Wastewater Treatment (WWT)

Microbiology At Work

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Our Solution

We provide a simple, economical biological solution to wastewater treatment.

Our proprietary suspension provides an effective, natural process by which impurities in water and sludge are degraded biochemically. This metabolic process results in :

- Significant BOD, COD and solids reduction;
- Biological nutrient/nitrate/phosphate reduction;
- Improved dehydration and decreased sludge volumes: 20-40% less sludge (depending on organic content);
- Increased plant capacity;
- Odor elimination via biological ion-exchange;
- No chemicals.

Our additive is entirely non-toxic, a proprietary marine algae suspension from Ascophyllum nodosum seaweed. Its bio-active properties break down organic compounds in a metabolic process and eliminate toxicity.

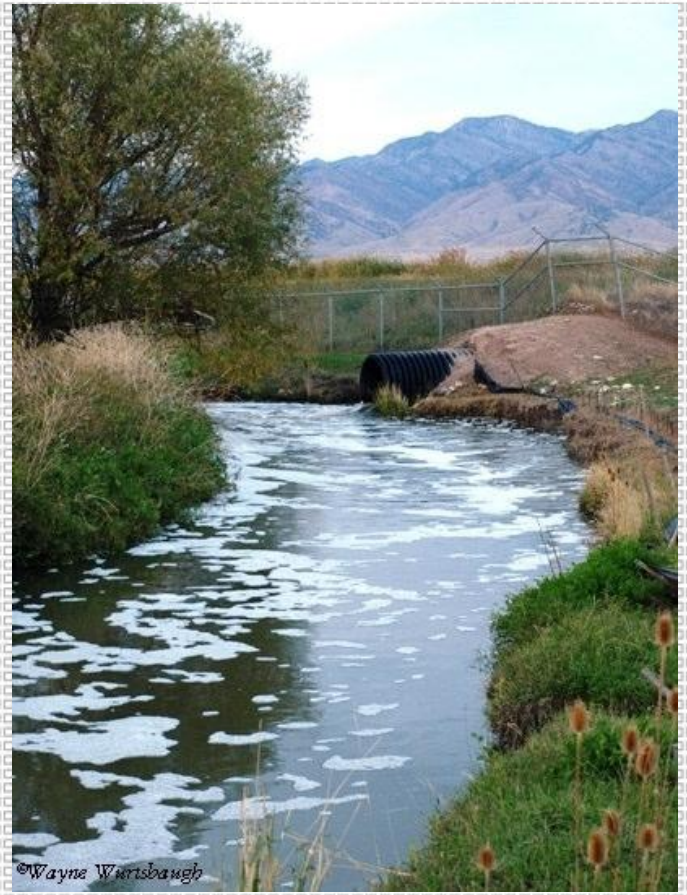
Endorsement

- Our additive is currently being employed as a biological WWT solution in 90% of the conventional WWT Plants in the Republic of Slovenia and has been endorsed by the Institute for Water of the Republic of Slovenia (IzVRS).

Incentives

Our Wastewater Treatment Economizes :

- Lower sludge treatment costs;
- Increased overall capacity / efficiency;
- Reduced energy usage;
- Reduced O_2 usage,



Microbiological Process

Particulates are dissolved	Hydrolysis + sedimentation
Nitrification enhanced	Converting ammonia (NH4) to nitrate (NO3)
Denitrification: Nitrates are respiration oxydation agent for obligate aerobes instead of oxygen	Through ion-exchange with CO2
Sulfide oxidized into harmless elemental sulfur	Sulfide ion (S2) synthesizes with carbon hydrates
Phosphorous reduced via ion-exchange	Preventing/reversing eutrophication
Complex carbohydrates are digested	Into Carbon + CO_2
Bleach is degraded	Into peptides + amino acids
Minerals are dissolved	Released harmlessly with water effluent
Natural disinfection of WW plant and water effluent	Bacterial synthesis in the metabolic process - a natural sanitizing effect
Sludge is DRIER through efficient digestion and ODORLESS	Composting process
No green algae growth bloom	Filamentous algae inhibited due to biological phosphorous and nitrate reduction
Harmful pathogens are inhibited	Including hepatitis virus, pseudomonas bacteria, and pathogenic algae
Heavy metals are sequestered	Blocked and harmlessly released into waterway