

# Build Your AdvanTex<sup>®</sup> Know-How

*Operation and Maintenance for  
AdvanTex Treatment Systems*

# Overview

- O&M basics
- Before going to the site
- At the site
- Before leaving the site
- Back at the office

# O&M Is Important Because ...

- It optimizes the treatment process.
- It ensures system longevity.
- It establishes accountability.
- It protects the owner's investment.

# AdvanTex<sup>®</sup> is a program, not a product

We sell an integrated package, not parts and pieces

This does not mean that we cannot use local tanks

Minimizes potential issues

Every engineered project is reviewed by an Orenco engineer

Orenco provides:

- Web based management tools for Dealers and Operators
- Drawings, Specifications, and Design criteria for designers
- Installation inspection, commissioning, and operator training in regions without an Orenco Dealer.
- Ongoing technical support for every project.

# Service Provider's O&M Responsibilities



# Routine Maintenance Focuses On ...

- Control panel
- Pumping system
- Septic tank/chamber
- Recirculation tank/chamber
- Discharge tank/chamber
- Textile filter
- Miscellaneous

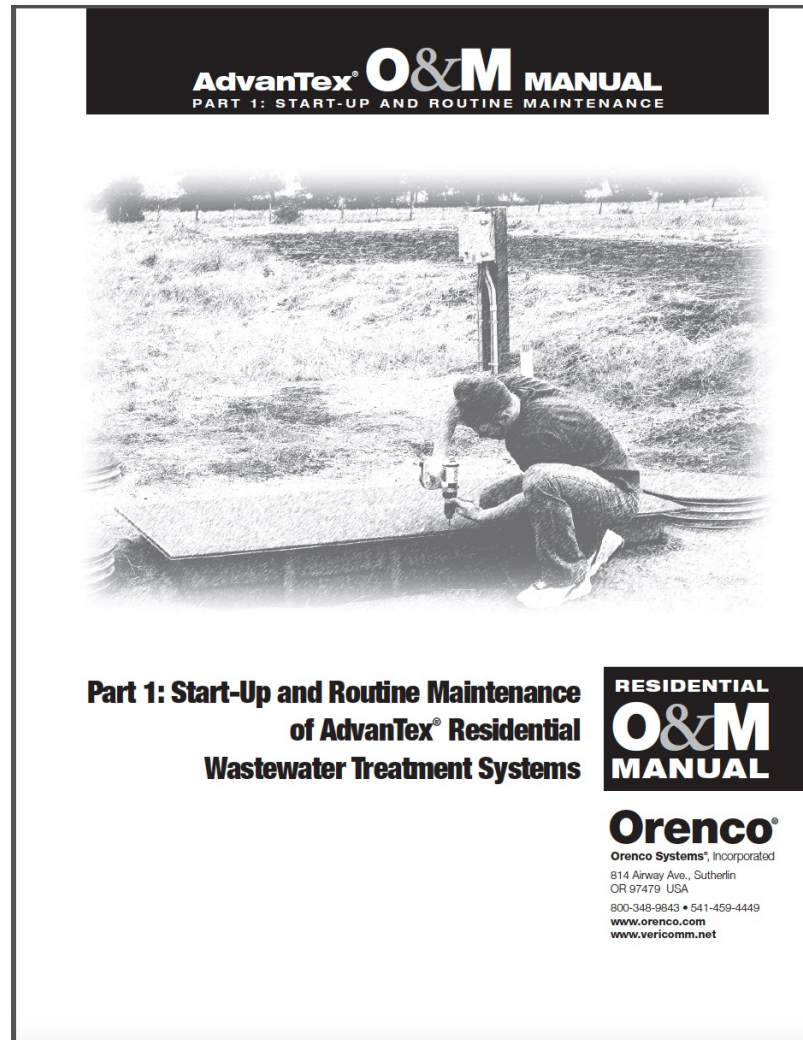
# Routine Maintenance Frequency

- Commercial Systems:
  - Typically based on reporting requirements
  - Once every 3-6 months is common after 1<sup>st</sup> year
  
- Residential Systems:
  - Within 3 to 6 months of start-up
  - At ...
    - ~ 12 months after startup
    - ~ 18 months after start-up (for NSF states only)
  - Thereafter, every 12 months
    - Spring/summer is the best time for annual visits

# Before Going to the Site



# Review AdvanTex O&M Manual



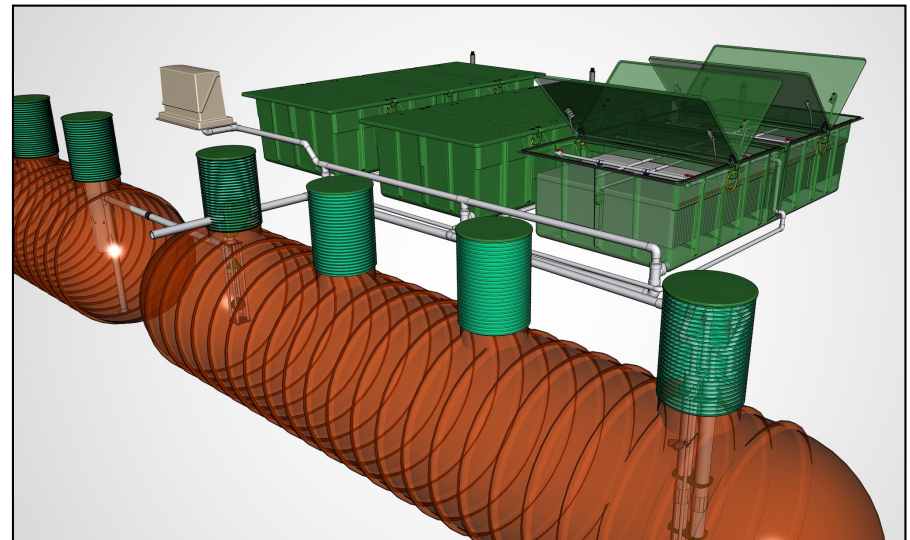
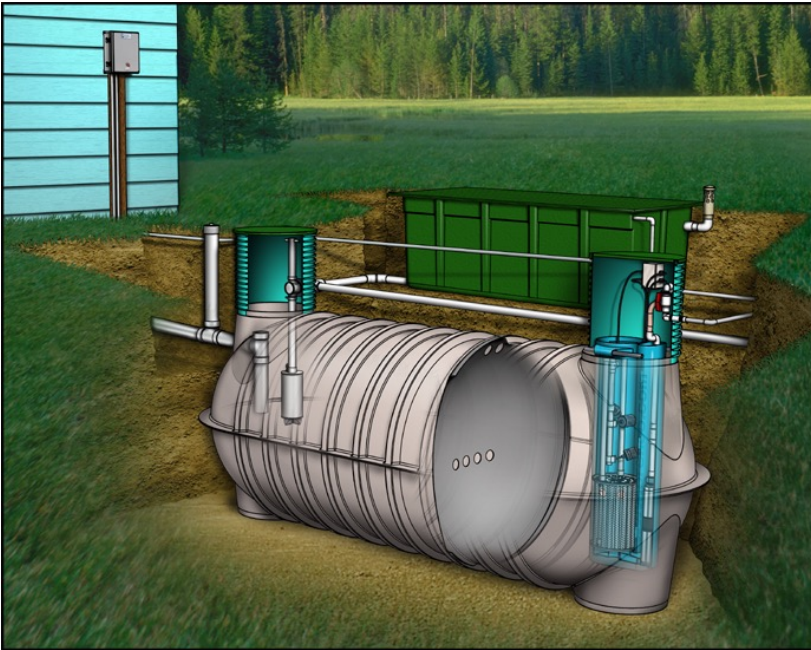
# Review Site Information



# Tools Required for Effective O&M



# AdvanTex Treatment Systems



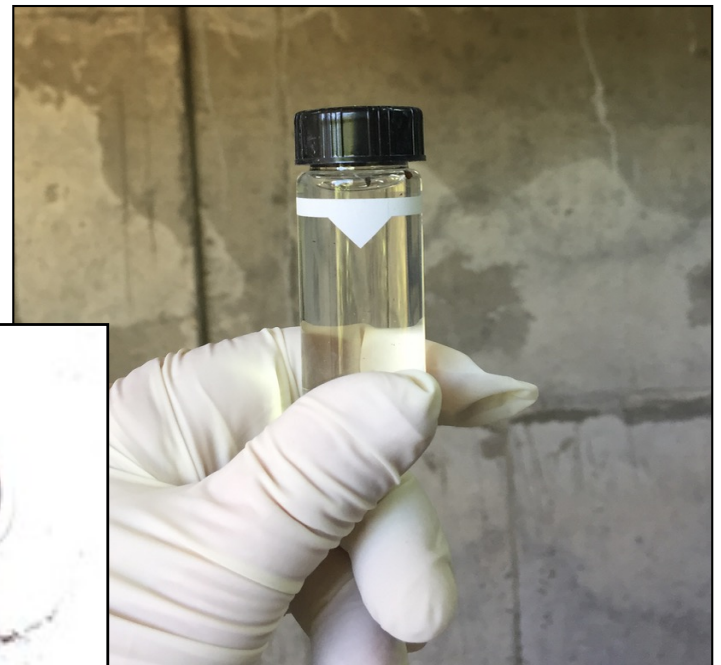
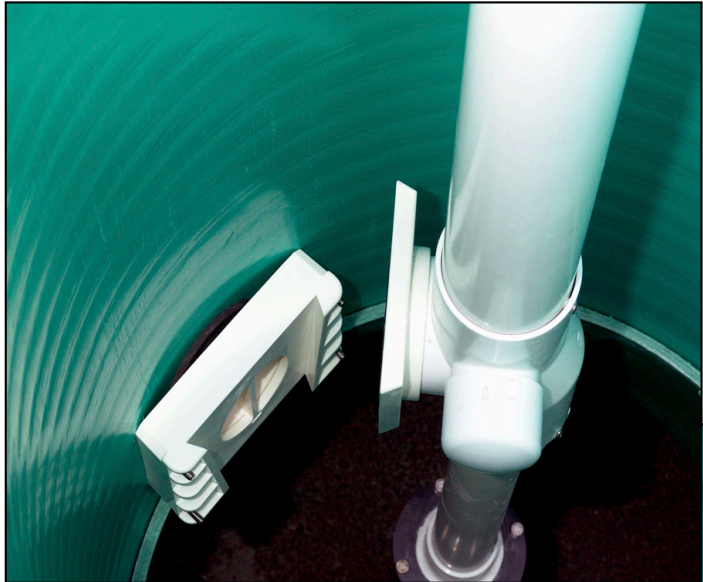
# At the Site

# Getting Started

- Walk the site
- Visually inspect ...
  - ~ Equipment for damage
  - ~ Tank liquid levels
- Unbolt pod lids
- Check pods for odors



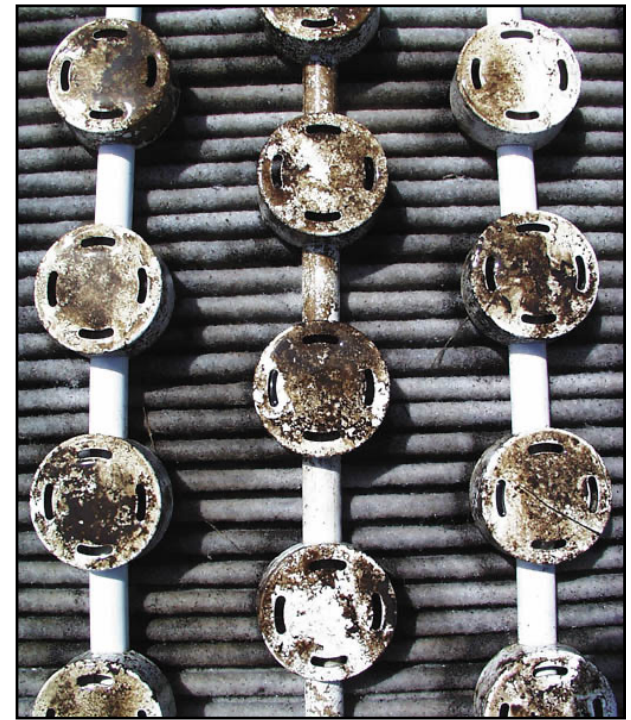
# Sampling Filtrate



# AdvanTex Textile Filter

## Characteristics of Biomat

- Color — Light to dark brown, not yellow
- Texture — Gelatinous, not lard-like
- Odor — Musty, not pungent
- Moisture — Moist, not ponding\*



*\*If ponding or nuisance odors occur, refer to the troubleshooting section of the Residential AdvanTex<sup>®</sup> O&M manual.*

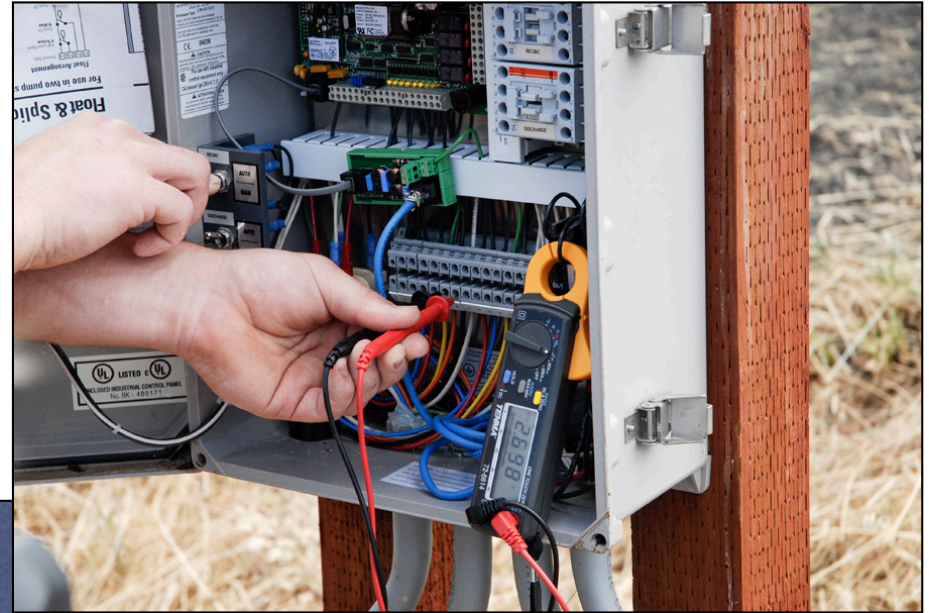


# Grease and Oil Buildup : Commercial



# Checking Pump Operation and testing floats

- Engage test mode  
(VeriComm® panels only)
- Measure incoming panel voltage
- Toggle switch to “manual”
- Verify pump operation



# Checking Float and alarm Operation

- Confirm proper float operation
- Lift and low each float individually
- Confirm proper input at the panel



# Cleaning the Pump

- Ensure that the breakers in the control panel are in the off position.
- Close ball valve.
- Disconnect discharge assemblies.
- Remove pump.



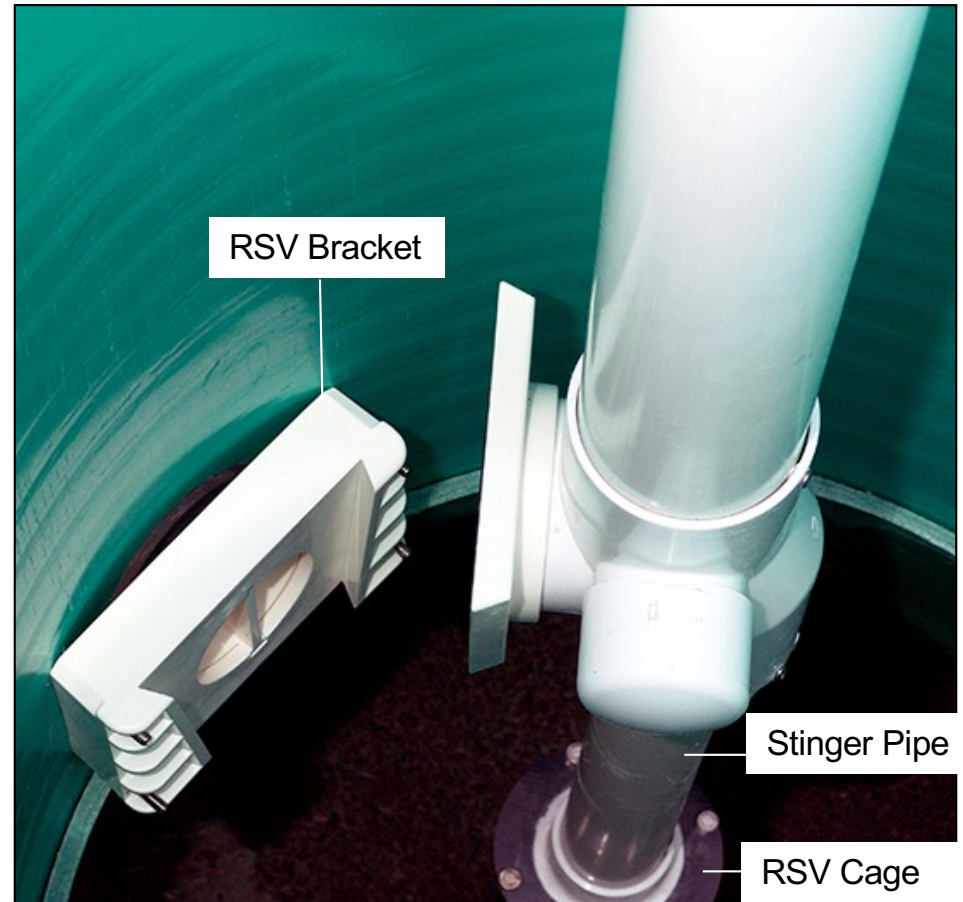
# Cleaning the Pump



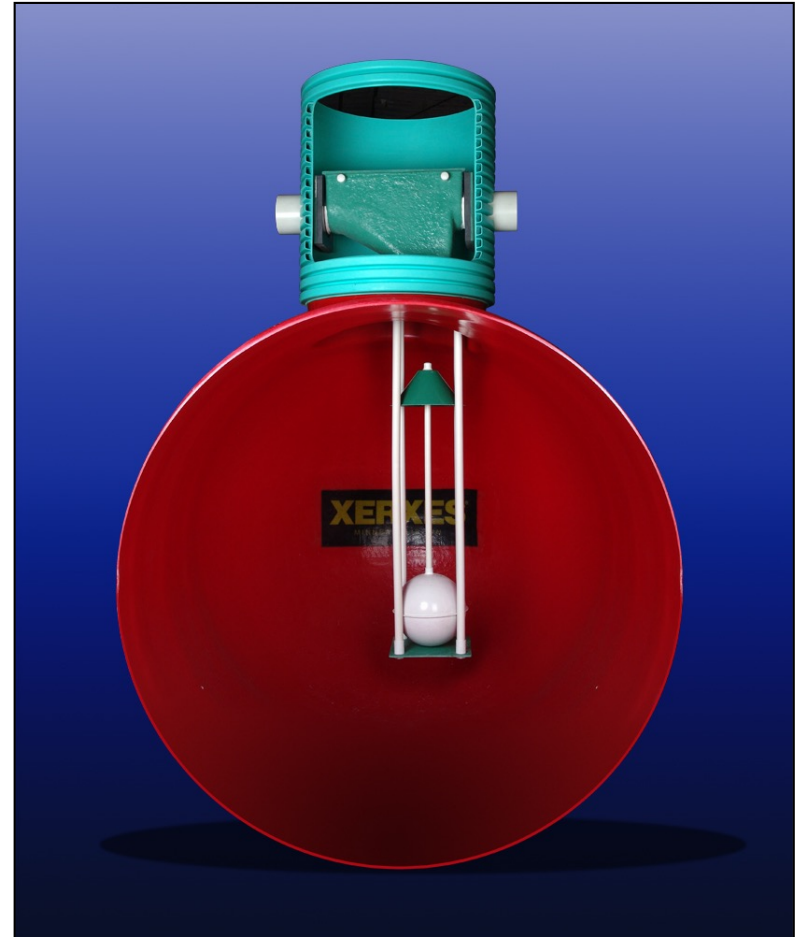
# Cleaning the Biotube<sup>®</sup> Filter Cartridge



# Cleaning the Recirculating Splitter Valve: Residential

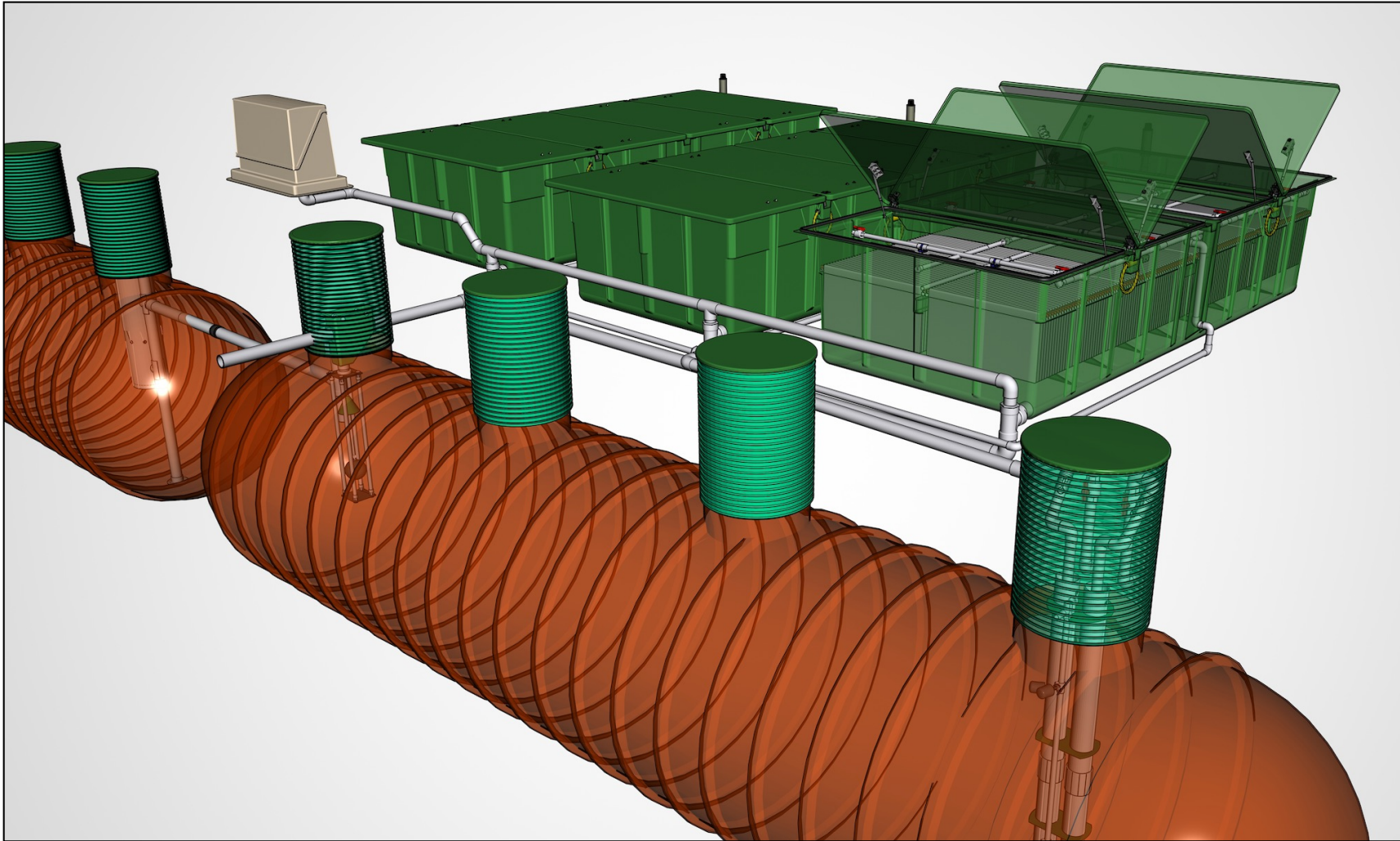


# Recirculating Valve: Commercial





# Inspecting the Processing Tank



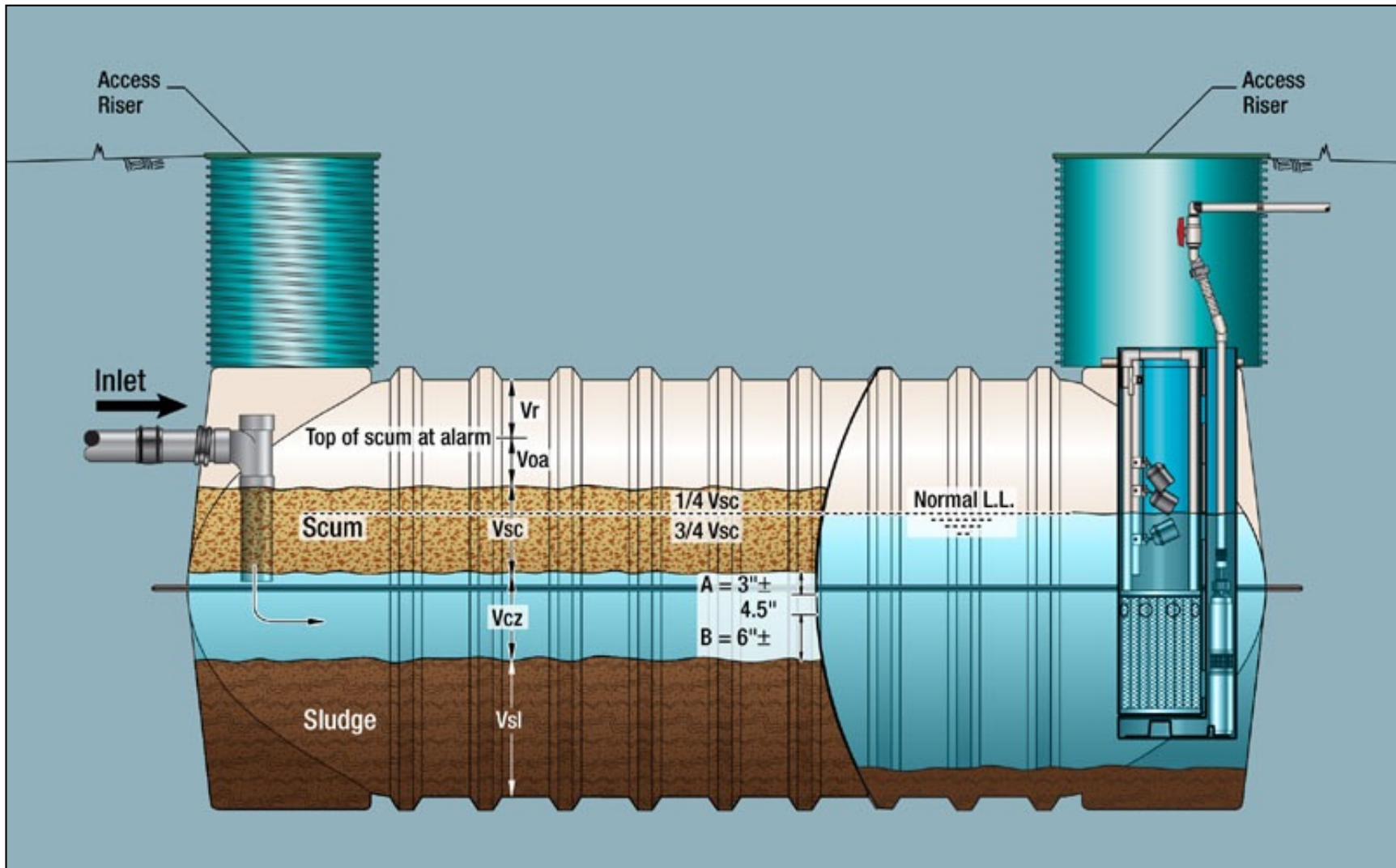
# Inspecting the Tank

## Measuring Scum/Sludge Thickness

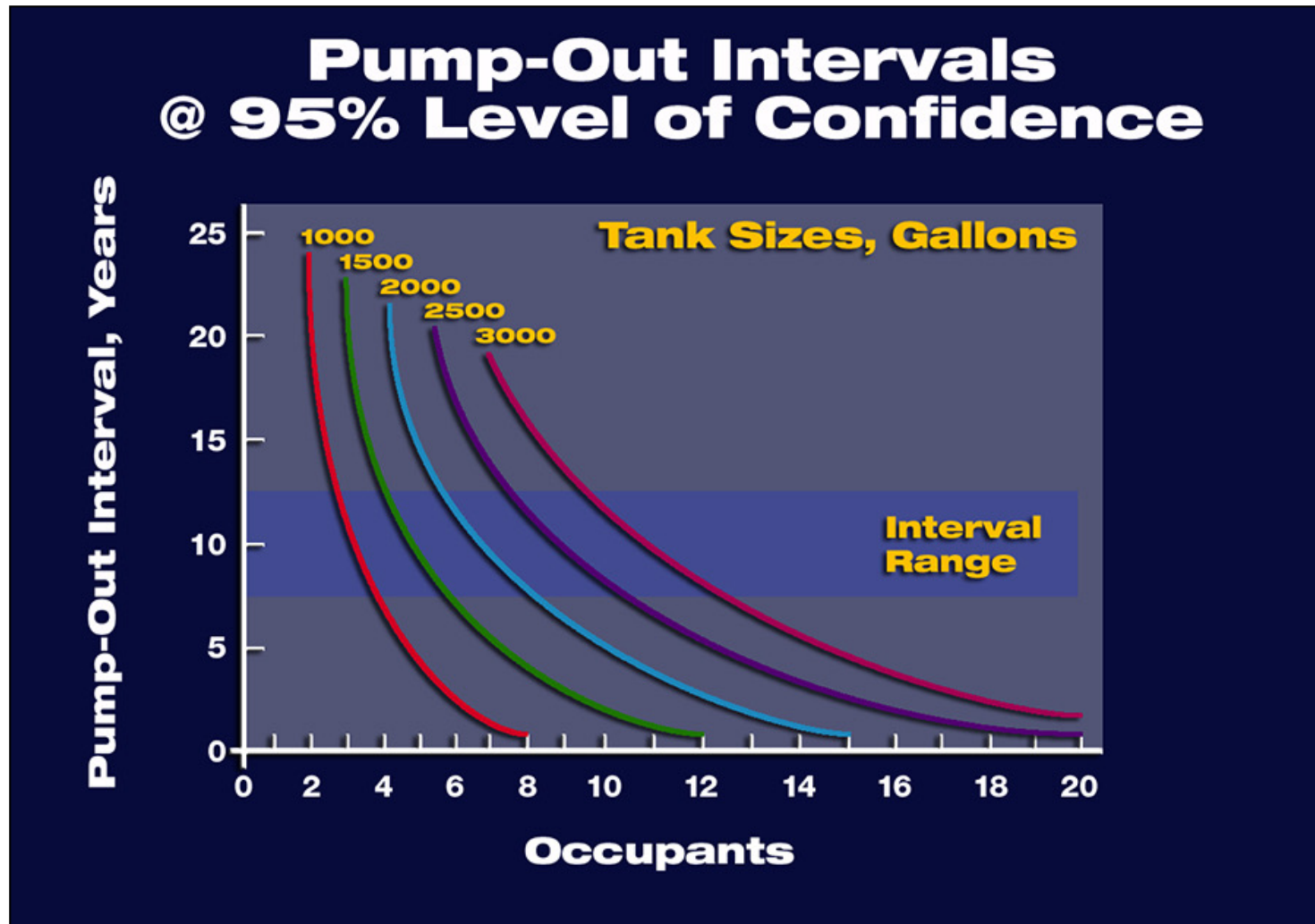
- Measure scum/sludge accumulation after 1 year
  - ~ Thereafter, measure every 3 years
- Measure and record buildup in recirculation chamber



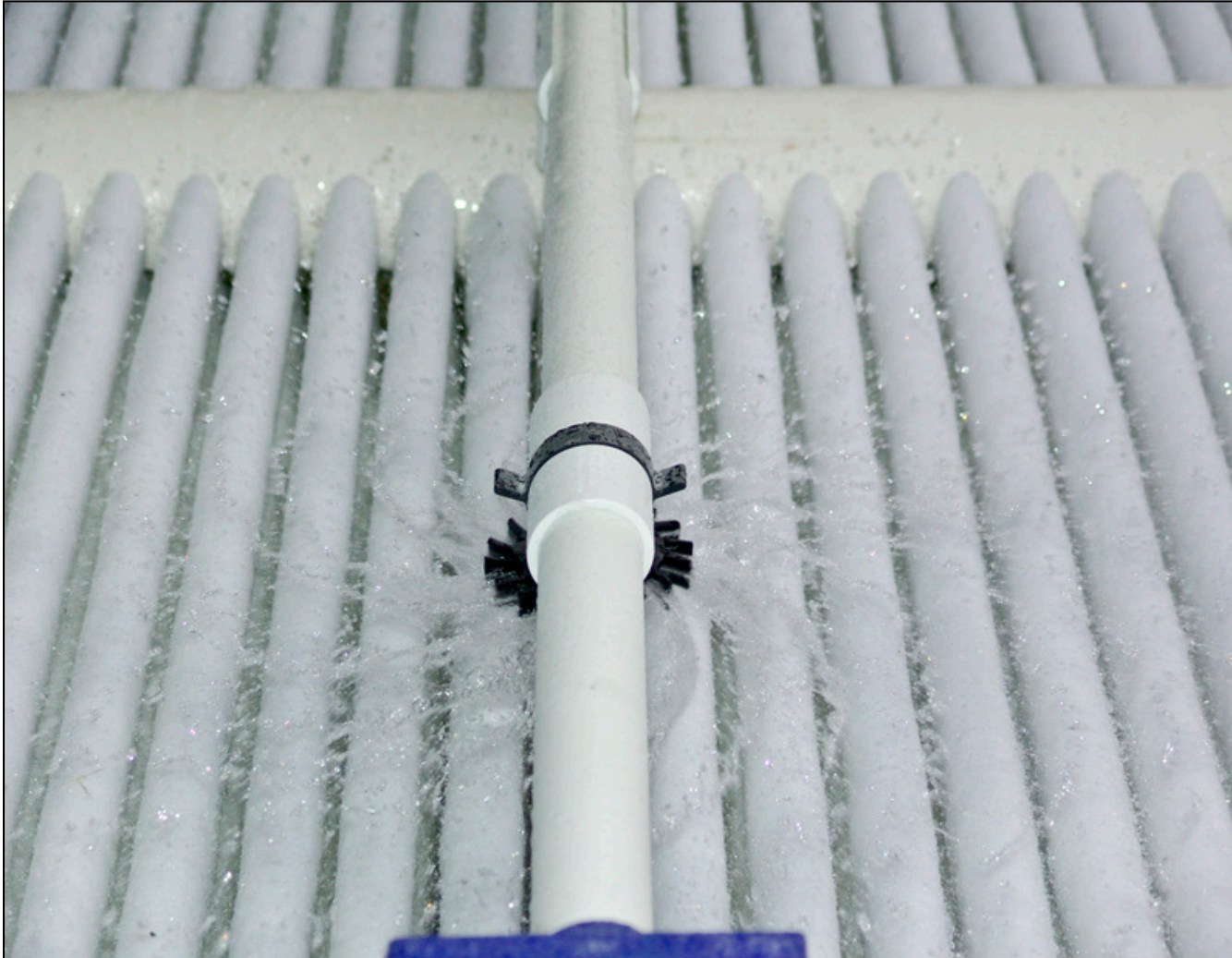
# Measuring Scum/Sludge Thickness



# Pump-Out Intervals, in Years



# Spin Nozzles



# Flushing AdvanTex Laterals



# Two Main Ways to Clean Laterals

- Use pump
- Use a bottle brush

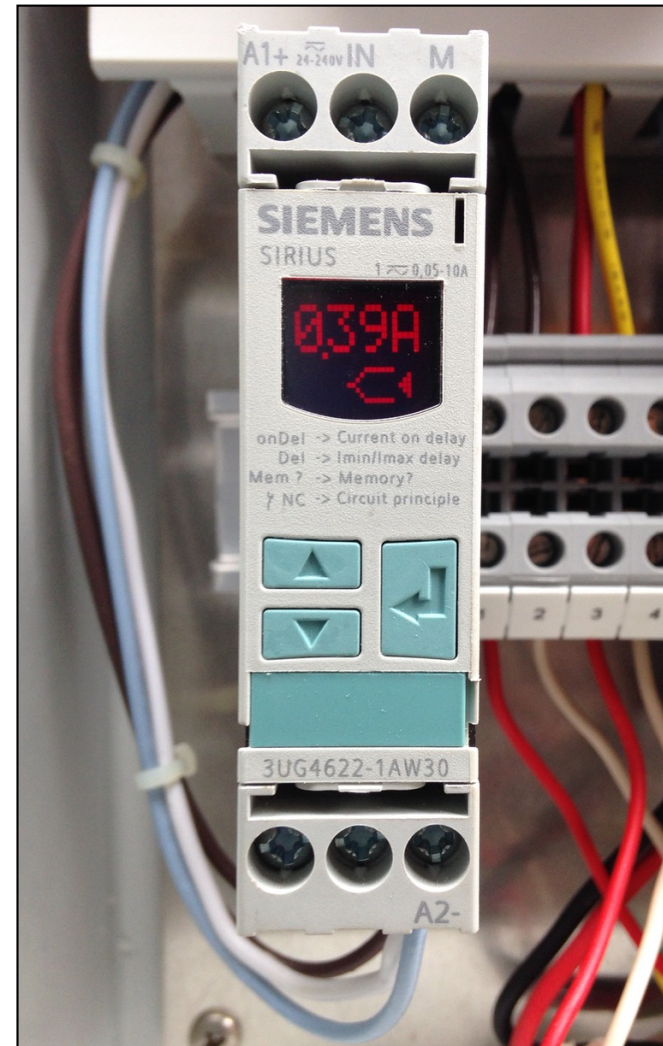


# Risers, Splice Box, Floats, and RSV

- Reinstall splitter valve (if applicable)
- Verify tank liquid level is in normal range
- Verify no holes or leaks in riser/riser connection
- Inspect splice box; remove any water present
- Verify float condition and neat wrap of float cords



# Miscellaneous O&M Procedures



# Before Leaving the Site

# Before Leaving the Site



# Before Leaving the Site



# Back at the Office

- Complete all paperwork
- Submit all reports as required

# Summary: O&M Is Important Because ...

- It optimizes treatment process.
- It ensures system longevity.
- It establishes accountability.
- It protects the owner's investment.

# ***Solutions for Decentralized Wastewater Treatment***

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