

DEPARTMENT OF LICENSING AND REGULATORY AFFAIRS

BUREAU OF CONSTRUCTION CODES

SKILLED TRADES REGULATION RULES

Filed with the secretary of state on April 26, 2023

These rules become effective 7 days after filing with the secretary of state.

(By authority conferred on the director of the department of licensing and regulatory affairs by sections 207, 209, and 907 of the skilled trades regulation act, 2016 PA 407, MCL 339.5207, 339.5209, and 339.5907, and Executive Reorganization Order Nos. 1996-2, 2003-1, 2008-4, 2011-4, and 2017-1, MCL 445.2001, 445.2011, 445.2025, 445.2030, and 339.3102)

R 339.5101, R 339.5102, R 339.5111, R 339.5112, R 339.5113, R 339.5114, R 339.5115, R 339.5116, R 339.5117, R 339.5118, R 339.5119, R 339.5121, R 339.5131, R 339.5141, R 339.5151, R 339.5161, R 339.5171, R 339.5172, R 339.5173, R 339.5174, R 339.5175, R 339.5176, R 339.5201, R 339.5202, R 339.5203, R 339.5204, R 339.5205, R 339.5206, R 339.5207, R 339.5208, R 339.5209, R 339.5210, R 339.5211, R 339.5212, R 339.5213, R 339.5214, R 339.5215, R 339.5216, R 339.5217, R 339.5218, R 339.5219, R 339.5220, R 339.5221, R 339.5222, R 339.5223, R 339.5224, R 339.5225, R 339.5226, R 339.5227, R 339.5231, R 339.5232, R 339.5233, R 339.5234, R 339.5235, R 339.5236, R 339.5237, R 339.5238, R 339.5240, R 339.5241, R 339.5242, R 339.5243, R 339.5244, R 339.5245, R 339.5246, R 339.5247, R 339.5248, R 339.5249, R 339.5250, R 339.5251, R 339.5252, R 339.5253, R 339.5261, R 339.5262, R 339.5263, R 339.5264, R 339.5265, R 339.5266, R 339.5270, R 339.5290, R 339.5295, R 339.5300a, R 339.5300b, R 339.5300c, R 339.5300d, R 339.5300e, R 339.5300f, R 339.5301, R 339.5302, R 339.5305, R 339.5306, R 339.5309, R 339.5400, R 339.5405, R 339.5406, R 339.5408, R 339.5411, and R 339.5412 of the Michigan Administrative Code are added, as follows:

PART 1. GENERAL PROVISIONS

R 339.5101 Definitions.

Rule 101. (1) As used in these rules, “act” means the skilled trades regulation act, 2016 PA 407, MCL 339.5101 to 339.6133.

(2) A term defined in the act has the same meaning when used in these rules.

R 339.5102 Advertising.

Rule 102. (1) An individual who does not hold a license issued under the act shall not advertise for work that requires a license, as that term is defined in section 105 of the act, MCL 339.5105.

(2) A violation of this rule constitutes false advertising pursuant to section 607(f) of the act, MCL 339.5607.

## PART 2. ISSUANCE OF LICENSES

### R 339.5111 Verification of licensure.

Rule 111. An individual who is seeking written verification that a person is or is not licensed shall submit to the department a written request for this verification, along with a \$30.00 fee.

### R 339.5112 License; name or address change, or both; duplicate license request.

Rule 112. Except as provided in the act, a licensee who is seeking to amend his or her contact name, address, phone number, or email address shall submit the department form with 1 of the following fees, as applicable:

- (a) Name change with reprint .....\$10.00.
- (b) Address change with reprint .....\$10.00.
- (c) Name change, no reprint.....No fee.
- (d) Address change, no reprint .....No fee.
- (e) No data change, duplicate license request .....\$10.00.
- (f) Online data change, no reprint..... No fee.

### R 339.5113 License classification.

Rule 113. (1) A licensee who is seeking an additional mechanical license classification shall submit to the department an application provided by the department along with the nonrefundable application fee.

(2) A boiler licensee who is seeking to upgrade his or her license to a higher classification shall maintain his or her current license in good standing for at least 1 year and take the prescribed examination. A boiler licensee may only upgrade his or her license 1 classification at a time.

### R 339.5114 License examination; minimum grade.

Rule 114. (1) An individual who is applying for licensure pursuant to section 203 of the act, MCL 339.5203, shall take a written examination approved by the department. A score of 75% is required to pass the written examination.

- (2) A written examination may include a duplicate question or questions, as needed.
- (3) If a hands-on examination, commonly referred to as a practical exam in the industry, is administered as part of a license examination, the practical exam must be either pass or fail. The practical exam may be in addition to a written examination, as provided in subrule (1) of this rule.

### R 339.5115 Minimal standards.

Rule 115. (1) The minimal standard of acceptable practice is the Stille-DeRossett-Hale single state construction code act, 1972 PA 230, MCL 125.1501 to 125.1531. A licensee who deviates from the minimal standard of acceptable practice or the specified requirements of the codes adopted pursuant to the Stille-DeRossett-Hale single state construction code act, 1972 PA 230, MCL 125.1501 to 125.1531, its rules, these rules, or

any acts by which the licensee operates may be considered to have committed an act demonstrating incompetence as described in section 607(g) of the act, MCL 339.5607.

(2) The department may verify any work or experience information provided by an applicant for licensure to establish the applicant's minimum practical experience in the applicant's desired license trade or classification. This work may be inspected, when practical, or it may be proven by the applicant submitting to the department pictures, diagrams, or other evidence as considered necessary and appropriate by the department.

#### R 339.5116 Renewal for licensure application.

Rule 116. Unless otherwise specified in the act, a licensee who fails to submit the renewal for licensure application within 60 days after the license's expiration date shall pay to the department, in addition to the renewal fee, a late renewal fee of \$100.00 for renewal.

#### R 339.5117 License renewal.

Rule 117. Unless otherwise specified in the act, an individual's license for his or her trade expires on December 31 of every calendar year.

#### R 339.5118 Relicensure.

Rule 118. Unless otherwise specified in the act, a licensee who fails to renew a license 3 or more years after the license expired or who had his or her license revoked shall meet the requirements in section 411 of the act, MCL 339.5411, and shall take and pass the required examination.

#### R 339.5119 Code update courses; instructors; standards.

Rule 119. (1) Unless otherwise provided in the act, the department shall approve instructor-provided code update courses that comply with the act and these rules.

(2) Instructors shall be approved by the department.

(3) A certificate of completion must be issued, either electronically or by paper, by a course provider to an individual who has successfully completed the code update class by required attendance. The certificate must contain all of the following information:

(a) A course approval number granted by the department.

(b) The name and address of the individual, school, organization, or company who sponsors or administers the course.

(c) The date the certificate was issued.

(d) The student's name and license number.

(4) The department may withdraw the approval of a course if the approval was issued in error, if the approval was issued based on incorrect information, or if the course is found to be in violation of these rules. Notice of withdrawal of approval must be in writing and must state the reason for the withdrawal of approval. An appeal of the withdrawal must be processed pursuant to the administrative procedures act of 1969, 1969 PA 306, MCL 24.201 to 24.328.

#### PART 4. LICENSE FEES

R 339.5121 Nonrefundable application fee.

Rule 121. The nonrefundable application fee is the initial license fee, as established pursuant to the respective cycle duration, as specified in the applicable article within the act.

#### PART 5. COMPLAINTS

R 339.5131 Complaints.

Rule 131. A complaint filed under the act must be made within 12 months after the latest of the following:

- (a) Last day at jobsite.
- (b) Final approval from the inspector.
- (c) Payment or partial payment tendered.

#### PART 6. PENALTIES AND REMEDIES

R 339.5141 Violations.

Rule 141. (1) A licensee shall respond to the department within 30 days of the date a citation is issued against a licensee. Failure to respond to the department within 30 days is a violation of the act.

(2) A licensee may receive written communication from the department requesting information for any reason. The licensee shall respond to the department, with the requested information, within the timeline allocated by the department in the written request, no later than the date that is prescribed in a letter to the licensee. Failure to respond to the department within the timeline allocated is a violation of the act.

#### PART 7. ELECTRICIANS AND ELECTRICAL CONTRACTORS

R 339.5151 Licenses; issuance.

Rule 151. (1) If a master electrician ceases to represent an electrical contractor, both the electrical contractor and the master electrician who was employed by the electrical contractor shall notify the department immediately of any changes in the employment status of the master electrician. The contractor license may be summarily suspended pursuant to section 507 of the act, MCL 339.5507, until the contractor designates an employee or officer who is a licensed master electrician to qualify for the contractor.

(2) If a fire alarm specialty technician ceases to represent a fire alarm contractor, both the fire alarm contractor and the fire alarm specialty technician who was employed by the fire alarm contractor shall notify the department immediately of any changes in the employment status of the fire alarm specialty technician. The contractor license may be

summarily suspended pursuant to section 507 of the act, MCL 339.5507, until the contractor designates an employee or officer who is a licensed fire alarm specialty technician to qualify for the contractor license.

(3) If a sign specialist ceases to represent a sign contractor, both the sign contractor and the sign specialist who was employed by the sign contractor shall notify the department immediately of any changes in the employment status of the sign specialist. The contractor license may be summarily suspended pursuant to section 507 of the act, MCL 339.5507, until the contractor designates an employee or officer who is a licensed sign specialist to qualify for the contractor license.

## PART 8. MECHANICAL CONTRACTORS

R 339.5161 Mechanical specialty license classifications.

Rule 161. (1) A mechanical specialty license is a license limited to a specific type of mechanical installation. Specialty licenses are not required if the work is covered under a different license classification, as follows:

(a) Limited to solar heating and cooling. Solar heating and cooling means the installation of equipment and systems intended to utilize solar energy for space heating or cooling.

(b) Limited to solid fuel and vented decorative gas appliances. Solid fuel equipment and vented decorative gas appliances means the installation of equipment that utilizes combusted solid fuel to produce heat or a vented fuel gas appliance in which the primary function lies in the aesthetic effect of the flames.

(c) Limited to liquified petroleum gas (LP) distribution piping. LP distribution piping means it is limited to the installation of fuel gas piping from the outlet of the first stage regulator to the inlet of the second stage regulator.

(d) Limited to fuel gas piping. Fuel gas piping means the installation of piping, valves, and fittings from the outlet of the point of delivery to the outlet of the appliance shut off valve used to convey natural gas, manufactured gas, LP, or a mixture of these gases.

(e) Limited to fuel gas piping and venting. Fuel gas piping and venting means the installation of fuel gas piping and the installation of a continuous open passageway from the flue collar or draft hood of an appliance to the outside atmosphere for the purpose of removing flue or vent gases.

(2) An individual who holds a heating, ventilation and air conditioning (HVAC) equipment license is not required to obtain a specialty license limited to solid fuel and vented decorative gas appliances, LP distribution piping, solar heating and cooling, fuel gas piping, or fuel gas piping and venting.

## PART 9. BOILER

### SUBPART A. BOILER LICENSES

R 339.5171 Scope of rules; adoption of national examination.

Rule 171. (1) The rules in this subpart establish minimum requirements for each of the following:

- (a) The licensing of boiler inspectors, boiler repairers, boiler installers, and stationary engineers.
- (b) The requirements for the issuance of permits to install, repair, and alter boilers, boiler external piping, and non-boiler external piping.
- (c) The fees charged by the department for the issuance of a boiler license or boiler permit.

(2) Under section 927 of the act, MCL 339.5927, the board adopts the examination prepared by the National Institute for Uniform Licensing of Power Engineers (NIULPE), Inc., 510 N. Wolcott Ave., Chicago, Illinois 60622. The examination topics may be reviewed under the certification requirements for each level of boiler operator or stationary engineer at <https://niulpe.org>. The written examination for all classifications of boiler operator and stationary engineer must be delivered and administered by NIULPE.

R 339.5172 Out-of-state applicant for licensure in this state.

Rule 172. If an individual holds a national organization's license as a boiler repairer or boiler installer in another state, that individual may be licensed in this state for the work he or she is licensed to perform by the national organization. The individual shall submit to the department both of the following:

- (a) An application with a copy of his or her current and valid national license.
- (b) Payment of the nonrefundable application fee.

R 339.5173 Boiler installer's or repairer's license.

Rule 173. (1) A boiler installer or repairer shall be licensed as required by section 939 of the act, MCL 339.5939.

(2) An individual who is applying for a boiler installer's license must have at least 5 years of experience in all phases of boiler installation in the class of license for which the applicant is applying. A credit of 2 years of experience toward the 5 years of experience may be given for 2 years of experience in the design, construction, manufacture, or inspection of boilers.

(3) An individual who is applying for a boiler repairer's license must have at least 5 years of experience in all phases of boiler repair in the class of license for which the applicant is applying. A credit of 3 years of experience toward the 5 years of experience may be given for 3 years of experience in the design, construction, manufacture, or inspection of boilers.

R 339.5174 Classes of boiler installer's licenses.

Rule 174. (1) A class 1B installer's license qualifies an individual to install a low-pressure boiler that does not exceed a firing rate of 1,000,000 British thermal units (BTU) per hour as certified by the boiler manufacturer. For a class 1B license, the sum of all modules in a modular boiler must not exceed a firing rate of 1,000,000 BTU per hour as certified by the boiler manufacturer.

(2) A class 2B installer's license qualifies an individual to do both of the following:

- (a) Install a low-pressure boiler of any capacity or firing rate.
- (b) Perform work covered by a class 1B license.
- (3) A class 3B installer's license qualifies an individual to do all the following:
  - (a) Install a power boiler that has a capacity of not more than 5,000 pounds of steam per hour.
  - (b) Install or replace non-boiler external piping as defined by the American Society of Mechanical Engineers (ASME), as defined in Subpart B Part1, code B31.1, 2018, and R 339.5209.
  - (c) Perform work covered by a class 2B license.
- (4) A class 4B installer's license qualifies an individual to do all the following:
  - (a) Install a power boiler that has a capacity of not more than 300,000 pounds of steam per hour.
  - (b) Install or replace non-boiler external piping as defined by ASME code B31.1 and R 339.5209.
  - (c) Perform work covered by a class 3B license.
- (5) A class 5B installer's license qualifies an individual to do all of the following:
  - (a) Install a power boiler of any capacity or firing rate, except for a nuclear heat source boiler.
  - (b) Install or replace non-boiler external piping as defined by ASME code B31.1 and R 339.5209.
  - (c) Perform work covered by a class 4B license.
- (6) A class 6B installer's license qualifies an individual to install a boiler that utilizes a nuclear heat source or its parts, appurtenances, or system components. Before a license is issued, an individual who is applying for a class 6B license shall submit evidence of both of the following:
  - (a) Familiarity with and knowledge of all federal rules and regulations regarding the installation of a boiler that has a nuclear heat source.
  - (b) Employment by a company in possession of a valid ASME nuclear code symbol applicable to the portions of any nuclear boiler system that the company proposes to install.
- (7) A class P license qualifies an individual to install or replace non-boiler external piping or repair non-boiler external piping as defined by ASME code B31.1 and R 339.5209.

R 339.5175 Boiler repairers; classes of licenses.

- Rule 175. (1) A class I license allows a licensee to repair a low-pressure boiler by means other than welding, riveting, or other fabrication process.
- (2) A class II license allows a licensee to do both of the following:
    - (a) Repair a low-pressure boiler, a hot water supply boiler, and a fire tube boiler of any pressure.
    - (b) Perform work covered by a class I license.
  - (3) A class III license allows a licensee to do all of the following:
    - (a) Repair a high-pressure boiler.

(b) Repair or replace non-boiler external piping, as defined by ASME code B31.1 and R 339.5209.

(c) Perform work covered by a class II license.

(4) A class IV license allows a licensee to do both of the following:

(a) Repair or field-erect a boiler of any pressure, except for a boiler that has a nuclear heat source.

(b) Repair or replace non-boiler external piping as defined by ASME code B31.1 and R 339.5209.

(5) A class V license allows a licensee to erect and repair a boiler or its parts that has a nuclear heat source, appurtenances, or system components, and also provides that the licensee may repair or replace non-boiler external piping, as defined by ASME code B31.1 and R 339.5209. Before a license is issued, an applicant for a class V license shall submit evidence of the following:

(a) Familiarity with and knowledge of all federal rules and regulations regarding the construction of a boiler that has a nuclear heat source.

(b) Employment by a company in possession of a valid ASME N-type symbol stamp applicable to the portions of any nuclear boiler system he or she proposes to repair.

(6) A class P license qualifies a person to install or repair non-boiler external piping as defined by ASME code B31.1, 2018, and R 339.5209.

#### R 339.5176 Fees.

Rule 176. (1) Fees for licenses, examinations, boiler operator and stationary engineer registration; permit applications, certificates, and inspections are as follows:

(a) Licenses:

|                                    |           |
|------------------------------------|-----------|
| (i) Installer license.....         | \$100.00. |
| (ii) Installer examination .....   | \$100.00. |
| (iii) Installer renewal.....       | \$100.00. |
| (iv) Repairer license .....        | \$100.00. |
| (v) Repairer examination .....     | \$100.00. |
| (vi) Repairer renewal .....        | \$100.00. |
| (vii) Inspector license .....      | \$100.00. |
| (viii) Inspector examination ..... | \$100.00. |
| (ix) Inspector renewal .....       | \$75.00.  |

|   |           |
|---|-----------|
| (x) Boiler operator registration .....              | \$80.00.  |
| (xi) Boiler operator examination.....               | \$100.00. |
| (xii) Boiler operator registration renewal.....     | \$80.00.  |
| (xiii) Stationary engineer registration.....        | \$100.00. |
| (xiv) Stationary engineer written examination ..... | \$100.00. |
| (xv) Stationary engineer registration renewal.....  | \$100.00. |
| (xvi) Out of state applicant .....                  | \$200.00. |

(b) Permit applications:

|  |             |
|--|-------------|
| (i) Nuclear installation permit application..... | \$1,500.00. |
|--|-------------|



- (ii) Nuclear repair permit application.....\$500.00.
- (iii) Low-pressure installation permit application.....\$100.00.
- (iv) High pressure installation permit application.... \$ 130.00 + .06 cents per foot of piping.

(v) Repair permit application .....\$75.00.

(c) Certificates:

(i) Certificates .....\$75.00.

(ii) Reprinting of certificate more than 30 days after issuance ..... \$40.00.

(d) Inspections:

(i) Power boilers-150 square feet or less .....\$85.00.

(ii) Power boilers-more than 150 square feet to 4,000 square feet.....\$175.00.

(iii) Power boilers-more than 4,000 square feet to 10,000 square feet .....\$200.00.

(iv) Power boilers-more than 10,000 square feet ..... \$225.00.

(v) Low-pressure heating boiler without manhole .....\$85.00.

(vi) Inspection of an additional low-pressure heating boiler without a manhole at the same physical location, on the same date .....\$70.00.

(vii) Low-pressure heating boiler with manhole.....\$85.00.

(viii) Low-pressure hot water supply boilers .....\$85.00.

(ix) Inspection of an additional low-pressure hot water supply boiler at the same physical location, on the same date .....\$65.00.

(x) Low-pressure process boiler without manhole.....\$85.00.

(xi) Low-pressure process boiler with manhole .....\$85.00.

(xii) Miniature hobby locomotive boiler .....\$15.00.

(2) Permit application fees are nonrefundable.

(3) Certificate inspection reports submitted to the department's boiler division for data entry must be assessed a fee of \$5.00 per page.

(4) A copy of a boiler report will be provided by the department at a cost of \$1.00 per page. Payment must be received by the department before a copy of a report will be released.

(5) The department's boiler division shall provide special inspections not otherwise covered in subrule (1) of this rule or section 919 of the act, MCL 339.5919. The fee assessed by the department for special inspections must be at the rate of \$100.00 for the first hour and \$120.00 for each additional hour, plus lodging, meals, transportation, and other related expenses incurred for performing special inspections.

## SUBPART B. BOILER INSPECTORS, INSTALLERS, REPAIRERS, AND OPERATORS AND STATIONARY ENGINEERS

### PART 1. GENERAL PROVISIONS

R 339.5201 Scope.

Rule 201. The rules in this part establish minimum standards of safety for the use, construction, installation, inspection, alteration, and repair of boilers, boiler external piping, and non-boiler external piping, licensing of boiler inspectors, boiler repairers, and boiler installers, requirements for permits to install, repair, and alter, and fees to be changed.

R 339.5202 Definitions.

Rule 202. (1) As used in this part:

(a) “Accident” means a sudden and accidental breakdown of a boiler or a part of a boiler that results in physical damage to the boiler that necessitates the repair or replacement of the boiler or a part of the boiler. Accident does not mean a breakdown due to any of the following unless a unique or unusual explosion hazard exists as a result of the breakdown:

- (i) Normal erosion.
- (ii) Corrosion.
- (iii) Wastage of metal that requires restoration.
- (iv) Leaking tubes.
- (v) Weakened metal, such as water legs or handhole areas.

(b) “Aftercooler” means a device used for lowering the temperature of a boiler blowoff discharge before it enters the building drain.

(c) “Alteration” means any change in the item described on the original manufacturer’s data report that affects the pressure-containing capability of the boiler or its piping. A nonphysical change such as an increase in the maximum allowable pressure, whether internal or external, or design temperature of a boiler or its piping is an alteration.

(d) “ASME”, “ASME boiler and pressure vessel code”, “ASME code”, or “code” means the boiler and pressure vessel code of the American Society of Mechanical Engineers, with addenda, as prescribed and approved by the council of the society.

(e) “Authorized inspector” means an individual who is designated as an authorized inspector by an authorized inspection agency, who holds a valid certificate of competency and national board commission with an “A” or “B” endorsement, and who is employed by the authorized inspection agency that assumes responsibility for the individual’s actions.

(f) “Boiler assembler” means a corporation, company, partnership, or individual who assembles a boiler that has been delivered in pieces. For ASME code section I power boiler assemblies, a boiler assembler shall possess the appropriate code symbol stamps.

(g) “Boiler blowoff piping” means the piping, fittings, and valves from the boiler to the blowoff tank, blowoff separator, or other safe point of discharge through which the water in the boiler may be blown out under pressure, except for drains such as those used in water columns, gauge glasses, or piping to feed water regulators and similar devices.

(h) “Boiler blowdown vessel” means an unfired pressure vessel into which water is discharged above atmospheric pressure from a boiler blowoff line.

(i) “Boiler installation” means the installation of a boiler, including all connected piping, valves, fittings, flanges, firing equipment, controls, appurtenances, and auxiliaries. The term includes the field assembly of boilers.

(j) “CSD-1” means the 2018 ASME code for controls and safety devices for automatically fired boilers.

(k) "Certificate of competency" means a certificate issued to a person that has passed an examination for inspectors prescribed by the board of boiler rules.

(l) "Chief inspector" means the chief boiler inspector appointed under the act.

(m) "Condemned boiler" means a boiler that has been inspected and declared unsafe or rejected for use by an inspector who is qualified to take such action and who has applied a stamping or marking designating its rejection.

(n) "Deputy inspector" means an inspector who is licensed under the act and employed by the director.

(o) "Existing installation" means any steam boiler constructed, installed, placed in operation, or contracted for before August 10, 1917, or any hot water heating or supply boiler constructed, installed, placed in operation, or contracted for before the effective date of these rules.

(p) "Existing steam boilers," means steam boilers that are in actual use, or that are installed and ready for use before August 10, 1917. Existing steam boilers does not include secondhand boilers, rental boilers, or boilers that are subject to change in ownership or are to be reset, in which case the rules for new construction apply.

(q) "External inspection" means an inspection that is conducted while the boiler is under pressure and that does not involve examination of the internal surfaces of the pressure parts of the boiler.

(r) "Field assembly" means assembling prefabricated boiler pressure parts without field welding or riveting.

(s) "Field erection" means the erecting and assembling of boiler parts by welding, riveting, or other fabrication process.

(t) "Flash tank" means a closed vessel equipped with internal baffles or an apparatus for the purpose of separating moisture from flash steam as it passes through the vessel.

(u) "Hobby" means an interest or activity that an individual pursues in his or her leisure time without compensation.

(v) "Hot water heating and hot water supply boiler:" means a boiler that operates at pressure of not more than 160 pounds per square inch (PSI) or temperatures of not more than 250 degrees Fahrenheit, at or near the boiler outlet.

(w) "Inspector" means an individual who holds a valid certificate of competency and national board commission.

(x) "Internal inspection" means an inspection made when a boiler is shut down and handholes or manholes are opened for inspection of the interior.

(y) "Labeled" means devices, equipment, appliances, or material to which a label, seal, symbol, or other identifying mark of a nationally recognized testing laboratory, inspection agency, or other organization concerned with product evaluation that maintains periodic inspection of the production of the items has been affixed and by whose label the manufacturer attests to compliance with applicable nationally recognized standards.

(z) "Licensed boiler installer" means a person licensed under the act to engage in the business of making piping connections to a boiler or in the business of field-assembling boilers.

(aa) "Licensed boiler repairer" means a person licensed under the act to engage in making or supervising all phases of boiler repair, alterations, or field erection.

(bb) “Listed” means equipment, appliances, or material included in a list published by a nationally recognized testing laboratory, inspection agency, or other organization concerned with product evaluation that maintains periodic inspection of production of listed equipment, appliances, or materials, and whose listing states either that the equipment, appliances, or material meets nationally recognized standards or has been tested and found suitable for use in a specified manner. The authority having jurisdiction shall utilize the system employed by the listing organization to identify a listed product.

(cc) “Maximum allowable working pressure” or “MAWP” means the maximum gage pressure permissible for the boiler to operate.

(dd) “Maximum operating pressure” means the maximum operating pressure of the complete boiler system as designed, which includes supply, return, feed, and blow off piping.

(ee) “Mechanical assembly” means the work necessary to establish or restore a pressure retaining boundary whereby pressure retaining capability is established through a mechanical, chemical, or physical interface.

(ff) “Mechanical repair” means a method of repair which restores a pressure retaining boundary whereby pressure retaining capability is established through a mechanical, chemical, or physical interface.

(gg) “Miniature boiler” means a power boiler that does not have any of the following:

(i) An inside diameter of the shell of more than 16 inches.

(ii) A working pressure of more than 100 p.s.i.g.

(iii) A gross volume of more than 5 cubic feet.

(iv) More than 20 square feet of heating surface.

(hh) “Miniature locomotive boiler” means a miniature hobby steam locomotive boiler that operates on a narrow-gauge track that is less than 24 inches wide and that is for public display or use.

(ii) “Modular boiler” means a steam or hot water heating assembly consisting of a grouping of individual boilers called modules, intended to be installed as a unit, with a single inlet and a single outlet. Modules may be under 1 jacket or may be individually jacketed.

(jj) “NBIC” means national board inspection code.

(kk) “Nonstandard boiler” means a boiler that does not bear the National Board Stamping or stamp of any state or political subdivision that has adopted a standard of construction equivalent to that required by the board of boiler rules.

(ll) “New boiler” means a boiler constructed, installed, placed in operation, or contracted for after July 1, 1966.

(mm) “Owner or user” means a person, firm, partnership, or corporation that owns or operates a boiler within this state.

(nn) “Out-of-use boiler” means a boiler not ready for use having the fuel supply, electricity, and all piping that may pressurize the boiler disconnected.

(oo) “Portable boiler” means a boiler that is primarily intended for temporary location and that is, by its construction and usage, obviously portable.

(pp) “Pressure-retaining items” means any boiler, pressure vessel, piping, or material used for the containment of pressure, either internal or external. The pressure may be obtained from an external source, by the application of heat from a direct source, or any combination of these methods.

(qq) “Reinstalled boiler” means a boiler that is removed from its original setting and that is reinstalled at the same location or reinstalled at a new location.

(rr) “Reinstatement” means the granting of a license or registration, with or without limitations or conditions, to a person whose license or registration has been suspended by the chief inspector.

(ss) “Rental boiler” means a boiler that is in temporary use for not more than 1 year regardless of whether installed inside a boiler room, temporary room, temporary shed, or without external covering.

(tt) “Repair” means the work necessary to restore a boiler or its piping to a safe and satisfactory operating condition.

(uu) “Safe point of discharge” means a point of discharge that will protect personnel and property from injury due to discharge.

(vv) “Special inspector” means a boiler inspector who holds a license in this state pursuant to the act, and who is regularly employed by an insurance company authorized to insure against a loss from boiler accidents in this state or by any city that is exempt under the act and has an authorized boiler inspection department.

(ww) “Standard boiler” means a boiler that bears the stamp of the National Board of Boiler and Pressure Vessel Inspectors or of another state or political subdivision that has adopted a standard of construction equivalent to that required by the board of boiler rules of this state.

(xx) “Traction boiler” means a boiler designed for the express purpose of pulling farm equipment or to convert steam power into flywheel energy driving farm apparatus such as threshers, saws, or grinding equipment.

(yy) “Used boiler” means a boiler that is being reinstalled by the same owner.

(zz) “Water heater” means a heater, in commercial or industrial size, that provides corrosion resistance for supplying potable hot water at pressure not exceeding 160 psi or temperatures not exceeding 210 degrees Fahrenheit. A water heater that does not exceed any of the following is exempt from these rules:

- (i) A heat input of more than 200,000 BTU per hour.
- (ii) A water temperature of more than 210 degrees Fahrenheit.
- (iii) A nominal water-containing capacity of more than 120 gallons.

(2) Terms defined in the act have the same meanings when used in these rules.

R 339.5203 Adoption by reference of the NBIC.

Rule 203. (1) An owner of a boiler shall ensure the inspection, repair, and alteration of boilers, piping, and blowdown vessels is pursuant to the NBIC, 2019 edition. The code is adopted and amended by reference in these rules and available for inspection and purchase at the Michigan Department of Licensing and Regulatory Affairs, Bureau of Construction Codes, 611 W. Ottawa, Lansing, Michigan 48933 or for purchase from the National Board of Boiler and Pressure Vessels Inspectors, 1055 Crupper Avenue, Columbus, Ohio 43229, phone: 1(614) 888-8320, <https://www.nationalboard.org>, at a cost as of the time of adoption of these rules of \$325.00 for each code book.

(2) The accreditation program described in the NBIC for repairs and alterations to pressure retaining items is mandatory for repairs to all power boilers and high-pressure

high temperature water boilers and alterations to any boiler not exempted by these rules. Repair companies in possession of a certificate of authorization issued by the National Board of Boiler and Pressure Vessel Inspectors to repair and alter pressure-retaining items shall have in their employ an individual who has an appropriate class repairer license issued by the department's boiler division. Repair companies not currently in possession of the certificate of authorization or a certificate of authorization issued by ASME have 1 year from the date of adoption of this rule to secure the certificate. Companies currently in possession of a valid certificate issued by ASME have until the next certificate review or 1 year, whichever is greater, to secure the certificate of authorization identified above. The board may waive the time requirement if appropriate justification is presented.

(3) Where the text of the NBIC refers to the "certificate holder," the reference applies to all licensed boiler repairers, except when the reference is in relation to completion of NBIC forms and NBIC stamping, the reference refers to repair companies in possession of a valid certificate of authorization issued by the National Board of Boiler and Pressure Vessel Inspectors to repair and alter pressure retaining items.

(4) The standard welding procedures referenced in the NBIC are accepted for use in this state but are not mandatory. A licensed boiler repairer who elects to use 1 or more of the standard welding procedures shall file a list of the standard welding procedure identification numbers with the department's boiler division before conducting any repairs or alterations requiring welding.

#### R 339.5204 ASME code adoption by reference.

Rule 204. (1) A boiler, blow down vessel, and expansion tank must be constructed as prescribed by these rules and the ASME boiler and pressure vessel code, section I, II, III, IV, V, VIII, IX, X, XI, 2019 edition, and ASME code B31.1, 2018 edition, power piping, which are adopted by reference as amended in these rules and are available for inspection and purchase at the Michigan Department of Licensing and Regulatory Affairs, Bureau of Construction Codes, 611 W. Ottawa, Lansing, Michigan 48933 or purchase from the ASME International, Two Park Avenue, New York, New York 10016-5990, phone: 1(800) 843-2763, <https://www.asme.org>, at a cost indicated below, as of the time of adoption of these rules:

- (a) Section I (1 volume) .....\$500.00.
- (b) Section II (4 volumes) .....\$3,150.00.
- (c) Section III (11 volumes).....\$6,385.00.
- (d) Section IV (1 volume).....\$510.00.
- (e) Section V (1 volume) ..... \$570.00.
- (f) Section VIII (3 volumes).....\$2,240.00.
- (g) Section IX (1 volume)... .. \$580.00.
- (h) Section X (1 volume) ..... \$450.00.
- (i) Section XI (2 volumes) ..... \$1,450.00.
- (j) CSD-1 (1 volume) ..... \$103.00.
- (k) B31.1 (1 volume)..... \$335.00.

(2) An owner of a boiler shall not recalculate design maximum allowable working pressures based on ASME codes published after 1998 for boilers in service before December 31, 1998.

R 339.5205 Inspection and stamping during construction.

Rule 205. A manufacturer shall register a boiler, blowdown vessel, and expansion tank other than a cast sectional boiler built or constructed for use in this state after the effective date of these rules, with the National Board of Boiler and Pressure Vessel Inspectors.

R 339.5206 Adoption; ASME code CSD-1.

Rule 206. (1) An owner or user of a boiler shall ensure that the installation, maintenance, operation, and testing of controls and safety devices is pursuant to manufacturer's instructions and ASME code CSD-1, 2018 edition. The code is adopted by reference as amended in these rules and available for inspection and purchase at the Michigan Department of Licensing and Regulatory Affairs, Bureau of Construction Codes, 611 W. Ottawa, Lansing, Michigan 48933 or for purchase from the ASME International, Two Park Avenue, New York, New York 10016-5990, (800) 843-2763, <https://www.asme.org>, at a cost as of the time of adoption of these rules of \$103.00 for each code book.

(2) An owner or user of a boiler system shall ensure that the maintenance and testing of controls and safety devices is conducted by an individual with a valid mechanical contractor license with the appropriate classification under the act. Individuals conducting maintenance and testing must be under the guidance and supervision of a licensed mechanical contractor.

(3) An owner or user shall provide to the inspector, at the time of certificate inspection, evidence showing what maintenance has been performed and what tests have been completed. The evidence must be a dated and signed service report or checklist, listing each control and safety device tested with the manufacturer's name, model number, set point, and actual operational test point. The service report must include the license number and heating service classification of the mechanical contractor who is performing or supervising the work.

(4) If an owner does not provide the inspector with the required evidence of maintenance and testing between certificate inspections, then the inspector may issue a certificate of inspection for a term less than that stated under section 943 of the act, MCL 339.5943.

(5) For hot water heating and hot water supply boilers with a BTU input of 400,000 or less, the requirements of this subrule must be conducted once during an inspection cycle but must be performed within 12 months before the certificate inspection required by R 339.5213.

(6) An owner, user, or operator of a boiler system shall ensure that the daily, weekly, and monthly operational checks are performed and documented pursuant to the manufacturer's instructions and these rules. If the manufacturer's instructions are not available, CSD-1, 2018 edition, nonmandatory appendix D contains a recommended checklist for additional information on periodic checks.

(7) A manually operated remote shutdown switch, as required by CSD-1, 2018 edition, must be located outside of each exit access doorway to the boiler room. The switch may be located just inside each exit access doorway should a possibility of tampering or weather conditions exist. A licensee may request a deviation from the requirements of this subrule by submitting a drawing clearly showing the deviation and stating justification for the request to the chief inspector for review and approval before the installation of a boiler. The chief inspector shall notify the licensee of the approval or denial of the request.

(8) A single manually operated remote shutdown switch may be used in a multiple boiler installation that shares a common boiler room. Kitchen cooking boilers, steam kettles, and steam cookers used for food preparation located in a kitchen are exempt from having a manually operated remote shutdown switch and lockable disconnect.

(9) Where applicable, the boiler installation must comply with the, R 408.30901 to R 408.30998; R 408.30701 to R 408.30796; and R 408.30801 to R 408.30880.

#### R 339.5207 Manufacturer's data reports: filing.

Rule 207. A manufacturer's data report for boilers must be signed by an authorized inspector and filed by the manufacturer with the chief inspector before installation. A data report that is signed by an authorized inspector and the ASME stamp on the boiler denotes that the boiler has been constructed pursuant to these rules. If a boiler is of special design, blueprints showing details of the proposed construction must be submitted to, and approved by, the chief inspector before construction is started.

#### R 339.5208 Installation and reinstallation of boilers.

Rule 208. (1) An owner shall ensure that the installation of a new boiler or a reinstalled boiler meets the requirements of these rules; the ASME boiler and pressure vessel code, 2019 edition, the NBIC 2019 edition, and ASME CSD-1 2018. The ASME code requirement for the completion of a P4B data report for the installation of mechanically assembled boiler external piping is not required. Witnessing of the pressure test required by the NBIC part 1, section 2, paragraph 2.10.2, is not required.

(2) Where applicable, the boiler installation must comply with R 408.30901 to R 408.30998; R 408.30701 to R 408.30796; and R 408.30801 to R 408.30880.

(3) The NBIC code, part 1, section 2, paragraph 2.4.4, is enforced by R 408.30701 to R 408.30796.

(4) The NBIC code, part 1, section 3, paragraph 3.6.1, is enforced by R 408.30901 to R 408.30998.

#### R 339.5209 Non-boiler external piping; power boilers; adoption and amendment of standards.



Rule 209. (1) An owner of a boiler shall ensure that the installation of piping not covered by the ASME boiler and pressure vessel code, section I, 2019 edition, is installed as prescribed by the ASME code for pressure piping, B31.1, 2018 edition.

(2) The owner of a chemical plant or petroleum refinery shall comply with subrule (1) of this rule or ensure the installation is installed as prescribed by ASME code for chemical plants and petroleum refineries, B31.3, 2019 edition.

(3) A licensee under this rule is not required to possess an ASME code symbol stamp, but must hold a valid installer's license.

(4) The owner shall ensure that the installation of all of the following piping meets the requirements under subrule (1) of this rule:

- (a) Blowoff piping beyond the second valve out to the safe point of discharge.
- (b) Steam piping out to the load.
- (c) Feed-water piping from the pump.
- (d) Condensate piping.

R 339.5210 Permits; documentation for installation, reinstallation, alteration, and repair of boilers, boiler external piping, and non-boiler external piping.

Rule 210. (1) All of the following provisions apply to installation permits:

(a) A licensee who is applying for the permit shall ensure that work does not proceed until an approved permit has been secured.

(b) An individual shall not install, alter, repair, or replace welded pipe without holding a proper license and first securing a permit from the department's boiler division. The licensee applying for the permit shall ensure that work does not proceed until an approved permit has been secured.

(c) An individual shall not install or replace nonwelded pipe without holding a proper license. A permit is not required.

(2) All of the following provisions apply to repair and alteration permits or reports:

(a) The licensee who is applying for the permit shall ensure that work does not proceed until an approved permit has been secured, except as provided by section 941 of the act, MCL 339.5941.

(b) An individual shall not repair or replace welding piping without holding a proper license and first securing a permit from the department's boiler division. The licensee applying for the permit shall ensure that work does not proceed until an approved permit has been secured, except as provided for in section 941 of the act, MCL 339.5941.

(c) An individual shall not perform welded repairs to nonwelded piping without holding a proper license and first securing a permit from the department's boiler division. The licensee applying for the permit shall ensure that work does not proceed until an approved permit has been secured, except as provided for in section 941 of the act, MCL 339.5941.

(d) A licensee who makes welded repairs to boilers or boiler external piping requiring the use of the national board of boiler and pressure vessel inspectors "R" symbol stamp shall furnish the department's boiler division with 1 copy of the approved permit application, along with reports as required by the NBIC, upon completion of the work.

(e) A public utility or industrial plant that has been granted an exemption under section 947 of the act, MCL 339.5947, that makes a welded repair to non-boiler external piping shall maintain records of the repairs and make the records available for review as required by these rules.

(3) A permit is required for either of the following:

(a) A change in use of an existing boiler from high pressure to low pressure and low pressure to high pressure, hot water heat to hot water supply and hot water supply to hot water heat, steam heating to hot water heating and hot water heating to steam heating, or steam heating to hot water supply and hot water supply to steam heating. The change must comply with these rules.

(b) Replacement by mechanical methods, without welding, of sections in sectional boilers, heat exchangers, feed water heater or economizer, and tube bundles.

(4) A licensee replacing boiler components required by these rules to be code symbol stamped and National Board of Boiler and Pressure Vessel Inspectors (National Board) registered shall provide the department's boiler division with the manufacturer's data reports.

(5) Any changes in the scope of work stated on the original permit application must be submitted to the department's boiler division for approval.

(6) A licensed boiler repairer shall secure a permit for a change in use of an existing boiler or replacement by mechanical methods, without welding, of sections in sectional boilers, heat exchangers, feed water heater or economizer, and tube bundles in accordance with the act.

#### R 339.5211 Registration of boilers.

Rule 211. (1) Within 6 months from the effective date of these rules, all owners or users of boilers and their installations now in use or installed ready for use in this state shall report to the chief inspector on forms prescribed by the department, giving the location, type, capacity, age, and date of installation.

(2) Before transfer of ownership of a boiler is complete, the current owner shall ensure that all invoices for inspection certificates and inspections for services rendered under his or her ownership are paid in full. Upon completion of transfer of ownership, the new owner of a boiler shall notify the department's boiler division of the change in ownership of a boiler or change in ownership of a location where a boiler is installed. Upon written notification, a new certificate of inspection must be issued in the name of the new owner.

(3) A boiler owner or user shall notify the department's boiler division immediately when his or her boiler insurance has been discontinued.

#### R 339.5212 Right of access.

Rule 212. The director, chief inspector, deputy inspector, or any special inspector shall have free access, during reasonable hours, to any premises in this state where a boiler is being constructed, installed, repaired, operated, or connected and ready for use for the purpose of ascertaining whether the boiler complies with the act.

R 339.5213 Boiler inspection.

Rule 213. After a boiler is inspected by the chief or deputy inspector and the boiler and its installation are approved by the department, all certificate inspections must be conducted pursuant to the NBIC and these rules by an inspector who is properly licensed to inspect boilers in this state.

R 339.5214 Extension of internal inspection certificate to 24 or 36 months.

Rule 214. (1) An internal boiler inspection may be increased from an annual inspection to a 24-month inspection frequency by approval of the board of boiler rules. An employee delegated by the utility or industrial facility shall apply for the extension and submit a copy of the documents that control its program for approval by the board of boiler rules. The information must be addressed by plant orders, procedures, or policies. The following information may be contained in 1 document or several documents if 1 document contains references to all other documents addressing the required information:

- (a) Operator training.
- (b) Boiler maintenance.
- (c) Water chemistry.
- (d) Operating parameters.
- (e) Chemical cleaning schedule.
- (f) Protective devices.
- (g) Boiler external inspection.
- (h) Testing of pressure relief devices pursuant to the NBIC. Repairs must be conducted by the valve manufacturer or a "VR" stamp holder.

(2) The plant owner shall establish a review committee. The inspector must be a member of the committee. The purpose of the committee is to determine the acceptability of a boiler to operate safely for a 24-month period. The committee shall have access to and review all information pertaining to the past operation, maintenance, and repair of the boiler. The review committee meeting must be conducted within 30 days after the internal inspection. The committee may decrease the period of time the boiler may operate, but shall not extend the period beyond 24 months. The signed summary report of the review committee meetings must be submitted to the department's boiler division. The grace period provided under R 408.4057 does not apply to this rule. The inspector shall indicate the next inspection due date on his or her inspection report to the department's boiler division.

(3) An internal boiler inspection may be increased from a 24-month inspection to a 36-month inspection frequency if the board of boiler rules approves the inspection frequency. An employee designated by the utility or industrial facility shall request a change in inspection frequency in writing and submit a copy of the document that controls its program with supporting documentation that demonstrates all of the following for approval by the board of boiler rules.

- (a) The boiler complies with all of the requirements of subrule (1) of this rule and is currently inspected under 24-month inspection frequency approved by the board of boiler rules.

(b) The boiler is a power boiler.

(c) The following information must be included in the program document, plant orders, plant procedures, or plant policies:

(i) The boiler is fully attended during operations by qualified personnel designated by the owner to operate the boiler.

(ii) The owner has a designated organization that provides oversight to boiler maintenance, and monitors boiler conditions to prevent significant deterioration from scaling, corrosion, erosion, or overheating to boiler components. The program document must contain an organizational chart that delineates the reporting structure of this organization along with the organization responsible for boiler operation and maintenance within the owner's organization.

(iii) The owner has installed instrumentation available and functioning for continuous monitoring of water chemistry parameters as identified by the boiler manufacturer and routine calibration is performed. This instrumentation must be maintained on a list for each boiler to which this paragraph applies to.

(iv) The owner has a program for routine monitoring of the water chemistry condition, which includes physical samples being analyzed by the owner's staff. The owner shall maintain a list of the physical samples for each boiler to which this paragraph applies to.

(v) The owner has alarm response procedures that provide direction to operators for actions to correct variations to chemistry parameters that include removing the boiler from service.

(d) The establishment of a review committee whose purpose is to determine the acceptability of a boiler to operate safely for a 36-month period. The review committee must be made of, at a minimum, the following members:

(i) A representative from the owner's boiler operating and maintenance organization.

(ii) A representative from the owner's organization designated to provide oversight to boiler maintenance and monitoring of boiler condition.

(iii) The inspector.

(e) The summary report of the review committee meeting.

(4) The review committee described under subrule (3)(d) of this rule shall have access to and review all information pertaining to the past operation, maintenance, and repair of the boiler. The review committee meeting must be conducted within 30 days after the internal inspection. The review committee may shorten the period of time that the boiler may operate but must not extend the period beyond that permitted by the board of boiler rules.

(5) The grace period provided under section 943(c) of the act, MCL 339.5943, does not apply to this rule. The inspector shall indicate the next inspection due date on the inspection report submitted to the department's boiler division.

(6) Utilities or industrial facilities with a prescheduled boiler internal certificate inspection period shall communicate the date when the boiler is removed from service with the department's boiler division. The boiler internal inspection may occur at any time during the outage period. The next operating period is calculated based on the date of the certificate inspection conducted during this period.

(7) An external inspection of the boiler must be conducted while under pressure, within 12 months of the certificate inspection, and every 12 months thereafter until the next boiler internal inspection.

#### R 339.5215 Reporting unregistered boilers.

Rule 215. (1) If a special inspector visits a location to conduct an inspection as required by these rules, then he or she shall report the location of all boilers that are not registered. This reporting is in addition to the reporting of the inspection of registered boilers and their installation. The chief inspector shall assign a deputy to visit the location to inspect all unregistered boilers and affix a Michigan serial number.

(2) If a special inspector inspects a boiler that does not bear a Michigan serial number, then the inspector shall attempt to verify whether the boiler is unregistered or is missing the Michigan serial number tag. If the inspector is unable to determine that the boiler is registered, he or she shall report it as prescribed in subrule (1) of this rule.

#### R 339.5216 Filing of welding procedures.

Rule 216. (1) If welding is employed in the installation, reinstallation, repair, replacement, or alteration of a boiler, then the licensed installer or repairer shall file welding procedure specifications and the procedure qualification reports qualified pursuant to the requirements of ASME code section IX, "welding and brazing qualifications," with the department's boiler division, before conducting any welding.

(2) A licensed installer or repairer who utilizes welding in the installation, reinstallation, repair, replacement, or alteration shall have available, for the inspector's review, welding procedure specifications and welder performance qualification records to be used or that were used in the installation, reinstallation, repair, replacement or alteration at the work site or other mutually agreed upon locations.

#### R 339.5217 Inspection of components and systems in a nuclear power plant.

Rule 217. (1) Preservice or baseline inspections; in service inspections; repairs; replacements; modifications; alterations examinations; testing; records; and reports of complete nuclear power plants and individual nuclear components, parts, appurtenances, piping, supports, nuclear systems, and applicable associated auxiliary systems that comply with all of the requirements of the construction code ASME BPV Code, section III, when the requirements have been completed, irrespective of the physical location, must be as prescribed in section XI, rules for in service inspection of nuclear power plant components, of the ASME boiler and pressure vessel code. A copy of the current edition of section XI-2019, is available for inspection and purchase at the Michigan Department of Licensing and Regulatory Affairs, Bureau of Construction Codes, 611 W. Ottawa, Lansing, Michigan 48933, or for purchase from the ASME International, Two Park Avenue, New York, New York 10016- 5990, (800) 843-2763, at a cost as of the time of adoption of these rules of \$16,273.00 for the BPV Code books.

(2) The owner of a nuclear power plant shall file inspection plans and schedules, pump and valve testing programs, and requests for relief from section XI of the ASME code requirements with the department's boiler division.

(3) The nuclear power plant shall maintain compliance with requirements, as prescribed by the Nuclear Regulatory Commission.

R 339.5218 Reports of inspection to be filed.

Rule 218. (1) Certificate inspection reports submitted electronically must be in a form acceptable to the department's boiler division.

(2) Certificate inspection reports submitted to the department's boiler division for data entry must be assessed a fee of \$5.00 per report.

(3) An inspector shall leave a signed and dated inspection sticker or inspection report at the inspection location.

(4) An inspector shall record his or her National Board of Boiler and Pressure Vessel Commission number on the inspection report.

R 339.5219 Rental boilers.

Rule 219. A rental boiler must be inspected before it is rented, and the boiler must be approved for temporary installation. An inspection certificate for an approved rental boiler is valid for 12 months.

R 339.5220 Refusal of inspection or nonpayment of fee.

Rule 220. If the owner or user of a boiler required to be inspected refuses to allow an inspection to be made or refuses to pay the fee prescribed by R 339.5176, the chief inspector shall suspend the certificate of inspection until the owner or user allows the inspection or pays the fee.

R 339.5221 Notice of violation.

Rule 221. (1) A written notice of violation containing the code deficiencies must be sent to, or served upon, the owner or user by the chief inspector, deputy inspector, or special inspector advising of the existing conditions and stating a compliance date when the violation must be corrected. If the code deficiencies are not corrected by the compliance date, the violation notice serves as a suspension of the certificate.

(2) When the notice of violation is issued as certificate blocking, the inspection certificate is suspended, and a written notice must be given to the owner or user at the time of the notice of violation is issued. The certificate blocking violation continues in effect until the boiler conforms to these rules and the certificate has been reinstated.

(3) A fee must be charged pursuant to R 339.5176 for all follow-up visits by the chief inspector or deputy inspector.

R 339.5222 Defacing or removing certificate or numbers.

Rule 222. No individual, except the chief inspector or a deputy inspector, shall deface or remove any certificate of inspection or mark of identification number on a boiler.

R 339.5223 Boiler insurance policies.

Rule 223. All insurance companies shall notify the chief inspector within 30 days of all boiler policies, newly written, canceled, not renewed, or suspended because of unsafe conditions.

R 339.5224 Notification; defective boilers.

Rule 224. If a special inspector, upon the first inspection of a new risk, finds that the boiler or any of the appurtenances are in such condition that the company refuses insurance, the company shall immediately notify the chief inspector and submit a notice of violation of the defects.

R 339.5225 Notification in case of accident that renders boiler inoperative.

Rule 225. (1) If an accident occurs that renders a boiler inoperative, then the owner or user shall immediately notify the chief inspector.

(2) For a serious accident, notice must be given immediately by the quickest method available, and neither the boiler nor any of its parts shall be removed or disturbed before an inspection has been made by the chief inspector, deputy inspector, or special inspector, unless the removal is to save human life. A condition or failure that results in bodily injury or physical damage to equipment or property other than the boiler or that creates a unique or unusual explosion hazard must be reported as a serious accident.

(3) A detailed accident report must be submitted by the owner's or user's insurance company boiler inspector.

R 339.5226 Restamping of boilers.

Rule 226. When the stamping on a boiler becomes indistinct, the inspector shall instruct the owner or user to have it restamped. A request for permission to restamp the boiler must be made to the chief inspector and proof of the original stamping must accompany the request made to the chief inspector. Restamping authorized by the chief inspector must only be done by an inspector, and must be identical with the original stamping, except that it is not required to restamp the ASME code symbol. A notice of completion of restamping must be filed with the chief inspector by the inspector who stamped the boiler, together with a facsimile of the stamping applied.

R 339.5227 Condemned boilers.

Rule 227. A boiler that has been inspected and declared unsafe by the chief inspector, deputy inspector, or special inspector and that the owner has determined will be scrapped must be placed out of service and stamped or labeled with the word "condemned." The stamping must be as shown by the facsimile submitted under R 339.5226 and must be situated in several conspicuous locations as shown below and as determined by the inspector:

-CONDEMNED-

### R 339.5231 Reinstallation of boilers repaired out of state.

Rule 231. Repairs conducted outside of this state to boilers or pressure parts of boilers that will be reinstalled in this state must be conducted by an organization in possession of valid certificate of authorization to repair boilers. The organization shall conduct the repair pursuant to the NBIC and submit all forms to the department's boiler division required by the NBIC.

### R 339.5232 Nonstandard boilers.

Rule 232. (1) An individual may petition the board to approve the use of a nonstandard boiler. Upon receipt of the petition, the board shall require the appropriate testing and evaluation for the nonstandard boiler to determine whether construction is equivalent to standards adopted by reference in R 339.5205.

(2) A boiler owner requesting to have a special installation and operation permit shall submit the following items to the board of boilers rule, as applicable, in the English language and units:

(a) A list of all existing or proposed design and service conditions, maximum allowable working pressure (MAWP) and temperature, internal and external loading, corrosion and erosion allowance, heat treatment, and service requirements or service conditions.

(b) Documentation that the manufacture of the boiler is based on requirements from the applicable ASME code section as follows:

- (i) Power boilers- section I.
- (ii) Materials specifications- section II.
- (iii) Nuclear power plant components- section III, divisions 1 and 2.
- (iv) Heating boilers- section IV.
- (v) Pressure vessels- section VIII, divisions 1 and 2.
- (vi) Welding and brazing qualifications- section IX.
- (vii) Fiberglass- reinforced plastic pressure vessels- section X.
- (viii) Power piping- ASME B31.1.

(3) If the design, construction, and certification were not based on ASME code rules, the manufacturer of the boiler shall provide a copy of the design rules and show how they meet or exceed the ASME code requirements by providing the following:

(a) A complete set of design drawings showing weld joint details and construction including internal and external attachments.

(b) A list of all pressure boundary materials or those materials and the material's thickness subject to stress due to pressure and loading. The list must include a material specification to meet or exceed the applicable ASME codes specification. If material used is a specification other than referenced in the applicable ASME code section, the manufacturer of the boiler, through the owner, shall submit a copy of the material specifications used in the vessel construction and indicate how it is considered equivalent to the ASME code stress value permitted for materials in the applicable ASME code section.

(c) Documentation of any mill identification, including location of identification.



- (d) Manufacturers' materials test reports and traceability including test reports required by applicable code section.
- (e) Welding or brazing procedure specifications and welder or brazer performance qualification records.
- (f) Non Destructive Examination (NDE) procedures and results of examinations.
- (g) Record of pressure test or proof test.
- (h) Documentation showing the quality assurance program used by the manufacturer is equivalent to requirements of the ASME code.
- (i) Identification of the inspection agency performing inspections and certifying the manufacturer's data report or equivalent.
- (j) Evidence of qualification or certification of the inspection agency by a jurisdictional authority.
- (k) Documentation to show that inspectors making certification inspections have been certified as required by the jurisdictional authority. Individual names and national board commission number, if any, must be provided. System of supervisory control of inspection must be included.
- (l) Documentation of fabrication inspections by the manufacturer and inspection agency.
- (m) An internal and external inspection report by inspection agency inspectors.
- (n) A facsimile of the nameplate or stamping.
- (o) A copy of the manufacturer's data report or equivalent document certified by the manufacturer and the inspection agency's inspector.
- (p) A copy of any code or standard used for design or construction.
- (4) The original code of construction must be used to establish the allowable stresses and joint efficiencies when calculating the MAWP of a vessel.

R 339.5233 Clearance between boilers and other objects.

Rule 233. (1) A licensee performing an installation shall ensure the installation is made pursuant to the NBIC part 1 section 2.3.3 and 3.3.4, except for the requirement that the minimum clearance of 24 inches is provided between a boiler, its controls, firing equipment, and appurtenances and the building walls and partitions or other boilers or machinery.

(2) The licensee shall ensure that clearances are pursuant to the manufacturer's instructions where required clearances are greater than the minimum required by this rule. The boiler owner shall ensure that the clearances are maintained for the life of the boiler and not infringed upon by items in storage.

(3) The elevation of a boiler above the floor must be as specified in R 408.30901a to R 408.30996.

(4) A licensee may request a deviation from the requirements of this rule by submitting a drawing and the manufacturer's installation requirements to the chief inspector for review and approval before installation of the boiler. The licensee shall be notified by the chief inspector of the approval or denial of the request.

(5) Where applicable, the boiler installation clearances must comply with R 408.30801 to R 408.30880.

R 339.5234 Steam kettles.

Rule 234. (1) A fired or electrically heated steam kettle, irrespective of size, that has piped feed connections must comply with these rules.

(2) A fired or electrically heated kettle, irrespective of size without feed piping connections, must comply with these rules. Instead of an installation permit, an owner or user shall report the installation to the chief inspector before the unit is operated. The chief inspector shall assign a deputy inspector to visit the installation location to inspect the kettle to determine its safety for operations. A kettle that is operated at or below 15 psi must be inspected biennially. A kettle that is operated at more than 15 psi must be inspected annually.

(3) Steam kettles manufactured to ASME section VIII division-1 2019 must have the minimum appurtenances and controls that are required in mandatory appendix 19.

R 339.5235 Safety appurtenances and controls.

Rule 235. An individual shall not attempt to remove, or do any work on, any safety appurtenance or control prescribed by these rules while a boiler is in operation. If an appurtenance or control is repaired during an outage of a boiler, it must be reinstalled and in proper working order before the appurtenance or control is placed back in service. A person shall not load the safety valves to maintain a working pressure of more than that stated on the certificate of inspection.

R 339.5236 Prevention of contamination of potable water supply.

Rule 236. The boiler owner shall ensure that a boiler has proper connections to the potable water supply system to prevent contamination. The connections must be as specified in R 408.30701 to R 408.30796.

R 339.5237 Platforms.

Rule 237. (1) A platform must be installed at 1 end of all drums of a water tube boiler that are more than 4 feet above the floor or walkway to permit safe access to the interior of the drums for cleanout and inspection.

(2) An inspector shall notify the owner or user who is required to conform to this rule and give written notice of a violation to the owner or user that the installation of the required stairway, runaway, platform, or ladder is to be made. The owner or user is allowed 1 year from the date of the violation to complete the work.

(3) A licensee may request a deviation from the requirements of this rule by submitting drawings to the chief inspector for review and approval before installation of the boiler. The chief inspector shall notify the licensee of the approval or denial of the request.

R 339.5238 Exits from boiler rooms.

Rule 238. An owner shall ensure that the exit from a boiler room complies with the

requirements specified in R 408.30401 to R 408.30499a.

R 339.5240 Age limit of nonstandard existing steam boilers.

Rule 240. The age limit of any existing steam boilers of nonstandard construction, installed before July 1, 1966, is 30 years except that after a thorough internal and external inspection and a hydrostatic pressure of 1-1/2 times the allowable working pressure and held for a period of at least 30 minutes, during which no distress or leakage develops, any boilers having other than a lap-riveted longitudinal joint may be continued in operation without reduction in working pressure.

R 339.5241 Age limit of lap seam boilers.

Rule 241. The age limit of any boiler having lap-riveted longitudinal joints and operating at a pressure in excess of 50 psi is 20 years. This type of boiler, when removed from an existing setting, must not be reinstalled at a pressure in excess of 15 psi. A reasonable time for replacement, not to exceed 1 year, may be given at the discretion of the chief inspector.

R 339.5242 Lap seam crack.

Rule 242. The shell or drum of a boiler in which a typical lap seam crack is discovered along a longitudinal riveted joint or lap joints must be permanently discontinued for use under pressure. "Lap seam crack" as used in this rule, means the typical crack frequently found in lap seams extending parallel to the longitudinal joint and located either between or adjacent to rivet holes.

R 339.5243 Age limit of standard existing boilers.

Rule 243. The age limit of any existing steam boilers of standard construction is dependent on a thorough internal and external inspection and hydrostatic pressure test of 1-1/2 times the allowable working pressure for a period of 30 minutes. If a boiler under these test conditions exhibits no distress or leakage, it may continue to operate at the same working pressure.

R 339.5244 Portable boilers.

Rule 244. Portable boilers, used for purely portable purposes and transported from place to place, must comply with the rules for new construction when reinstalled at a new location. These portable boilers must have a factor of safety of at least a 5.5 strength-to-strength ratio for butt-strap construction and a factor of not less than a 6 strength-to-strength ratio for lap-seam construction.

R 339.5245 Cast-iron headers and mud drums.

Rule 245. The maximum allowable working pressure on a water-tube boiler, the tubes of which are secured to cast iron or malleable iron headers, or that have cast iron mud drums, must not exceed 160 p.s.i.g.

R 339.5246 Safety valves on connected boilers of different pressures.

Rule 246. When 2 or more boilers operating at different pressures and safety valve settings are interconnected, the lower pressure boilers or interconnected piping must be equipped with safety valves of sufficient capacity to prevent overpressure, considering the maximum amount of steam that can flow into the lower pressure system.

R 339.5247 Hydrostatic testing of traction boilers.

Rule 247. (1) A traction boiler designed to pull farm equipment or to convert steam power into flywheel energy driving farm apparatus, such as thrashers, saws, or grinding equipment, is subject to both of the following provisions:

(a) It must be tested hydrostatically every 3 years to a hydrostatic pressure of 1-1/2 times working pressure and held for sufficient time to permit visual observation of all seams, joints, supports, and attachments.

(b) All seams, attachments, supports, and joints must be exposed for each inspection.

(2) Traction boilers used for display or hobby purposes must not be operated for any other purpose except for the purpose that they were originally constructed.

(3) Lap seam boilers must not be operated in excess of 100 psi.

(4) Any repairs by welding or riveting to traction boilers must be made by licensed repair shops only after an approved permit has been obtained and subject to the approval of the inspector before and after repair is made.

R 339.5248 Miniature hobby locomotive boilers.

Rule 248. (1) At the initial inspection of a miniature hobby locomotive boiler, the owner shall provide the chief boiler inspector with design specifications and calculations for review and acceptance. If a boiler is approved for use, then the department's boiler division shall issue an identifying state number and a deputy boiler inspector shall attach it to the boiler.

(2) The owner shall ensure that a miniature hobby locomotive boiler has all the following minimum equipment:

(a) A pressure gauge graduated to approximately 1-1/2 times the operating pressure, but not more than 4 times the operating pressure.

(b) A means to extinguish the fire in the firebox if of a low water condition.

(c) Two means of feeding water to the boiler, 1 of which must be operable while the locomotive is stationary.

(d) A water level gauge glass located so that the top of the bottom nut of the gauge glass is approximately 10% of the distance between the crown sheet and the shell, but not less than 1/2 inch above the crown sheet.

(e) Two safety valves set at not more than 10% above the operating pressure for boilers fabricated after the effective date of the rules. The capacity of the safety valves must be equal to or greater than the calculated steam generated capacity of the boilers.

(3) The owner shall determine the maximum allowable working pressure of the miniature hobby locomotive boiler by calculation. In place of acceptable calculations, the

owner shall subject the boiler to a hydrostatic pressure test of 1-1/2 times the owner specified operating pressure.

(4) Every 3 years, during the certificate inspection, the owner shall hydrostatically test the boiler to not more than 1-1/2 times the operating pressure.

(5) The department's boiler division shall develop procedures, policies, and check lists necessary to accomplish the inspections and tests required by these rules.

(6) Repairs to miniature hobby locomotive boilers are exempt from the licensing and permitting requirements of the act. Repair welding must be made pursuant to the requirements of ASME code section IX. Welding procedures and performance qualifications must be filed with the department's boiler division for review.

R 339.5249 Failure to prepare boiler for internal inspection.

Rule 249. If a boiler has not been properly prepared for an internal inspection, an inspector may decline to make the inspection or test, and a certificate blocking violation must be issued as provided in R 339.5221.

R 339.5250 Stripping of riveted boiler to determine required data.

Rule 250. If a riveted boiler is jacketed so that the longitudinal seams of shells, drums, or domes cannot be seen, and if data cannot be determined by other means, enough of the jacketing, setting wall, or other form of casing or housing must be removed so that the size of the rivets, pitch of the rivets, and other data necessary to determine the safety of the boiler may be obtained.

R 339.5251 Replacement of heating or process boiler pressure relief device.

Rule 251. When it is necessary to replace pressure relief devices on low pressure heating or process boilers for any reason, the replacement must be made with other than top-outlet type valves.

R 339.5252 Rerolling tubes.

Rule 252. Rerolling a tube is considered maintenance, except rerolling a tube required as a result of an accident is considered a repair. This repair work requires a repair permit and must be performed by a licensed repairer.

R 339.5253 Qualified technical education program content; department approval; application and approval process, standards; fees.

Rule 253. (1) An organization requesting approval of a qualified technical education program (QTEP) or an employer requesting approval of a qualified training program (QTP) pursuant to section 903(1)(e) and (f) of the act, MCL 339.5903, shall submit an application provided by the department. All applications must be complete. If an application is incomplete, a full evaluation is not possible, and the incomplete application will be disapproved. The applicant must be notified in writing, by the department's boiler division, of the deficiencies within 30 days after the date that the application is received.

(2) A fee of \$100.00 must accompany the application for the review.

(3) The QTEP and QTP are not required to address subject matter in refrigeration.

(4) An application and supporting documentation submitted to the department's boiler division for QTEP and QTP for low or high pressure boiler operators must contain at a minimum, the subject matter listed in section 935 of the act, MCL 339.5935.

(5) An application and supporting documentation submitted to the department's boiler division for QTEP or QTP intended for training third, second, and first class stationary engineers must contain the following subject matter in addition to the subjects listed in section 935 of the act, MCL 339.5935:

(a) For a third-class stationary engineer, thermodynamic, applied science, applied mechanics, public acts and boiler codes, prime movers, water treatment, control instrumentation, and industrial legislation.

(b) For a second-class stationary engineer, in addition to continuing training in the subjects listed in section 935 of the act, MCL 339.5935, and subdivision (a) of this subrule, the following subjects must be included:

- (i) Metallurgy and material testing.
- (ii) Power plan systems.
- (iii) Mechanical drawing.
- (iv) Environmental protection.

(c) For a first-class stationary engineer, in addition to continuing training in the subjects listed in section 935 of the act, MCL 339.5935, and subdivisions (a) and (b) of this subrule, the following subjects must be included:

- (i) Principles of fluid mechanics.
- (ii) Thermodynamics and plant cycles.
- (iii) Applied engineering technologies.
- (iv) Safety, loss, and environmental management.
- (v) Business and workforce management.

(6) An application and supporting documentation submitted to the department's boiler division for QTEP or QTP must contain all of the following general information:

- (a) The name and address of the applicant and all training site addresses.
- (b) Name and contact information of the individual responsible for the program.
- (c) Policies and procedures for the selection of instructional staff.
- (d) A statement of purpose and objectives of the program.
- (e) Administrative and technical criteria for the development and delivery of the program.
- (f) A description of the facilities, equipment, and instructional materials consistent with the purpose, design, and intended outcome of each learning experience in the program.
- (g) A syllabus or course description, including contact hours and topics for each course.
- (h) A statement of the criteria used to determine successful completion by participants in each of the training programs offered by the applicant.
- (i) A list of instructional materials and other resources essential for the successful presentation of the program.

(7) Approval of a program by the department must be evidenced by a program approval report prepared by the department's boiler division and issued to the applicant. The report must include all of the following:

- (a) Name and address of the applicant.
- (b) Program identification number.
- (c) The date of approval.
- (d) The conditions of approval.

(8) A program or amendment that has been approved by the department must not be altered. If an organization wishes to amend any part of a program, the organization shall submit a draft document clearly identifying the changes for department review. The organization shall not implement changes to the program without approval by the department. All changes must be submitted in writing for approval. The authorization must be in writing from the department.

(9) The department shall have access to any location during the presentation of an approved program for the purpose of evaluation to determine compliance with an approved program.

## PART 10. BUILDING OFFICIALS, INSPECTORS AND PLAN REVIEWERS

R 339.5261 Applicability.

Rule 261. These rules apply to all the following:

- (a) The registration and reregistration of all building officials, plan reviewers, and inspectors.
- (b) The approval of educational and training programs, required testing and instructors to qualify individuals for registration, reregistration as building officials, plan reviewers, or inspectors.
- (c) The minimum training and experience standards, qualifications, and classification of responsibility applicable to individuals who are engaged in the administration and enforcement of codes and plan reviews.

R 339.5262 Educational and training program; program approval process; instructional qualifications.

Rule 262. (1) A provider of an educational and training program shall apply for approval of the program by completing an application for program approval as provided by the department and submitting the application with the required fee to the department.

(2) To qualify as an instructor of an educational and training program, an individual shall possess experience or education, or both, to supervise and instruct courses as required under section 1007 of the act, MCL 339.6007. An individual shall be at least 1 of the following to qualify:

- (a) A licensed, certified, or approved instructor at any of the following in this state:
  - (i) A high school.
  - (ii) An intermediate school district.
  - (iii) A community college.

- (iv) A public or private university.
- (v) The bureau of construction codes in the department.
- (vi) The Michigan occupational safety and health administration.
- (vii) Any other federal, state, or local governmental agency.
- (viii) A proprietary school licensed by the department.
- (b) Be currently licensed with at least 3 years of experience, and possess equivalent qualifications or relevant experience in the subject matter being taught.
- (3) The subject matter of educational and training programs must meet the minimum requirements of section 1007 of the act, MCL 339.6007, and must be relevant to the subject trade for which the applicant is seeking approval.

R 339.5263 Changes to program, provider information, or test.

Rule 5263. (1) A provider of an approved education and training program or test who wants to make changes to the program, provider information, or test shall notify the department, in writing, at least 10 days before making any of the following changes:

- (a) A change in the name of the applicant.
- (b) A change in the address of the applicant.
- (c) A change in the principal officers of an applicant organization.
- (2) Any changes with respect to the program must be made only when approved by the department in advance. If the illness of an instructor, natural disaster, or other emergency causes a change in the approved program, the provider shall notify the department at the earliest opportunity. A written notice that confirms the verbal report must be submitted to the department within 10 days after the verbal notification.

R 339.5264 Registration and reregistration; required hours of training; training categories; effective date.

Rule 264. (1) An individual who is applying for renewal or reregistration shall complete not less than the required number of hours of continuing education in an approved educational or training program, as described in table 264 of this rule, in all the following categories:

- (a) State public acts and state administrative rules, which must include programs and courses designed to enhance an individual's understanding of technical writing, public speaking, laws, rules, and the administration and enforcement of related statutes and regulations.
- (b) Technical, which must include programs and courses designed to enhance an individual's understanding of state laws, state rules, and the state administration and enforcement of related statutes and regulations.
- (c) Plan review, which must include programs to enhance an individual's ability to review and approve residential and commercial construction documents to determine compliance with applicable codes, standards, and statutes.
- (d) Specialty, which must include courses designed to increase an individual's knowledge of inspection and construction techniques in the various registration classifications.



(2) Continuing education is valid for reregistration only when accrued during an individual's current 3-year registration period, except as provided in subrule (3) of this rule.

(3) The department may approve any of the following types of educational or training programs for the purpose of satisfying registration or reregistration requirements by the individual.

(a) Association programs that are sponsored by any of the following entities:

(i) Inspector organizations.

(ii) Township, municipal, and county organizations.

(iii) Professional and trade organizations.

(b) Home study courses, such as online courses.

(c) Private contractor technical update courses.

(d) University, college, and community college courses.

(e) Department-sponsored training programs.

(f) Training sponsored by nationally recognized model code promulgating organizations, such as the International Code Council.

(4) The department of the commission may approve the following educational or training association programs that are sponsored by any of the following entities to satisfy an individual's registration or reregistration requirements:

(a) Inspector organizations.

(b) Township, municipal, and county organizations.

(c) Professional and trade organizations.

(5) Table 264 reads as follows:

Table 264

Hours Required for Reregistration

Training

Registration Classifications

| Category       | Building   | Inspector  |            |            |            | Plan Reviewer |            |            |            |
|----------------|------------|------------|------------|------------|------------|---------------|------------|------------|------------|
|                |            | Building   | Electrical | Mechanical | Plumbing   | Building      | Electrical | Mechanical | Plumbing   |
| Rules and Acts | 18 hrs (b) | 4 hrs (b)  | 4 hrs (b)  | 4 hrs (b)  | 4 hrs (b)  | 4 hrs (b)     | 4 hrs (b)  | 4 hrs (b)  | 4 hrs (b)  |
| Technical      | 16 hrs (a) | 16 hrs (a) | 16 hrs (a) | 16 hrs (a) | 16 hrs (a) | 16 hrs (a)    | 16 hrs (a) | 16 (a)     | 16 hrs (a) |
| Plan Review    | 2 hrs      | 2 hrs      | 2 hrs      | 2 hrs      | 2 hrs      | 8 hrs         | 8 hrs      | 8 hrs      | 8 hrs      |
| Specialty      | 8 hrs (a)  | 12 hrs (a) | 12 hrs (a) | 12 hrs (a) | 12 hrs(a)  | 12 hrs (a)    | 12 hrs (a) | 12 hrs (a) | 12 hrs (a) |
| Total          | 44 hrs     | 34 hrs     | 34 hrs     | 34 hrs     | 34 hrs     | 40 hrs        | 40 hrs     | 40 hrs     | 40 rs      |

(6) When applying for reregistration in 1 or more review classifications, including building, electrical, mechanical, and plumbing, the number of technical and specialty hours

is per classification. If an individual is also a plan reviewer and is also applying for reregistration as either a building, electrical, mechanical, or plumbing inspector, the number of hours for a technical and specialty may be applied to the same plan reviewer classification, refer to table 264 subrule (5) of these rules.

(7) When applying for reregistration in more than 1 plan reviewer or inspector classification, the number of acts and rules hours may be applied to more than 1 registration classification, refer to table 264 subrule (5) of these rules.

#### R 339.5265 Building official registration qualifications.

Rule 265. An individual who is applying for registration as a building official shall comply with all the following:

- (a) File a completed application on a form provided by the department.
- (b) Pay the applicable registration fee established under section 1023 of the act, MCL 339.6023.
- (c) Pay the applicable examination fee and pass an examination required by the act.
- (d) Provide documentation supporting that the applicant has 2 years of experience as a registered inspector or plan reviewer.

#### R 339.5266 Requirements for renewal of registration as a building official.

Rule 266. (1) As a condition of renewal of a building official registration, an individual shall meet the requirements of section 1011 of the act, MCL 339.6011, by doing both of the following:

- (a) Submitting an online application for renewal as a building official as prescribed by the department and accompanied by the required fee of \$25.00 per year of the registration.
  - (b) Providing documentation supporting the successful completion of continued training and educational programs as approved by the department pursuant to section 1007 of the act, MCL 339.6007, and required in R 339.5502.
- (2) The fee and continued training are in addition to any other fee and continued education requirements, if the building inspector holds additional inspection classifications, plan review classifications or other licenses under the act.
- (3) Successful completion of education for a building official includes of all the following:
- (a) Eighteen hours of education regarding state public acts and state administrative rules directly related to this state's construction regulations.
  - (b) Sixteen hours of education regarding technical knowledge related to this state's codes and various technical code provisions.
  - (c) Two hours of building plan review education.
  - (d) Eight hours of specialty training, which includes, but is not limited to, courses designed to increase a building official's knowledge of inspection and construction techniques in the various trades.
- (4) Failure to comply with all renewal requirements in the act or these rules will result in the denial of the registration renewal and the forfeiture of all renewal fees.

(5) This rule does not apply to an individual who obtains an initial building official registration partially through a 3-cycle registration cycle.

R 339.5270 Building inspector registration; qualifications.

Rule 270. (1) An individual who is applying for registration as a building inspector shall comply with all the following:

- (a) File a completed application on a form provided by the department.
- (b) Pay the applicable registration fee established under section 1023 of the act, MCL 339.6023.
- (c) Pay the applicable examination fee and pass an examination required by the act.
- (d) Provide documentation supporting that the individual has any of the following:
  - (i) A residential builder's license issued by this state and 6 years of experience immediately preceding application in any 1 or more of the following professions:
    - a) A contractor in general building construction as a contractor.
    - b) A skilled trades worker.
    - c) An individual who was in charge of structural construction.
    - (ii) A license as a building inspector from other states or foreign countries with inspector experience in building construction. The individual shall provide to the department the requirements of licensure for that state or country before he or she receives approval from the department.
    - (iii) Seven years of experience in general building construction in any 1 or more of the following professions:
      - (a) A building contractor.
      - (b) A person in charge of general building construction.
      - (c) A project manager, superintendent, supervisor, or foreman actively engaged in general building construction immediately preceding submission of the application.
      - (d) A skilled worker in structural carpentry, structural masonry, structural steel erection, or structural concrete construction who has been actively engaged in the general building construction field immediately preceding the submission of the application.
      - (e) Possesses a current license as an architect or engineer under the article 20 of the occupational code, 1980 PA 299, MCL 339.2001 to 339.2014.
- (2) Contractor and general building construction does not include a plumbing contractor's license, an electrical contractor's license, or a mechanical contractor's license.

R 339.5290 Requirements for renewal of registration as a building inspector.

Rule 290. (1) As a condition for renewal of a building inspector registration, an individual shall meet the requirements of section 1011 of the act, MCL 339.6011, by doing both of the following:

- (a) Submitting an online application for renewal as a building inspector as prescribed by the department and accompanied by the required fee of \$25.00 per year of the registration.

(b) Providing documentation supporting the successful completion of continued training and educational programs as approved by the department pursuant to section 1007 of the act, MCL 339.6007, and required in R 339.5502.

(2) The fee and continued training are in addition to any other fee and continued education requirements specified in subrule (1) of this rule, if the building inspector holds additional inspection classifications, plan review classifications, or other licenses under the act.

(3) Successful completion of continued education for building inspectors includes all the following:

(a) Four hours of education regarding state public acts and state administrative rules directly related to this state's construction regulations.

(b) Sixteen hours of education regarding technical knowledge related to this state's codes and various technical code provisions.

(c) Two hours of building plan review education.

(d) Twelve hours of specialty training, including, but not limited to, courses designed to increase a building inspector's knowledge of inspection and construction techniques in the various trades.

(4) Failure to comply with all renewal requirements in the act or these rules will result in the denial of the registration renewal and the forfeiture of all renewal fees.

(5) This rule does not apply to an individual who obtains an initial building inspector registration partially through a 3-cycle registration cycle.

#### R 339.5295 Requirements for renewal of registration as an electrical inspector.

Rule 295. (1) As a condition of an electrical inspector registration, an individual shall meet the requirements of section 1011 of the act, MCL 339.6011, by doing both of the following:

(a) Submitting an online application for renewal as an electrical inspector as prescribed by the department and accompanied by the required fee of \$25.00 per year of the registration.

(b) Providing documentation supporting the successful completion of continued training and educational programs as approved by the department pursuant to section 1007 of the act, MCL 339.6007, and required in R 339.5502.

(2) The fee and continued training are in addition to any other fee and continued education requirements specified in subrule (1) of this rule, if the electrical inspector holds additional inspection classifications, plan review classifications, or other licenses under the act.

(3) Successful completion of continued education for electrical inspectors includes all the following:

(a) Four hours of education regarding state public acts and state administrative rules directly related to this state's construction regulations.

(b) Sixteen hours of education regarding technical knowledge related to this state's codes and various technical code provisions.

(c) Two hours of electrical plan review education.

(d) Twelve hours of specialty training including, but not limited to, courses designed to increase a building inspector's knowledge of inspection and construction techniques in the various trades.

(4) Failure to comply with all renewal requirements in the act or these rules will result in the denial of the registration renewal and the forfeiture of all renewal fees.

(5) This rule does not apply to an individual who obtains an initial electrical inspector registration partially through a 3-cycle registration cycle.

#### R 339.5300a Requirements for renewal of registration as a mechanical inspector.

Rule 300a. (1) As a condition of renewal of a mechanical inspector registration, an individual shall meet the requirements of section 1011 of the act, MCL 339.6011, by doing both of the following:

(a) Submitting an online application for renewal as a mechanical inspector, as prescribed by the department, and accompanied by the required fee of \$25.00 per year of the registration.

(b) Providing documentation supporting the successful completion of continued training and educational programs as approved by the department pursuant to section 1007 of the act, MCL 339.6007, and required in R 339.5502.

(2) The fee and continued training are in addition to any other fee and continued education requirements specified in subrule (1) of this rule, if the mechanical inspector holds additional inspection classifications, plan review classifications, or other licenses under the act.

(3) Successful completion of continued education for a mechanical inspector includes all of the following:

(a) Four hours of education regarding state public acts and state administrative rules directly related to this state's construction regulations.

(b) Sixteen hours of education regarding technical knowledge related to state codes and various technical code provisions.

(c) Two hours of mechanical plan review education.

(d) Twelve hours of specialty training including, but not limited to, courses designed to increase a mechanical inspector's knowledge of inspection and construction techniques in the various trades.

(4) Failure to comply with all renewal requirements in the act or these rules will result in the denial of the registration renewal and the forfeiture of all renewal fees.

(5) This rule does not apply to an individual who obtains an initial mechanical inspector registration partially through a 3-cycle registration cycle.

#### R 339.5300b Requirements for renewal of registration as a plumbing inspector.

Rule 300b. (1) As a condition of renewal of a plumbing inspector registration, an individual shall meet the requirements of section 1011 of the act, MCL 339.6011, by doing both of the following:

(a) Submitting an online application for renewal as a plumbing inspector, as prescribed by the department, and accompanied by the required fee of \$25.00 per year of the registration.

(b) Providing documentation supporting the successful completion of continued training and educational programs as approved by the department pursuant to section 1007 of the act, MCL 339.6007, and required in R 339.5502.

(2) The fee and continued training are in addition to any other fee and continued education requirements specified in subrule (1) of this rule, if the plumbing inspector holds additional inspection classifications, plan review classifications, or other licenses under the act.

(3) Successful completion of continued education for a plumbing inspector includes of all the following:

(a) Four hours of education regarding state public acts and state administrative rules directly related to this state's construction regulations.

(b) Sixteen hours of education regarding technical knowledge related to state codes and various technical code provisions.

(c) Two hours of plumbing plan review education.

(d) Twelve hours of specialty training including, but not limited to, courses designed to increase a plumbing inspector's knowledge of inspection and construction techniques in the various trades.

(4) Failure to comply with all renewal requirements in the act or these rules will result in the denial of the registration renewal and the forfeiture of all renewal fees.(5) This rule does not apply to an individual who obtains an initial plumbing inspector registration partially through a 3- cycle registration cycle.

R 339.5300c Requirements for renewal of registration as a building plan reviewer.

Rule 300c. (1) As a condition of renewal of a building plan reviewer registration, an individual shall meet the requirements of section 1011 of the act, MCL 339.6011, by doing both of the following:

(a) Submitting an online application for renewal as a building plan reviewer, as prescribed by the department, and accompanied by the required fee of \$25.00 per year of the registration.

(b) Providing documentation supporting the successful completion of continued training and educational programs as approved by the department pursuant to section 1007 of the act, MCL 339.6007, and required in R 339.5502.

(2) The fee and continued training are in addition to any other fee and continued education requirements specified in subrule (1) of this rule, if the building plan reviewer holds additional plan review classifications, inspector classifications, or other licenses under the act.

(3) Successful completion of continued education for a building plan reviewer includes all of the following:

(a) Four hours of education regarding state public acts and state administrative rules directly related to this state's construction regulations.

(b) Sixteen hours of education regarding technical knowledge related to state codes and various technical code provisions.

(c) Twelve hours of specialty training including, but not limited to, courses designed to increase a building plan reviewer's knowledge of plan review and construction techniques in the various trades.

(4) Failure to comply with all renewal requirements in the act or these rules will result in the denial of the registration renewal and the forfeiture of all renewal fees.

(5) This rule does not apply to an individual who obtains an initial building plan review registration partially through a 3-cycle registration cycle.

**R 339.5300d Requirements for renewal of registration as an electrical plan reviewer.**

Rule 300d. (1) As a condition of a renewal of an electrical plan reviewer registration, an individual shall meet the requirements of section 1011 of the act, MCL 339.6011, by doing both of the following:

(a) Submitting an online application for renewal as an electrical plan reviewer, as prescribed by the department, and accompanied by the required fee of \$25.00 per year of the registration.

(b) Providing documentation supporting the successful completion of continued training and educational programs as approved by the department pursuant to section 1007 of the act, MCL 339.6007, and required in R 339.5502.

(2) The fee and continued training are in addition to any other fee and continued education requirements, if the electrical plan reviewer holds additional plan review classifications, inspector classifications, or other licenses under the act.(3)

Successful completion of continued education for an electrical plan reviewer includes all of the following:

(a) Four hours of education regarding state public acts and state administrative rules directly related to this state's construction regulations.

(b) Sixteen hours of education regarding technical knowledge related to state codes and various technical code provisions.

(c) Eight hours of electrical plan review education.

(d) Twelve hours of specialty training including, but not limited to, courses designed to increase an electrical plan reviewer's knowledge of plan review and construction techniques in the various trades.

(4) Failure to comply with all renewal requirements in the act or these rules will result in the denial of the registration renewal and the forfeiture of all renewal fees.

(5) This rule does not apply to an individual who obtains an initial building plan review registration partially through a 3-cycle registration cycle.

**R 339.5300e Requirements for renewal of registration as a mechanical plan reviewer.**

Rule 300e. (1) As a condition of renewal of a mechanical plan reviewer registration, an individual shall meet the requirements of section 1011 of the act, MCL 339.6011, by doing both of the following:

(a) Submitting an online application for renewal as a mechanical plan reviewer, as prescribed by the department, and accompanied by the required fee of \$25.00 per year of the registration.

(b) Providing documentation supporting the successful completion of continued training and educational programs as approved by the department pursuant to section 1007 of the act, MCL 339.6007, and required in R 339.5002.

(2) The fee and continued training are in addition to any other fee and continued education requirements specified in subrule (1) of this rule, if the mechanical plan reviewer holds additional plan review classifications, inspector classifications, or other licenses under the act.

(3) Successful completion of continued education for a mechanical plan reviewer includes all of the following:

(a) Four hours of education regarding state public acts and state administrative rules directly related to this state's construction regulations.

(b) Sixteen hours of education regarding technical knowledge related to state codes and various technical code provisions.

(c) Eight hours of mechanical plan review education.

(d) Twelve hours of specialty training including, but not limited to, courses designed to increase a mechanical plan reviewer's knowledge of plan review and construction techniques in the various trades.

(3) Failure to comply with all renewal requirements in the act or these rules will result in the denial of the registration renewal and the forfeiture of all renewal fees.

(4) This rule does not apply to an individual who obtains an initial mechanical plan review registration partially through 3-cycle registration cycle.

R 339.5300f Requirements for renewal of registration as a plumbing plan reviewer.

Rule 300f. (1) As a condition of renewal of a plumbing plan reviewer registration, an individual shall meet the requirements of section 1011 of the act, MCL 339.6011, by doing both of the following:

(a) Submitting an online application for renewal as a plumbing plan reviewer, as prescribed by the department, and accompanied by the required fee of \$25.00 per year of the registration.

(b) Providing documentation supporting the successful completion of continued training and educational programs as approved by the department pursuant to section 1007 of the act, MCL 339.6007, and required in R 339.5502.

(2) The fee and continued training are in addition to any other fee and continued education requirements, if the plumbing plan reviewer holds additional plan review classifications, inspector classifications, or other licenses under the act.

(3) Successful completion of continued education for a plumbing plan reviewer includes all of the following:

(a) Four hours of education regarding state public acts and state administrative rules directly related to this state's construction regulations.

(b) Sixteen hours of education regarding technical knowledge related to state codes and various technical code provisions.

(c) Eight hours of plumbing plan review education.



(d) Twelve hours of specialty training including, but not limited to, courses designed to increase a plumbing plan reviewer's knowledge of plan review and construction techniques in the various trades.

(4) Failure to comply with all renewal requirements in the act or these rules will result in the denial of the registration renewal and the forfeiture of all renewal fees.

(5) This rule does not apply to an individual who obtains an initial plumbing plan review registration partially through a 3-cycle registration cycle.

#### R 339.5301 Acts and rules; continuing education.

Rule 301. (1) An individual who attends the acts and rules continuing education training, specified in R 339.5502, during his or her 3-year registration cycle will have satisfied the required training for all other registrations he or she may hold as an official, inspector, plan reviewer, or any other combination of those registrations for his or her renewal requirement. An individual who holds multiple registrations shall take the acts and rules continuing education training only once every 3-year registration cycle.

(2) All other courses must be tailored to either the specific trade inspector classification, the trade plan reviewer classification, or the building official registration, to attain the total number of continuing education training hours required for each registration renewal.

#### R 339.5302 Building plan reviewer registration; qualifications.

Rule 302. An individual who is applying for registration as a building plan reviewer shall comply with all the following:

- (a) File a completed application on a form provided by the department.
- (b) Pay the applicable registration fee established under section 1023 of the act, MCL 339.6023.
- (c) Pay the applicable examination fee and pass an examination required by the act.
- (d) Provide documentation supporting that the applicant has 1 of the following:
  - (i) A residential builder's license issued by this state and 6 years of experience immediately preceding application in any 1 or more of the following professions:
    - (A) General building construction as a contractor.
    - (B) Skilled trades worker.
    - (C) A person in charge of structural construction.
  - (ii) A license as a building plan reviewer from another state or foreign country with plan reviewer experience in building construction. The individual shall provide to the department the requirements of licensure for that state or country before he or she receives approval from the department.
  - (iii) Seven years of experience in general building construction in 1 or more of the following professions:
    - (A) A contractor.
    - (B) A skilled trades worker.

(C) An individual who was a person in charge of structural construction.

(iv) An individual under paragraph (iii) of this subdivision must also possess 2 years of experience as a journey level, structural, construction, or skilled trades worker including as a carpenter, brick layer or mason, or steel worker.

R 339.5305 Electrical inspector registration; qualifications.

Rule 305. An individual who is applying for an electrical inspector registration shall comply with all of the following:

- (a) File a completed application on a form provided by the department.
- (b) Pay the applicable registration fee established under section 1023 of the act, MCL 339.6023.
- (c) Pay the applicable examination fee and pass an examination required by the act.
- (d) Provide documentation supporting that the individual is licensed as an electrical journeyman or master electrician as required under section 1022 of the act, MCL 339.6022.

R 339.5306 Electrical plan reviewer registration; qualifications.

Rule 306. An individual who is applying for registration as an electrical plan reviewer shall comply with all of the following:

- (a) File a completed application on a form provided by the department.
- (b) Pay the applicable registration fee established under section 1023 of the act, MCL 339.6023.
- (c) Pay the applicable examination fee and pass an examination required by the act.
- (d) Provide documentation supporting that the individual is licensed as an electrical journeyman or master electrician as required under section 1022 of the act, MCL 339.6022.

R 339.5309 Mechanical inspector registration; qualifications.

Rule 309. (1) An individual who is applying for registration as a mechanical inspector shall comply with all of the following:

- (a) File a completed application on a form provided by the department.
- (b) Pay the applicable registration fee established under section 1023 of the act, MCL 339.6023.
- (c) Pay the applicable examination fee and pass an examination required by the act.
- (d) Hold a mechanical license from this state in 3 of the 4 following categories for at least 1 year immediately preceding application:
  - (i) Hydronic heating and cooling and process piping.
  - (ii) HVAC equipment.
  - (iii) Refrigeration.
  - (iv) Fire suppression.

(2) If the individual does not hold a mechanical license from this state, as specified in subrule (1)(d) of this rule, he or she shall provide to the department an affidavit of

experience from previous and current employers. The affidavit must comply with both of the following:

(a) Attest that the individual has been actively engaged in the performance of mechanical work in 3 of the 4 following categories for 6 years under a licensed mechanical contractor:

- (i) Hydronic heating and cooling process piping.
- (ii) HVAC equipment.
- (iii) Refrigeration.
- (iv) Fire suppression.

(b) Attest that the licensed mechanical contractor who supervised the applicant was licensed in the required category at the time of supervision.

(3) If the individual holds a license as a mechanical inspector from another state or foreign country with inspector experience in mechanical code enforcement, he or she shall provide to the department proof of licensure and the requirements of licensure for that state or country to be eligible to receive approval from the department.

#### R 339.5400 Mechanical plan reviewer registration; qualifications.

Rule 400. (1) An individual who is applying for registration as a mechanical plan reviewer shall comply with all the following:

(a) File a completed application on a form provided by the department.

(b) Pay the applicable registration fee established under section 1023 of the act, MCL 339.6023.

(c) Pay the applicable examination fee and pass a required examination established under section 321 of the act, MCL 339.5321.

(d) Hold a mechanical license from this state in 3 of the 4 following categories, for at least 1 year immediately preceding application:

- (i) Hydronic heating and cooling process piping.
- (ii) HVAC equipment.
- (iii) Refrigeration.
- (iv) Fire suppression.

(2) If the individual does not hold a mechanical license in this state, as specified in subrule (1)(d) of this rule, he or she shall provide to the department an affidavit of experience from previous and current employers. The affidavit must comply with both of the following:

(a) Attest that the applicant has been actively engaged in the performance of mechanical work for 6 years under a licensed mechanical contractor in 3 of the 4 following categories:

- (i) Hydronic heating and cooling and process piping.
- (ii) HVAC equipment.
- (iii) Refrigeration.
- (iv) Fire suppression.

(b) Attest that the licensed mechanical contractor or contractors who supervised the applicant were licensed in the required category or categories at the time of supervision.

(3) If the individual holds a license as a mechanical plan reviewer from another state or foreign country with inspector experience in mechanical code enforcement, he or she shall provide to the department proof of licensure and the requirements of licensure for that state or country to be eligible to receive approval from the department.

R 339.5405 Plumbing inspector registration; qualifications.

Rule 405. (1) An individual who is applying for registration as a plumbing inspector shall comply with all the following:

- (a) File a completed application on a form provided by the department.
- (b) Pay the applicable registration fee established under section 1023 of the act, MCL 339.6023.
- (c) Pay the applicable examination fee and pass a required examination, established under section 321 of the act, MCL 339.5321.
- (d) Provide documentation supporting that the individual has either of the following:
  - (i) A journey plumbers license from this state for at least 2 years immediately preceding application for registration.
  - (ii) A current master plumbing license from this state.
- (2) If the individual does not hold a plumber license from this state, as specified in subrule (1)(d) of this rule, he or she shall provide an affidavit of experience to the department from previous and current employers. The affidavit must attest that he or she was actively engaged in the performance of plumbing work for 5 years under a licensed plumbing contractor.
- (3) If an individual holds a license as a plumbing inspector from another state or foreign country with inspector experience in plumbing code enforcement, he or she shall provide to the department proof of licensure and the requirements of licensure for that state or country to be eligible to receive approval from the department.

R 339.5406 Plumbing plan reviewer registration; qualifications.

Rule 406. (1) An individual who is applying for registration as a plumbing plan reviewer shall comply with all of the following:

- (a) File a completed application on a form provided by the department.
- (b) Pay the applicable registration fee established under section 1023 of the act, MCL 339.6023.
- (c) Pay the required examination fee, established under section 407 of the act, MCL 339.5407.
- (d) Provide documentation proving that the individual has either of the following:
  - (i) A journey plumbers license from this state for at least 2 years immediately preceding application for registration.
  - (ii) A master plumber license from this state.
- (2) If the individual does not hold a plumber license from this state, as specified in subrule (1)(d) of this rule, he or she shall provide to the department an affidavit of experience from previous and current employers. The affidavit must attest to the

applicant having been actively engaged in the performance of plumbing work for 5 years under a licensed plumbing contractor.

(3) If an individual holds a license as a plumbing plan reviewer from another state or foreign country with plan review experience in plumbing code enforcement, he or she shall provide to the department proof of licensure and the requirements of licensure for that state or country to be eligible to receive approval from the department.

#### R 339.5408 Provisional registration.

Rule 408. (1) An individual may apply for a provisional registration as a building inspector or building plan reviewer provided, he or she meets the requirements as specified in section 219 of the act, MCL 339.5219.

(2) An applicant may apply for a provisional registration as an inspector or plan reviewer in the plumbing trade provided he or she meets the requirements as specified in section 219 of the act, MCL 339.5219.

(3) An applicant may apply for a provisional registration as an inspector or plan reviewer in the electrical trade provided, he or she meets the requirements as outlined in section 219 of the act, MCL 339.5219.

(4) An applicant may apply for a provisional registration as an inspector or plan reviewer in the mechanical trade provided he or she meets the requirements as specified in section 219 of the act, MCL 339.5219.

(5) If an individual is unable to qualify for a provisional license under section 219 of the act, MCL 339.5219, he or she shall do all of the following:

(a) Submit his or her work experience for the previous 6 years detailing work performed in the trade related to the trade classification for which he or she is applying.

(b) Submit all education obtained during the same 6-year period.

(c) Submit 3 letters of reference from former clients for whom the applicant provided services within the 6 years immediately preceding application.

(6) An individual who is provisionally registered, pursuant to section 1021 of the act, MCL 339.6021, shall not perform the duties and responsibilities of an inspector or plan reviewer until he or she has met all requirements for full registration.

### PART 11. PLUMBING AND PLUMBING CONTRACTORS

#### R 339.5411 Master plumber and plumbing contractors; changes in employment status; license suspension.

Rule 411. (1) If a master plumber ceases to represent a plumbing contractor, both the plumbing contractor and the master plumber who was employed by the plumbing contractor shall notify the department immediately of any changes in the employment status of the master plumber.

(2) The contractor license may be summarily suspended pursuant to section 507 of the act, MCL 339.5507, until the contractor designates an employee or officer who is a licensed master plumber to represent the plumbing contractor license.

R 339.5412 Journey plumbing examinations.

Rule 412. (1) To obtain a journey license, an applicant shall take and pass the 2-part examination. The examination includes both a practical skill portion and a written examination portion.

(2) An applicant will have 365 days, beginning the date of receipt of the application, to achieve licensure.

(3) Failure to pass both the written examination and the practical skill portion of the examination, within 365 days after receipt of application, will result in forfeiture of any fees paid to the department and the application being voided under the act.

(4) To obtain licensure after the expiration of the 365 days, an applicant shall submit a new application and fees and meet the registration requirements in place at the time of the new application, including taking the journey plumbing examination and successfully passing both parts of the examination that is in effect on the date the department received the new application.