



SludgeHammer®

nature called. we answered.



**Empowering Nature in
Wastewater Treatment Systems**

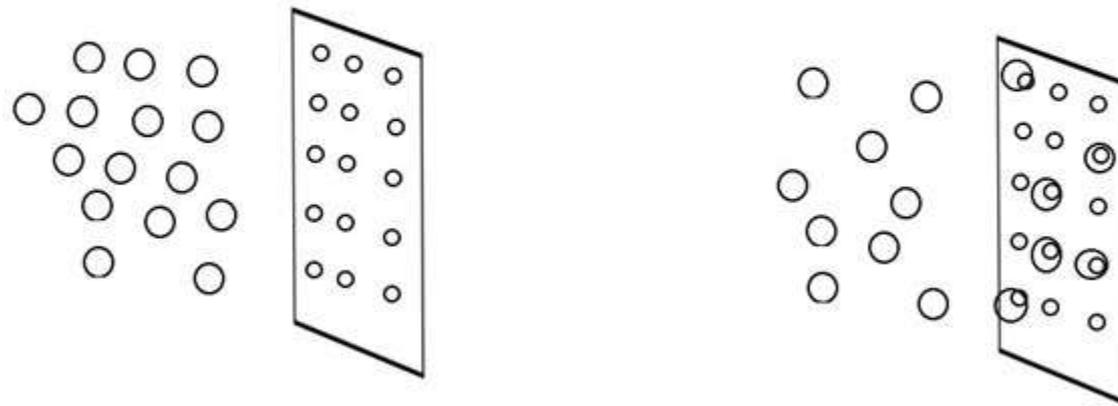


How Does Filtration Work?

Absolute Filtration versus Depth Filtration

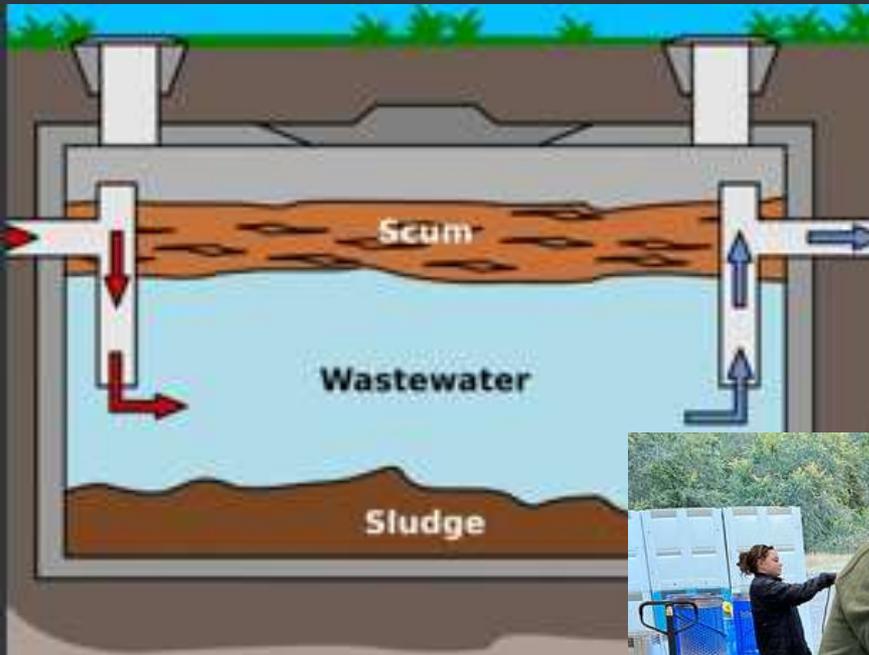


Absolute Filter

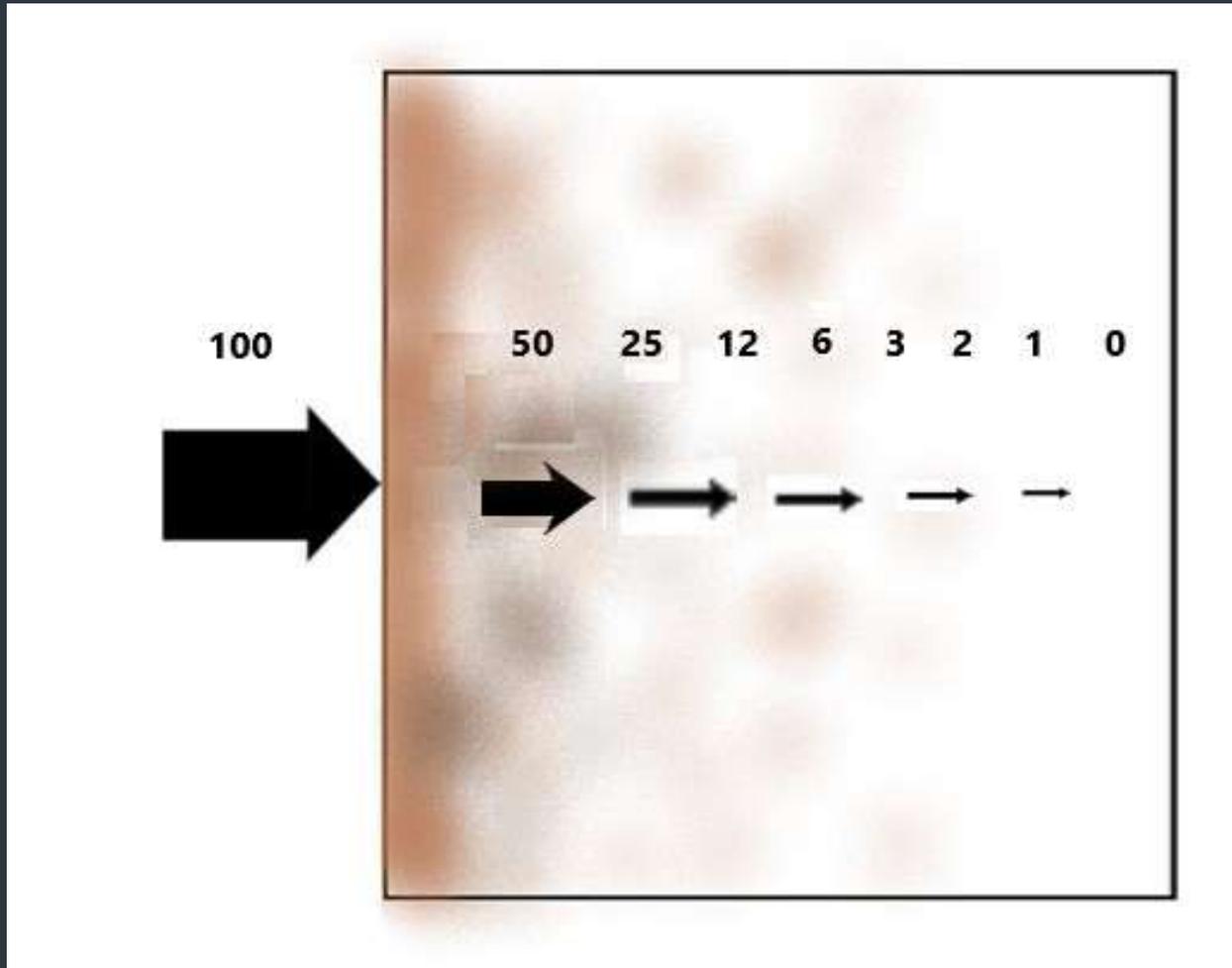




Settlement is Step 1



Depth Filtration

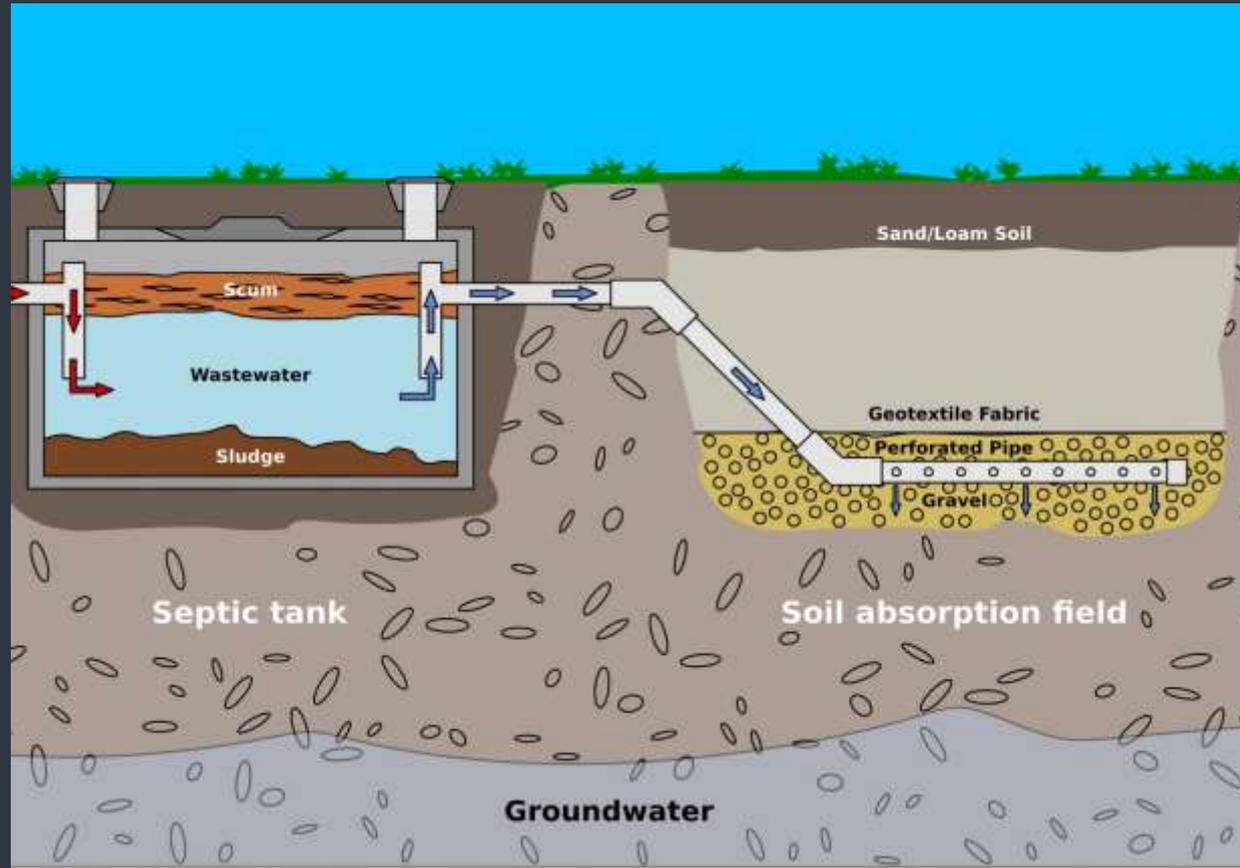




Soil Grains Provide an Infinite Number of Pores of all Sizes

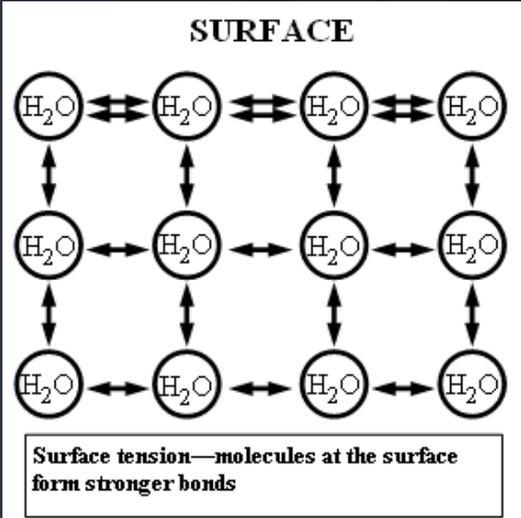
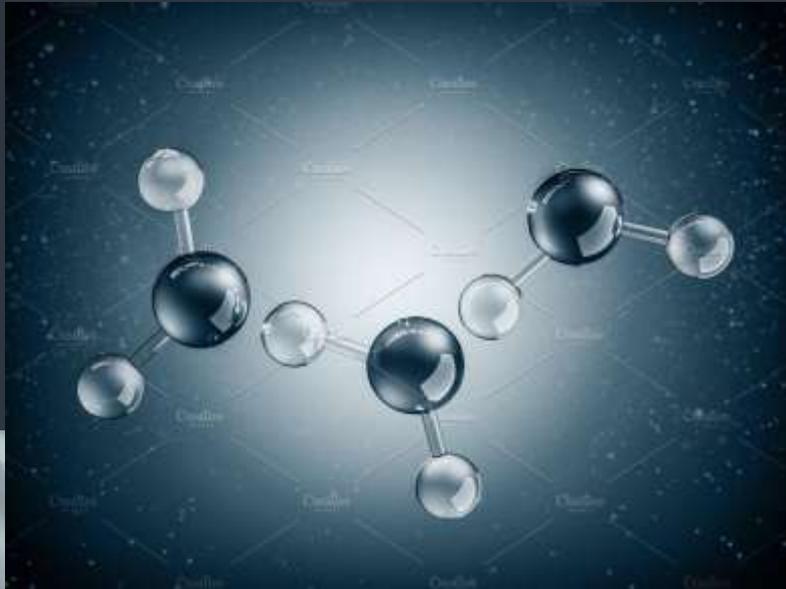
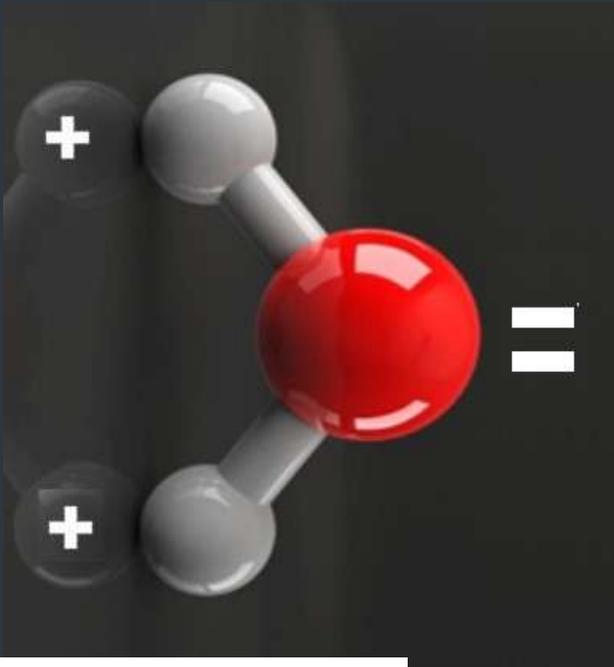


What actually gets into the soil from a septic tank?

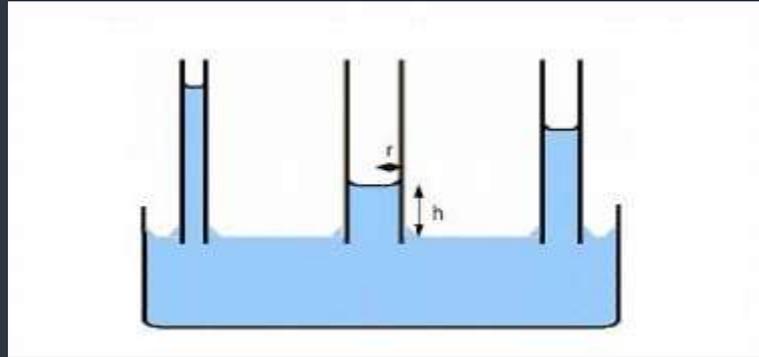




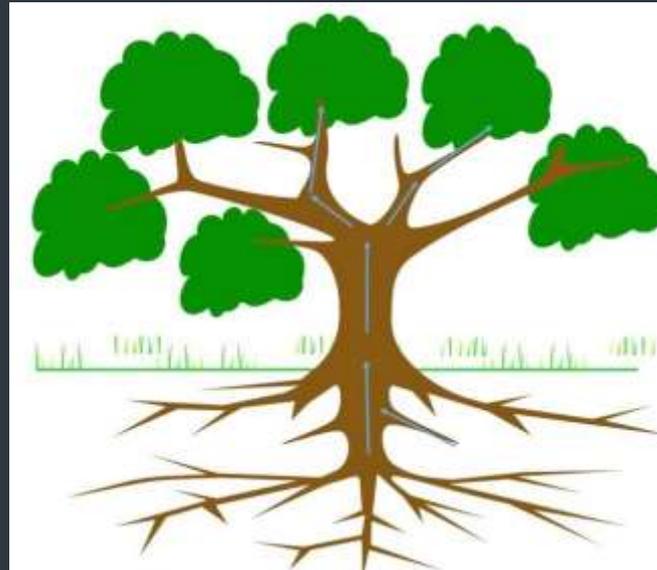
It's About Water



Capillary action is the Key

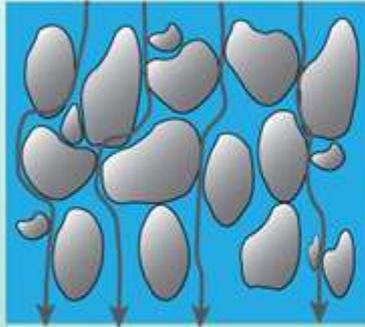


Capillary action can pull water all the way up a 200 foot tree!



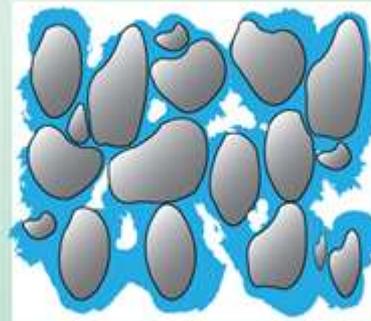


Gravitational Water



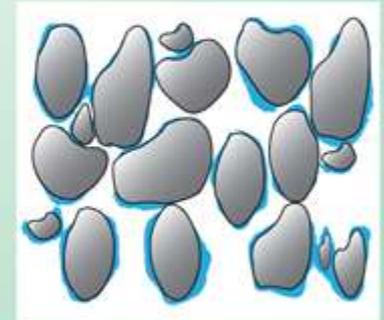
**Water drains
through soil profile**

Capillary Water



**Water held in large
pores**

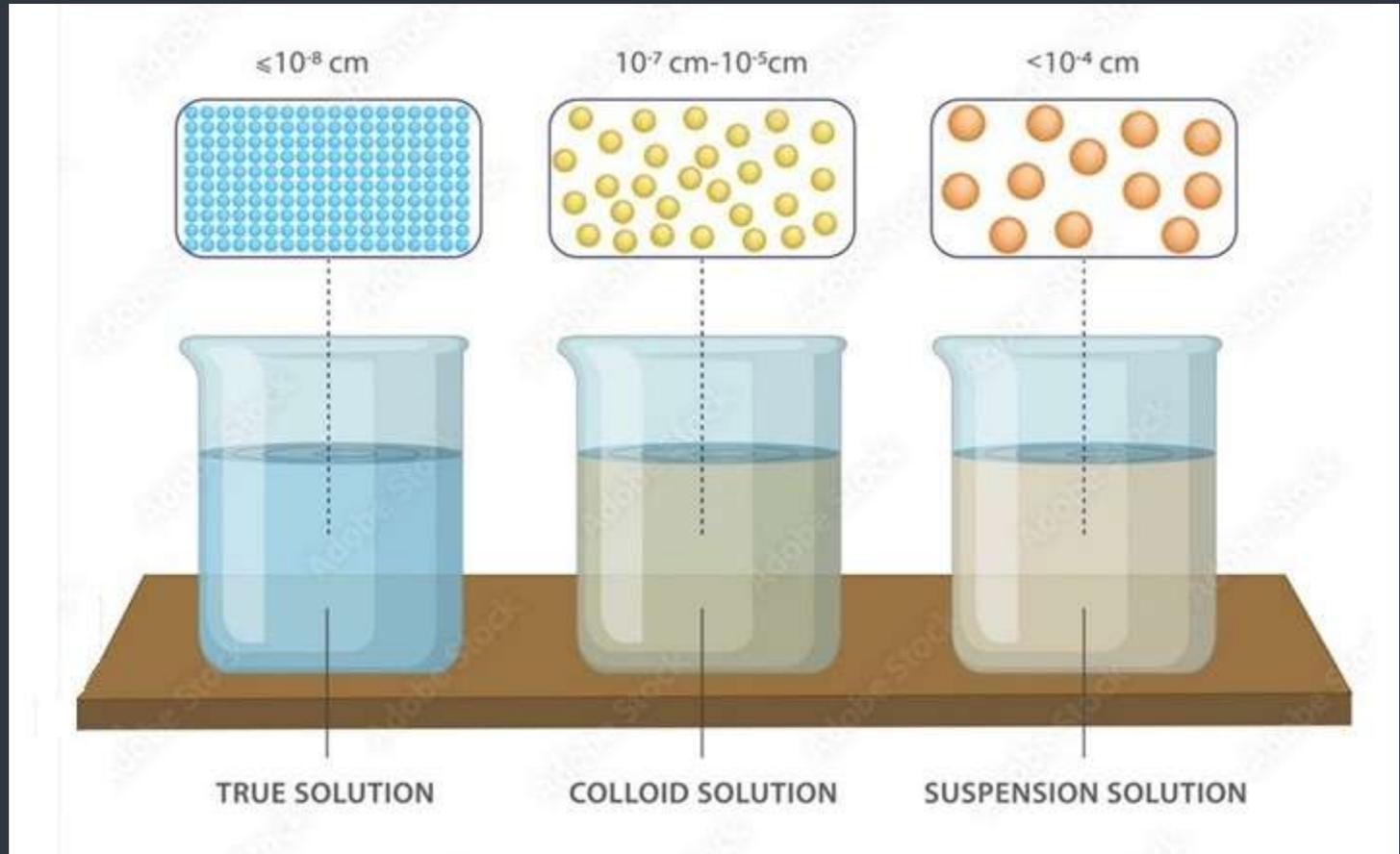
Hydroscopic Water



**Water adheres to
soil particles**



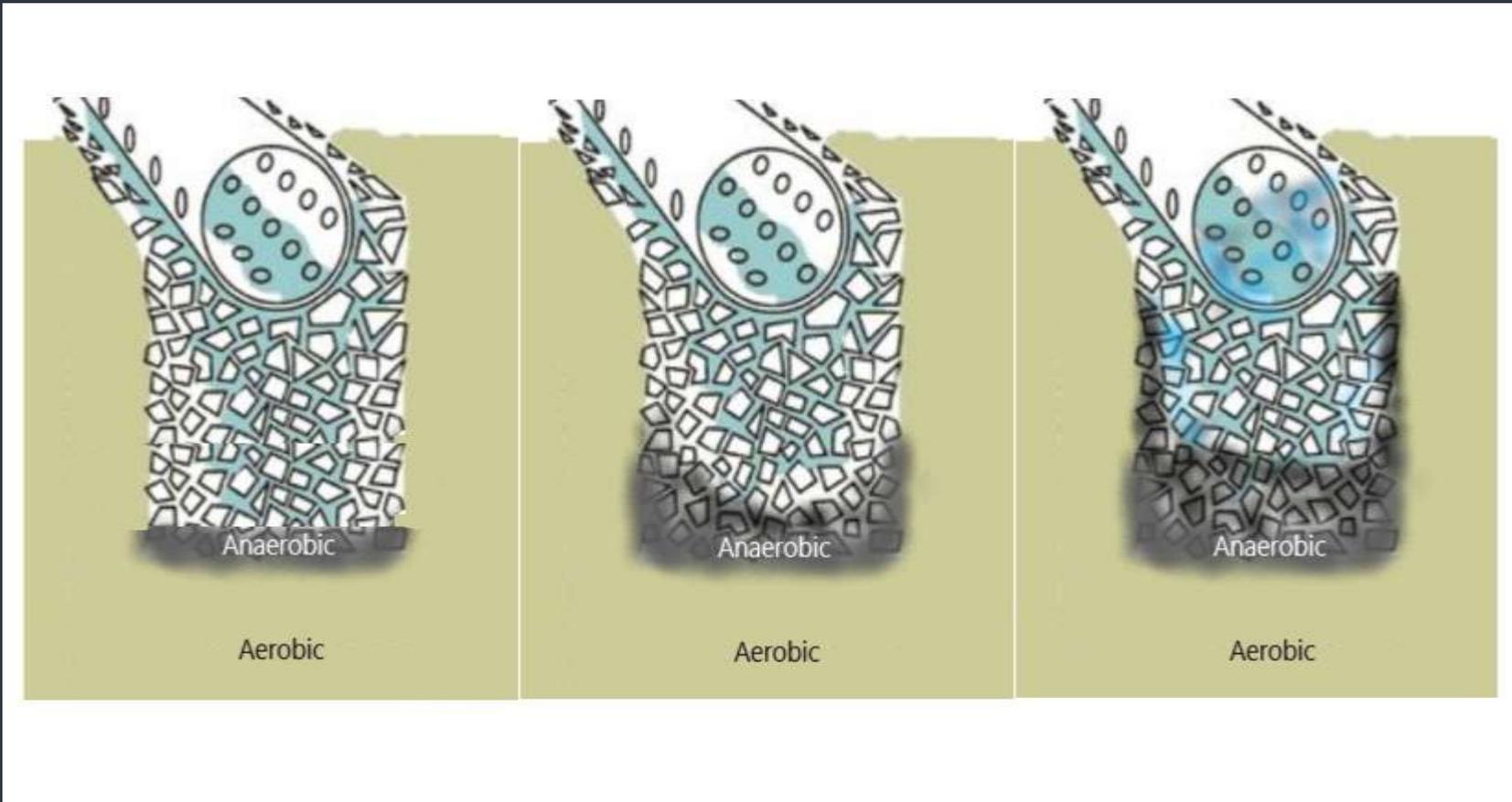
The Missing Ingredient - Colloids





Growth of the Biomat

Colloidal Mucus - The Culprit



Now we have a problem!





Fermenting Manure



SOIL BACTERIA



Huge appetite for organic carbon

Survive in anaerobic conditions

Ferment sugars such as muco-polysaccharides

Denitrify nitrate and nitrite for oxygen

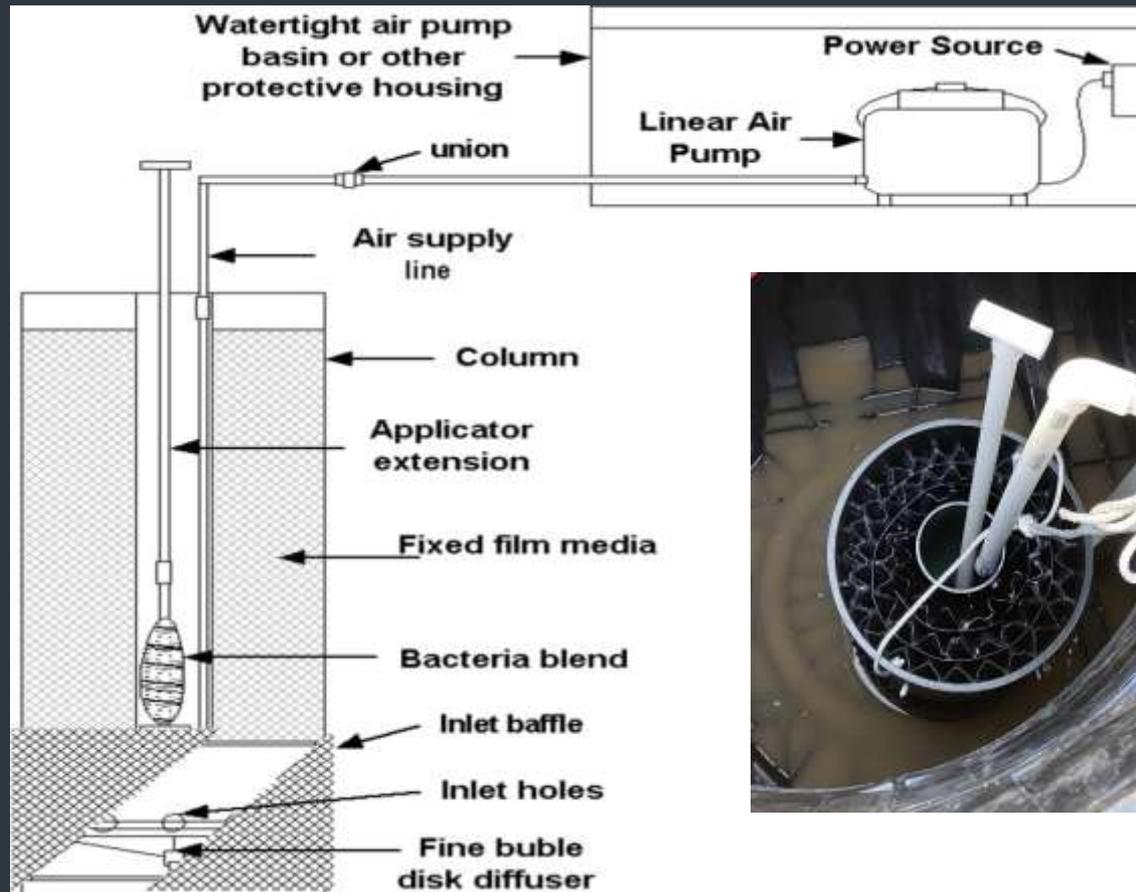
Operate at low temperatures

Form spores with low biomass

Very short generation times

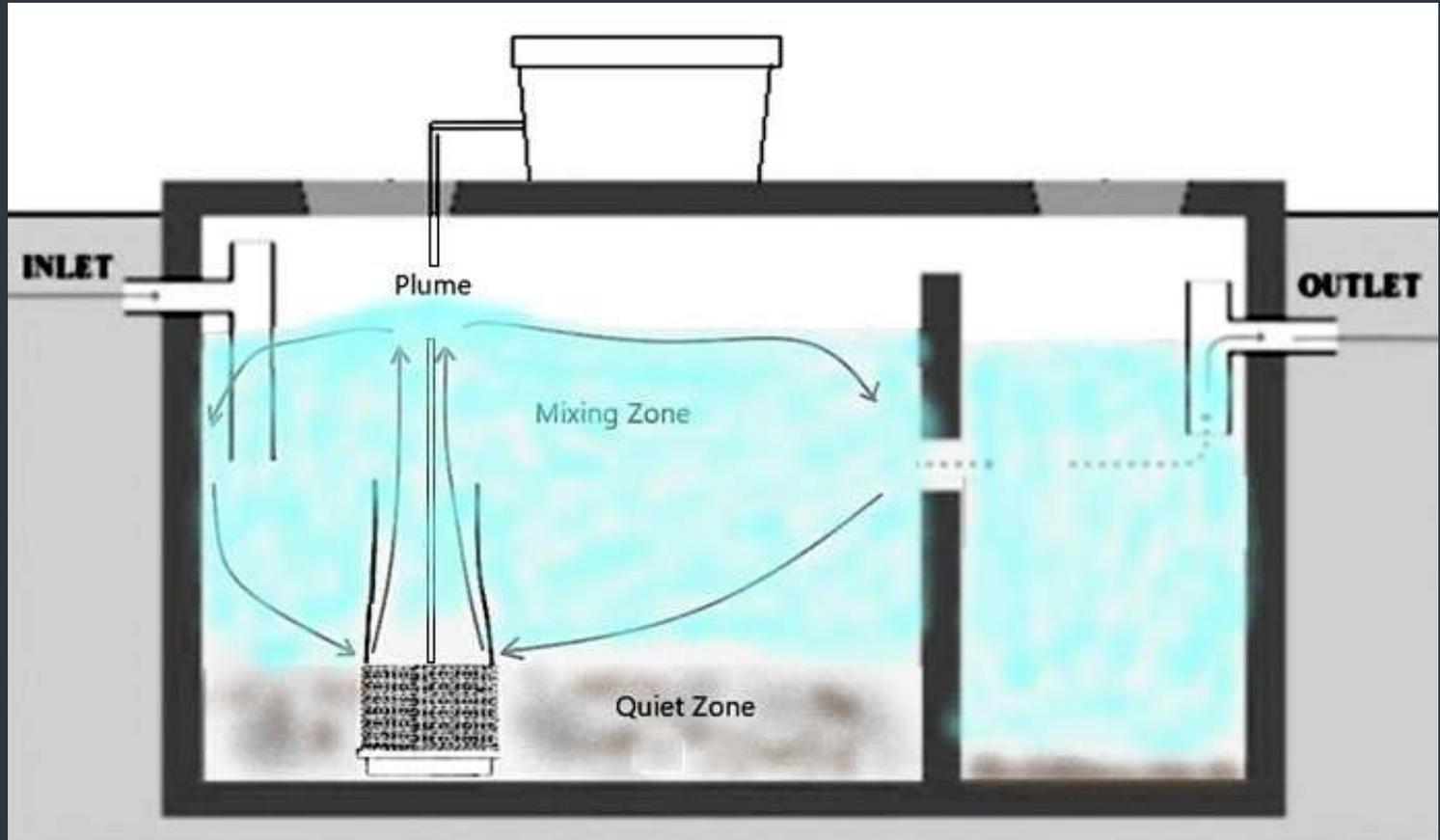


The ABG is an aeration device that provides a specific refuge where facultative soil bacteria can be grown inside the tank.





Two-Zoned Treatment Tank





Easy to Install – Works in All Tanks





Test facility at UC Davis



SludgeHammer ABG systems are the ONLY rigorously tested and IAPMO/UPC certified remediation system on the market.





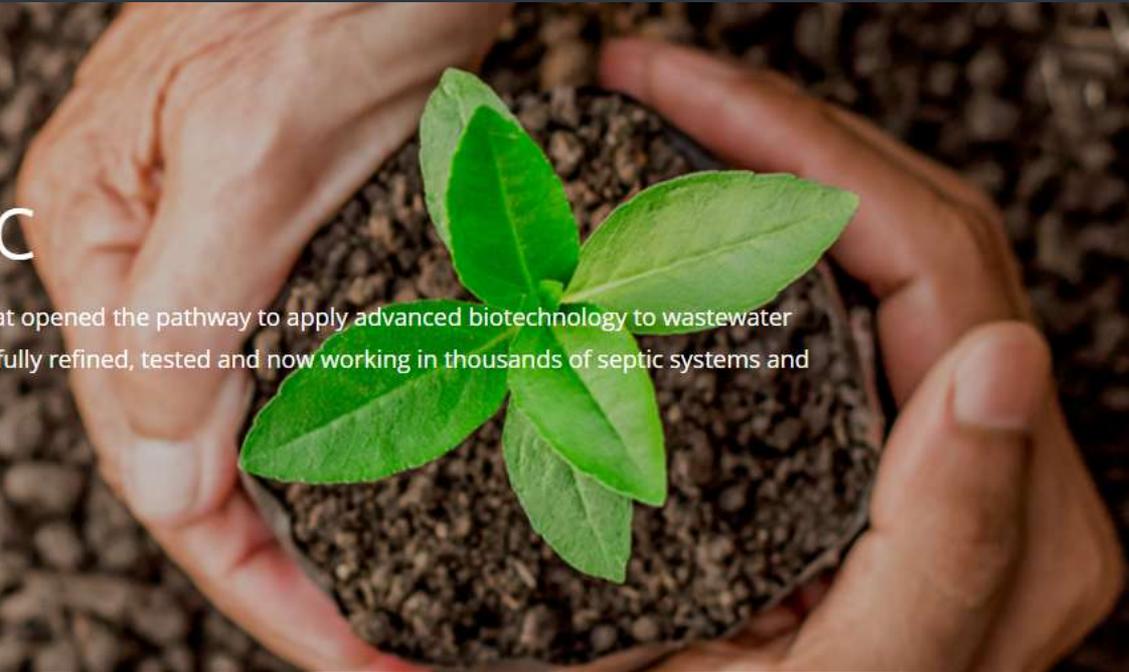
Crystal Clear, Odor Free





IT'S SCIENCE NOT MAGIC

The Aerobic Bacterial Generator (ABG) is a breakthrough concept that opened the pathway to apply advanced biotechnology to wastewater treatment in a simple and economic fashion. The SludgeHammer is fully refined, tested and now working in thousands of septic systems and larger industrial waste systems throughout the world.



Thank you for your time today and let's move into any
Questions the group may have.....