

The Baylor College of Medicine, located in Houston's Texas Medical Center in Houston, is recognized as a premiere academic health science center and is known for excellence in education. For its Biosafety Level Three (BSL-3) Select Agent Facility, Merrick & Company provided commissioning (Cx) services including test development, component verification, construction management assistance, equipment testing, HVAC tests, documentation, and containment compliance.

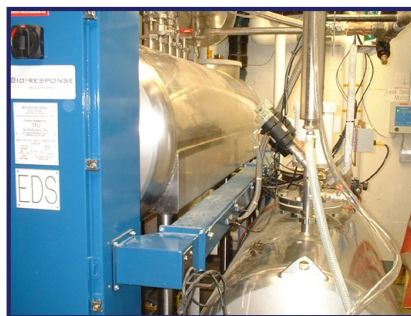
The BSL-3 Select Agent Facility directly supports the Baylor College of Medicine mission by providing containment laboratories to research BSL-3/BSL-3E agents and other emerging diseases. There are also BSL-3 laboratories that will support molecular biology work on deactivated components of BSL-3/BSL-3E agents and work on NIAID BSL-2 Category A, B, and C agents, and ABSL-2 animal facilities to allow research on a variety of small animal models, primarily rodents and rabbits.

This new \$4M laboratory within an existing facility is approximately 5,000 gross square feet (gsf), including associated mechanical room located adjacent to and outside the containment barrier. BSL-3 laboratories plus enhancements (BSL-3E) are designed to containment standards and requirements as defined in the BMBL for BSL-3 Laboratories. These laboratories are designed to minimize exposure to the chemical, biological, radiological, and physical hazards found in research environments, and to meet the latest codes and guidelines. Specific design features of the facility are that it incorporates flexibility and expandability to allow various scientific programs to expand or shrink, and support alternative uses within a BSL-3 environment over the life of the facility. It is also designed to create spaces and opportunities for interaction and exchange between scientists. The site affords opportunities for exterior break areas for interaction, contemplation and informal discussions.



Key Project Features:

- Gown in/shower out laboratory
- Effluent decontamination system using thermo-chemical process
- HEPA filtered supply and exhaust
- Redundant supply fans
- Redundant exhaust fans
- Pass through autoclaves
- Badge & keypad door entry



Merrick provided the following Cx Services:

- Developed Cx documentation and plan
- Reviewed key submittals for Cx requirements and information to aid in functional test development
- Verified components for name plate data and checked installation
- Provided management of Cx issues during construction
- Assisted in Site Acceptance Testing (SAT) of vendor equipment
- Developed and executed functional HVAC test protocols
- Developed a Cx report that summarizes the Cx activities and tests and addresses the containment compliance aspect of the facility
- Developed a BMBL compliance matrix to assist BCM in securing approval to work with select agents