MATERIAL(S) SELECTION / DESIGN CRITERIA

**Condition A:** Low to mild hydrogen sulfide environments (pH > 3.0). Substrate shall receive a minimum of ½" cementitious lining material manufactured from Type II Portland cement, and enhanced with silica fume. Materials shall contain poly-fiber reinforcement, chemical admixtures, and siliceous aggregates.

Approved material shall be **Quadex QM-1s Restore** as manufactured by **Quadex, Inc.**

**Condition B:** High hydrogen sulfide environments (pH > 2.0). Substrate shall receive a minimum of ½" cementitious lining material manufactured from 100% pure calcium aluminate cement and enhanced with high-density chemically stable aggregates. Materials shall contain poly fiber reinforcement and chemical admixtures.

Approved material shall be **Quadex Aluminaliner** as manufactured by **Quadex, Inc.**

**Condition C:** New construction with anticipated harsh hydrogen sulfide environments (pH < 2.0) or substrate corrosion < 0.125 inch and harsh hydrogen sulfide environments (pH < 2.0). Substrate shall receive a minimum of 125 mils of 100% solids epoxy lining material containing no VOC’s.

Approved epoxy material shall be **Quadex Structure Guard.**

**Condition D:** Severe hydrogen sulfide environments (pH < 2.0) and substrate corrosion > 0.125 inch. Substrate shall receive a composite system consisting of a minimum ½” cementitious lining material manufactured from 100% pure calcium aluminate cement and a 125 mil topcoat of 100% solids epoxy lining material containing no VOC’s.

Approved cementitious material shall be either **Quadex Aluminaliner** or **Quadex QM-1s Restore** and approved epoxy material shall be **Quadex Structure Guard.**