Approval

Approving Authority	*Name*	*Signature*	*Date*
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President	Mike Fisher		22 July 2024

Revision History

Revision #	*Description of Change*	*Effective Date*	*DCR#*
0	Initial Issue	25JUL2024	24003
1			
2			

1 Purpose

1.1 To establish guidelines for the cleaning of interior surfaces of welded piping fabrications at our pre-fab shop.

1.2 Typically, this is provided as an alternative for cases where cleaning and flushing operations at field sites may not be feasible or possible, especially when modifying existing systems which need to remain operating.

1.3 Chemical cleaning the interior surfaces of welded carbon steel or stainless steel pipe is done to remove loose dirt and rust, welding slag, grease or oil, mill scale and coatings.

2 Scope

2.1 Pre-rinsing

2.2 Brushing/de-greasing

2.3 Rinsing

2.4 Drying

2.5 Protection

3 Responsibilities

3.1 The following is the responsibility of the Pre-fab shop Foreman.

3.1.1 Ensure the employees are trained to this procedure.

3.1.2 Periodic visual exams to verify conformance to this procedure.

4 Procedures

4.1 Pressure spray with hot water interior of pipe and fittings to remove any loose debris, rust, and slag present.

4.1.1 Discharge pressure of sprayer shall be set at a minimum of 100 psi.

4.1.2 Water temperature shall be a minimum of 120 degrees F.

4.1.3 Spraying shall continue until all loose debris have been removed from interior of pipe.

4.2 Apply specified cleaning chemical to interior surface of pipe with pressure sprayer. Coat entire interior surface.

4.3 Using a brush (with extension pole when needed) aggressively scrub the interior of the pipe and fittings in a manner to remove any remaining welding slag, rust, mill scales, grease, paint, varnish, or other contaminants that might be present.

4.4 Using a pressure sprayer, spray rinse interior of pipe and fittings with clean water until all cleaning chemical and contaminants have been removed.

4.4.1 Discharge pressure of sprayer shall be set at a minimum of 100 psi.

4.4.2 Water temperature shall be a minimum of 120 degrees F.

4.5 Upon completion of the pipe rinse activity, use compressed air and/or a shop fan of adequate size to promote enough air flow through the pipe to completely dry the interior of the pipe and fittings of the cleaned segment of pipe.

4.6 Visually inspect the interior surface of the pipe for evidence of contaminants.

4.6.1 Also wipe inside of pipe with a rag and examine for evidence of contaminants.

4.6.2 If any welding slag, rust, mill scales, grease, paint or varnish, or other contaminants are present, repeat the cleaning process until interior of pipe is clean.

4.7 Upon satisfactory cleaning of the pipe interior, seal all open ends with plastic to prevent contamination prior to installation.

4.7.1 The pipe should be preserved in clean, dry and airtight condition.