

WP/SEA MINIMUM REQUIREMENTS ICP Flushing



MEMORY JOGGERS

Ensure that the following conditions are met before proceeding. If not met, address on WP/SEA.

- Communicate the "RIGHT TO STOP WORK AUTHORITY POLICY" and is exercised by all crewmembers and other personnel that believe something or some condition has changed. The job is to be stopped and accessed before proceeding. The WP/SEA may need to be modified or a new WP/SEA maybe required before starting the work task again.
- > Prepare a list of all sensitive equipment that shall be removed, blocked off or isolated during flushing operations.
- All pipe work shall be free from dirt and grease.
- ➤ Ball valves shall be flushed in fully open position.
- ➤ All piping shall be adequately supported before filling the piping systems with water.
- Piping containing check valves shall have the source of flushing on the upstream side. If this is not possible, the check valve disc shall be removed or jacked open
- All other valves in system not removed shall be flushed in the full open position.
- > Turbines, pumps, compressors and vessels shall be blinded off prior to flushing operations.
- > The flushing medium shall in general be fresh water. When flushing stainless steel lines, the chloride content shall be less than 2000ppm or as per customer specs.
- > If required a qualified person shall install piping & tubing as required for the flushing operation.
- > Verify all crewmembers involved with ICP flushing have on appropriate PPE within flushing limits.
- > Gas testing is to be carried out in all hazardous areas immediately before starting work task. Gas Detector monitoring shall be conducted continuously at the worksite at all times.
- Verify good communications is established and maintained between the platform operators and the ICP flushing crew.
- > Verify access and escape routes are clear at all times or alternative routes marked and the work force informed.
- Verify all QC requirements have been met and have been released for installation.
- Check pins and whip checks must be fitted across all crows' foot connectors before starting.
- > Check above and below worksite to minimize chance of items falling onto workers.

MINIMUM REQUIREMENTS

- 1) Verify **All** conditions identified in the "Memory Joggers" section are met (or are not applicable); if **ANY** are not met, **STOP** and add the necessary step to the WP/SEA to ensure the safest method possible.
- 2) Review the work scope with the crewmembers and associated personnel before starting flushing of pipe begins.
- 3) Release flange joints at test limits and carry out visual inspection.
- 4) Fit/install rated blind flanges/spades at test limit points as per test pack isometrics.
- 5) Fit D&T blind flanges at fill & vent points if required.
- 6) Erect signs & barriers and make announcements over platform PA system.
- 7) Connect fill hose from utility station and top off piping with potable water until water starts to flow or vent out. (Carbon Steel Only)
- 8) Commence flushing operations observing and checking the soundness of the piping and flange joints for leaks.
- 9) Install pump for flushing if a higher volume of water flow is required.
- 10) Increase water volume as required
- 11) On completion of flushing water pressure shall be fully depressurized.
- 12) Completing the depressurization of the piping, crewmembers shall immediately properly drain and button up the open ends for Hydro Testing.
- 13) Perform all QC functions and sign off.
- 14) Upon complementing the work, a review of the work area by the designated person will remove all barriers or will instruct one of the crewmembers to do so.
- 15) The designated person and crewmembers will verify that all the equipment and location have been left in a clean, safe condition. All the tools, equipment and barriers have been removed and all persons have been accounted for.