

SPCC Experience

VARIOUS SUBSTATIONS & CLIENTS

Multiple Locations



Rock containment berm

SBX has completed multiple design/build projects for various electric utilities involving Spill Prevention, Control, and Countermeasure (SPCC) Plans. Electrical substations utilize various pieces of equipment (i.e., transformers, switches, circuit breakers, etc.) that contain oil for cooling and insulation purposes. SPCC plans ensure that facilities put in place containment and other counter measures that would prevent oil spills from reaching navigable waters. The SPCC rule applies to substations with individual vessels of more than 660 gallons or an aggregate capacity of 1320 gallons.



Lined channel to gravity oil / water separator



Catch basin with oil flow restrictor

SBX has completed the design and construction of SPCC plans for over 60 substations. The methods used for oil containment can vary depending on the needs of the client including site access, available property (both inside or outside of substation), maintenance, future expansion potential. Often multiple methods will be utilized at one location. SBX uses a practical design approach based on field experience obtained constructing SPCC projects.

SBX has successfully utilized a variety of oil containment mechanisms in our SPCC work including:

- Gravity oil-water separators
- Oil detention ponds
- Catch basin with oil stop flow restrictors
- Rock containment berms
- Gravel beds with liners
- Oil stop valves
- Concrete containment with oil stop drains
- CI agent booms
- CI agent barriers

Each facility is unique and the most practical and cost effective options are evaluated prior to construction.



Oil detention pond



Gravity oil / water separator (pipe and channel inflow)



Oil stop valve in earthen berm

DESIGN PARAMETERS

- Design for largest oil containing piece of equipment plus 10 %.
- Design capacity to handle rain events.
- Minimize future maintenance.
- Minimize manual operation and inspection.
- Minimize impact or disruption of substation and access constraints.



Field constructed concrete containment with oil stop valves



Gravity oil water separator (direct flow from substation)



CI agent barrier

SPECIALTY TRAINING

- **All SBX substation crews performing SPCC work are ITS trained for working inside live substations.**
- **SBX maintains CADWELD certified staff for ground grid repairs.**
- **With over 60 projects inside of active substations (a very dangerous work place), SBX has zero accidents, zero near misses, and zero safety incidents.**