

CASE STUDY:

BIOSOLIDS PLANT DAY TANK LINING

CLIENT

Local Utility Authority

PROBLEM

A sludge holding tank at a biosolids treatment plant was experiencing severe corrosion and structural deterioration requiring comprehensive surface preparation and the application of a robust corrosion-resistant lining.

RESULTS

The project successfully extended the operational life and enhanced the structural integrity of the sludge holding tank, ensuring its continued safe and efficient use at the biosolids treatment plant.

In July 2024, Conco Spray Solutions, a Sprayroq-certified partner, undertook a critical project at a biosolids treatment plant operated by a local utility. The project centered around the vapor blasting and corrosion lining of a deteriorating sludge holding tank. The team employed crushed glass media to effectively clean and prepare the steel surfaces before applying advanced lining solutions.

The primary objective was to address the severe deterioration of the steel tank, which required a robust approach to surface preparation and lining. After thorough cleaning with crushed glass media, Fastset mortar was used to smooth out the angles at the base of the tank, ensuring a uniform surface. A primer was subsequently applied, followed by Sprayroq's proprietary Sprayshield Green II lining at a thickness of 200 mils. Sprayshield Green II was specifically chosen for its high performance in environments where there is movement of above-ground steel and exposure to open elements.

CHALLENGES

The project posed significant challenges, primarily due to the advanced state of corrosion in the steel tank. During the vaporblasting process, holes were blasted through the steel on several occasions, necessitating immediate halts to the project for welding patches. These interruptions, coupled with the need for a thicker corrosion lining application under harsh environmental conditions, made the project particularly demanding.

SOLUTION

Conco Spray Solutions responded to these challenges with agility and expertise. The use of Sprayshield Green II not only provided the required durability against the harsh conditions but also accommodated the structural movements of the steel tank. The application of a thicker lining ensured long-term protection and integrity of the tank, highlighting the effectiveness of Sprayroq's advanced coating solutions in extending the life of critical infrastructure.

RESULTS

Despite the challenges, the project was completed successfully, significantly extending the operational life of the sludge holding tank and ensuring continuous and safe operation of the biosolids treatment facilities. The utility benefited from the enhanced protection against future corrosion, ultimately reducing maintenance costs and downtime.



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