

Biodegradation of BTX in a Petrochemical WWTP © 2009

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ECOPROBIOTICS®, of the Bacta-Pur® System, are beneficial communities of natural bacteria, which have been on earth for millions of years and have been selected for their synergistic ability to biodegrade pollutants and to improve water quality. ECOPROBIOTICS® increase biodiversity. Just as people take yogurt for its' probiotic ability to assure the presence of the optimal community for digestion and immunity, ECOPROBIOTICS® improve ecosystem health. EVERY PRODUCTION of Bacta-Pur® products is analyzed and cleared for shipment ONLY after passing all performance tests and being CERTIFIED PATHOGEN FREE using techniques from the food industry. ECOPROBIOTICS® are purely natural and beneficial. They NEVER contain added chemicals such as surfactants, emulsifiers or enzymes..., nor do they contain genetically modified (GMO) or deliberately mutated organisms. ECOPROBIOTICS® are safe and beneficial; disease causing organisms are never used, as others do or permit.

Background

Benzene, xylene and toluene (BTX) are found in fuels and are common hydrocarbon pollutants. The ability of the Bacta-Pur® System to biodegrade BTX was demonstrated with the influent and waste water from a petrochemical WWTP. A control without Bacta-Pur® was run for comparison.

Treatment

Bacta-Pur® H-2000 was preconditioned prior to being added to the solution of 400 ppm of BTX. Additional BTX were added, during the experiment, when concentrations decreased below 0.01 ppm.

Results

The concentration of BTX treated with preconditioned Bacta-Pur® H-2000 decreased from 400 to 0.01 ppm within 24 hr. BTX were then added to increase the concentration again to 400 ppm. Twenty four hours later the concentration was once again at 0.01 ppm. Throughout the entire 48 hours there was no change in the control.

