

CASE STUDY

SUPERIOR VOC PROTECTION FOR PROJECT SITUATED ON FORMER RAILROAD SITE

PROJECT: Smith Performing Arts Center

LOCATION: Las Vegas, NV

PRODUCTS: Liquid Boot® Gas Vapor Barrier System
 GeoVent™ Gas Venting System
 Ultraseal® Waterproofing provided by CETCO Building Materials

BACKGROUND: Vapor intrusion has become a significant environmental issue for regulators, industry leaders, and concerned residents nationwide. The use of a spray-applied gas vapor barrier to protect against the threat of vapor intrusion has become a widely recognized application by numerous local and state regulatory and guidance groups. These groups also recommend that a gas venting system be used in conjunction with the gas vapor barrier for optimum mitigation of gas vapors.

CHALLENGE: To install a seamless and gas-tight gas vapor barrier, protecting the 125,000 square foot structure from residual VOC contamination in the soil. Portions of the project are situated in the water table, therefore, protection from water migration was also required.

The performing arts facility is situated on a location formerly used as a union railroad site. Soil gas analysis show residual VOC gases present in the soil due to its former use. VOC levels indicate a need for a gas vapor barrier and venting system to protect the structure from gas vapor intrusion and to protect the indoor air quality.

SOLUTION: CETCO provided design assistance, on and offsite training and technical support for both the waterproofing and gas vapor barrier and venting systems. CETCO's dual system provides superior waterproofing and gas vapor protection by implementing an active waterproofing technology, UltraSeal®, and the industry-leading gas vapor barrier system, Liquid Boot®. GeoVent™, high-performance, low-profile and trenchless gas venting system, was installed in conjunction with the gas vapor barrier system.

RESULT: Liquid Boot® Gas Vapor Barrier and UltraSeal® Waterproofing (provided by CETCO Building Materials) proved to be the most cost effective solution for the project. CETCO's Liquid Boot® technology allows for a seamless, monolithic application. Liquid Boot® is sprayed at ambient temperatures and can adhere to penetrations, footings and other details without the use of batton strips, compression or welding, effectively sealing critical vapor intrusion pathways.

For a free consultation regarding your next project, contact a Remediation Technologies expert at 714.384.0111 or 800.527.9948



Kleinfelder Engineering was chosen to assess the project site's soil conditions and offer solutions for contaminated soils and water. Ultimately, the Liquid Boot® Gas Vapor Barrier and GeoVent™ Gas Venting systems were specified to mitigate the subsurface soil contamination issues resulting from residual VOC contamination. CETCO certified installer, Commercial Roofers, Inc., was the preferred installer on the project.