Cleaning Unlined Crude Oil Tank Cars in Preparation for Lining

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Safety Assessment & Planning

Confined Space Access Permits
Safety Assessment & Planning

Confined Space Access

Permits

Trained Confined Space Personnel
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Proper PPE & Gas Testing Equipment
Prep the Car

Drain all liquids using the proper grounding and containment procedures
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Measure your gas & oxygen readings inside the tank.
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- Use a chemical injector to apply hydrogen scavenger cleaner to remove crude residue.
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Measure salt contamination in cleaned tank by testing for chlorides
Chloride Contamination over 8 µg / sq cm is recommended to be treated
QA Practices

- Black Light for testing for hydrocarbon contamination
Pressure wash with an organic bonding chemical that will aid in the removal of chlorides, sulfates and surface reacted salts
Corrosion in Unlined Crude Cars
LIGHT CORROSION
Corrosion in Unlined Crude Cars

Check the corrosion for the depth of the pitting and the density of corrosion

Plan your coating selection and application based on the amount and type of corrosion
Corrosion in Unlined Crude Cars

MEDIUM CORROSION
Corrosion in Unlined Crude Cars

Proper ventilation and curing of high DFT lining system is essential

Followed by holiday inspection

Repair and touch-up procedures should be discussed before lining cars
Corrosion in Unlined Crude Cars

HEAVY CORROSION
Questions