



Nu Flow Completes Pipe Rehabilitation Of Naval Fire Training Center

Nu Flow's Potable Lining Specialty Team arrived at the San Diego Naval Base Fire Training Center in May to execute a special mission. Many buildings at the facility had been experiencing serious plumbing leaks. Re-piping had been considered but was rejected due to exorbitant costs and lengthy down time. Epoxy pipe lining was selected as the weapon of choice to attack this problem.

Engineering Support Personnel (ESP) was the primary contractor for the Naval Center restoration and it subcontracted Nu Flow to complete the task based on Nu Flow's extensive resumé and excellent reputation.

Nu Flow's mandate included the rehab of six buildings containing more than 2,900 feet of potable water black steel pipe, ranging from 1 1/2 to 6 inches in diameter.

Nu Flow team leader Matt Marcum met with ESP supervisor Mike Oliver to coordinate the project by stages and formulate a work schedule that would promote clear lines of communication between the Nu Flow and naval base personnel.

"Communication and flexible scheduling are the key to happy clients," says Marcum. "A job of this size requires as much customer service as it does epoxy applications."

Potable water system rehabilitation consists of three primary steps: preparation, cleaning and lining. To properly prepare, you must identify all of



the pipe runs, connections and valves. Next, all valves are removed and air hoses are attached to all of the fixtures. Compressed air and particulate is then used to clean out the entire piping system. Finally, when the system has been dried, an NSF-approved epoxy is then "blown" through the pipes.

The direction of epoxy coating is controlled by a master header that adjusts the level of compressed air sent to various fixtures. The end result is a smooth, epoxy barrier coating between the pipes and potable water, preventing future pinhole leaks in copper and build-up due to corrosion of galvanized pipe.

The project began with the three smallest fire training buildings containing approximately 300 feet of pipe. Stage two consisted of two larger buildings containing 500 feet of pipe. The final stage included the largest of the buildings, containing 1,000 feet of pipe and some unique challenges.

Corrosion was the primary problem in the largest building. Salt air had nearly destroyed the black steel pipe. The best example of this problem was the flange on one of the larger pipes. The threaded section of the pipe was paper thin and had perforated areas. Nu Flow used a false barrier around the pipe while shooting the epoxy, in order to force-fill all the perforations, using multiple applications of epoxy to create a structural coating. Dual coatings are mandatory on larger diameter pipe, but the team paid special attention to the flange and threaded areas to achieve the desired result.

The project was completed on time and without incident. Oliver reported that the Navy was very happy with the work performed and is interested in using the Nu Flow process for future Navy projects. Nu Flow is in the process of arranging an on-site demonstration for additional EPS and naval staff.

The center trains more than 35,000 military personnel per year, as well as municipal firefighters and civilians. Nu Flow is proud to support our military.

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