



CLEAR SOLUTIONS

OILFIELD WATER, CRUDE AND EMULSION TREATMENT SPECIALISTS

Applying innovative hydrodynamic cavitation technology to break heavy emulsions, treat water for reuse, and recover quality crude.

Avonlea Environmental Services is a Calgary, Alberta based company dedicated to developing technologies that provide clear solutions.

Our team of experts understand how process inefficiencies can result in the loss of hundreds of barrels of residual crude oil in the recovery process, or lead to costly operational challenges and setbacks.

Our cost-effective and innovative cavitation technology is a simple, field-ready solution that enables operators to:

- increase produced water oil recovery
- separate oil contaminants
- treat water for reuse

Simple solutions that support the bottom line have never been more clear.

AVONLEA
ENVIRONMENTAL SERVICES CORP.



285145 Wrangler Way, #5
Rocky View No. 44,
Calgary, AB, Canada, T1X 0K3



+1 (403) 828-6360



info@avonlea.tech



<http://avonlea.tech>



WHAT IS HYDRODYNAMIC CAVITATION?

A rapid decrease in localized pressure in a liquid leads to water vaporization and the creation of a nuclei. The nuclei expands into a microbubble, which becomes unstable when reaching maximum radius. The microbubble then implodes, releasing tremendous energy and shock waves, at the molecular level.

Avonlea's patented Cavitek technology creates thousands of cavitations every second. This extreme energy release can be calibrated to impose chemical reactions, break down difficult emulsions and achieve fluid/gas/solid interactions, quickly, easily, and inexpensively.



OUR SERVICES

RESIDUAL CRUDE RECOVERY

Maximize oil output and recover residual crude from produced water just prior to disposal.

Avonlea's residual crude recovery program enables operators to:

- Reduce chemical costs
- Improve injection well performance
- Lower injection pressures and decrease stress on equipment

WATER TREATMENT FOR REUSE

A simple and efficient way to clean oilfield waters and remove contaminants in real time.

Avonlea's water treatment programs:

- Supercharge and expedite chemical reactions and fluid separation
- Reduce treatment costs
- Reduce chemical usage
- Decrease retention/settling time
- Decrease tankage requirements

BIOCIDE PROGRAM ENHANCEMENT

Supercharge your biocide treatment program by increasing biocide/ microbe contact area and improving the immediate kill of your current biocide treatment by a full log.

BREAKING HEAVY EMULSIONS

Avonlea's Cavitek technology requires no chemicals to break emulsions quickly, easily, and efficiently into their oil and water phases.

Separate your frac flow-back fluids into clean sales oil and reusable produced water with little or no waste, and:

- Achieve significant cost savings
- Remove need for 3rd party disposal
- Reduce trucking needs
- Maximize crude recovery
- Small equipment footprint on-site
- Support ESG programs