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PRESS RELEASE



Skip the Extra Nitrification Step: Do More with BCP655™ Bioconverter for Industrial and Municipal Lagoons!

High ammonia and nitrogen levels can be a big problem for industrial and municipal wastewater lagoons. The standard treatment is nitrification, a two-step process that first converts ammonia to nitrite and then nitrite to nitrate before these can be denitrified to nitrogen gas. Nitrifiers are highly temperature dependent and sensitive to certain organic compounds. They



require ample oxygen and have trouble functioning in cold temperatures, which can lead to plant upsets. In contrast, BCP655™ from Bionetix® International is an exceptional alternative that boosts the efficiency of nitrogen and ammonia removal from wastewater lagoons and other biological treatment units even in cooler temperatures.



BCP655™ consumes organic and inorganic nitrogen such as ammonia, nitrate, and nitrite in municipal and industrial treatment plants. Bacteria strains in BCP655™ are capable of using ammonia, nitrate, and nitrite as a nitrogen source. Selected strains used in BCP655™ are heterotrophs and utilize organic carbon as the source for food and

energy. In the presence of organic carbon at elevated concentrations, they can consume more ammonia than nitrifying bacteria. Overall nitrogen removal occurs through a variety of mechanisms including higher carbon uptake and use of nitrite/nitrate for respiration and growth purposes. BCP655™ actually removes nitrogen from wastewater rather than converting it to another form, as done by nitrification.

When compared with nitrifiers, BCP655™ has at least five noteworthy advantages.

1. Nitrifiers are temperature dependent; BCP655™ is effective in a wider range of temperatures and facilitates nitrogen removal in cold weather.

2. Nitrifiers convert ammonia without reducing BOD/COD; BCP655™ simultaneously digests ammonia, nitrite, and nitrate in conjunction with BOD/COD reduction.

3. Nitrifiers are sensitive to toxic organic compounds; BCP655™ consumes organic compounds without substantial toxicity problems.

4. Nitrifiers require ample oxygen to oxidize ammonia; BCP655™ uses less oxygen.

5. Nitrifiers require a subsequent denitrification step to convert nitrite/nitrate to nitrogen gas; BCP655™ uses denitrifying bacteria from the start.

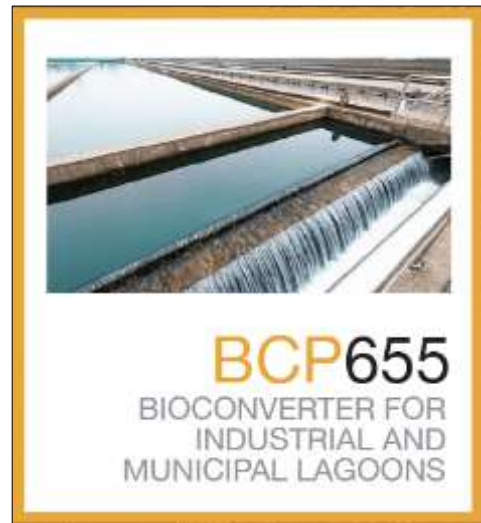


BCP655™ can increase wastewater treatment efficiency by at least 50%. It reduces plant upsets from shocks, even in cooler weather, and eliminates expensive surcharges for high TKN discharge levels. BCP655™ can also be used with A55L™ to increase overall nitrogen removal. Contact Bionetix® to learn more about denitrification with BCP655™:

<https://www.bionetix-international.com/contact-us/>

Learn more about BCP655™ here:

<https://www.bionetix-international.com/products/bcp655/>



Keywords: nitrification, ammonia, nitrogen, high ammonia levels, wastewater treatment, BOD, COD, nitrite, nitrate, plant upsets, pollutants, Bionetix, biological treatment, wastewater lagoons, wastewater efficiency, nitrifying bacteria, denitrifying bacteria, shock loading



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