



**Sub-Slab Depressurization System (SSDS)
Steel Sound Enclosure
NES 09-268**



NES was selected to fabricate an SSDS system for a dry cleaning laundry facility in New York. A custom fabricated steel enclosure with a minimal footprint was provided in order to accommodate limited space available at the site, along with property owner requirements for system sound level and overall equipment security. System instrumentation and controls were designed to provide real-time remote monitoring to ensure system operational up-time and effectiveness in reaching remedial clean-up goals.

Design Parameters

Site Contaminants	Chlorinated solvents
SSDS Vapor System	75 scfm at 30 inches wc vacuum at the moisture separator inlet with vapor discharge to atmosphere
Site Power	120/240 VAC, 1 phase
NEC Area Classification	Non-Classified system enclosure interior and exterior

System Equipment

SSDS Blower	Regenerative blower (1.5 hp)
Critical Instrumentation	Analog transmitters to measure flow and vacuum
Controls	PLC based with remote operation, remote notification, data-logging, and VFD operation for phase conversion and adjusting blower performance
System Enclosure	Steel sound enclosure (exterior 8 feet x 4 feet x 8 feet)





Sub-Slab Depressurization System (SSDS)
Cargo Container
NES 09-138



NES was selected to fabricate an SSDS system for an industrial manufacturing facility in New York. A steel cargo shipping container with two interior rooms was provided so that all process equipment and controls were located and installed inside a secure environment while providing for safe and comfortable system operation. Property owner noise requirements dictated the design and installation of system sound attenuation components.

Design Parameters

Site Contaminants	Chlorinated solvents
SSDS Vapor System	500 scfm at 30 inches wc vacuum at the moisture separator inlet with carbon for vapor treatment
Site Power	460 VAC, 3 phase
NEC Area Classification	Class 1, Division 2 process equipment interior room with Non-Classified controls interior room

System Equipment

SSDS Blower	Rotary lobe positive displacement blower (10 hp)
Off-Gas Treatment	Vapor phase carbon
Controls	PLC with remote operation, remote notification, and data-logging
System Enclosure	Steel cargo shipping container (exterior 20 feet x 8 feet x 8.5 feet)





**Sub-Slab Depressurization System (SSDS)
Galvanized Steel Sound Enclosure
NES 08-300**



NES was selected to fabricate an SSDS system for a commercial dry cleaning laundry facility in New York. An NES custom fabricated blower sound enclosure was provided for the skid mounted system in order to meet site specific sound requirements.

Design Parameters

Site Contaminants	Chlorinated solvents and potentially petroleum products
SSDS Vapor System	180 scfm at 20 inches wc vacuum with carbon for vapor treatment
Site Power	120/240 VAC, 1 phase
NEC Area Classification	Class 1, Division 2 enclosure interior with Non-Classified exterior

System Equipment

SSDS Blower	Rotary lobe positive displacement blower (2 hp)
Off-Gas Treatment	Vapor phase carbon
Controls	Relay based with auto-dialer for remote telemetry
System Enclosure	Galvanized steel sound enclosure (exterior 6 feet x 3 feet x 4 feet)





NES was selected to fabricate an SSVS system for a military contractor in Connecticut. Steel exterior siding and enclosure secondary containment for the moisture separator tank was required.

Design Parameters

Site Contaminants	Chlorinated solvents and potentially petroleum products
SSDS Vapor System	300 acfm at 50 inches wc vacuum with carbon for vapor treatment
Site Power	120/240 VAC, 1 phase
NEC Area Classification	Non-classified interior with controls located inside enclosure

System Equipment

SSDS Blower	Regenerative blower (7.5 hp)
Off-Gas Treatment	Vapor phase carbon
Controls	PLC based with auto-dialer for remote telemetry
System Enclosure	Steel exterior constructed shed (exterior 12 feet x 8 feet x 9.5 feet)