



NES was selected to fabricate an SVE/Air Sparge system for a retail petroleum service station in New Jersey. The system was designed and fabricated with dual SVE blowers and dual Sparge compressors to target a vast array of wells along with providing overall redundancy to ensure system operation up-time. Local building codes required that the wooden shed be designed and constructed in accordance with the International Building Code (IBC).

### Design Parameters

Site Contaminants	Gasoline
SVE System Each	240 scfm at 87 inches wc vacuum at the moisture separator inlet with catalytic oxidizer for vapor treatment
Sparge System Each	84 scfm at 12 psi at the compressor outlet
Site Power	208 VAC, 3 phase, 4 wire
NEC Area Classification	Class 1, Division 2 shed interior with Non-Classified exterior

### System Equipment

SVE	Rotary lobe positive displacement blowers (10 hp each)
Sparge	Rotary vane compressors (10 hp each)
Off-Gas Treatment	Catalytic oxidizer dedicated to each SVE vapor stream
Controls	PLC with wireless remote monitoring unit and VFD operation for adjusting each SVE blower and each Sparge compressor performance
System Enclosure	Wooden shed (exterior 16 feet x 8 feet x 9.5 feet)