



their safety is essential.

Protecting people, property, and the planet.

Southwestern Utility Ensures Power Supply to Customers During Substation Rebuild

Basic Concepts (BCI) Provides Versatile Containment for Mobile Transformer

Background:

Electric substations should provide uninterrupted power flow. But, age, time and ever-increasing energy demands may cause problems. A major Texas utility discovered severe infrastructure issues with one of its substations. These issues could compromise its performance and reliability.



Solution:

After weighing the options, the utility decided to rebuild it. This meant taking the substation offline during a year or more of construction. But how could they ensure all customers in the area would have power, without increasing the demands on the grid? The best solution was to reroute power through a temporary mobile substation.

A portable 69kV transformer and regulator arrived on a mobile trailer. Like permanent substations, these units need cooling oil to operate. Thus, they must meet Spill Prevention Control and Countermeasures (SPCC) requirements.

The utility wanted a versatile, low-maintenance secondary containment solution. Durability was also key. They decided to use a custom **Rigid-Lock QuickBerm®** for both the transformer and the regulator. The transformer berm was 12 feet by 54 feet by 1 foot; the regulator berm was 14 feet by 20 feet by 1 foot.

Its single-piece construction allowed for fast and easy setup, with no assembly required – with a simple tug, the patented Rigid-Lock wall-supports locked quickly in place. And it enabled drive-in and drive-out access for the trailer with no need to raise or lower the wall.

To avoid manual draining following a rainstorm, the utility connected an HFF Oil Stop Valve to the berm. Not only did this provide continued unmonitored drainage without incurring O&M costs, it also ensured all water draining from the containment site was free of oil.









IBC containment

Fuel or tanker containment





Drum containment

Generator containment

Rigid-Lock QuickBerm®

- Secondary containment with drive-in, drive-out capability for vehicles
- Flexible, durable geomembrane liner sets up in minutes, no assembly needed
- Stainless steel brace support for strong structural integrity, no sagging
- · Folds down for easy portability

Rigid-Lock QuickBerm® offers one-piece construction for 100% leakproof protection to avoid costly fines and comply with EPA and SPCC. Reliable protection for the environment against hazardous spills from:

Vehicles

Tankers

- · Pumps
- · 55-gallon drums

- Generators
- · Pillow tanks
- Intermediate bulk containers (IBCs)

- · Air compressors
- · Heavy equipment
- Storage tanks

HFF Oil Stop Valve

- Self-activating, passive filtration system for secondary containment drainage
- · Quickly evacuates water while safely removing hydrocarbons
- Multi-directional filtration provides highest flow rates on the market

Versatile filtration device that filters and processes rain water, reducing organic hydrocarbons to a non-detectable level while meeting SPCC and IEEE 980 requirements. Automatically shuts off in the event of a major oil release. Requires low maintenance when used with reusable pre-filter. Standard and custom sizes available, per specified flow rates.





Use with a variety of containment systems. Standard and custom sizes available, per specified flow rates.

BCI is a portfolio company of Justrite Safety Group. Justrite Safety Group is a growing family of leading industrial safety companies. Together we protect workers, workplaces and the environment with a comprehensive range of industrial safety solutions. We cover every facet of the industrial safety landscape—from the storage, containment and clean-up of hazardous materials to safety identification, emergency showers, industrial matting, and motion safety.