

220 CMR: DEPARTMENT OF PUBLIC UTILITIES

220 CMR 20.00: STEAM DISTRIBUTION COMPANIES

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20.01: Purpose and Scope

- (1) 220 CMR 20.00 prescribes minimum safety requirements for the design, fabrication, installation, inspection, testing, operation, and maintenance of Main and Service Piping by Steam Distribution Companies.
- (2) 220 CMR 20.00 applies to every Steam Distribution Company operating a plant, equipment or facilities for the manufacture, production, transmission, furnishing or distribution of steam to or for the public for compensation within the Commonwealth.
- (3) Every Steam Distribution Company shall comply with M.G.L. c. 164B, M.G.L. c. 25, § 18A, and 220 CMR 20.00.
- (4) 220 CMR 20.00 does not apply to:
 - (a) Plant, equipment or facilities used for or in connection with the generation or production of steam or not directly associated with the distribution of steam; or
 - (b) The design, fabrication, and installation of piping downstream of the customer's property line.
- (5) Any entity operating a steam distribution system within the Commonwealth that does not meet the definition of a Steam Distribution Company must file with the Department a detailed inspection and maintenance plan, in accordance with the Department's specifications and M.G.L. c. 164B, § 4. The plan must be filed every two years as directed by the Department.

20.02: Definitions

For the purposes of 220 CMR 20.00, the following definitions apply:

Accessible. Capable of being visually inspected (*i.e.*, Expansion Joints or welds not buried or located in a manhole, tunnel, or vault).

Active Corrosion. Continuing corrosion which, unless controlled, could result in a condition that is detrimental to public safety.

20.02: continued

Asbestos-containing Material. Friable asbestos and any material containing 1% or more asbestos by area as determined by a laboratory using USEPA-approved methods. Asbestos-containing Material includes but is not limited to sprayed-on and troweled-on materials applied to ceilings, walls, and ceilings, walls, and other surfaces, insulation on pipes, boilers, tanks, ducts, and other equipment, structural and non-structural members, tiles, shingles or asbestos containing paper.

Blow-off Valve. A valve typically connected to the Main on one end and open to the atmosphere on the other end. Blow-off Valves are used to depressurize the steam Main during outage operations, as well as to drain Condensate from the Main during shutdown, outage and start-up operations. Blow-off Valves are typically closed in normal operating conditions. These valves are sometimes also termed open-end or free-blow valves.

Bypass Valve. A valve that is fitted with piping to enable steam flow around the Main Valve when the Main Valve is isolated. Bypass Valves are used upon re energization of a section of the Main, and are sometimes termed warm-up or equalizing valves.

Condensate. Water that collects as steam and, when cooled, changes to a liquid state. In normal operation, the Main or Service Piping will produce varying amounts of Condensate while in service, and provision for its removal is required (typically by Steam Traps).

Department. Department of Public Utilities, Commonwealth of Massachusetts.

Division. Pipeline Safety Division of the Department.

Emergency Leak. Any Leak or Vapor Condition that is immediately hazardous or a threat to public safety, including but not limited to the following:

- (a) Any Leak on the bellows of an exposed Expansion Joint;
- (b) Any Leak likely to cause third-party property damage or personal injury;
- (c) Any Leak resulting from External Damage or other outside forces, including but not limited to fire, explosion, vandalism, or natural forces; or
- (d) Any Leak or Vapor Condition that, in the judgment of the operating personnel at the scene, is regarded as potentially hazardous.

Expansion Joints. Manufactured fittings installed in Main or Service Piping to compensate, where necessary, for thermal expansion. Expansion Joints are typically either slip joints or bellows joints (internally or externally pressurized).

External Damage. Damage to facilities caused by external forces including but not limited to third parties.

Incident. An unplanned condition or situation necessitating a response, including but not limited to the following:

- (a) An Emergency Leak, steam release, hazardous material spill, or explosion;
- (b) A condition or situation that is likely to lead to abnormal plant or system operations;
- (c) A condition or situation that jeopardizes key systems or components;
- (d) A condition or situation that compromises personnel safety; or
- (e) A condition or situation that is likely to damage third-party property or impact the health and safety of the general public.

Integrity Management Plan (IM Plan). A written explanation of the mechanisms or procedures that a Steam Distribution Company uses to implement its SDIMP or IM Program to ensure compliance with 220 CMR 20.00.

Leak. A breach in the pressure boundary of the Main or Service Piping that allows the escape of steam from the system.

Main. Includes the piping, Main Valves, Blow-off Valves, Bypass Valves, Expansion Joints, Steam Traps, equipment, and fittings for the delivery of steam from a Steam Distribution Company's steam production facility to the Steam Distribution Company's service area. Mains are external to the property line of the steam production facility, and are differentiated from Service Piping.

20.02: continued

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Main Valve. A valve located in the Main that is used for isolating a section of the Main.

Nonemergency Leak. Any Leak or Vapor Condition that is not immediately hazardous or a threat to public safety at the time of discovery and reasonably can be expected to remain nonhazardous and not a public safety threat.

Safety-related Condition. A condition that is likely to lead to an Incident, personal injury, third party damage, or system or component failure, including but not limited to the following:

- (a) Any structural defect associated with a steam manhole/vault that poses a safety risk to operating or maintenance personnel and could damage or render steam piping or control equipment inoperable;
- (b) Any crack, material defect, or weld failure that impairs the structural integrity of the steam pipeline or related steam components;
- (c) Unintended movement or abnormal loading by natural forces such as earthquake, flooding, or washout that impairs the serviceability of steam piping and related components, such as valves, Expansion Joints, guides, anchors, and supports; or
- (d) Any condition that could result in the failure of a steam pressure-reducing valve supplying steam at line pressure to a steam customer.

Service Piping. The piping, valves, Steam Traps, equipment, and fittings for the delivery of steam originating from the Main to the thermal energy end-user (customer), terminating at the customer's property line.

Steam Distribution Company. A person, firm, partnership, association or private corporation organized or operating under the laws of the Commonwealth with the primary purpose of operating a plant, equipment or facilities for the manufacture, production, transmission, furnishing or distribution of steam to or for the public for compensation within the Commonwealth; provided, however, that Steam Distribution Company shall not include:

- (a) an entity producing or distributing steam exclusively on private property and solely for use by the entity or the entity's tenant, and not for distribution or sale; or
- (b) a company that produces and sells steam as a by-product of the production of electricity for sale in the wholesale electricity markets and does not own or operate pipelines off site of the generating facility for the distribution of steam.

Steam Distribution Integrity Management Program (SDIMP or IM Program). An overall approach by a Steam Distribution Company to ensure the integrity and condition of its steam distribution system through the development and implementation of condition assessments.

Steam Trap. A device fitted on the Main and Service Piping to allow the discharge of accumulated Condensate from an operating steam line. Steam Traps operate essentially as automated valves that are activated by one or more means to eject Condensate with minimal steam loss.

Vapor Condition. The presence of visible steam or water vapor in close proximity to buried Mains.

Water Intrusion. Water originating from external sources making physical contact with the Main or Service Piping. This contact can result in flash vapor that may be reported as a Vapor Condition.

20.03: Applications for Exceptions from Provisions of 220 CMR 20.00

Any Steam Distribution Company may make a written request to the Department for an exception to the provisions of 220 CMR 20.00, in whole or in part. The request shall justify why the exception should be granted and shall demonstrate why the exception does not derogate from the safety objectives of 220 CMR 20.00. The request shall include details on the need for the exception, specific information on the circumstances surrounding the exception, the provisions of 220 CMR 20.00 from which exception is sought, and a description of any safety consequences that might result from the exception. Documentation in support of the request shall also be submitted.

20.03: continued

The Department may, after consideration and the payment of the appropriate fee, issue a written decision denying the exception or granting the exception as requested or as modified by the Department and subject to conditions. An exception may be granted or denied in writing by the Director of the Division, or by the Director's functional successor in the event of an internal reorganization of the Department. Any person aggrieved by a decision of the Director may appeal the decision to the Department. Any appeal shall be in writing and shall be made not later than ten business days following issuance of the written decision.

In an emergency, a verbal request for an exception may be granted by the Director or his functional equivalent, provided that the verbal request is subsequently confirmed in writing within seven days of the exception being granted.

20.04: Notification of Construction

At least ten days prior to the start of construction, or reconstruction, of 100 feet or more of Main, each Steam Distribution Company shall file with the Department a letter of intent providing details of the proposed construction, except when an Emergency Leak makes such notice impracticable. When such notice is impracticable due to an Emergency Leak, such filing shall be made at the earliest practicable time following remediation of the Emergency Leak.

20.05: Operating and Maintenance (O&M) Plan

(1) Each Steam Distribution Company shall establish and file with the Department a detailed written O&M plan that implements the provisions of 220 CMR 20.00. Each Steam Distribution Company shall submit to the Department any revisions to the O&M plan within 30 days following the revisions' effective date.

(2) The O&M plan shall include, at a minimum, the following:

- (a) Operating and maintenance procedures during normal operations and repairs;
- (b) Procedures for reporting, investigating, classifying, handling, and monitoring steam Leaks, Vapor Conditions and External Damage;
- (c) Procedures to correct, within specified timeframes, deficiencies found during inspections, evaluations, and tests required by 220 CMR 20.00;
- (d) Procedures for continuing routine surveillance and inspections of the Main and Service Piping to identify and to take appropriate action concerning failures, leakage history, excessive Water Intrusion, manhole structural condition and other unusual operating and maintenance conditions;
- (e) Procedures for personnel who perform O&M activities (including all inspections, surveys, and condition assessments) to recognize and report any Safety-related Condition, including procedures for providing a written Safety-related Condition report to the Department within five working days from the date of discovery of the Safety-related Condition;
- (f) A list of qualified persons who may approve the turn-on of any section of the Main and Service Piping; and
- (g) Procedures to ensure that the turn-on of any section of the Main and Service Piping is accomplished only by persons specifically trained, qualified, and approved for such purpose.

(3) Each Steam Distribution Company shall establish and maintain detailed, up-to-date and accurate geographical information system (GIS) maps and records of its Mains and Service Piping.

(4) Each Steam Distribution Company shall comply with its O&M plan. In order to encourage consistency and uniformity when performing O&M activities, company personnel shall maintain a copy of the O&M plan and procedures in the field where work is being performed or have access to an electronic copy.

20.06: Emergency Plan

(1) Each Steam Distribution Company shall establish and file annually on January 31st with the Department a detailed written emergency plan that implements procedures to minimize the hazards resulting from an Emergency Leak or Incident. Each Steam Distribution Company shall comply with its emergency plan.

20.06: continued

- (2) At a minimum, the emergency plan must include the following:
 - (a) Procedures for receiving, identifying, and classifying notices of Emergency Leaks or Incidents;
 - (b) Procedures for establishing and maintaining adequate means of communication with fire, police, and other public safety officials;
 - (c) Procedures for establishing and maintaining continuous communication and coordination between field crews and dispatching personnel;
 - (d) Procedures for the availability of personnel, equipment, tools, and materials, as needed at the scene of an Emergency Leak or Incident;
 - (e) Procedures directed toward protecting human life and safety as the highest priority, with protection of property second in priority;
 - (f) Emergency Main and Service Piping shutdown procedures;
 - (g) Procedures for making safe any actual or potential hazard to life or third-party property;
 - (h) Procedures for safely restoring to service any of the Main or Service Piping following emergency shutdown or outage;
 - (i) Instructions to control and mitigate the release of Asbestos-containing Material or Asbestos-containing Material debris, resulting from the failure of any Main or Service Piping.
 - (j) Procedures for analyzing each facility failure for the purpose of determining its cause and minimizing the possibility of a recurrence, including procedures for selecting samples of the failed facility or equipment for laboratory examination; and
 - (k) Procedures for the Steam Distribution Company (or, at the Department's request, an independent consultant) to test or survey any equipment or systems as part of an investigation and analysis of a failure or Incident for the purpose of determining its cause and minimizing the possibility of a recurrence.
- (3) Each Steam Distribution Company shall:
 - (a) Provide a copy of the latest edition of the emergency plan to supervisors who are responsible for emergency action; and
 - (b) Train the appropriate operating personnel to ensure that they are knowledgeable about and can comply with the emergency plan.
- (4) No later than January 31st of each year, each Steam Distribution Company shall file with the Department, and with all municipalities within which its facilities are located, a list indicating the names and 24-hour contact information of its responsible officials who may be contacted in the event of an Emergency Leak. Changes to this list within the year shall be reported to the Department and affected municipalities no later than 30 days after such changes.

20.07: Aging Report for Major Steam Components

- (1) Each Steam Distribution Company shall maintain an accurate steam system facilities Aging Report listing all major steam piping and components by period of installation, in a format to be determined by the Department. The Aging Report shall include, but not be limited to, major piping, Expansion Joints, main line valves, guides, anchors, and supports. Each Steam Distribution Company shall file its Aging Report with the Department every five years no later than March 1st, beginning with March 1, 2023.
- (2) Each Steam Distribution Company shall monitor the number of vaults or manholes requiring repairs each calendar year and provide this information, including a breakdown of the number of repairs performed during the year and the number remaining to be performed at the end of the year, to the Department annually on March 1st, beginning with March 1, 2023.

20.08: Customer Education and Information Program

- (1) Each Steam Distribution Company shall initiate and maintain on a continuing basis, a program for customer education and information designed to assist its customers, and appropriate government organizations, in recognizing steam emergency conditions and situations, and to provide them the means to notify the Steam Distribution Company of such situations.
- (2) No later than January 31st of each year, each Steam Distribution Company shall file a report with the Department describing the Steam Distribution Company's customer education and information program, including a detailed statement of the means of its implementation and samples of all descriptive literature and other educational aids. The report shall identify all changes from the prior year's program.

20.09: Employee Training

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- (1) Each Steam Distribution Company shall ensure that the employees involved in the operation, maintenance, or testing of Mains and Service Piping satisfactorily complete training to ensure effective and safe implementation of the procedures required by 220 CMR 20.00. Additionally, each Steam Distribution Company shall ensure that supervisors are tested annually to determine proficiency and have satisfactorily completed refresher training as testing results deem necessary.
- (2) Each Steam Distribution Company shall ensure that new employees receive basic classroom training prior to on-the-job training in field operations.
- (3) Each Steam Distribution Company shall maintain records of the training provided under 220 CMR 20.09, including the names of the employees trained, courses provided, courses completed, and the number of hours of training.

20.10: Periodic Inspections

At a minimum, each Steam Distribution Company shall conduct the following periodic inspections:

- (1) Steam Traps. The Steam Distribution Company shall establish and maintain an active Steam Trap survey program for the regular systematic inspection, testing, repair or replacement of all Steam Traps, to ensure that they are working properly. Each survey shall also include the inspection and replacement or remediation of associated trap piping assemblies (*i.e.*, small bore pipe) that show signs of Active Corrosion during the survey. Additionally, each survey must comply with the following:
 - (a) All Steam Traps and trap piping assemblies shall be inspected seasonally for general condition and proper operation. At least four inspections shall be conducted in each calendar year, once per quarter, at intervals not exceeding four months.
 - (b) Traps that fail inspection must be replaced or remediated upon discovery but no later than 60 days from discovery.
 - (c) Corrosion under removable insulation on traps and trap assemblies shall be checked four times per year, once per quarter, at intervals not exceeding four months.
- (2) Blow-off Valves and Bypass Valves. Blow-off Valves and Bypass Valves shall be inspected for operability immediately prior to closing each associated Main Valve during a scheduled shut-down of a section of the Main and associated Service Piping. Condensate shall be removed from a shut down section of the Main and associated Service Piping prior to re-opening Main Valves.
- (3) Accessible Expansion Joints. Accessible Expansion Joints shall be inspected every six months. The inspection shall include, as applicable, checks for leakage, proper alignment, and traverse measurement.
- (4) Inaccessible Expansion Joints. Inaccessible Expansion Joints shall be surveyed for any potential leakage on a ten-year schedule that accomplishes 10% each year, using best available methods or techniques.
- (5) Manholes. Manholes containing Mains and Service Piping shall be inspected for general conditions, including the following:
 - (a) Steam distribution equipment inside the manhole at least once each calendar year at intervals not exceeding 15 months;
 - (b) Support systems inside manholes, such as anchors, guides, and supports, shall be checked for atmospheric corrosion at least once each calendar year at intervals not exceeding 15 months;
 - (c) Surface temperature readings of manhole castings, covers and appurtenances that are located at or above grade and subject to contact with pedestrians, vehicles and other members of the public, at least once each calendar year at intervals not exceeding 15 months; and
 - (d) Structural integrity at least once every five calendar years.

20.10: continued

(6) Upon the removal from service of any Expansion Joint or steel Main or Service Piping, the Steam Distribution Company shall inspect the item for internal corrosion and for external corrosion under insulation (CUI). A removed Expansion Joint shall include pipe coupons (short segments of pipes) at least 12" long where possible or an appropriate length as determined by the Steam Distribution Company. For removed Main or Service Piping, inspection of a pipe coupon (12" or greater) is sufficient. The Steam Distribution Company shall document and maintain records of these inspections to support future inspections of pipe remaining in service.

20.11: Condition Assessment and Steam Distribution IM Program (SDIMP)

(1) Condition Assessment. Each Steam Distribution Company shall develop and implement a Condition Assessment program to conduct an overall, system-wide assessment of the condition of the entire accessible distribution system.

- (a) The Condition Assessment shall be conducted at least once every ten years (or sooner if required by the Department) to support the SDIMP outlined below in 220 CMR 20.11(2).
- (b) The Condition Assessment shall address public safety issues including, but not limited to, hot manhole covers and vapor conditions that are hazardous or a threat to public safety.
- (c) Each Steam Distribution Company shall establish a tracking program or application to document the assessment and condition findings discovered during each Condition Assessment and shall report these findings once every ten years to the Department as part of the annual safety report required by 220 CMR 20.15(4).

(2) Steam Distribution IM Program (SDIMP). Each Steam Distribution Company shall develop and implement a Steam Distribution IM Program (SDIMP) that includes a written IM Plan. The IM Plan must contain procedures for developing and implementing the following elements:

- (a) Knowledge. The Steam Distribution Company must demonstrate an understanding of its steam distribution system developed from reasonably available information.
 1. Identify the characteristics of the Main and Service Piping's design and operations and the environmental factors that are necessary to assess the applicable threats and risks to its Main and Service Piping.
 2. Consider the information gained from past design, operations, and maintenance.
 3. Identify additional information needed and provide a plan for gaining that information over time through normal activities conducted on the Main and Service Piping (for example, design, construction, operations or maintenance activities).
 4. Develop and implement a process by which the SDIMP will be reviewed periodically and refined and improved as needed.
 5. Provide for the capture and retention of data on any new Main or Service Piping installed. The data must include, at a minimum, the location where the new Main or Service Piping is installed and the material of which it is constructed.
- (b) Identify Threats. The Steam Distribution Company must consider the following categories of threats to its Main and Service Piping: corrosion, natural forces, excavation damage, other outside force damage, material or welds, equipment failure, incorrect operations, and other concerns that could threaten the integrity of its Main and Service Piping. The Steam Distribution Company must consider reasonably available information to identify existing and potential threats. Sources of data may include, but are not limited to, Incident and Leak history, corrosion control records, survey records, maintenance history, excavation and property damage experience.
- (c) Evaluate Risk. The Steam Distribution Company must evaluate the risks associated with its distribution Main and Service Piping. In this evaluation, the Steam Distribution Company must determine the relative importance of each threat and the risks posed to its Main and Service Piping.
- (d) Identify and Implement Measures to Address Risks. The Steam Distribution Company must determine and implement measures designed to reduce the risks from failure of its Main and Service Piping. These measures must include an effective steam leak management program for Emergency and Nonemergency Leaks. The Steam Distribution Company shall continuously implement measures to address and mitigate the risks to customers and the public at large (within its service areas).

20.11: continued

(e) Measure Performance, Monitor Results, and Evaluate Effectiveness. The Steam Distribution Company must develop and monitor performance measures from an established baseline to evaluate the effectiveness of its SDIMP. The Steam Distribution Company must consider the results of its performance monitoring in periodically re-evaluating the threats and risks. These performance measures must include the following and be reported as part of the annual safety report required by 220 CMR 20.15(4):

1. Number of Emergency Leaks either eliminated or repaired (or total number if all Emergency Leaks are repaired when found) categorized by cause;
2. Number of Nonemergency Leaks;
3. Leaks per mile of pipe;
4. Number of excavation and property damages;
5. Total number of leaks either eliminated or repaired, categorized by cause; and
6. Any additional measures the Steam Distribution Company determines are needed to evaluate the effectiveness of the SDIMP in controlling each identified threat.

(f) Periodic Evaluation and Improvement. The Steam Distribution Company must re-evaluate threats and risks on its entire distribution system and consider the relevance of threats in one location to other areas. The Steam Distribution Company must determine the appropriate period for conducting complete program evaluations based on the complexity of its system and changes in factors affecting the risk of failure. The Steam Distribution Company must conduct a complete program re-evaluation at least once every ten years and provide the results of this re-evaluation to the Department. The Steam Distribution Company must consider the results of the performance monitoring in these evaluations.

20.12: Welding - Qualification and Nondestructive Testing

(1) All welding must be performed by qualified welders employing qualified welding procedures, in accordance with the American Welding Society Standard Welding Procedure Specifications.

(2) Welds subjected to temperatures over 350°F (175°C) on pipe over six inches in diameter shall be subject to nondestructive testing by radiographic inspection in accordance with 220 CMR 20.12(3) and (4).

(3) All underground buried field welds greater than 2½ inches in diameter in new Main and Service Piping installations and all prefabricated shop welds shall be nondestructively tested prior to being placed in service.

(4) Each Steam Distribution Company shall establish a program of random, unannounced, nondestructive testing for new accessible field welds made on existing Main and Service Piping, to assess the quality of welding and the work of each welder. The required minimum testing rate shall be 10% of all welds made during a calendar month. If 10% or more of the welds tested in a calendar month are found to be unacceptable, the test rate shall increase by 5% for the ensuing calendar month. If fewer than 10% of the welds are found to be unacceptable in a calendar month where the required test rate was greater than 10%, the test rate may be decreased by 5% for the ensuing calendar month.

20.13: Leaks, Vapor Conditions and External Damage

(1) Each Steam Distribution Company shall be responsible for the investigation, prioritization, and repair of each Leak, Vapor Condition or External Damage, as applicable, found on its system.

(2) Each Steam Distribution Company shall respond promptly to any notification of a Leak, Vapor Condition or External Damage.

(3) Nonemergency Leaks or Vapor Conditions shall be repaired within four months from the date of discovery.

20.13: continued

(4) Each Steam Distribution Company shall respond immediately to Emergency Leaks or External Damage to protect life and third-party property, and must work continuously until repairs are completed, or until the condition is no longer hazardous.

(5) Each Steam Distribution Company shall create a steam Leak/Vapor Condition/External Damage record, identified by number to record the entire history of a Leak/Vapor Condition/External Damage on the Main and Service Piping from the time of discovery through repair, as applicable. The record shall contain information as to the location and apparent cause of the event, and the nature of the repair.

20.14: Logging and Analysis of Steam Incidents

(1) Each Steam Distribution Company shall record each report of an Incident received on a service record number.

(2) Each Steam Distribution Company shall keep and maintain a daily log that includes the recording of the receipt and handling of each Incident containing the following information:

- (a) Cross reference to the related service record number;
- (b) Location of Incident;
- (c) Time report first received;
- (d) Description as to type of Incident;
- (e) Time personnel first dispatched to location;
- (f) Time of arrival of personnel at location;
- (g) Times of dispatch and arrival of any additional personnel called to the location; and
- (h) Time when the Incident is cleared.

(3) Each Steam Distribution Company shall conduct an investigation, including a "lessons learned" or debriefing session involving affected personnel, following resolution of each Incident to review activities to determine whether the procedures were effectively followed in each case, the causes of the failure, and actions needed to minimize the possibility of a recurrence.

20.15: Reports of Incidents and Interruptions

(1) At the earliest practicable moment following discovery, each Steam Distribution Company shall report to the Department by telephone, through the Department's emergency notification system, all Incidents involving the Main or Service Piping that include any of the following events:

- (a) Injury requiring inpatient hospitalization or death to any persons;
- (b) Damage to third-party property;
- (c) Airborne release of Asbestos-containing Material; or
- (d) Anything significant in the judgment of the Steam Distribution Company.

(2) At the earliest practicable moment following discovery, each Steam Distribution Company shall report to the Department by telephone, through the Department's emergency notification system, any unscheduled interruption of service affecting two or more customers, or any other interruption deemed reasonably significant, provided that nothing in 220 CMR 20.00 shall require a Steam Distribution Company to report service interruptions resulting primarily from a loss of steam production output.

(3) Within 30 days following discovery, each Steam Distribution Company shall submit to the Department a written report of each Incident that meets the reporting requirements in 220 CMR 20.15(1). The report shall set forth a chronological sequence of events including a detailed description of the:

- (a) Incident;
- (b) Response, action, and investigation by the Steam Distribution Company; and
- (c) Results and findings of the investigations to date, including the results of the investigation required by 220 CMR 20.14(3).

20.15: continued

(4) No later than March 1st of each year, each Steam Distribution Company shall file its annual report on all safety-related matters with the Department. The report shall include, but not be limited to:

- (a) The dates, locations, duration, and causes of all Leaks emergency or nonemergency;
- (b) The dates, locations, duration, and causes of all Main and Service Piping Incidents and service outages or interruptions;
- (c) The number of injuries that required inpatient hospitalization;
- (d) The number of fatalities;
- (e) The approximate cost of third-party property damage;
- (f) The time elapsed between the Incident and the return to service following a repair; and
- (g) Mitigation of any release of Asbestos-containing Material.

20.16: Corporate Filings

(1) Each Steam Distribution Company shall file with the Department a certified copy of its certificate of incorporation and bylaws, and any amendments, modifications, or revisions thereto within six months of August 17, 2012, or within one month of taking ownership of the steam distribution assets from a prior entity. Thereafter, each Steam Distribution Company shall file with the Department any updates or changes to its certificate of incorporation or bylaws within one month following such change.

(2) By March 31st each year, each Steam Distribution Company shall report to the Department its intrastate operating revenues for the previous calendar year derived from the manufacture, production, transmission, furnishing, or distribution of steam to or for the public.

20.17: Department Examinations and Investigations; Fines

(1) The Department may conduct announced or unannounced examinations and investigations into a Steam Distribution Company's safety performance, including compliance with 220 CMR 20.00. These may include entry into the offices and other property of the Steam Distribution Company during normal business hours.

(2) If after examination or investigation, the Department has reason to believe that a Steam Distribution Company has failed to comply with M.G.L. c. 164B or 220 CMR 20.00, the Department may commence an enforcement proceeding against the company, conducted pursuant to 220 CMR 69.00: *Procedures for Determination and Enforcement of Violations of Safety Codes Pertaining to Pipeline Facilities, Transportation of Natural Gas, Liquefied Natural Gas Facilities, and Steam Distribution Facilities*, and may levy fines against the company.

(3) The determination of the amount and appropriateness of a civil penalty shall be made pursuant to M.G.L. c. 164, § 105A.

20.18: Records

(1) Each Steam Distribution Company shall maintain records documenting all Employee Training, Periodic Inspections, Welding - Qualification and Nondestructive Testing, Leaks/Vapor Conditions/External Damage, Emergency Leaks, Incidents and Interruptions, Facility Failures, maintenance, tests, investigations, surveys and analyses demonstrating compliance with all applicable provisions of 220 CMR 20.00.

(2) Except as specified in 220 CMR 20.18(3), the minimum period of retention of records required by 220 CMR 20.00 shall be ten years.

(3) Records related to corrosion shall be maintained for the life of the facility.

(4) All records or copies thereof, shall be kept on file at Steam Distribution Company offices within the Commonwealth, and shall be readily accessible upon request to the staff of the Department.

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(5) Each Steam Distribution Company shall use an electronic records management system that will allow for readily available and readily accessible records. The system software should be updated/upgraded as new versions become available.

20.19: Steam Distribution Company Procedures

Each Steam Distribution Company shall incorporate procedures for all requirements of 220 CMR 20.00 into its written applicable procedures to ensure compliance with M.G.L. c. 164B and 220 CMR 20.00.

20.20: Table of Filing and Reporting Deadlines

| Provision | Item | Frequency | Filing Date | Notes |
|--------------------|--|------------------------|--|--|
| 20.04 | Notification of construction | As needed | Ten days prior to start | For emergency leak, at earliest practicable time following remediation |
| 20.05(1) | Revision to O&M | As needed | 30 days after effective date | n/a |
| 20.06(1) | Emergency Plan | Annually | January 31 st | n/a |
| 20.06(4) | Emergency Contacts | Annually and as needed | January 31 st and within 30 days after any changes thereafter | n/a |
| 20.07(1) | Aging Report | Every five years | March 1 st | Filed with Annual Safety Report |
| 20.07(2) | Manhole Repair List | Annually | March 1 st | Filed with Annual Safety Report |
| 20.08(2) | Customer Education and Information Program | Annually | January 31 st | n/a |
| 20.11(1) | Condition Assessment | Every ten years | March 1 st | Filed with Annual Safety Report |
| 20.11(2)(e) | SDIMP performance measures | Annually | March 1 st | Filed with Annual Safety Report |
| 20.11(2)(f) | SDIMP re-evaluation results | Every ten years | March 1 st | Filed with Annual Safety Report |
| 20.15(1), (2), (3) | Incidents and Interruptions | As needed | By telephone upon discovery; written report within 30 days | n/a |
| 20.15(4) | Annual Safety Report | Annually | March 1 st | n/a |
| 20.16(1) | Corporate Filings | As needed | Within one month of changes or revisions | n/a |
| 20.16(2) | Operating Revenues | Annually | March 31 st | n/a |

REGULATORY AUTHORITY

220 CMR 20.00: M.G.L. c. 164B, § 1.