Troubleshooting Aerobic Treatment Units

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What Most People think when they hear “ATU”
Standard 40 System Types

Conventional ATU  
(Saturated System)

Media Filters  
(Unsaturated)

Drainfield Systems
Advanced Troubleshooting

There are approaching 60 Certified Brands representing nearly 1000 models and sizes

- Controls
- Blowers/Mixers
- Pumps
- Other technology that is product specific.
- Since each can be so unique, we recommend that you begin with the manufacturer of the equipment.
Advanced Troubleshooting

The following assumptions are made:

• Mechanical Equipment is in working order
• There are no obvious site issues, installed as permitted
• Recommended pumping and maintenance is occurring
• The System has not been disconnected from power
• pH, Dissolved Oxygen and other observations can be made
Questions about your System

• Is this the original system, or a replacement?
  • When was the system installed
• Do you have a maintenance provider?
  • When was the system serviced last?
• Have you had your system pumped or cleaned?
  • If so, when?
  • At whose recommendation?
Questions about your System

- Have you had your system pumped or cleaned?
  - If so, when?
  - At whose recommendation?
Questions about your System

- Do you experience frequent power interruptions/outages?
- Has your system been without power for greater than a three hour period? If so, when and how long?
- Do you frequently have standing water in the yard?
- Do you live in or near the 100 year flood plain?
Questions about your home

• Do you have a water softener?
• Whole house water filter?
  • If so, do you know where the backwash goes?
Questions about your home

- Do you have a garden tub/Jacuzzi in one of your bathrooms?
  - If so, how often do you use it?
  - Is it on the second floor?
- Do you have multiple Shower Heads
Questions about your home

• Since your system was installed have any additional toilets, bathrooms, or homes been plumbed to it?
• What was the approximate year of construction for your home?
• Since then, have you replaced any fixtures? (toilets, shower heads, etc.)
Questions about your home

• Do you have a utility sink in your garage?
• Do you ever clean paint brushes, mix pesticides/herbicides, or any caustic or acidic cleaners in the sink?
• Does anyone’s job or hobbies effect the way water is used in your home? (examples are: pet grooming, hair salon, artist, laundry service, daycare, home brewing?)
Questions about your home

• Do you have a drain in your garage?
• Are your gutters or air conditioning hooked up to your household plumbing?
Occupancy of the Home

How Many Residents?
Occupancy of the Home

How Many Residents/System Load?

How many of these go to work or school outside the home?
Occupancy of the Home

How Many Residents/System Load?

How many infants do you have in the home?
Occupancy of the Home

How Many Residents/System Load?

Do you have house guests regularly?
Occupancy of the Home

How Many Residents/System Load?

Do you have house guests regularly?

• If so, how many and what is the average length of their stay?
Occupancy of the Home

How Many Residents/System Load?

Do you have a home-based business?

• Do you have any employees?
• Clients/Patients that visit regularly?
Laundry Practices

• How many loads on Average per week?
• How many loads do you wash on your biggest laundry day?
• Do you change your water level for each load or do you leave it one setting?
• Do you wash diapers?
Laundry Practices

- What brand and type (powder or liquid) of detergent do you use?
- How often and much bleach do you use?
- Borax
- Detergent Enhancers
- Liquid Fabric Softeners
- Do you need extra detergent to get your clothes clean?
Bathroom Cleaning Practices

Toilets

• Please describe how you clean your toilets?
• How often do you clean your toilets?
• Do you use automatic cleaning products in the tank of the commode such as 2000 Flushes, Tidy Bowl, Vanish, Clorox, etc.?
• Have you ever used Septic Tank Additives, Enhancers or Yeasts?
What Goes down your Sink

Do you have a garbage disposal?

- If so, how often do you use it? (several times per day, daily, only on occasion)
- Approximate number of cups per use.
- Describe items placed down disposal.
What Goes down your Sink

• Do you ever exceed recommended strengths when creating cleaning solutions?
• Do you use Liquid Plumber or other Drain Cleaners?
• Do you pour mop water or other household cleaners down the drain?
• If so, what cleaners, how often, and what quantity?
Health of Residents

• Is anyone in the household on medication for an infection?
• If so, how long have they been on this medication and what type of medication?
• Is anyone in the home being treated for cancer/AIDS?
• Is anyone on chemotherapy (oral or intravenous)?
• Does anyone in the home have chronic diarrhea (either due to gastrointestinal surgery, intestinal/colon by-pass, or other gastrointestinal conditions)?
• Does anyone in the family suffer from bulimia?
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QUESTIONS?
www.nowra.org