Case Histories-Wineries



Environmental Leverage® inc.





Winery Lagoon issues



Winery with issues meeting permit.

High levels of septicity in lift station, nutrient deficiency



Recommended adjustment to ammonia levels, bioaugmentation and process controls







Winery California





Winery with issues meeting permit during crush or after high spills.

Recommended adjustment to ammonia levels, bioaugmentation MicroClear 206 and MicroClear M100 Micronutrients and process controls







Winery EQ lagoons septicity and nutrient deficiency with high organic loading

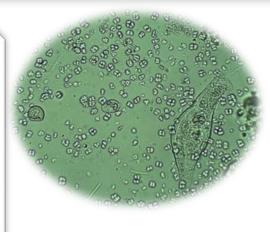
Dredging of lagoons, addition of nutrients directly to lagoon



Winery Foam Napa

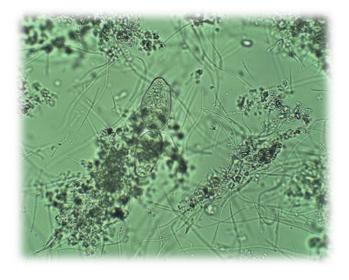






Plant loading seriously exceeded design capacity Foaming continual Tetrads and Type 021N filaments

EQ tank added Nutrients increased Bioaugmentation added when spills or high loading occurs







POAA is a biocide with a very long stable life in wastewater. High dosages can easily kill a small wastewater plant. Return of a small amount of RAS and bioaugmentation used upstream in EQ to help break down the biocides prior to entering the Aeration basin Venturi used to increase DO levels in the EQ



Oils in Winery





Lubricating oils are used in wineries. Bioblocks can be used in the lift station to pretreat the oils A DAF was used as well at this plant







Australia Barossa winery





Onsite audit and training to help teach Critical 5 to increase BOD and TSS removal





New Zealand winery



Algae issues in the pond MicroClear 101 used





Australia Mc Claren Vale







Onsite audit and training to help teach Critical 5 to increase BOD and TSS removal



Antifoams at a winery CA





Many times antifoams are used when foaming occurs. Antifoams can be oil based and cause not only higher organic loading, but Free floating filaments or Nocardia or Zooglea due to oils. Antifoams can have a BOD of 2-700,000 ppm BOD. Nutrient deficiency can occur as well. Fix the issue instead of using band-aid

Here nutrients were added along with bioaugmentation MicroClear 206 and problem solved no more antifoams needed.







Wineries can have spills from 50-100,000 ppm when a tank is cleaned out. Typical reaction is to reach for the antifoam when foaming occurs. Instead adjust N, add MicroClear 206 and skip the antifoams. Better solutions

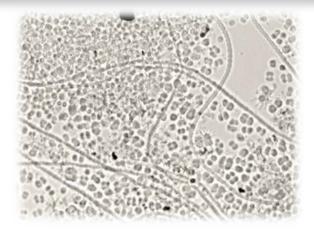






High BOD and Nutrient deficiency







High BOD spill- TSS and BOD in effluent, as well as foaming

Solution- Increase ammonia and add bioaugmetation to help degrade excess BOD loading temporarily

Lagoon effluent violations





- Dredge lagoons
- Add nitrogen
- Add bioaugmentation





Winery Sonoma Plant foam-over

High organic loading lead to foam over in tanks

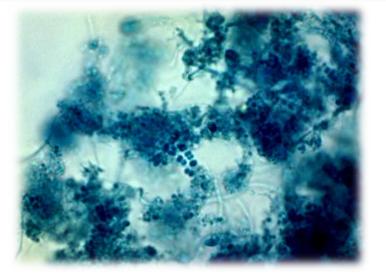
Solution, add sprayers for mixing and foam suppression in EQ tank Add more nitrogen Add more bioaugmentation when spills occur

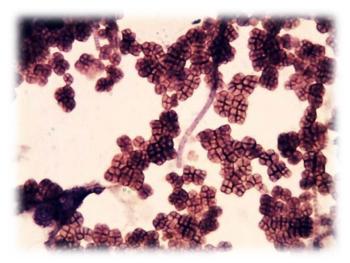






Winery with Nitrogen deficiency

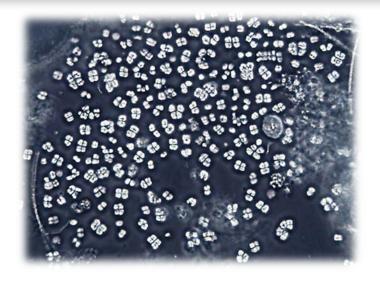


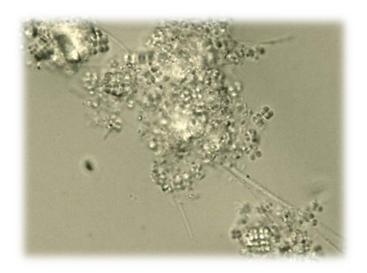


This winery had high TSS High loading caused nutrient deficiency

Whenever you see Tetrads they always indicate nitrogen deficiency

This is common at wineries







Winery and Restaurant TX



Unable to meet permits- BOD and TSS





Training on operations, solids handling, nutrient addition. Bioaugmentation added



Environmental Leverage The Next Generation of Solutions

- Chemicals, Laboratory, Training, Consulting, Total Systems Approach
 - Onsite Audits & Consulting
 - Beneficial Reuse & Biosolids Alternatives
 - Training Programs
 - MicroClear[®] & MicroSolv[™] Bioaugmentation Products
 - Cooling Tower & Wastewater Lab Services
 - Computer Based Dosing Wizards
 - Wastewater Audits
 - Online ELearning Courses













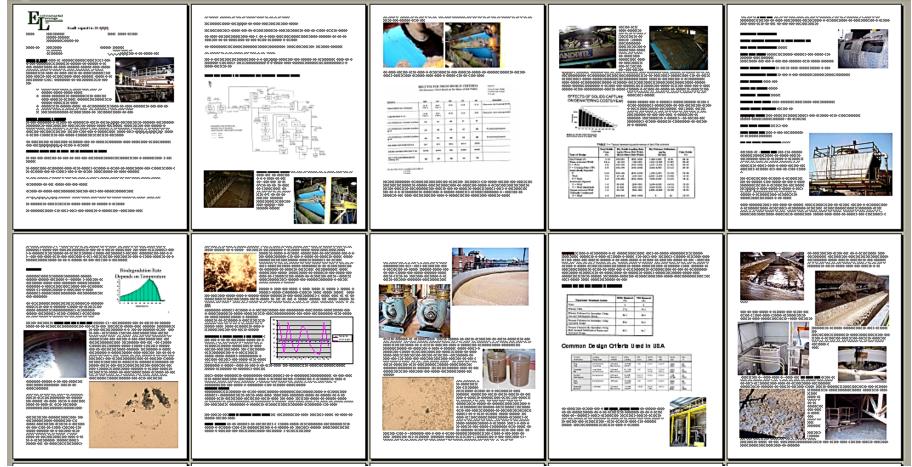






Full onsite audit of Treatment plant, or "Virtual Audits"

Evaluation of Equipment, Process Recommendations, System Optimization, Troubleshooting, Testing, Solids Handling, etc.



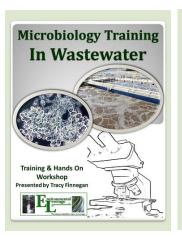
Wastewater Training Programs

Wastewater Training Materials 4 – CD Set

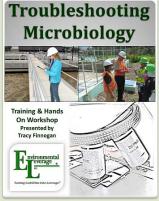
Higher Life Forms CD Filamentous Bacteria CD An Overview of Wastewater Training Wastewater Microbiology

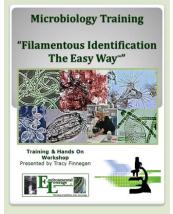
Filamentous Identification The Easy Way[™] Training CD Powerful Filamentous Training

Custom Training CD or Manuals









Environmental

Microbiology Training

"How To Use

Training & Hands On

Workshop Presented by Tracy Finnegan

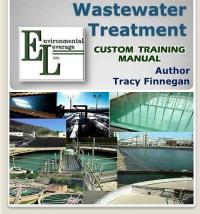
The Microscope



Wastewater Training

Visual Troubleshooting

Tracy Finnegan



An Overview of

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- Online computer-based training
- Interactive courses with videos, photos, & quizzes
- Convenience and flexibility at individual pace
- No travel expenses or hassles.

Online ELearning: Wastewater Training Courses Overview

Control and Minimization of Total costs of operations is always necessary, but guaranteed reliability and long term sustainability are the keys to transport your wastewater treatment system above and beyond normally targeted measures. These wastewater training programs are based upon years of experience and accumulation of practices on actual performance of thousands of treatment systems. These wastewater training programs have been consistently successful in teaching people how to be proactive and achieve their goals of reducing Total Costs of Operation while also achieving compliance.

You will learn step by step procedures which will enable you or your operators to develop quick, easy to establish system checks to control and monitor your system in order to predict upsets, minimize energy and chemical usage, and avoid costly repairs and unnecessary maintenance procedures.

These courses have been pre-approved for Wastewater CEU's in Alaska, California, Connecticut, Idaho, Indiana, Maine, Massachusetts, Nevada, New York, North Carolina, Tennessee, Vermont, Washington and West Virginia. Some states do not require pre-approval. If you need these approved for your state, please contact our office.

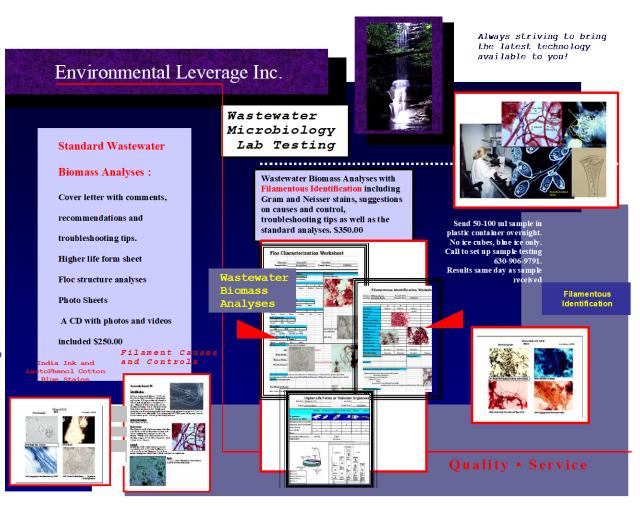
These courses are eligible for CEU's, Contact Hours or PDH (Professional development hour) in Alabama, Arizona, Maryland, Virginia and more to come.

Now approved in Canada for Nova Scotia and Saskatchewan.



Environmental Leverage Analytical Services

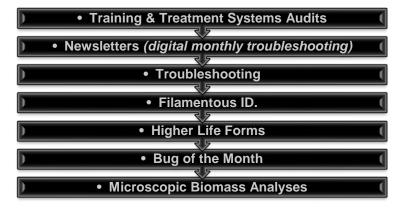
- Wastewater Biomass Analysis
- Filamentous Identification
- Cooling Tower Microbio Analyses





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SLARCH

Mystery Bug of The Month - From 2004 - 2017



These photomicrographs were taken from a wastwater sample. Most of the objecthes used were 100x, 400x and 1000x. You can see this free uninner open what looks like a flap to capture food. Notice how when you go from low power to a higher magnification, more details jump out. Do not be afraid to go up to a higher magnification, even 1000d









TURNING LIABILITIES INTO LEVERAGE

Join Environmental Leverage[®] on a Journey into the Future with our next generation of Water & Wastewater Treatment solutions

The future begins now....

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