

NLB UHP Water Jets Remove Coatings from Underground Pipes

Baker's of Jericho Hill Inc. of Alfred, NY recently used an NLB waterjetting system to remove a variety of heavy coatings from 24" and 36" diameter pipes, that had been located underground for 20-30 years. The pipes were tested to determine if there were corrosion cells between the coating and the pipe. Failure to remove corrosion cells could lead to perforations in the pipe, which could result in an explosion or environmental spill, depending on the pipeline product.

The pipe coatings included heavy wax tape wrappings, coal tar epoxy, and an epoxy mastic coating, each with a thickness of about 50-100 mills. Alternative coating removal methods were considered, such as abrasive blasting. However, due to coating thicknesses, abrasive blasting was not effective. A crew of five men attempted to remove the coatings manually with scrapers, chipping hammers, and torches, but these techniques were very slow and took several days to complete. Additionally, manual methods would leave a great deal of coating on the pipe.

NLB's ultra-high pressure water jets allowed the contractor to quickly cut through 100% of the coatings, permitting the contractor to immediately prepare the pipe for recoating. The contractor used one NLB 40201D UHP waterjetting pump (6 gpm at 40,000 psi), along with two NCG8400A-3 rotating hand lances. When using two NLB UHP rotating hand lances, powered by a single pump, the two men stripped all of the coatings in just one day. Additionally, by using water instead of grit, disposal costs were minimized and containment costs were avoided.



With two operators, the pipe coatings were removed in only one day.



Operator using NLB's NCG8400A-3 Rotating Hand Lance for 100% coating removal.

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