

WASTEWATER DIGESTER PROTECTIVE LINER SYSTEM

- PROJECT: New Wastewater Digester Protective Liner
 - LOCATION: Mainstee, MI
 - OWNER: Sewer & Water Municipality
 - APPLICATOR: Quality Maintenance Contractors
- COATING SYSTEM: Aquaseal Hi-Rise X3™ Synergy Series Elastomeric Bridging Polyurea 60 mils HT-100F UB™ Polyurea 60-80 mils TOTAL AREA: 2,800 sq. ft.
- COMPLETION DATE: May 2012



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- **PROBLEM:** City officials in Mainistee, Michigan needed to expand their wastewater system. This critical, multi-million dollar, infrastructure investment must provide a long service life. The wastewater management process takes a heavy toll on concrete structures. Sewage waste produces hydrogen sulfide gas that contributes to the rapid deterioration of concrete surfaces. To mitigate this challenge, city officials opted to find a coating solution that will protect and extend the structure's service life.



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- SOLUTION: Quality Maintenance Contractors (QMC) won the contract because of their experience with lining wastewater structures. QMC chose to use SPI's Synergy Series Aquaseal Hi-Rise X3™ elastomeric bridging polyurea as a base coat, and HT-100F UB™ chemical-resistant polyurea for the top coat. QMC based their product decision on being able to dramatically reduce surface preparation time. Lining concrete surfaces typically requires extensive surface preparation work that includes filling in bug holes with a plasticized mortar, then applying a concrete primer coat. SPI's Aquaseal Hi-Rise X3™ elastomeric polyurea bridges and seals surface imperfections to form a seamless membrane. Aquaseal Hi-Rise X3™ eliminated the costly, time consuming process of applying a concrete mortar filler, which in turn, saved the application crew one week of prep-time and additional material cost. QMC applicators sweep-blasted the concrete surface to create an anchor profile for coating adhesion purposes. Moisture meters were used to check concrete moisture outgassing. Approximately 60 mils of Synergy Series Aquaseal Hi-Rise X3™ was spray applied through the Synergy Series LPG™ proportioner as a base coat. Several hours later, a top coat of 60-80 mils of HT-100F UB™ polyurea was sprayed to create a barrier that is resistant to many chemicals and gases.



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- RESULTS: City management is pleased how quickly QMC installed the liner system. Their new wastewater clarifier tank now has a durable protective coating that will extend its service life for years to come.



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CONCRETE RESURFACING WATERPROOFING PROTECTION

- PROJECT: Concrete Foundation of Historical Residential Home – Washington State, 2012 Resurface and waterproof 1300 sq. ft. damaged and porous exterior concrete foundation walls
- SUBSTRATE PREPARATION & SPI PRODUCT: Minimal surface preparation required No primer used Resurfaced and waterproofed exterior concrete foundation walls in one-step with SPI's spray applied Synergy Series Aquaseal HI-Rise X3™ & LPG™ proportioning equipment Reduced labor and material costs due to expanding characteristics of Synergy Series Aquaseal HI-Rise X3™ 800.627.0773 | specialty-products.com info@specialty-products.com VISIT US | facebook.com/SPIpolyurea twitter.com/SPIpolyurea | youtube.com/specialtyproductsinc
- **LPG™ (portable, light weight, low-pressure proportioner), and the Lock n Load™ gun are manufactured exclusively by SPI.*



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