NITRIFYING MICROORGANISMS REDUCE AMMONIA FORMATION

BETHLEHEM, Pa. (2007) — A blend of ammonia-oxidizing bacterial strains enhances wastewater treatment plant nitrifying rates under adverse conditions. MICROCAT-XNL by Bioscience, Inc., is formulated for municipal plants receiving ammonia containing wastes, and for use by chemical, food processing, petroleum refining, textile and other industries generating wastes with high levels of nitrogen.

It is also used to reseed treatment plants whose nitrifying systems have been depleted by cold weather or toxic and inhibitory influents.

In a 3 MGD municipal treatment plant receiving high volumes of industrial and food processing wastes, cold weather caused ammonia-nitrogen content in the aerated lagoon to exceed the 3 mg/l permit limits. Addition of MICROCAT-XNL to the second of two lagoons in series, plus pH control using soda ash, improved removal rates to 83 percent versus 51 and 43 percent during previous winters, when lagoon temperatures fall to 10 to 14 degrees C.

Ammonia-nitrogen contents in the effluent averaged 2.85 mg/l during bioaugmentation, with an average influent level of 17.41 mg/l.

The microbial product was added directly to the second aerated lagoon via a chemical pump system housed in an insulated shed.

For a more detailed case study and further information, call Bioscience, Inc., at 484-245-5232 or FAX 484-245-5236; e-mail bioscience@bioscienceinc.com; Web site: www.bioscienceinc.com.