Steel Pipe Issues

. e Stora_e & Handlin_

- Pipe not stored properly at job sites to protect coating.

. e Stora_e & Handlin_

- Pipe not transported to job sites properly to protect coating from damage.

. e Stora_e & Handlin_

- Pipe roughly handled due to available lifting equipment.

pection

- Some Com anies do not use ins ectors.
- Some Companies utilize contract inspectors to oversee construction projects. Not always inspecting as thoroughly as required.
- Some Companies utilize their own personnel to work as inspectors. Not always properly trained, equipped, or at each job site.

pectors

- Multiple jobs to inspect on any given day seems to be the rule.
- Lack of training pertaining to Api-1104 and company welding procedures being utilized.
- Not cognizant of the welding qualifıcations oı the welders at the job site.

pector Issues

- No depth gauge to measure mill thickness of coating.
- Lack of understanding on proper calibration, grounding, and appropriate settings for jeeping.
- No Tong Meter, Stop Watch, or Temperature Probe for monitoring welding passes.

pector issues

- Fails to visually inspect weld area for quality of weld, arc burns, and weld splatter onto coated pipe.

pector issues

- Fails to visually inspect quality of applied coating for cathodic protection.
- Inadequate record keeping.

g Issues

- Failure to verify welder qualifications.
- Failure to follow company approved welding procedure.
- Pipe moved to change weld gap tolerance.

g Issues

- Line up clamps not always used.
- Line up clamps removed prior to 50% root bead

g Issues

- Improper welding rod use.
- Time between root pass and hot pass not verified.
- Failure to pre-heat if procedure calls tor it
- Welder & Inspector fail to visually inspect completed weld.

g Issues

- Welding rods not stored properly


SparkleTts

g Issues

- If pre-heat is done checking temperature with a temp stick not always done.
- Welders & Inspectors do not have ton meter to verif volta e and amperage settings.
- Improper cleaning of root pass.
- Weld area not shielded from weather conditions.

g Issues

- Not properly reviewing non-destructive testing (x-ray)

Operator's Welding Procedure

g lssues

- Jeeping procedures not at job site.
- Jeeps not calibrated properly
- Area adjacent to weld not properly prepared for coating procedure.
- Fittings not properly coated.
- Coatin_ thickness _au_es not bein_ utilized.

g Issues

- Coating not properly applied to piping and fittings

g Issues

- Bubbles in tape coating not detected.
- Voids in epoxy coatings not detected.

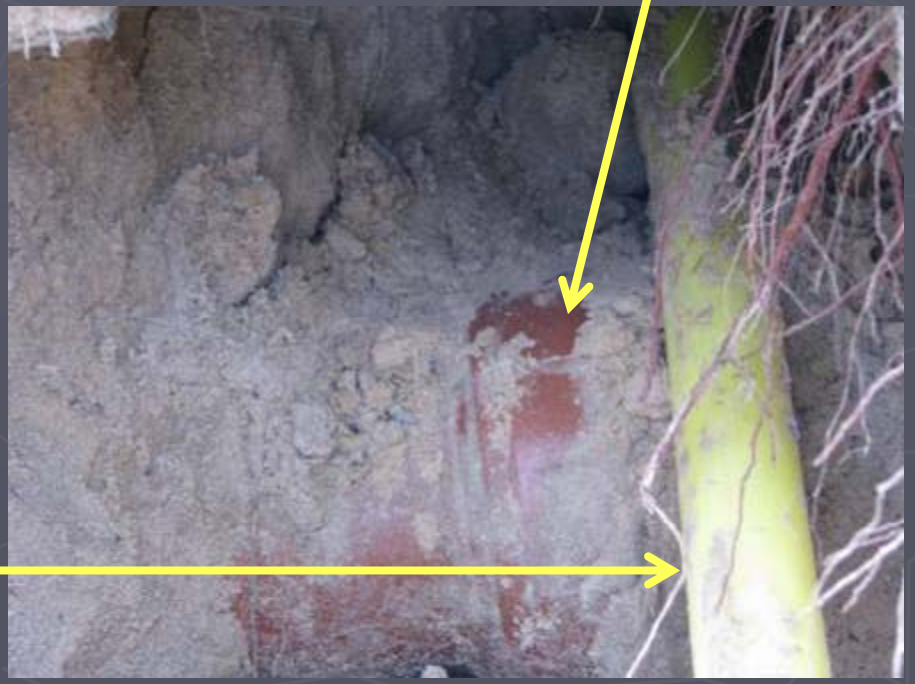
Failure to inspect the pipe coating just prior to lowering into ditch and backfilling.

Construction / Procedural Issues

proper maintenance and to protect against damage that might result from proximity to other structures.

Electric Line

Sewer Line



2” Plastic Gas Main

with comprehensive written specifications.

Failure to install an anode in accordance with procedures.

Failure to install a main with at least 24 inches of cover.

not being adhered to

- Pipe rough handled into ditch.
- Inadequate padding of pipe.
- Improper use of Rock Shields.
- Improper pigging and purging procedures.

- Failure to ground pipe in gaseous atmospheres.
- Not following proper torque requirements in installation of bolts.
- Unqualified personnel making hot taps, welding, purging, etc...
- Pressure Testing, documentation issues, offsets not documented, fault gauges.
- Not properly disposing of asbestos coatings.

- Items listed above were only those witnessed by State Inspectors.
- Lack of oversight in areas of new construction will lead to DIMP issues in the future.
- Strong consideration should be given to OQ requirements for new construction.

The End