



Nitra-Seal Enables Brownfield Redevelopment

Historic South Carolina Mill Transformed into Affordable Housing Units

Site Details

Location

Greenville, SC

Square Feet

40,000

Contaminants of Concern

TCE

Building Use

Residential

Project Summary

A community redevelopment project in South Carolina was recently constructed at a former industrial mill site where chlorinated solvents such as trichloroethene (TCE) were historically used and released into the environment. A Nitra-Seal Nitrile-Advanced contaminant vapor barrier system was chosen to protect future residents from potential vapor intrusion (VI) risk. The housing development included 214 multi-family units, with a percentage dedicated to workforce housing.

Application

The Nitra-Seal contaminant vapor barrier was installed at the residential complex where VI could become a potential concern. An environmental consultant, experienced in vapor mitigation design, was aided by Land Science technical support to complete a work plan and vapor mitigation design. The barrier system was installed by a Land Science Certified Applicator, who coordinated with the General Contractor to ensure installation efficiency. The spray-applied Nitra-Core layer effectively sealed the numerous building penetrations and seams, which was confirmed using smoke testing to ensure the highest level of quality assurance/quality control (QA/QC) for the installation.

Results

40,000 square feet of Nitra-Seal was installed. The installer stayed ahead of the strict concrete pour schedule and tight budget requirements. While at the same time, maintaining all QA/QC protocols to ensure long-term VI protection. Once installed, the Nitra-Seal contaminant vapor barrier system effectively protects future residents from potential VI risk and exposure caused by the former mill operations. This new residential complex supplies much-needed affordable housing to the region, while sustainably repurposing a former brownfield.