In 2008, under the Canadian Environmental Protection Act, 1999 (CEPA), regulations concerning storage tank systems for petroleum-based products were introduced, requiring any associated underground piping transporting these products to be double contained if the storage tank meets the criteria outlined in the regulations.

- **SOR/2008-197** — Storage Tank Systems for Petroleum Products and Allied Petroleum Products Regulations

**National Fire Code of Canada (NFC)**


**Leak Detection**

In addition to double contained underground piping, monitoring of the interstitial space (i.e., the space between the inner and outer pipe) is also required under these federal regulations/codes.

- **National Fire Code of Canada 2020, Table 4.4.1.2.-C — Leak Detection Testing and Monitoring of Underground Piping Systems**

**Why do we need Double Containment?**

It’s the law.

**How do we DESIGN Double Containment?**

1. **Material Selection**
   - Chemical Compatibility
   - Pressure
   - Temperature

2. **Thermal Expansion and Contraction**

3. **System Layout**
   - Accommodate for size of components

**How do we MONITOR Double Containment?**

- **ABOVE GROUND APPLICATION: Best Practice**
  - Visual leak detection
  - Electronic leak detection

- **BELOW GROUND APPLICATION*: Federally Mandated**
  - Visual leak detection
  - Electronic leak detection

**Where do we NEED Double Containment?**

**Federally Mandated Applications**
- Chemical Plants
- Laboratories
- Fuel Systems for Emergency Generators
- Healthcare/Hospital Use
- Laboratories
- High-Tech & Data Storage Environments (Network & Server Rooms etc.)
- Public areas (Museums, Libraries, Theaters, and Restaurants)
- Historical Sites
- Residential Buildings
- and more...

**Best Practice Applications**
- Healthcare/Hospital Use
- Laboratories
- High-Tech & Data Storage Environments (Network & Server Rooms etc.)
- Public areas (Museums, Libraries, Theaters, and Restaurants)
- Historical Sites
- Residential Buildings
- and more…

**I’m ready to specify Double Containment!**

For more information, contact: 1.866.473.9462 | ipexna.com