

Utilities Department

<u>Distribution Piping Systems</u> <u>Procedure</u>

February 5, 2021 Rev. 3

Purpose:

This policy and procedure covers the operation of distribution piping systems under the auspices of the University of Notre Dame Utilities Department for the purposes of performing system configuration changes to allow for construction, maintenance and isolation due to failures. Systems included under this document include:

<u>Service</u> <u>Location</u>

Steam (70 psi and 10 psi)

Condensate

Tunnels and Ricwells

Tunnels and Ricwells

Domestic Cold Water (both Hard and Soft)

Direct buried

Domestic Hot Water

Chilled Water

Direct buried

Direct buried

Direct buried

Compressed Air Tunnels
Heating Hot Water Tunnels

Policy:

- 1. All distribution system valve operations shall <u>only be performed by Utilities Department personnel</u> or their authorized designees except for valves that service:
 - Campus and Athletic field irrigation water only, which may be operated by the Landscape Services Department
 - b. Fire protection water services, specifically Post Indicator Valves (PIV), which may be operated by the Fire Department
 - c. Building Valves located within a facility, which may be operated by the Utilities Maintenance Department.
- 2. Authorized designees so stipulated by the Utilities Department shall be those persons who have an intimate knowledge of the respective distribution system or who have been trained or briefed on the specific activity or project being undertaken. Authorized designees may only act with the full knowledge and approval of an authorized Utilities Department administrator with responsibilities and/or knowledge of the system.
- 3. The <u>Utilities Operations Group shall be advised prior to all operations</u> that affect the delivery of services to facilities. Contact can be made by calling the main control room at (574)631-0133 24/7.
- 4. All valve operations other than those covered as exceptions in item 1 shall be documented in their respective system Valve Operation Log (VOL), which shall be maintained by the Utilities Department. The VOL's shall be available for inspection at all times by Utilities personnel.
- 5. All valves shall be referenced by a valve number using the following tagging protocol

Plat No. – System Code – Numerical Reference (two digit)

Example: FO6-DC-01

System Codes:

DC Domestic Cold Hard Water
DS Domestic Cold Soft Water

FP Domestic Cold Fire Protection Water
HS Domestic Hot (Soft) Water Supply

HR Domestic Hot (Soft) Water Recirculation HHS Heating Hot Water Supply

HHS Heating Hot Water Supply
HHR Heating Hot Water Return

IR Irrigation Water
CS Chilled Water Supply
CR Chilled Water Return

S7 Steam 70 psi S1 Steam 10 psi CA Compressed Air CO Condensate

ST Storm (used for manhole/catch basin tagging)

SN Sanitary (used for manhole tagging)

- 6. Domestic Cold Water Hydrants shall only be used by authorized and trained personnel of the Utilities and Fire Department (or their mutual aid partners).
 - a. Hydrants may be used for temporary water uses under the following conditions
 - i. Prior approval by the Utilities Department
 - ii. Properly equipped with cross connection controls
 - iii. Equipped with a shut off valve downstream of the cross connection control to serve as the on-off control device for the temporary water user. Operation of the hydrant to control water flow is strictly prohibited.
 - iv. Note fire hydrants shall always be either in the full open or full close position. Throttling is strictly prohibited due to the possible contamination of the water supply.
- 7. Valves associated with this policy also include drains, vents, bypasses and any other auxiliary devices associated with the various systems.
- 8. When activities conclude for an activity or project a review of all affected valves shall be undertaken either by visual inspection or by operation in such a manner to determine that the valves have been left in the proper position for the respective system to operate normally.
- 9. Where applicable the Lockout/Tagout Procedure shall be implemented in addition to the provisions listed in this document. Lockout/Tagout of underground valves is acknowledged to be problematic if not impossible. Use of the VOL for such valves provides a method of tracking and informing affected persons of the hazards.
- 10. Should there be a system failure or emergency situation necessary actions shall be taken to control the situation without the need to explicitly follow the requirements of this policy and its procedures. Subsequent to the event the system configuration shall be confirmed as indicated in item 8.