

A Safety Message For Our Steam Customers

This pamphlet provides information to help keep your steam system operating safely and efficiently.

Maintenance Responsibility

Con Edison is responsible for the maintenance associated with all traps and strainers before the meters. This responsibility does not include any of the trap piping, only the traps and strainers themselves. In addition, Con Edison is responsible for maintaining the meters and any meter regulating valves or in-line metering plates. The customer is responsible for all other piping, valves, strainers, strainer flanges, and separators, with the exception of the strainer bull gasket, and separator inspection port.

About Steam and Condensate

Steam is water in the vapor phase. Condensate is water that accumulates in pipes and equipment as the steam cools.

How to Avoid Condensate Build-up

To ensure safe and reliable steam operation, make sure that condensate-removal equipment, such as steam traps and drain valves, is installed at appropriate points in your steam system. A licensed plumber or consulting engineer can assist in assuring proper placement of steam traps, drain valves, and drip legs.

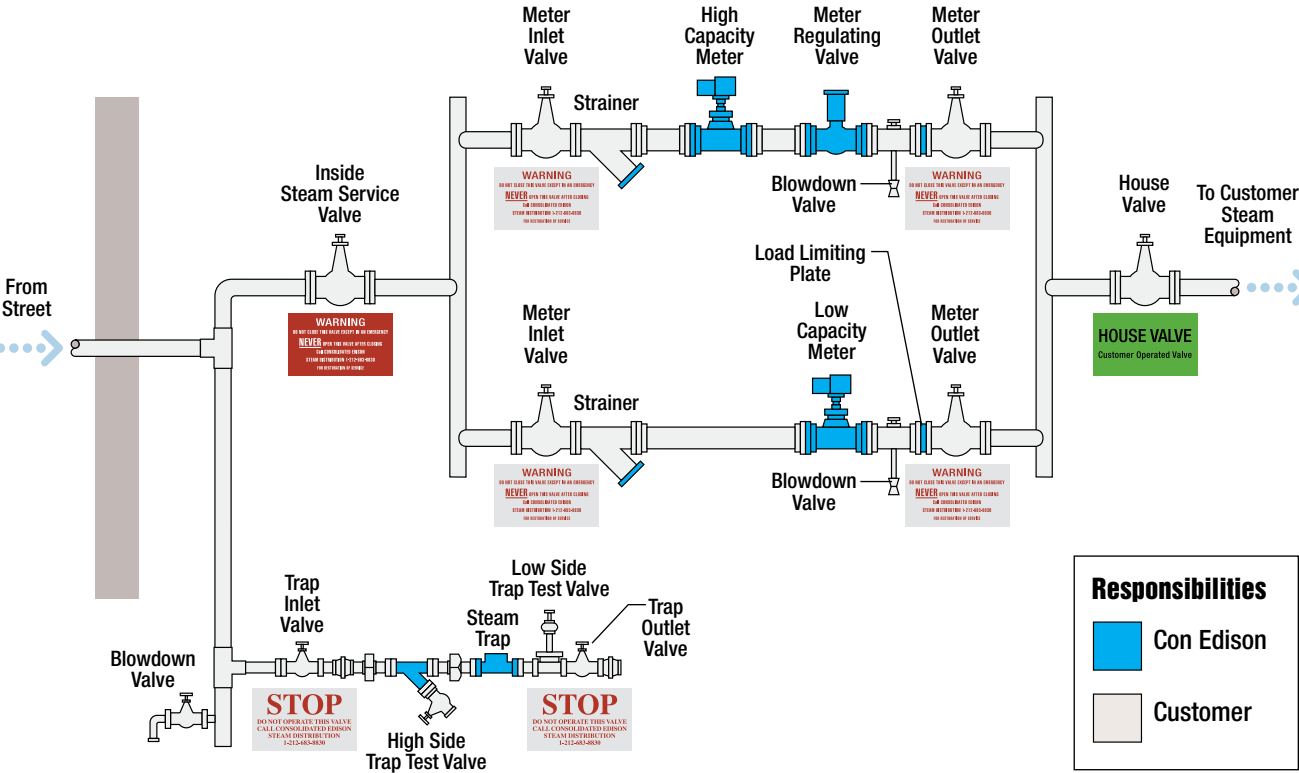
A **steam trap** automatically removes condensate from the pipe system. To ensure safety and reliability, check the steam trap regularly to make sure it is working properly. **Drain valves** are used to remove condensate from lines before turning on the steam after there has been an extended outage.



Thermodynamic steam trap

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Typical Customer Meter Station



Periodic Testing of Steam Traps

All steam traps should be tested or inspected for proper operation on a schedule recommended by the manufacturer. A clogged trap or a trap that fails in the closed position may cause harmful water hammer that could result in property damage and/or bodily injury. On the other hand, a trap that fails in the open position not only wastes energy and is costly to you but can cause high ambient temperatures.

Trap Inlet and Outlet Valves

The inlet and outlet valves on steam traps before Con Edison meters are **never to be closed by anyone other than Con Edison personnel**. To prevent unauthorized use, Con Edison is tagging each valve and sealing the trap inlet valves. These valves must remain open to avoid condensate build-up.



Metal tag identifying valves to be opened or closed only by Con Edison steam employees

Steam-Pipe Maintenance

Regular inspections by a qualified operator or heating contractor will help keep your steam-pipe system operating safely and efficiently.

Here are some things you and your operator or contractor should be aware of:

- Make sure that pipes are properly insulated. Insufficient pipe insulation causes excessive heat loss and condensate build-up that can result in pipe failure.
- Vent lines from condensate-collection vessels, such as dilution and/or flash tanks, must be kept unblocked to prevent pressure from building up.

- If you are a seasonal customer, please make sure that your steam equipment is thoroughly inspected before having it turned on. All inspections, adjustments, and repairs to your steam-piping system should be done only by a qualified operator or heating contractor.

Pardon the Interruption

Occasionally, we may have to interrupt your service to make repairs to the steam distribution system. If this happens, Con Edison will notify you in advance of the outage.

How to Avoid Delay in Service Turn-on After Repair

Following these guidelines will help you get the work you need done in a safe, efficient, and timely manner.

(a) If you plan to change or modify your steam pipes, replace pressure-reducing valve(s) or meter station, change pipe flange(s), and/or perform any repair requiring welding, you must call and notify Con Edison Steam Distribution Engineering (SDE) — before work begins — regarding the scope of work to be performed. Approval is also required from SDE prior to changes in dilution or flask tanks, pipe anchorage, pipe guides, expansion devices, and trap locations. At your request, we will arrange the shutoff of steam service to the building. We will also advise you about New York City Building Code requirements for high-pressure steam piping work including any radiographic (X-ray) examination requirements for welding or weld repairs.

Refer to the NYC Buildings Department rules on High-Pressure Steam Piping Systems in the NYC Building Code, Appendix A, Chapter 20, Section 20-02. A copy of the rules will be provided upon request.

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(b) If asbestos abatement is performed, it must be done in compliance with federal, state, and city environmental rules and regulations. We require an air-clearance report(s) showing fiber count and volume of air collected issued by a third-party New York State-certified ELAP (Environmental Laboratory Approval Program) laboratory. This must be done before steam service can be reactivated. This report(s) is required for all abatement work, regardless of project size, conducted inside steam rooms or areas that require Con Edison Steam Distribution personnel to enter to restore service.

The Inside Steam-Service Valve

The inside steam-service valve is the first valve in the building. It is to be closed *only* in an emergency. To prevent use by unauthorized persons, Con Edison has wire-sealed the valve and attached a metal warning tag that lists all emergency restrictions. Once closed, it is possible that condensate may build up behind the inside service valve. For this reason, it is imperative that customers NEVER open the inside service valve. To open this valve, customers must call Con Edison.

WARNING

DO NOT CLOSE THIS VALVE EXCEPT IN AN EMERGENCY

NEVER OPEN THIS VALVE AFTER CLOSING

Call CONSOLIDATED EDISON

STEAM DISTRIBUTION 1-212-683-8830

FOR RESTORATION OF SERVICE

Metal tags identifying valves to be closed only in an emergency and to be opened only by Con Edison steam employees

WARNING

DO NOT CLOSE THIS VALVE EXCEPT IN AN EMERGENCY

NEVER OPEN THIS VALVE AFTER CLOSING

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STEAM DISTRIBUTION 1-212-683-8830

FOR RESTORATION OF SERVICE

Unattended Open Drain Valves

Avoid having any unattended open drain valves during a scheduled or unscheduled steam outage. This is critical because when work in the street has been completed, steam service will be restored and an unattended open drain valve is unsafe during the start-up process.

When you open a drain valve during a scheduled or unscheduled steam outage, make sure the valve is returned to the closed position before leaving the area. Whenever a drain valve is open, you must have someone present.

Interruption of Electric Service

Customers who require electric service to operate their steam system safely should, in the event of an electric outage, isolate their steam service, preferably by utilizing the first isolation valve after the steam meter station. Alternatively, the inside steam-service valve can be used for isolation, but Con Edison must be called to reopen the valve. During an interruption of electric service, customers who have electric condensate-removal pumps should consider isolating their steam service to prevent condensate receivers/sumps from overflowing and flooding mechanical equipment rooms.

NOTE: Each 1/2" trap will discharge approximately three gallons of water per hour.

Customer Seminars

Con Edison offers free half-day seminars to our steam customers. Topics include a steam-system overview, information about metering equipment, and a discussion of safety issues. Seminars are open to building managers, engineers, and maintenance staff. To register, please call Con Edison at 1-212-460-1216.

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How to Reach Us

We want to provide our customers with the best possible service. If you need us, we are easy to reach.

In case of an emergency or to schedule a turn-off or turn-on of service (24 hours a day):

Phone: 1-212-683-8830 or 1-800-914-9112 or
1-800-75-CONED (1-800-752-6633)

Steam Distribution Engineering department:

(For piping changes or modifications, NYC Building Code)

Phone: 1-212-460-4410 or 1-212-460-6288

Fax: 1-917-534-4070

Steam Environment, Health and Safety representative:

(For questions about asbestos abatement and monitoring results)

Phone: 1-212-894-9520 or 1-212-894-9521

Fax: 1-917-534-4491

Our Web Site:

www.conEd.com/Steam