Steel Mill Secondary Containment

PROBLEM
This steel mill had a severely corroded secondary containment area caused by hydrochloric acid at elevated temperatures continuously hitting their trench.

USI was called in by an engineering firm to train and supervise the general laborers at the steel mill while they applied the coating to prevent future erosion.

Not all projects run smoothly, and this is a prime example.

Both USI and a representative from the coating manufacturer had to be extensively involved in training the general laborers to apply the coating correctly. This training and supervision went on for 4 weeks.

Having a qualified contractor for coating application is very important. USI is always happy to recommend a preferred and qualified team that can properly install the solution for your project for a long-lasting, quality repair.

SUBSTRATE
Concrete

PRODUCTS USED
Duromar RPC Repair Polymer Concrete
Duromar DF-1303
Duromar HPL-4320 Red
Duromar HPL-4320 Gray

SOLUTION

Since the hydrochloric acid was very acidic the first step was to neutralize the concrete to a neutral PH level or even to a caustic environment to a level between 7 and 10 .

After treating the area to create a neutral environment, Duromar RPC Repair Polymer Concrete was used to rebuild the areas that were eroded.

After the areas were rebuilt, one coat of Duromar DF 1303 was applied as the primer followed by two coats of Duromar HPL-4320.

One coat of Duromar HPL-4320 was applied in red and the other was applied in gray. This allows for maintenance crews to visually see when the coating is wearing off and a recoat is needed.