



BOG Batch System of Leachate Treatment

**Collection Pit - Aeration&Innoculation Tank - Filtration
Small Footprint, Low Energy, Low Cost**



Waterwise 3.1kW Mixer & Aerator 87kgO₂/kwh



**Light Weight 175kg, No Gearbox Reduces
Maintenance to Minimum, No Parasitic Disease**



**Full Water Body Circulation for Aerobic Digestion, Rapid
Microbial Growth to Reduce BOD Rapidly**




High Oxygen Transfer Results in Heavy Metal Oxidation



Fine Bubble Aeration Evident



Additional Aeration as Jets Strike the Surface



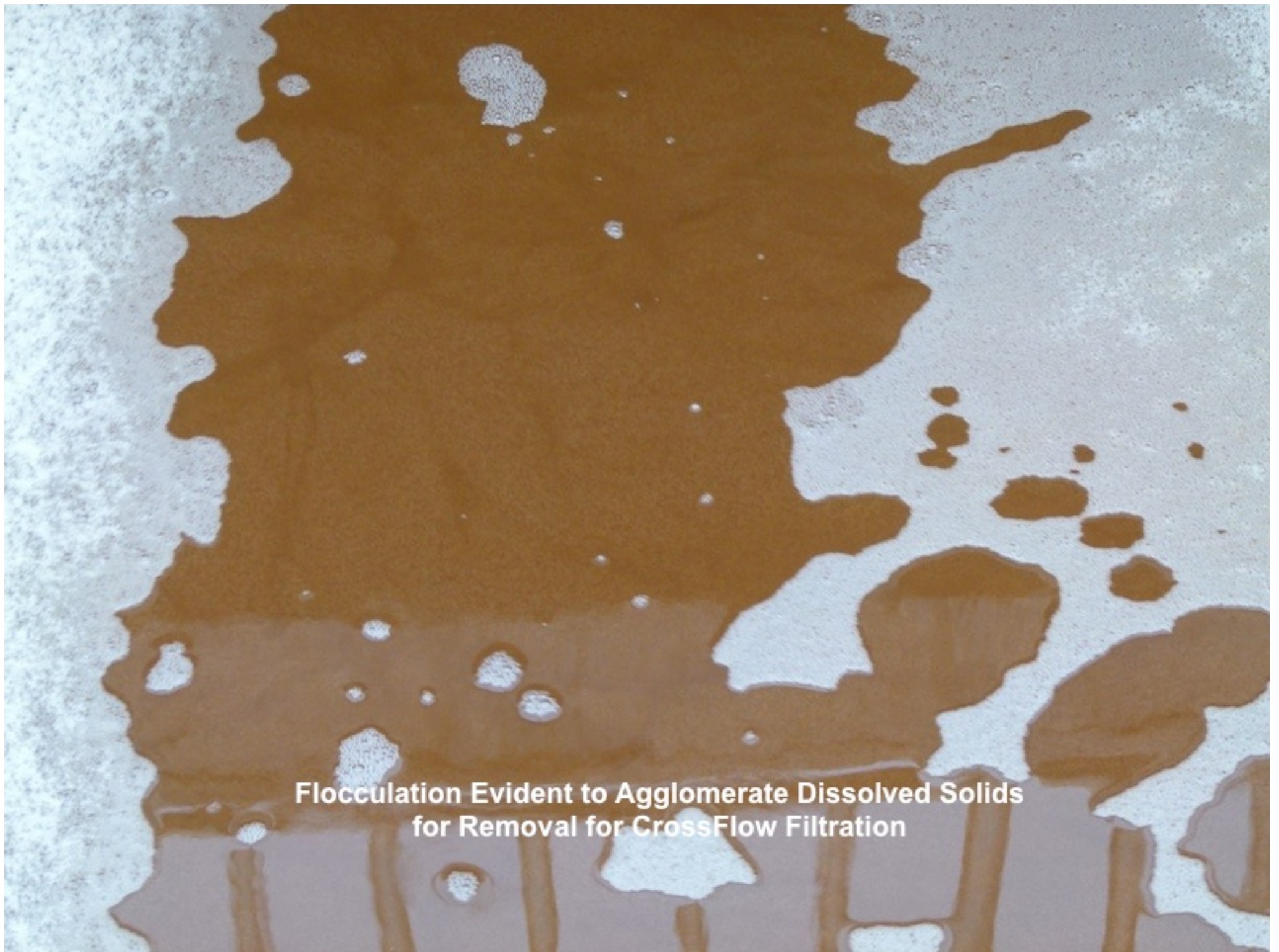
Intense Mixing and Aeration



Raw Leachate Aerated, Inoculated and Flocculated to ensure Heavy Metal and Arsenic Removal, Odour reduction, BOD COD and Ammonia Reduction

Industrial Organic Removal Evident Using Zeolite Powder





**Flocculation Evident to Agglomerate Dissolved Solids
for Removal for CrossFlow Filtration**



**Filtration CrossFlow Installation Filtering
Solids Down to 0.45micron >90% efficiency
at up to 17m³ per hour**



**CrossFlow Receiving Leachate
from the 500m³ Tank**



**Filtration Plant Including CrossFlow, Carbon & Zeolite Polishing
Removing Contaminants and Colour**



Alternative Polishing - Carocel™ Solar Desalination Demonstration



Commissioning Initially Showing Carbon & Zeolite Fines Colouration



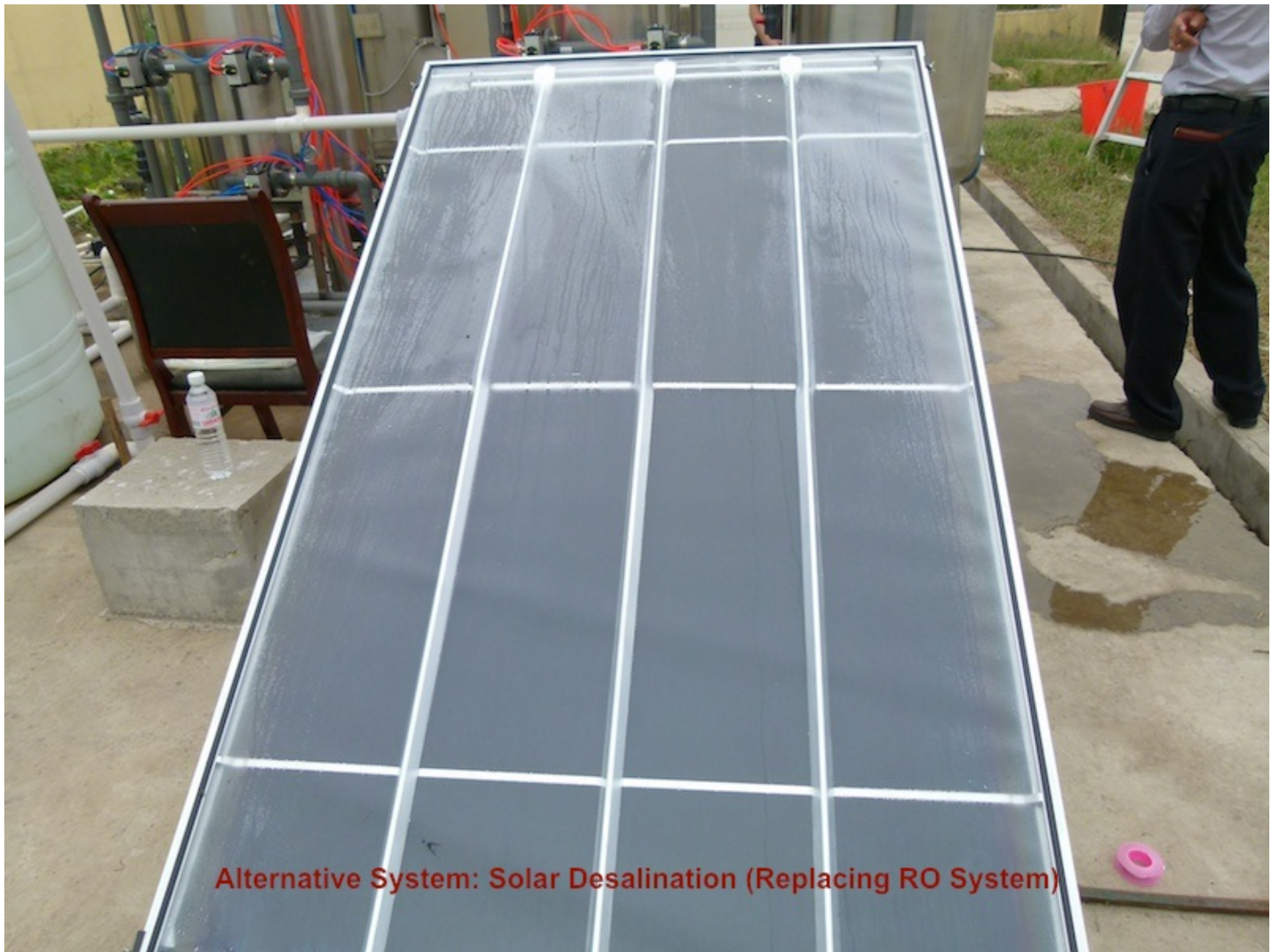
**Commissioning 2: Improved Colour
Against Source Liquid Below**



Commissioning 3: 6 Hours Later with Fines Reducing



Right to Left: Leachate to Clear Compliant Water



Alternative System: Solar Desalination (Replacing RO System)