

# WASTEWATER MANHOLE RESTORATION

## FEATURING **Aquaseal-UB III™** **Synergy Series**

**PROJECT:**  
Rehabilitating 25 Concrete  
Wastewater Manholes

**LOCATION:**  
City of Montrose, CO

**OWNER:**  
Colorado Public Works & Utilities

**APPLICATOR:**  
Airtight Foam Solutions

**COATING SYSTEM:**  
SPI's - LPG™ Proportioner  
Aquaseal™ UB III Synergy Series  
Polyurea Protective Coatings

**COMPLETION DATE:**  
June 2011

**PROBLEM:**

Wastewater manhole rehabilitation is one of the most challenging jobs out there. Contractors face numerous obstacles when embarking on a manhole rehab project. For example: working in tight spaces, limited access to the job site, advanced concrete degradation requiring extensive surface preparation, and mitigating coating bug/pin holes. To add to these challenges, this particular project required the sewer main to remain live during the entire process.

**SOLUTION:**

The applicator elected to use SPI's portable LPG™ proportioner and Aquaseal™ UB III Synergy Series polyurea coating. The unique SPI technology of the LPG™ equipment and Synergy Series chemistry offers several advantages. The elastomeric coating can be applied directly onto the porous concrete substrate, with minimal prep work other than removal of damaged concrete. No primer is required. In addition, the LPG™ equipment processing

technology virtually eliminates bug/pin holes. The coating also has a unique Ultra Bond™ (UB) molecule, which forms a tenacious bond to many organic and inorganic surfaces.

The applicator used pressure washing and abrasive blasting to remove damaged concrete. Then a 400,000 BTU ducted heater was used to pump heat into the manhole to draw out moisture. Next, the crew applied an average of 120 mils of Aquaseal-UB III™ polyurea to the concrete.

**RESULTS:**

"Rehabbing 25 manholes for the City of Montrose, Colorado could have been a real nightmare, but with SPI's Aquaseal™ UB III polyurea coating and the portable LPG™ proportioner, the job went smoothly," says Eddie Kelley of Airtight Foam Solutions. "In fact, it was pretty much flawless."

