



**Product Release
For Immediate Release**

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Easy Upgrade for Nitrogen Removal in Wastewater

Providence, RI USA- AnoxKaldnes, Inc. manufacturer of patented LagoonGuard™, MBBR™ and BiofilmChip™ is marketing their proven system, the HYBAS™ treatment process (a type of Integrated Fixed-Film Activated Sludge IFAS process). This system is especially suitable for Nitrogen removal in existing activated sludge systems. At the top of the list of the many benefits of the HYBAS™ is the system's ability to upgrade existing treatment systems using the existing tankage on site to meet new effluent ammonia or even total nitrogen limits.

The HYBAS™ increases aerobic sludge age of the aerobic basins without increasing the solids loading rate to the secondary clarifiers because it allows the nitrifiers to grow on the biofilm carrier elements, which are retained within the aerobic zones of the system. The design of a HYBAS™ is extremely flexible, compact and non-clogging for proven performance for many years to come. It is also designed to minimize any maintenance costs and provide for low overall lifecycle costs. It is the most cost-effective way to upgrade your wastewater treatment system.

The basis of the HYBAS™ process is the thousands of polyethylene carrier elements that provide a home for a vast, highly active bacteria culture. These elements are kept in constant motion throughout the entire volume of the wastewater by our specially designed aeration system and sieves, resulting in uniform, highly effective treatment.

Most recently we installed HYBAS™ into a city with an activated sludge system for BOD removal only. Due to the increase in projected flows and the implementation of new effluent requirements, expansion of the plant was required. The HYBAS™ process made it possible to convert the existing conventional activated sludge plant to increase its treatment capacity from 5.4 MGD to 8 MGD while increasing treatment performance from BOD removal only to Nitrogen removal to <10 mg/L. The results of the upgrade showed consistent effluent ammonia concentrations to less than 0.5 mg/L using the HYBAS™ process in only 4.5 hours of retention time at 55°F. The process can be further expanded by adding more media. Contact us to see how we can help you optimize your system.