings

Hello Aaron Yates! [Log off](#)

[Dashboard](#) > [Company Details](#) > [Manage User](#) > [User Details](#) > [Edit User](#) > [User Notification Settings](#)

User Notification Settings

[User information](#)
[Notification settings](#)

Manage Notification Settings

Receive notifications from Vericomm when there are new tasks or fault conditions on the panels you monitor.

Alarms ☒ **Email** ☐ **SMS (Text)**

Alerts ☐ **Email** ☐ **SMS (Text)**

Task ☐ **Email** ☐ **SMS (Text)**

Send notifications ▼

[Save Changes](#) [Cancel](#)

Remote Settings Changes

Edit Site - Advanced Settings

- General
- Information
- Graph Settings
- Panel Settings

Datapoint Settings

Point Group All

The default value for Duration is Zero (for a permanent change). You can set it to the desired value.

| Po... | Point | Orenc... | Last Known Value | New Value | Duration |
|-------|-------------------------------------|----------|-----------------------------|----------------------|----------------------|
| 17 | Recirc Off Cycle Time | 19.7 | 19.7 Minutes (Automatic) | <input type="text"/> | <input type="text"/> |
| 18 | Recirc On Cycle Time | 0.3 | 0.3 Minutes (Automatic) | <input type="text"/> | <input type="text"/> |
| 19 | Recirc Override Off Cycle Time | 9.7 | 9.7 Minutes (Automatic) | <input type="text"/> | <input type="text"/> |
| 20 | Recirc Override On Cycle Time | 0.3 | 0.3 Minutes (Automatic) | <input type="text"/> | <input type="text"/> |
| 21 | Recirc Minimum Override Cycles | 3 | 3.0 Cycles (Automatic) | <input type="text"/> | <input type="text"/> |
| 22 | Recirc Override Cycle Limit per Day | 7 | 7.0 Cycles (Automatic) | <input type="text"/> | <input type="text"/> |
| 23 | Recirc Time Limit per Day | 75 | 75.0 Minutes (Automatic) | <input type="text"/> | <input type="text"/> |
| 24 | Recirc High Level Pump Test | 2 | 2.0 Minutes | <input type="text"/> | <input type="text"/> |

Save Cancel

Call Scaling

- Limit the number of calls the system can make during sustained alarm conditions
- Most follow a 2/4/8/24 hour routine
- Alerts are automatically scaled to 24 hours

Summary

- Provides affordable, invisible, round-the-clock supervision of onsite systems, saving time and money in O&M
- VeriComm® gives you ...
 - Verification of system performance
 - Automatic notification of fault conditions
 - Diagnosis of the problem
 - Recommendations for action
 - Ability to change timer settings and other key operating parameters remotely
 - Secure Web access to system and site information
 - Standard reporting
 - Invisible utility

Demonstration

Solutions for Decentralized Wastewater Treatment

Questions?

ayates@orencowater.com