## EXPECTED IMPLEMENTATION JANUARY 2020



948 OPTIONAL DRAINAGE PRODUCTS AND LINER REPAIR SYSTEMS. (REV 5-14-19) (FA 7-29-19) (1-20)

SUBARICLE 948-9.7 is deleted and the following substituted:

**948-9.7 Spray Applied Liner:** Spray applied liners consist of liquid, slurry, foam or gel that is sprayed over the interior surface of an existing structure to rehabilitate it, with or without fiber reinforcement. Spray applied liner installers shall submit to the Department proof of experience for on-site supervision and previously completed contracts including the following:

- 1. Project name and location
- 2. Names of contracting parties
- 3. Owner's names
- 4. A brief description of the work
- 5. Dates of completion of spray applied liner work

Materials that may be used for spray applied lining are:

- 1. Hydrophilic urethane-based foams or gels which shall meet the requirements of ASTM F2414.
- 2. Epoxy resins and unsaturated styrene-based resins which shall meet the resin material requirements of ASTM F1216.
- 3. Cementitious materials, as recommended by the manufacturer, including: annular backfill, low density cellular concrete, shotcrete, gunite, centrifugally cast, and pre-packaged grout.
- 4. High-strength, low-porosity geopolymer materials, as recommended by the manufacturer.





