

CORROSION PROTECTION

All coated pipe for underground service will be electronically inspected prior to installation using coating deficiency detectors to check for any faults not observable by visual examination.

During installation all joints, fittings, and tie-ins will be coated with materials compatible with the coatings on the pipe. Coating materials will be designed to mitigate corrosion of the buried pipe, have sufficient adhesion to the metal surface to prevent under film migration of moisture, be sufficiently ductile to resist cracking, have enough strength to resist damage due to handling and soil stress, support any supplemental cathodic protection; and if the coating is an insulating type, have.

Grizzly will take prompt remedial action to correct any abnormal internal corrosion. Remedial action may include increased pigging, using corrosion inhibitors, coating the internal pipeline (e.g. an epoxy paint or other plastic liner), replacing the section of pipe, or a combination of these actions. All observations and measurements will be documented.

Cathodic protection systems will meet or exceed the minimum criteria set forth in the National Association of Corrosion Engineers (NACE) standard practice SP0169-2007 (formerly RP0169), Control of External Corrosion on Underground or Submerged Metallic Piping Systems, 2007 Edition (NACE SP0169-2007), and no later editions of the standard.

A combination of sacrificial anodes and AC rectifiers are utilized to achieve NACE standards.