

SECTION 15072 CLEANING

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions, apply to this Section.

1.2 SUMMARY

- A. This Section includes cleaning requirements for piping systems.
- B. Perform Type I and Type II cleaning after completion of testing.

1.3 SUBMITTALS

- A. Written evidence of experience of commercial cleaning contractor.
- B. Disposal Plans for Flushing Media.

PART 2 - PRODUCTS

2.1 MATERIALS

- A. Dry Oil-Free Compressed Air (CA): compressed air, oil free, -40°F to -75°F dewpoint at atmospheric pressure.
- B. Solvent: Solvent 140, Ashland Oil Co.

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Ensure pipe and components are free from physical defects.

3.2 PREPARATION

- A. Remove loose scale, rust, dirt, and other foreign materials by wire brushing, scrubbing, flushing, or purging.
- B. Remove dirt, rust, grease, oil, or other contaminants from exterior surface.

3.3 APPLICATION

- A. Type I and Type II Cleaning
 1. Isolate equipment, pumps, compressors, and other equipment that could be harmed by purging or flushing action. Block control valves in open position. Remove orifice plates, traps, strainers, instruments, or other equipment that could be adversely affected by flow or accumulation of particles cleaned by purge/flush procedure.

2. Introduce purging/flushing media at remote end of piping system. Where possible, flow from upstream side of globe or check valves. If not possible, remove globe or check valves and replace with spool pieces.
3. Open each branch or drop extremity of piping system to purge/flush entire system for specified minimum time period.
4. (For Type I Cleaning): Flow dry oil-free compressed air through piping systems at a minimum inlet pressure of 50 psig for a sufficient time to reach a -40°F dewpoint at outlet points. Hold for a minimum of 10 min (measured performance criteria).
5. (For Type II Cleaning): Flow potable water through piping systems at minimum velocity of 2.5 ft/s for minimum of 5 min through each outlet point (measured performance criteria). Notify Construction Manager minimum 72 h before flushing operation.
6. Reconnect isolated, removed, or bypassed items after completion of purge/flush.

3.4 FIELD QUALITY CONTROL

- A. Construction Manager will inspect shipments of chemically cleaned piping as follows:
1. Randomly select one piece of each 50 pieces received.
 2. Visually inspect selected pieces.
 3. Wipe piece with clean, white, solvent-dampened cloth.
 4. Visually inspect piece and cloth for contamination. Bloom (flash) rust formed after cleaning is not considered a contaminant.
 5. Accept shipments where no pieces are found contaminated. Rejected shipments will be recleaned.
- B. Cleaning Table

Table A

Section	Pre-installation	Post-installation	Remarks
15112	-	I	CA
15106	-	I, II	HWS, HWR, CHWS, CHWR
15106	-	II	CNDS, CNDR, TWS, TWR, PW,
15103	-	II	SWC, SWH
15104	-	II	DIS & DIR
15125	-	I	RS, RL
15146	-	II	SS-Non-Certified Materials (TB)

END OF SECTION 15072