



### Standard Operation Procedure

## ISO TANK 4-ADPA CLEANING PROCEDURE

1. **STEAM TANK:** Open discharge valve (if necessary, apply steam to valve until it can be opened, or loosen nuts to remove flange). Apply live steam into tank through dome lid. Steam until black effluent becomes clear. Average time for this procedure is 15 minutes, and generates about 5-8 gallons of condensate/4-ADPA mixture. NOTE: Capture and segregate all condensate as phenol content will be high.
2. **DRY TANK:** Apply Blower Hose for 5 minutes.
3. **PRE-SOLVE TANK:** While tank is still hot, recirculate 15 gallons of **LIQUI-FIRE RXE** via air-motor driven spinner for 30 minutes. Capture solvent at tank discharge for re-use. When all solvent has been reclaimed proceed to next step. NOTE: After the first tank is spun with LIQUI-FIRE RXE, the solvent will turn black from the 4-ADPA. It still has life for 2-4 more pre-solves.
4. **HOT WATER RINSE:** Perform two short rinse cycles.
5. **CAUSTIC WASH:** Tool Up to recirculate wash solution. Spin tank for 15 minutes with 5% caustic wash boosted with 10% John-Henry **MAGNUM** (by volume), using standard high volume pump system / spinner.
6. **COLD WATER FLUSH:** This is the final step. Enter tank for final inspection. Shadow areas, vapor space, and dome lid may be wiped down with undiluted John-Henry **MAGNUM** (methanol optional). Additional rinse may be necessary.
7. **NOTE: ALL GASKETS AND SEALS MUST BE REPLACED**

### Note: Chemical Usages

John-Henry **LIQUI-FIRE RXE:** 15 gallons may be re-circulated 2 to 4 times.

**CAUSTIC SODA:** 5% solution by weight.

John-Henry **MAGNUM:** 1 x 55 gallon drum per 500 gallons caustic solution.

Revised 1/23/2024