



I/A O&M



Presented By: Jared Willey
Advanced Onsite Services, Inc

Presenter Background

- AAS Ecology and Environmental Technology
- Dairy Lagoon Operator
- Activated Sludge and Aerated Lagoon Operator
- Onsite (I/A) system operator since 2004
- I/A Service Provider Owner since 2011
- I/A equipment rep since 2004
- Vermont wastewater rule TAC
- YOWA Board

Principles of Maintenance

Definitions:

O&M: Operations and Maintenance

PM: Preventive Maintenance

Treatment: How clean is the effluent

Service Provider: A qualified individual or company, trained and authorized by the manufacturer

Routine Inspection: Recurring or prescribed

Emergency Service:

Permit: Identifies the system, effluent limits, and maintenance frequency

Principles of Maintenance

Maintenance Program Types:

Permit Driven

Non Permit Driven

O&M

Emergency

PM

Run Till Fail



O&M

Operator/Service Provider requirement

- Reports submitted to regional or state permitting body
- Use of online reporting tools
- Sampling and or flow monitoring may be required

Manufacturer Driven

- Approval
- Warranty

Emergency

May involve a plumber or a septic hauler...or the police.

- High water, back-up, or alarm

- Property Transfer

 - Closing next week

 - Closed last month

Things to consider before responding:

- What kind of system is it?
 - ATU
 - Packed Bed Filter
 - Trickling Filter
 - SBR
 - Drainfield/Dispersal System
- Is there a Service Provider already?
- Are there service records?

What to look for in the System:

- Are all of the tanks/equipment accessible?
 - Flow path
 - Control Panel?
- Liquid Level
- Treatment (clean clear effluent)

Troubleshooting

- High Liquid Level:
- Odor:
- Cloudy Effluent:
- Out of permit Nitrogen



Troubleshooting

- Mechanical Issues



Sampling

- Grab vs Composite

Sampling locations: INF. EFF. PROCESS

Sampling Equipment:

Sludge Judge/Core Sampler

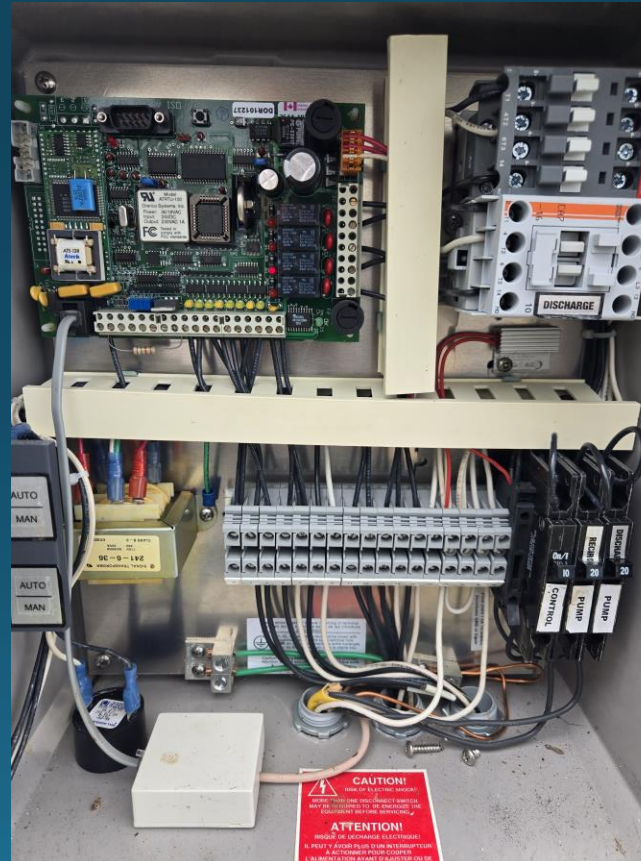
Peristaltic Pump

Dip cup



Controls

- Identify incoming and equipment power circuits
- Test control circuits
- Test pump/blower/etc.
- Record ETM/CT/Logs
- User Interface



The Repair

- Use of OEM Parts

Down Time?
Pump Out

Return to verify treatment



PM Program

- Permit Driven or Program Driven
- Establish inspection frequency
- Establish replacement frequencies
- Routine Pumping vs Sludge/Scum measurements















