

# Case Study: Wastewater Treatment Systems

LIFELAST, INC

**Project:** Lining of Concrete walls and Steel Rake Fill Tube of a 180' Diameter Wastewater Treatment Clarifier (10,000 ft<sup>2</sup>)

**Owner:** Blue Heron Paper Company (formally Smurfit Stone and Jefferson Smurfit), Newsprint Mill; Oregon City, Oregon

**Lining System:** LifeLast DuraShield 310

**Completion Date:** March 1995

In 1995 Jefferson Smurfit Corporation's Newsprint Mill in Oregon City, Oregon, had an opportunity to perform a close inspection of their wastewater treatment clarifier. Upon inspection they discovered that the concrete structures of the clarifier, particularly the walls, were experiencing extensive corrosive attack. In fact, the corrosion was so extreme that rebar was exposed in areas and the aggregate was protruding as much as 1/2" in spots. They needed something to eliminate the corrosive attack caused by the hydrosulfurous acid, sulfuric acid and hydrogen sulfide gas present in the system.



Jefferson Smurfit turned to LifeLast urethane coatings to solve the problem. LifeLast DuraShield's extremely low permeability, excellent chemical resistance, great flexibility, high build characteristics, quick turnaround and proven performance made it the natural choice as the solution.



*Clarifier after 6 years of liner service*

LifeLast sandblasted the concrete and steel and lined the walls with 125 mils of LifeLast urethane and the fill tube with 50 mils. In fact the work was completed in less than 72 hours. In August 2001 the clarifier was thoroughly inspected and Blue Heron (originally Jefferson Smurfit) found no disbondment or loss of coating throughout the structure. All 10,000 ft<sup>2</sup> was 100% in tact.

Please call us today to find out how LifeLast protective coatings can help protect and add additional life to your valuable wastewater equipment.



*Coated Fill Tube after 6 Years Service*

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