

### IRON SULFIDE REMEDIATION



The **PERMANGANATE SOLUTION SERIES** are aqueous solutions of permanganate salts used for the remediation of pyrophoric and non-pyrophoric iron sulfide particulate deposition as well as system malodours. They require no specialized equipment for safe, easy, and efficient application with reduced decontamination times for rapid vessel entry. Both the potassium (K) and sodium (Na) salts are offered to accommodate efficient product volume projections during the logistical planning process.

### FEATURES AND BENEFITS

- Concentrate solution
- K Salt available with added surfactant for rapid wetting of oil-wet deposits
- Compatible with other surfactants for additional penetration and removal of surface deposits
- Generates no gaseous by-products during application
- Product coloration changes during application indicating completion of reaction
- Wastewater friendly
- Dramatically reduces turnaround time
- Provides for fast, easy and safe application procedures
- Spent solution requires no specialized handling procedures and can be sent directly for disposal

### DIRECTIONS FOR USE

#### Treatment Rates

Preliminary recommendations include rates of aqueous dilution that reduce available permanganate down to 1% w/v at neutral pH for complete particulate iron sulfide remediation.

Use either salt solution as part of a high pressure application or liquid-phase circulation after completion of a full chemical cleaning procedure. May also be used for continuous injection. Not recommended for vapor phase injections.

#### Concentration

K Salt – 4% w/v  
Na Salt – 20% w/v

#### Dwell time / Operation time

Dependent on job, site and method of application. Dwell time may vary from 8-12 hours depending on depth of scaling and degree of contamination. Retain monitoring is recommended.

Consult with your West Penetone sales representative for procedures best suited for your application.