

EMOH™ FOR Dairies

WHAT IS EMOH™?

Electron
Magnetic
Oxxygen
Hydrogen

EMOH™ is Aequion's proprietary water system. It is comprised of dual treatment chambers (EMOH™ Cores) and a specialized venturi. Each chamber applies a powerful magnetic field that diminishes hydrogen-bonding energy while increasing the rate of ion exchange, allowing the formation of monomeric water molecules with greatly improved mobility. The venturi effectively increases dissolved oxygen levels.

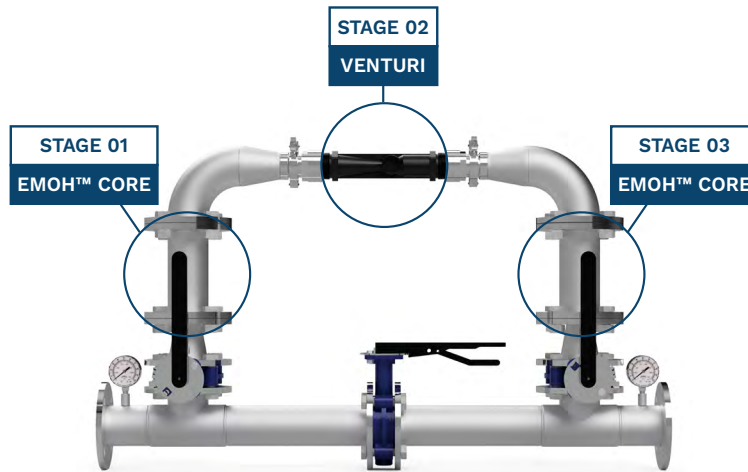
No chemical additives are ever used nor necessary.

MODEL 06 D EMOH™

Aequion's **Model 06D EMOH™** system for process lagoons incorporates a skid for flotation, a specialized pump and valves to handle continual solids.



REDUCE METHANE EMISSIONS



*Model 03 EMOH™



STAGE 01

Water passes through the first of two EMOH™ Core chambers. It is here that clustered H₂O molecules are broken down, magnetically-charged and reoriented.

STAGE 02

Water continues through a critical-orifice venturi. Under vacuum, ambient air is introduced into the system creating nanobubbles of dissolved oxygen.

STAGE 03

Water reaches the second EMOH™ Core and final stage of the EMOH™ process. Extended core exposure induces an equilibrium between monomer H₂O molecules and oxygen-infused nanobubbles.

THE POWER OF EMOH™ TECHNOLOGY

- Reduces Methane (CH₄) emissions by **over 75%**
- Reduces lagoon sludge by **over 70%**
- Reduces the production of Ammonia (NH₄)
- Maximizes dissolved oxygen levels
- Induces anaerobic-to-aerobic conversion
- Solves lagoon odor problem(s)
- Makes lagoon water safe for irrigation
- Eradicates algae providing visibly cleaner lanes
- Improves overall hoof health

ELIMINATION OF ODORS AND GREENHOUSE GAS EMISSIONS

EMOH™ solves the odor equation in dairy lagoons by reducing the production of three major greenhouse gases (and primary noxious-odor contributors): Methane (CH₄), Ammonia (NH₄) and Hydrogen Sulfide (H₂S). EMOH™ accomplishes this through aerobic digestion of the sludge layer, which is often dense and high in effluent Biochemical Oxygen Demand (BOD), Total Suspended Solids (TSS) and Ammonia.

ANAEROBIC TO AEROBIC CONVERSION

The benefits of EMOH™ technology in lagoon applications are made possible through anaerobic (> 2 mg/L) to aerobic (< 2 mg/L) conversion. This is achieved through high volume oxidation in concert with local, activated organisms. That is to say that by super-saturating dissolved oxygen levels, EMOH™ effectively stimulates aerobic bacteria resulting in:

- *the elimination of noxious odor emissions*
- *a decrease in Total Organic Carbon (TOC)*
- *a reduction in water hardness*
- *natural prevention of eutrophication*
- *diminished detrital layer thickness as benthic source of nutrient availability is better controlled*

IMPROVED WATER QUALITY

Increasing pressures from state agencies have created a challenging situation for many dairy businesses. Aequion's **Model 06 D EMOH™** supports farmers with their compliance efforts as well as state agencies with their environmental goals.



Aequion SERVICES



Evaluation, Design
And Engineering



Lab Analysis



Maintenance
And Repair



Remote Monitoring

MANUFACTURER'S WARRANTY



Aequion provides customers a two-year manufacturer's warranty on all of its products.

SPEAK TO AN Aequion TEAM MEMBER TODAY

We are here to help:

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Aequion's water experts are dedicated to answering questions and providing an overall positive support experience.

