



# SEATTLE CITY COUNCIL

## Legislative Summary

CB 119001

Record No.: CB 119001

Type: Ordinance (Ord)

Status: Passed

Version: 1

Ord. no: Ord 125337

In Control: City Clerk

File Created: 04/24/2017

Final Action: 06/30/2017

Title: AN ORDINANCE relating to the Seattle Boiler and Pressure Vessel Code; amending Section 22.450.010 of the Seattle Municipal Code and amending the Seattle Boiler and Pressure Vessel Code.

### Notes:

Date  
Filed with City Clerk: 6/30/2017

Mayor's Signature: 6/30/2017

Vetoed by Mayor:

Veto Overridden:

Veto Sustained:

Sponsors: Johnson

### Attachments:

Drafter: bonita.chinn@seattle.gov

Filing Requirements/Dept Action:

### History of Legislative File

Legal Notice Published: ☒ Yes ☐ No

| Version: | Acting Body:                                                                                            | Date:      | Action:                            | Sent To:                                 | Due Date: | Return Date: | Result: |
|----------|---------------------------------------------------------------------------------------------------------|------------|------------------------------------|------------------------------------------|-----------|--------------|---------|
| 1        | Mayor                                                                                                   | 05/16/2017 | Mayor's leg transmitted to Council | City Clerk                               |           |              |         |
| 1        | City Clerk                                                                                              | 05/16/2017 | sent for review                    | Council President's Office               |           |              |         |
|          | Action Text: The Council Bill (CB) was sent for review, to the Council President's Office               |            |                                    |                                          |           |              |         |
|          | Notes:                                                                                                  |            |                                    |                                          |           |              |         |
| 1        | Council President's Office                                                                              | 06/01/2017 | sent for review                    | Planning, Land Use, and Zoning Committee |           |              |         |
|          | Action Text: The Council Bill (CB) was sent for review, to the Planning, Land Use, and Zoning Committee |            |                                    |                                          |           |              |         |
|          | Notes:                                                                                                  |            |                                    |                                          |           |              |         |
| 1        | Full Council                                                                                            | 06/19/2017 | referred                           | Full Council                             |           |              |         |
|          | Action Text: The Council Bill (CB) was referred, to the Full Council                                    |            |                                    |                                          |           |              |         |
|          | Notes:                                                                                                  |            |                                    |                                          |           |              |         |
| 1        | Full Council                                                                                            | 06/26/2017 | passed                             |                                          |           |              | Pass    |

**Legislative Summary Continued (CB 119001)**

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**Action Text:** The Motion carried, the Council Bill (CB) was passed by the following vote, and the President signed the Bill:

**Notes:** Motion was made and duly seconded to pass Council Bill 119001.

In Favor: 9 Councilmember Bagshaw, Councilmember Burgess, Councilmember González, Council President Harrell, Councilmember Herbold, Councilmember Johnson, Councilmember Juarez, Councilmember O'Brien, Councilmember Sawant

Opposed: 0

|   |            |            |                        |            |
|---|------------|------------|------------------------|------------|
| 1 | City Clerk | 06/29/2017 | submitted for          | Mayor      |
|   |            |            | Mayor's signature      |            |
| 1 | Mayor      | 06/30/2017 | Signed                 |            |
| 1 | Mayor      | 06/30/2017 | returned               | City Clerk |
| 1 | City Clerk | 06/30/2017 | attested by City Clerk |            |

**Action Text:** The Ordinance (Ord) was attested by City Clerk.

**Notes:**

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CITY OF SEATTLE

ORDINANCE 125337

COUNCIL BILL 119001

AN ORDINANCE relating to the Seattle Boiler and Pressure Vessel Code; amending Section 22.450.010 of the Seattle Municipal Code and amending the Seattle Boiler and Pressure Vessel Code.

**BE IT ORDAINED BY THE CITY OF SEATTLE AS FOLLOWS:**

Section 1. Section 22.450.010 of the Seattle Municipal Code, last amended by Ordinance 124919, is amended as follows:

**22.450.010 Adoption of Seattle Boiler and Pressure Vessel Code**

The Seattle Boiler and Pressure Vessel Code is hereby adopted and by this reference made a part of this Subtitle IVB. ~~((A copy))~~ Copies of the Seattle Boiler and Pressure Vessel Code, with amendments, ~~((is))~~ are kept on file at the Seattle Department of Construction and Inspections and in the City Clerk's Office.

Section 2. Section 1 of the Seattle Boiler and Pressure Vessel Code, enacted by Ordinance 117723, is amended as follows:

**Section 1 - Administrative**

**1.1 Title.** These regulations shall be known as the "Seattle Boiler and Pressure Vessel Code," ~~((s))~~ may be cited as such, and will be referred to herein as "this code."

Section 3. Section 10 of the Seattle Boiler and Pressure Vessel Code, enacted by Ordinance 117723, is amended and renumbered as follows:

~~((Section 10))~~ **1.2 Purpose.** The purpose of this code is to ~~((establish and))~~ provide minimum standards for the protection of public health, safety, and property by regulating and controlling the quality, location, and installation of boilers and pressure vessels,

1 piping, and appurtenances. It is not intended to create or otherwise establish or designate  
2 any particular class or group of persons who will or should be especially protected or  
3 benefited by the terms of this code.

4 Section 4. Section 20 of the Seattle Boiler and Pressure Vessel Code, enacted by  
5 Ordinance 117723, is amended and renumbered as follows:

6 **((Section 20—Scope)) 1.3 General.**

7 **1.3.1 Scope.** ~~((Other than the exemptions listed in Section 100, the requirements~~  
8 ~~of this))~~ This code ((shall apply)) applies to the construction, erection, installation,  
9 operation, inspection, repair and alteration, relocation, replacement, addition to,  
10 use or maintenance of all boilers and pressure vessels. The design and testing of  
11 equipment regulated by this code are subject to the approval of the code official.

12 **1.3.2 Applicability of city laws.** A boiler permit application shall be considered  
13 under the Seattle Boiler Code in effect on a date as provided below, or on a date  
14 as otherwise required by law.

15 A. Boiler code permit applications shall be considered under the codes in  
16 effect on the date used to determine the codes applicable to the building  
17 permit application in accordance with the Seattle Building Code Section  
18 101.3 if any of Items 1 through 3 apply:

19 1. The boiler permit application is submitted as part of a building  
20 permit application;

21 2. The boiler permit application is for work directly associated with a  
22 building permit but is submitted separately from the building  
23 permit application; or

3. The boiler permit application is for initial tenant alterations submitted no later than 18 months after the date of the approved final inspection for the building, and is submitted before the expiration date of the building permit for the tenant alteration, as determined by Seattle Building Code Section 106.9.

B. Boiler permit applications, other than those subject to Item 1, shall be considered under the codes in effect on the date a complete boiler permit application is submitted that complies with all the requirements of Section 4.1, Installation Permits Required.

**1.3.3 Conflicts.** Where, in any specific case, different sections of this code specify different materials, methods of construction, or other requirements, the most restrictive shall govern. Where there is a conflict between a general requirement and a specific requirement, the specific requirement shall be applicable.

**1.3.4 Workmanship.** All equipment, appurtenances, devices, and piping shall be installed in a workmanlike manner, in accordance with recognized engineering practice, and in conformity with the provisions and intent of this code.

Section 5. Section 30 of the Seattle Boiler and Pressure Vessel Code, last amended by Ordinance 121865, is amended and renumbered as follows:

~~((Section 30))~~ **1.4 Powers and duties of the ((Director)) code official**

~~((30.1))~~ **1.4.1 General.** The code official is hereby authorized to administer ~~((and directed to enforce all the provisions of))~~ and enforce this code. ~~((Compliance with the requirements of this code shall be the obligation of the owner of the~~

1 building, structure or premises, the duly authorized agent of the owner, or any  
2 other person responsible for the condition or work, and not of the City or any of  
3 its officers or employees.))

4 A. Applications and permits. The code official shall receive applications,  
5 review construction documents, and issue permits for the erection and  
6 alteration, demolition, and moving of buildings and structures; inspect the  
7 premises for which such permits have been issued; and enforce  
8 compliance with provisions of this code.

9 B. Inspections. The code official shall make the required inspections or the  
10 code official shall have the authority to accept reports of inspection by  
11 approved agencies or individuals. Reports of such inspections shall be in  
12 writing and be certified by a responsible officer of such approved agency  
13 or by the responsible individual. The code official is authorized to engage  
14 such expert opinion as deemed necessary to report upon unusual technical  
15 issues that arise, subject to the approval of the appointing authority.

16 C. Notices and orders. The code official shall issue necessary notices or  
17 orders to ensure compliance with this code.

18 D. The code official shall keep official records of applications received,  
19 permits and certificates issued, fees collected, reports of inspections, and  
20 notices and orders issued. Such records shall be retained in the official  
21 records for the period required for retention of public records.

22 ~~((30.2 Deputies))~~ **1.4.2 Designees.** The ~~((Director))~~ code official may ~~((authorize~~  
23 ~~such qualified inspectors or employees as may be necessary to carry out the~~

functions specified in this code)) appoint such officers, inspectors, assistants, and employees, including the Chief Pressure Systems Inspector, as authorized from time to time. The code official may authorize such employees and other agents as may be necessary to carry out the functions of the code official.

**((30.3)) 1.4.3 Right of entry.** With the consent of the owner or occupier of a building or premises, or pursuant to a lawfully issued warrant, the ~~((Director))~~ code official may enter a building or premises at any reasonable time to perform the duties imposed by the code.

~~**(30.4 Stop Orders.** Whenever any work is being done contrary to the provisions of this code, or in the event of dangerous or unsafe conditions related to construction or demolition, the Director may order the affected work stopped by a notice describing the violation in writing, posted on the premises or served on any person responsible for the condition or work. It shall be unlawful for any person to engage in or to cause such work to be done until authorization from the Director is received.~~

~~**30.5 Authority to Disconnect Utilities in Emergencies.** The Director shall have the authority to disconnect fuel gas utility service or other energy supplies to a building, structure, premises or equipment regulated by this code in case of emergency where necessary to eliminate an immediate hazard to life or property. The Director may enter any building or premises to disconnect utility service. The Director shall, whenever possible, notify the serving utility, the owner and occupant of the building, structure or premises of the decision to disconnect prior to taking such action, and shall notify such serving utility, owner and occupant of~~

1           the building, structure or premises in writing of such disconnection immediately  
2           thereafter.

3           ~~**30.6 Authority to Condemn Equipment.** Whenever the Director ascertains that~~  
4           ~~equipment, or portion thereof, regulated by this code has become hazardous to~~  
5           ~~life, health or property, the Director shall order in writing that such equipment~~  
6           ~~may either be removed or restored to a safe condition, as appropriate. The written~~  
7           ~~notice shall fix a time limit for compliance with such order. Persons shall not use~~  
8           ~~or maintain defective equipment after receiving a notice.~~

9                     ~~When such equipment or installation is to be disconnected, written notice~~  
10           ~~of the disconnection and causes therefor shall be given within 24 hours to the~~  
11           ~~serving utility, the owner and occupant of the building, structure or premises.~~

12           ~~When any equipment is maintained in violation of this code, and in violation of a~~  
13           ~~notice issued pursuant to the provisions of this section, the Director shall institute~~  
14           ~~an appropriate action to prevent, restrain, correct or abate the violation.~~

15           ~~**30.7 Connection after Order to Disconnect.** Persons shall not make connections~~  
16           ~~from an energy, fuel or power supply nor supply energy or fuel to any equipment~~  
17           ~~regulated by this code which has been disconnected or ordered to be disconnected~~  
18           ~~by the Director, or the use of which has been ordered to be discontinued by the~~  
19           ~~Director until the Director authorizes the reconnection and use of such equipment.~~

20           ~~**30.8)) 1.4.4 Liability.** Nothing ((contained)) in this code is intended to be nor~~  
21           ~~shall be construed to create or form the basis for any liability on the part of the~~  
22           ~~City, or its officers, employees, or agents, for any injury or damage resulting from~~  
23           ~~1) the failure of equipment to conform to the provisions of this code, or ((by~~

1 ~~reason or in consequence of~~) 2) any inspection, notice, order, certificate,  
2 permission or approval authorized or issued, or 3) ~~((done in connection with))~~ the  
3 implementation or enforcement of this code, or 4) ~~((by reason of))~~ any action or  
4 inaction on the part of the City related in any manner to the enforcement of this  
5 code by its officers, employees, or agents.

6 This code shall not be construed to relieve ~~((from))~~ or lessen the  
7 responsibility of any person owning, operating, or controlling any equipment,  
8 building, or structure for any damages to persons or property caused by defects,  
9 nor shall the Seattle Department ~~((of Planning and Development))~~ of Construction  
10 and Inspections or ~~((the))~~ The City of Seattle be held ~~((as assuming))~~ to have  
11 assumed any such liability by reason of the inspections, permits, or certificates  
12 ~~((authorized by))~~ issued under this code, ~~((or any permits or certificates issued~~  
13 ~~under this code.))~~

14 **1.4.5 Responsibility for Compliance.** Compliance with the requirements of this  
15 code is the obligation of the owner of the building, structure, or premises, the duly  
16 authorized agent of the owner, or any other person responsible for the condition or  
17 work, not the obligation of the City or any of its officers, employees, or agents.

18 ~~((30.9))~~ **1.4.6 Cooperation of other officials and officers.** The ~~((Director))~~ code  
19 official may request, and shall receive, so far as is required in the discharge of the  
20 code official's ~~((Director's))~~ duties, the assistance and cooperation of other  
21 officials of ~~((the))~~ The City of Seattle.

Section 6. Section 40 of the Seattle Boiler and Pressure Vessel Code, enacted by Ordinance 117723, is repealed:

**~~((Section 40—Unsafe Equipment and Hazard Correction Order~~**

**~~40.1 Unsafe Equipment.~~** Any equipment regulated by this code, which constitutes a fire or health hazard or is otherwise dangerous to human life is, for the purpose of this section, unsafe. Any use of equipment regulated by this code constituting a hazard to safety, health or public welfare by reason of inadequate maintenance, dilapidation, obsolescence, fire hazard, disaster, damage or abandonment is, for the purpose of this section, an unsafe use. Any such unsafe equipment is hereby declared to be a public nuisance and may be abated.

**~~40.2 Hazard Correction Order.~~** Whenever the Director finds that unsafe equipment exists, the Director may issue a hazard correction order specifying the conditions causing the equipment to be unsafe and directing the owner or other persons responsible for the unsafe equipment to correct the condition. In lieu of correction, the owner may submit a report or analysis to the Director analyzing said conditions and establishing that the equipment is, in fact safe. The Director may require that the report or analysis be prepared by a licensed engineer. It shall be unlawful for any person to fail to comply with a hazard correction order as specified in this subsection.))

Section 7. Section 50 of the Seattle Boiler and Pressure Vessel Code, enacted by Ordinance 117723, is repealed:

**~~((Section 50—Notices~~**

~~It shall be unlawful for any person to remove, mutilate, destroy or conceal any lawful notice issued or posted by the Director pursuant to the provisions of this code.~~

1           ~~The Director may record a copy of any order or notice with the Department of~~  
2           ~~Records and Elections of King County.~~

3           ~~The Director may record with the Department of Records and Elections of King~~  
4           ~~County a notification that a permit has expired without a final inspection after reasonable~~  
5           ~~efforts have been made to provide a final inspection.))~~

6           Section 8. Section 60 of the Seattle Boiler and Pressure Vessel Code, enacted by  
7           Ordinance 117723, is repealed:

8           ~~((Section 60—Appeals~~

9           ~~Appeals from decisions or actions pertaining to the administration and enforcement of~~  
10           ~~this code shall be addressed to the Director. The appellant may request a review by three~~  
11           ~~or more members of the Construction Codes Advisory Board, convened by the Chair.~~  
12           ~~The issue of the appeal shall be taken into account by the Chair when selecting members~~  
13           ~~to hear an appeal. The results of this appeal shall be advisory only.))~~

14           Section 9. Section 70 of the Seattle Boiler and Pressure Vessel Code, enacted by  
15           Ordinance 117723, is amended and renumbered as follows:

16           ~~((Section 70—))~~ **1.4.7 Rules of the ((Director)) code official.** ~~((70.1 Authority.))~~ The  
17           ~~((Director shall have the power to render interpretations of))~~ code official has authority to  
18           interpret this code and to adopt and enforce rules and regulations supplemental to this  
19           code as may be ~~((deemed))~~ necessary ~~((in order))~~ to clarify the application of ~~((the~~  
20           ~~provisions of))~~ this code. Such interpretations, rules, and regulations shall ~~((be in~~  
21           ~~conformity with))~~ conform to the intent and purpose of this code. ~~((The Director is~~  
22           ~~authorized to promulgate, adopt and issue the following rules:~~

1. ~~“Building Construction Standards” to promulgate standards which are acceptable as a method or as an alternative design for meeting code required performance criteria, to recognize new technical data affecting code requirements, and to eliminate conflicts among code requirements.~~

2. ~~“Code Interpretations” to interpret and clarify conditions or language expressed in this code.~~

3. ~~Any other rule necessary for the administration of the purpose and intent of this code.~~

**~~70.2 Procedure for Adoption of Rules.))~~**

The ~~((Director))~~ code official shall promulgate, adopt, and issue rules ~~((according to))~~ in accordance with the procedures specified in Chapter 3.02 of the Administrative Code, Seattle Municipal Code.

Section 10. Section 80 of the Seattle Boiler and Pressure Vessel Code, enacted by Ordinance 117723, is amended and renumbered as follows:

**~~((Section 80))~~ 1.5 Construction Codes Advisory Board.**

**1.5.1 General.** A committee of the Construction Codes Advisory Board may examine proposed administrative rules ~~((, appeals))~~ and amendments relating to ~~((the boiler and pressure vessel))~~ this code and related provisions of other codes and make recommendations to the ~~((Director))~~ code official and to the City Council for changes in ~~((the boiler and pressure vessel))~~ this code. The committee will be called ~~((on an))~~ as needed ~~((basis))~~ by the Construction Codes Advisory Board.

Section 11. Section 90 of the Seattle Boiler and Pressure Vessel Code, last amended by Ordinance 121865, is amended and renumbered as follows:

**((Section 90--)) 1.6 Violations, ((and Penalties)) enforcement, and penalties.**

**((90.1)) 1.6.1 Violations.** It is a violation of this code for any person ~~((, firm or corporation))~~ to:

A. Work in violation of code. ~~((install))~~ Install, erect, construct, enlarge, alter, repair, replace, remodel, move, improve, remove, convert or demolish, equip, occupy, use, or maintain any boiler or pressure vessel system or equipment or cause, ~~((or permit))~~ allow, or direct the same to be done in the City, contrary to or in violation of any ~~((of the))~~ provision ~~((s))~~ of this code.

B. Unapproved material or devices. ~~((It is a violation of this code for any person, firm or corporation to use))~~ Use any material or ~~((to))~~ install any device, appliance, or equipment which does not comply with ~~((the applicable standards of))~~ this code or which has not been approved by the ~~((Director))~~ code official.

C. Operating without a license. ~~((It is a violation of this code to have))~~ Have charge of, ~~((or))~~ operate, or permit any ~~((one))~~ person to have charge of, or operate, any boiler or steam engine regulated by this ~~((Code))~~ code without a license to do so ~~((issued by the Director under))~~ as prescribed by SMC Chapter 6.420.

D. Posted notices. Remove, mutilate, destroy, or conceal any notice or order issued or posted by the code official pursuant to the provisions of this

code, or any notice or order issued or posted by the code official in  
response to a natural disaster or other emergency.

E. Requesting inspections. Conduct work under a permit without requesting  
an inspection required by this code.

F. Encouraging violation of code. Knowingly aid, abet, counsel, encourage,  
hire, induce, or otherwise procure another to violate or fail to comply with  
this code;

G. Non-compliance with notice of violation. Failure to comply with a notice  
of violation by the date set by the code official in the notice.

H. Complying with orders of the code official. Fail to comply with any order  
issued by the code official, including but not limited to stop work orders,  
emergency orders, or hazard correction orders.

**((90.2)) 1.6.2 Notice of Violation.** If, after investigation, the ~~((Director))~~ code  
official determines that standards or requirements of this code have been violated,  
or that orders or requirements have not been not complied with, the ~~((Director))~~  
code official may ~~((serve notice))~~ issue a notice of violation upon the owner,  
agent, or other person responsible for the action or condition.

A. Contents of notice of violation. The notice of violation shall state:

1. ~~((the))~~ The standards or requirements violated; ~~((shall state what))~~
2. What corrective action, if any, is necessary to comply; ~~((with the  
standards or requirements,))~~ and ~~((shall set))~~
3. Set a reasonable ~~((time))~~ date certain for compliance.

1           B.     Serving notice of violation. The notice shall be served upon the owner,  
2                 agent, or other responsible person by personal service (~~((, registered mail or~~  
3                 ~~certified mail with return receipt requested))~~ or regular first class mail,  
4                 addressed to the last known address of such person, or if no address is  
5                 available after reasonable inquiry, the notice shall be posted in a  
6                 conspicuous place on the premises. The notice may also be posted on the  
7                 premises at any time. (~~((The notice of violation shall be considered an~~  
8                 ~~order of the Director.))~~) Nothing in this subsection (~~((shall be deemed to))~~)  
9                 limits or precludes any action or proceeding (~~((pursuant to Sections 30 or~~  
10                ~~120 of))~~) to enforce this code, and nothing in this section (~~((shall be deemed~~  
11                ~~to))~~) obligates or requires the (~~((Director))~~) code official to issue a notice of  
12                violation prior to the imposition of civil or criminal penalties, (~~((in this~~  
13                ~~section.))~~)

14           C.     Code official review. Any person affected by a notice of violation issued  
15                 pursuant to this Section 1.6.2 may obtain a review of the notice by making  
16                 a request in writing to the code official within 10 days after service of the  
17                 notice. When the last day of the period computed is a Saturday, Sunday, or  
18                 City holiday, the period runs until 5 p.m. of the next business day.

19           D.     Review procedure. The review shall occur not less than 10 or more than  
20                 20 days after the request is received by the code official unless otherwise  
21                 agreed to by the person requesting the review. Any person affected by the  
22                 notice of violation may submit additional information to the code official.  
23                 The review shall be made by a representative of the code official who will

review any additional information that is submitted and the basis for  
issuance of the notice of violation. The reviewer may request clarification  
of the information received and perform a site visit.

E. Decision. After the review, the code official shall render one of the  
following four decisions:

1. Sustain the notice of violation;
2. Withdraw the notice of violation;
3. Amend the notice of violation; or
4. Continue the review of the notice of violation to a date certain.

F. Order. The code official shall issue an order containing the decision within  
15 days after the review is completed and shall cause the order to be sent  
by regular first class mail to the person or persons requesting the review,  
to any person on whom the stop work order was served, and to any other  
person who requested a copy before issuance of the order, addressed to  
their last known address.

**1.6.3 Stop work orders.** The code official may issue a stop work order whenever  
any work is being done without a permit, contrary to the provisions of this code,  
contrary to a permit issued by the code official, or in the event of dangerous or  
unsafe conditions related to equipment, construction, or demolition of boilers or  
pressure vessels.

A. Violation identified. The stop work order shall identify the violation or  
unsafe condition and may prohibit work or other activity on the site.

1           B.       Serving the stop work order. The code official shall serve the stop work  
2                   order by posting it on the premises in a conspicuous place at the site. If  
3                   posting is not physically possible, the stop work order may be served by  
4                   personal service or by regular first class mail to the last known address of  
5                   the person doing or causing the work to be done, the property owner, or  
6                   the holder of a permit if the work is being stopped on a permit. For  
7                   purposes of this section, service is complete at the time of posting or  
8                   personal service or, if mailed, three days after the date of mailing. When  
9                   the last day of the period so computed is a Saturday, Sunday, or City  
10                  holiday, the period runs until 5 p.m. on the next business day.

11          C.       Stop work order effective date. Stop work orders are effective when  
12                   posted, or if posting is not physically possible, when one of the persons  
13                   identified in Section 1.6.2(B) is served.

14          D.       Work after stop work order. It is unlawful for any person to engage in  
15                   work or to cause work to continue until authorization from the code  
16                   official is received.

17          E.       Administrative review of stop work orders. Any person aggrieved by a  
18                   stop work order may obtain a review of the order by delivering to the code  
19                   official a written request for review within two business days of the date  
20                   of service of the stop work order.

21            1.       Review procedure. The review shall occur within two business  
22                   days after receipt by the code official of the request for review  
23                   unless otherwise agreed by the person making the request. Any

1 person affected by the stop work order may submit additional  
2 information to the code official for consideration as part of the  
3 review at any time prior to the review. The review will be made by  
4 the code official, who will review all additional information  
5 received and may also request a site visit.

6 2. Decision. After the review, the code official may:

- 7 a. Sustain the stop work order;  
8 b. Withdraw the stop work order;  
9 c. Modify the stop work order; or  
10 d. Continue the review to a date certain.

11 3. Issuing order. The code official shall issue an order containing the  
12 decision within two business days after the review is completed  
13 and shall cause the order to be sent by regular first class mail to the  
14 person or persons requesting the review, any person on whom the  
15 stop work order was served, and any other person who requested a  
16 copy before issuance of the order, addressed to their last known  
17 address.

18 **1.6.4 Authority to disconnect utilities in emergencies.** The code official has the  
19 authority to:

- 20 A. Disconnect fuel-gas utility service or energy supplied to a building,  
21 structure, premises, or equipment regulated by this code in cases of  
22 emergency when necessary to eliminate an immediate hazard to life or  
23 property.

1           B.       Enter any building or premises to disconnect utility service.

2           Whenever possible the code official shall notify the serving utility, owner, and  
3           occupant of the building, structure, or premises of the decision to disconnect prior  
4           to taking such action, and shall notify the serving utility, owner, and occupant of  
5           the building, structure, or premises in writing of such disconnection immediately  
6           after the disconnection.

7           **1.6.5 Reconnection.** Until the code official authorizes reconnection of equipment,  
8           it is a violation to:

9           A.       Make connections from an energy, fuel, or power supply or supply energy  
10           or fuel to any equipment regulated by this code that is disconnected or  
11           ordered to be disconnected by the code official; and

12           B.       Use the equipment ordered to be disconnected, until the code official  
13           authorizes the reconnection and use of such equipment.

14           **1.6.6 Authority to condemn equipment.** Whenever the code official determines  
15           that any equipment or portion thereof regulated by this code is hazardous to life,  
16           health, or property, the code official shall order in writing that such equipment be  
17           disconnected, removed, or restored to a safe or sanitary condition. The written  
18           notice shall fix a date certain for compliance with such order. It is a violation for  
19           any person to use or maintain defective equipment after receiving such notice.

20           When any equipment or installation is to be disconnected, the code official  
21           shall give written notice of such disconnection and causes therefor within 24  
22           hours to the serving utility, the owner, and the occupant of the building, structure,  
23           or premises. When any equipment is maintained in violation of this code, and in

1 violation of a notice issued pursuant to the provisions of this section, the code  
2 official shall institute any appropriate action to prevent, restrain, correct, or abate  
3 the violation.

4 **1.6.7 Emergency order.** Whenever the code official finds that any equipment  
5 regulated by this code is so unsafe as to constitute an imminent hazard to life or  
6 limb, the code official may issue an emergency order. The emergency order may  
7 1) direct that the equipment be restored to a safe condition by a date certain; 2)  
8 require that the building, structure, or premises, or portion thereof, containing the  
9 equipment be vacated within a reasonable time to be specified in the order, or in  
10 the case of extreme danger, the order may specify immediate vacation of the  
11 building, structure, or premises, or portion thereof; or 3) authorize immediate  
12 disconnection of the utilities or energy source.

13 A. Service of emergency order. The emergency order shall be posted on the  
14 premises or personally served to the owner of the building or premises or  
15 any person responsible for the condition. The order shall specify the time  
16 for compliance.

17 B. Effect of emergency order. No person may occupy a building, structure, or  
18 premises, or portion thereof, after the date on which the building is  
19 required to be vacated until the building, structure, or premises, or portion  
20 thereof, is restored to a safe condition as required by the order and this  
21 code. It is a violation for any person to fail to comply with an emergency  
22 order issued by the code official. When any equipment is operated in  
23 violation of this code, or in violation of an order issued pursuant to the

provisions of this section, the code official may begin an action to prevent, restrain, correct, or abate the violation.

**1.6.8 Hazard correction order.** Whenever the code official finds that unsafe equipment exists, the code official may issue a hazard correction order. The order shall: 1) state the conditions causing the equipment to be unsafe, 2) direct the owner or other persons responsible for the unsafe equipment to correct the condition, and 3) give a date certain for completing the required corrections. In lieu of correction, the owner may submit a report or analysis of the conditions to the code official establishing that the equipment is, in fact, safe. The code official may require that the report or analysis be prepared by a licensed engineer; the code official may accept the report as adequate or may reject the report as insufficient.

A. Service of hazard correction order. The order shall be served upon the owner, agent, or other responsible person by personal service or regular first class mail addressed to the last known address of such person, or if no address is available after reasonable inquiry, the order may be posted in a conspicuous place on the premises. The order may also be posted on the premises if it is also being served by personal service or first class mail.

B. Effect of hazard correction order. It is a violation for any person to fail to comply with a hazard correction order as specified in this subsection.

**1.6.9 Recording.** The code official may record a copy of any order or notice with the Department of Records and Elections of King County.

1            ~~((90.3))~~ **1.6.10 Civil penalties.** Any person (~~((, firm or corporation))~~) violating or  
2            failing to comply with the provisions of this code (~~((shall be))~~) is subject to a  
3            cumulative civil penalty in an amount not to exceed \$500 per day for each  
4            violation from the date the violation occurs or begins until compliance is  
5            achieved. In cases where the (~~((Director))~~) code official has issued a notice of  
6            violation, the violation will be deemed to begin, for purposes of determining the  
7            number of days of violation, on the date compliance is required by the notice of  
8            violation.

9            A.        Enforcement in Municipal Court. Civil actions to enforce Section  
10           22.450.010 of the Seattle Municipal Code (SMC) shall be brought  
11           exclusively in Seattle Municipal Court, except as otherwise required by  
12           law or court rule. In any civil action for a penalty, the City has the burden  
13           of proving by a preponderance of the evidence that a violation exists or  
14           existed. The issuance of a notice of violation or of an order following  
15           review by the code official is not itself evidence that a violation exists.

16           B.        Judicial review. Because civil actions to enforce 22.450.010 of the Seattle  
17           Municipal Code (SMC) must be brought exclusively in Seattle Municipal  
18           Court pursuant to subsection 1.6.10.A, orders of the code official,  
19           including notices of violation issued under this chapter, are not subject to  
20           judicial review pursuant to Revised Code of Washington (RCW) Chapter  
21           36.70C, Judicial Review of Land Use Decisions.

22           C.        Appeal to Superior Court. Final decisions of the Seattle Municipal Court  
23           on enforcement actions authorized by 22.450.010 of the Seattle Municipal

Code (SMC) and this code may be appealed pursuant to the Rules for  
Appeal of Decisions of Courts of Limited Jurisdiction.

~~((90.4 Criminal Penalty))~~ **1.6.11 Alternative criminal penalty.** Anyone  
~~((violating or failing))~~ who violates or fails to comply with any notice of violation  
or order issued by the ~~((Director))~~ code official pursuant to this code or who  
removes, mutilates, destroys, or conceals a notice or order issued or posted by the  
~~((Director))~~ code official shall, upon conviction thereof, be punished by a fine of  
not more than ~~(((\$1,000))~~ \$5,000 or by imprisonment for not more than ~~((360))~~  
364 days, or by both ~~((such))~~ fines and imprisonment for each separate violation.  
If the violation continues to exist, each ~~((Each))~~ day ~~(('s))~~ the violation or failure  
to comply is continued shall constitute a separate offense.

~~((90.5))~~ **1.6.12 Additional Relief.** The ~~((Director))~~ code official may seek legal or  
equitable relief to enjoin any acts or practices and abate any condition ~~((which~~  
constitutes a violation of this code when civil or criminal penalties are inadequate  
to effect)) when necessary to achieve compliance.

**1.6.13 Administrative review by the code official.** Prior to issuance of the boiler  
or pressure vessel permit, applicants may request administrative review by the  
code official of decisions or actions pertaining to the administration and  
enforcement of this code. Requests shall be addressed to the code official.

**1.6.14 Construction Codes Advisory Board (CCAB) Review.** After completion  
of an administrative review by the code official, and prior to issuance of the boiler  
or pressure vessel permit, applicants may request a review of the code official's

decisions or actions pertaining to the application and interpretation of this code by the Construction Codes Advisory Board.

The review will be performed by three or more members of the Construction Codes Advisory Board, chosen by the board chair. The chair shall consider the subject of the review and members' expertise when selecting members to conduct a review. The decision of the CCAB committee is advisory only. The final decision is made by the code official.

**Exception:** Stop work orders, notices of violations and revocations of permits shall not be subject of a Construction Codes Advisory Board review.

Section 12. Section 100 of the Seattle Boiler and Pressure Vessel Code, last amended by Ordinance 121865, is repealed:

~~((Section 100—Exemptions from this Code~~

~~The following boilers and pressure vessels and other equipment shall not be required to comply with this code:~~

~~A. — In other than Group A, E, and I occupancies, listed potable hot water heaters, listed combination hot water heaters, (fired, electric, thermal, solar, and indirect) and listed pool heaters, provided none of the following limitations are exceeded:~~

~~A heat input of 200,000 Btu/h, or~~

~~A water temperature of 210°F, or~~

~~A nominal water-containing capacity of 120 gallons, or~~

~~A pressure of 160 pounds per square inch.~~

1        ~~B. — In Groups A, E, and I occupancies, listed potable water heaters, listed~~  
2                ~~combination hot water heaters, (fired, electric, thermal, solar, and indirect) and~~  
3                ~~listed pool heaters are required to comply with only Section 230 of this code.~~

4        ~~C. — Portable unfired pressure vessels subject to regular inspection by State of~~  
5                ~~Washington (RCW 70.79).~~

6        ~~D. — I.C.C. and D.O.T. regulated containers and/or pressure vessels.~~

7        ~~E. — Containers for liquefied petroleum gases which are regulated by the Seattle Fire~~  
8                ~~Code.~~

9        ~~F. — Unfired pressure vessels located in Groups B, F, H, M, R, S, and U Occupancies~~  
10                ~~having a volume of 5 cubic feet or less and operated at pressures not exceeding~~  
11                ~~250 psi.~~

12        **Exceptions:**

13        ~~a. — Expansion tanks exempted for size in Section 100 of this code shall~~  
14                ~~conform to the requirements of ASME Section IV, HG-709 applicable~~  
15                ~~edition together with applicable addenda.~~

16        ~~b. — Unfired pressure vessels containing lethal substances are not exempted.~~

17        ~~G. — Unfired pressure vessels and potable hot water heaters when they are:~~

18                ~~1. — less than 1 ½ cubic feet (11.25 gallons) in volume with safety valve setting~~  
19                ~~of 150 psi or less, or~~

20                ~~2. — less than 6 inches in internal diameter, and less than 5 cubic feet (37.5~~  
21                ~~gallons) in volume with a safety valve set at any pressure.~~

22        **Exception:** ~~Unfired pressure vessels containing lethal substances are not~~  
23                ~~exempted.~~

H. ~~Unfired pressure vessels of any size that are protected by approved pressure relief devices set to operate at a pressure not exceeding 15 psi.~~

**Exception:** ~~Pressure vessels receiving condensate capable of flashing to high pressure steam shall comply with Section 350 of this code.~~

I. ~~Any boiler or pressure vessel subject to regular inspection by federal inspectors or licensed by federal authorities.~~

J. ~~Electric boilers that meet all of the following criteria:~~

1. ~~Having a vessel volume not exceeding one and one half cubic feet; and~~

2. ~~Having a maximum allowable working pressure of one hundred (100) psi;~~

~~and~~

3. ~~If constructed after June 10, 1994, constructed to the American Society of~~

~~Mechanical Engineers Boiler and Pressure Vessel Code, or listed or~~

~~otherwise certified by a nationally recognized testing agency or~~

~~recognized foreign testing laboratory.~~

K. ~~Water storage tanks with no air cushion and no energy or heat source.))~~

Section 13. Section 110 of the Seattle Boiler and Pressure Vessel Code, enacted by Ordinance 117723, is repealed:

**((Section 110—Workmanship**

~~All equipment, appurtenances, devices and piping shall be installed in a workmanlike~~

~~manner, in accordance with recognized engineering practice and in conformity with the~~

~~provisions and intent of this code.))~~

Section 14. Section 120 of the Seattle Boiler and Pressure Vessel Code, last amended by Ordinance 121865, is amended and renumbered as follows:

~~((Section 120 – Application to Existing Boiler and Pressure Vessel Systems~~

~~120.1))~~ **1.7 Existing Installations.**

**1.7.1 Existing boilers and pressure vessels.** Boiler and pressure vessel systems lawfully in existence at the time of the adoption of this code may continue ~~((to be used,))~~ in use at the location approved by permit. The systems may be maintained or repaired, converted to another type of fuel, or have components replaced if the use, maintenance, ~~((or))~~ repair, conversion of fuel, or component replacement is done in accordance with the original code of construction and/or installation requirements design ~~((and location and no hazard to life, health or property has been created by such boiler and pressure system))~~ when approved by the code official.

~~((120.2))~~ **1.7.2 Maintenance of existing installations.** All boiler and pressure vessel systems, materials and appurtenances, and parts, both existing and new, ~~((and all parts thereof))~~ shall be maintained in proper operating condition in accordance with the original design and in a safe and hazard-free condition. All devices or safeguards ~~((which are))~~ required by ~~((this code))~~ the Seattle Boiler and Pressure Vessel Code shall be maintained in conformance with the code edition ~~((under which))~~ in effect when the system was installed, and boilers and pressure vessels shall be maintained in accordance with the manufacturer's instructions or nationally recognized standards. The owner or the owner's designated agent ~~((shall be))~~ is responsible for maintenance of boiler and pressure vessel systems

1 and equipment. ~~((Boilers and pressure vessels shall be maintained in accordance~~  
2 ~~with the manufacturer's instructions or nationally recognized standards.))~~ To  
3 determine compliance with this subsection, the ~~((Director))~~ code official may  
4 ~~((cause))~~ require a boiler or pressure vessel or equipment to be inspected or re-  
5 inspected.

6 **Exception:** The code official may modify the requirements of this section  
7 where all or a portion of the building is unoccupied.

8 ~~((120.3))~~ **1.7.3 Changes in ((Building or Occupancy)) existing building or**  
9 **occupancy.** ~~((Boiler))~~ Existing boiler and pressure vessel systems ~~((which))~~ that  
10 are a part of ~~((any))~~ a building or structure housing a vessel undergoing a change  
11 in use or occupancy, as defined in the International Building Code, shall comply  
12 with all requirements of this code ~~((which may be))~~ that are applicable to the new  
13 use or occupancy. If the use of the boiler or pressure vessel changes, then a new  
14 permit may be required and the equipment shall comply with all requirements of  
15 this code.

16 ~~((120.4 Historic Buildings and Structures.))~~ **1.7.4 Landmarks.** ~~((Historic~~  
17 ~~buildings and structures.))~~ The ~~((Director))~~ code official may modify the specific  
18 requirements of this code as it applies to ~~((buildings and structures designated as))~~  
19 landmarks ~~((of historical or cultural importance))~~ and require in lieu thereof  
20 alternate requirements ~~((which))~~ that, in the opinion of the ~~((Director))~~ code  
21 official, will result in a reasonable degree of safety to the public and the occupants  
22 of those buildings.

1                   ((A historic building or structure is one which has been designated for  
2                   preservation by the City Landmarks Preservation Board or the State of  
3                   Washington, has been listed, or has been determined eligible to be listed, on the  
4                   National Register of Historic Places, has been officially nominated for such  
5                   status, or is a structure contributing to the character of a designated landmark or  
6                   special review district.))

7                   Section 15. Section 130 of the Seattle Boiler and Pressure Vessel Code, enacted by  
8                   Ordinance 117723, is amended and renumbered as follows:

9                   **((Section 130 – Alternate Materials and Methods of Construction)) 1.8 Alternative**  
10                  **materials, designs, and methods of construction.** This code does not prevent the use of  
11                  any material, ((alternate)) alternative design, or method of construction not specifically  
12                  allowed or prohibited by this code, provided the alternate ((has been)) is approved and its  
13                  use is authorized by the ((Director)) code official.

14                  The ((Director)) code official may approve an ((alternate, provided)) alternative if  
15                  the ((Director finds that the)) proposed ((alternate)) alternative complies with the intent of  
16                  this code and that the ((alternate)) alternative, when considered together with other safety  
17                  features of the building or other relevant circumstances, ((will)) provides at least an  
18                  equivalent level of strength, effectiveness, fire resistance, durability, sanitation, and  
19                  safety.

20                  The ((Director)) code official may require that sufficient evidence or proof be  
21                  submitted to reasonably substantiate any claims regarding the use or suitability of the  
22                  ((alternate)) alternative. Acceptance of a Construction Code Advisory Board  
23                  recommendation may be considered sufficient evidence by the code official to approve

1 the alternative material, design, or method of construction. The ~~((Director))~~ code official  
2 may, but is not required to, record the approval of ~~((modifications))~~ alternatives and any  
3 relevant information in the files of the ~~((Director))~~ code official or on the approved  
4 permit plans.

5 Section 16. Section 140 of the Seattle Boiler and Pressure Vessel Code, enacted by  
6 Ordinance 117723, is amended and renumbered as follows:

7 ~~((Section 140--))~~ **1.9 Modifications.** The ~~((Director))~~ code official may modify the  
8 requirements of this code for individual cases provided ~~((the Director finds))~~ :

9 ~~((1))~~ 1. There ~~((there))~~ are practical difficulties ~~((involved))~~ in ~~((carrying out the~~  
10 ~~provisions))~~ complying with the requirements of this code;

11 ~~((2))~~ 2. The ~~((the))~~ modification is in conformity with the intent and purpose of this  
12 code; and

13 ~~((3))~~ 3. The ~~((the))~~ modification ~~((will))~~ provides a reasonable level of strength,  
14 effectiveness, fire ~~((protection and structural integrity))~~ resistance, durability,  
15 sanitation, and safety when considered together with other safety features of  
16 the building or other relevant circumstances.

17 The ~~((Director))~~ code official may, but is not required to, record the approval of  
18 modifications and any relevant information in the files of the ~~((Director))~~ code official or  
19 on the approved ~~((permit plans))~~ set of construction documents.

20 Section 17. Section 150 of the Seattle Boiler and Pressure Vessel Code, last amended by  
21 Ordinance 121865, is amended and renumbered as follows:

22 ~~((Section 150--))~~ **1.10 Tests.** ~~((Whenever))~~ If there is insufficient evidence of compliance  
23 with the ~~((provisions))~~ requirements of this code, or evidence that a material or method

1 does not conform to the requirements of this code, ~~((or in order to substantiate claims for~~  
2 ~~alternate materials or methods;))~~ the ~~((Director))~~ code official may require that tests, as  
3 ~~((evidence))~~ proof of compliance, ~~((to))~~ be made at no expense to the City. Test methods  
4 shall be ~~((as))~~ those specified in this code or by other recognized test standards. ~~((In the~~  
5 ~~absence of))~~ If there are no recognized and accepted test methods for the proposed  
6 alternative or modification, the ~~((Director))~~ code official shall ~~((specify the required~~  
7 ~~testing or examination methods and))~~ determine the test procedures. ~~((Tests))~~ All tests  
8 shall be ~~((performed))~~ made by an agency approved by the ~~((Director))~~ code official.  
9 ~~((Reports))~~ The agency shall provide a report of tests or examination results, and those  
10 results shall be retained by the ~~((Director))~~ code official for the period required for  
11 retention of public records.

12 Section 18. Section 160 of the Seattle Boiler and Pressure Vessel Code, last amended by  
13 Ordinance 121865, is amended and renumbered as follows:

14 **Section ~~((160))~~ 2 - Definitions.**

15 **2.1 Scope.** The following words and terms shall, for the purposes of this code, have the  
16 meanings given in this section.

17 **2.2 Interchangeability.** Words used in the present tense include the future; words in the  
18 masculine gender include the feminine and neuter; the singular number includes the  
19 plural and the plural the singular.

20 **2.3 Terms defined in other codes.** ~~((Certain words and terms used in this code, unless~~  
21 ~~clearly inconsistent with their context, shall have the meanings given below. When a~~  
22 ~~definition is not found below, the definitions of the American Society of Mechanical~~  
23 ~~Engineers' CSD-1-1998. Controls and Safety Devices for Automatically Fired Boilers~~

(CSD-1, see Section 170) shall be used.) Terms used but not defined in this code but defined in the *International Building Code, International Fire Code, Seattle Electrical Code, International Fuel Gas Code, Uniform Plumbing Code, or the American Society of Mechanical Engineers (ASME) Standard CSD-1 Controls and Safety Devices for Automatically Fired Boilers* shall be used. When a definition is found here and in ASME CSD-1, the definition given in this code shall govern.

**2.4 Terms not defined.** When a definition is not found below, the definitions of terms found in the codes and standards listed in Section 3.1 of this code shall govern.

**“A” OCCUPANCIES** are places of public assembly. Details can be found in ((the International)) Seattle Building Code ((Section 303.1)) Chapter 3.

**ACCESSIBLE** ((is)) means having access to ((but which first may require)) and includes the removal of an access panel, door, or similar obstruction ((covering the item described)) designed for removal.

**ACCESSIBLE, READILY** ((is)) means capable of being reached safely and quickly for operation, repair, or inspection without ((requiring those to whom ready access is requisite to climb)) climbing over or ((remove)) removing obstacles, or ((to resort)) resorting to the use of portable access equipment.

**APPLIANCE** ((is)) means a device which utilizes fuel or other forms of energy to produce light, heat, power, refrigeration or air conditioning, ((-This definition includes)) including vented decorative appliances.

**APPROVED** ((is approval)) means accepted by the ((Director)) code official.

1       **APPROVED AGENCY** ~~((is an established and recognized))~~ means an agency approved  
2       by the code official that is regularly engaged in conducting tests, examinations, or  
3       furnishing inspection services. ~~((when such agency has been approved by the Director.))~~

4       ASME is the acronym for American Society of Mechanical Engineers.

5       **ATTENDANT** means the person in charge of the operation of a boiler or unfired  
6       pressure vessel.

7       **AUTOMATIC CERTIFICATION PERMIT** means a permit used to modify the  
8       licensed attendance requirements for a specific boiler. (See Steam Engineer and Boiler  
9       Fireman License Law, Seattle Municipal Code Chapter 6.420.)

10       **"B" OCCUPANCIES** are business uses, such as offices. Details can be found in ~~((the~~  
11       ~~International))~~ Seattle Building Code ((Section 304.1)) Chapter 3.

12       **BOILER** ~~((is))~~ means a closed vessel in which water is heated, steam is generated, steam  
13       is superheated, or any combination thereof, under pressure or vacuum by the direct  
14       application of heat, ~~((The term boiler shall also include))~~ including fired units for  
15       heating or vaporizing liquids other than water where these systems are complete within  
16       themselves.

17       **BOILER ROOM** ~~((is))~~ means any room primarily used to house a boiler.

18       **BOILER, CERTIFIED AS AUTOMATIC** ~~((is either a boiler installed prior to the~~  
19       ~~adoption of CSD-1 which complies with Section 320 and Table 320-A of this code and~~  
20       ~~for which an automatic certification installation permit has been finalized, or any other~~  
21       ~~boiler installed after the adoption of CSD-1 for which an automatic certification permit~~  
22       ~~has been finalized which is used to modify the licensed attendance requirements for~~  
23       ~~specific boiler(s))~~ means a boiler that complies with Section 4.25 of this code, has an

1 automatic certification permit that passed final inspection and is used to modify the  
2 licensed attendant requirements for a specific boiler. (See “Steam Engineer and Boiler  
3 Fireman License Law”, Seattle Municipal Code Chapter 6.420).

4 **BOILER, CERTIFIED AS MONITORED** ((is)) means a boiler ((which)) that  
5 complies with ((the provisions of Section 320 and Section 330)) Section 4.26 of this code  
6 ((which)) and is used to modify the licensed ((attendance)) attendant requirements for a  
7 specific ((boilers)) boiler. (See “Steam Engineer and Boiler Fireman License Law”,  
8 Seattle Municipal Code Chapter 6.420.)

9 ~~((BOILER, CONDENSING is a boiler which condenses part of the water vapor~~  
10 ~~generated by the burning of hydrogen in fuels.))~~

11 **BOILER, HOT-WATER SUPPLY** ((is-a)) means a listed potable water boiler,  
12 exceeding ((any of)) the limitations of ((Section 100 paragraph A)) a potable hot water  
13 heater, but ((not exceeding)) that does not exceed a pressure of 160 psi (1100 kPa) or a  
14 temperature of 250 ((°F.)) degrees F (121 ((°)) degrees C), that provides hot water to be  
15 used externally to itself.

16 **BOILER, LOW-PRESSURE HOT-WATER-HEATING** ((is)) means a boiler ((from

17 ~~which hot water is circulated))~~ that circulates hot water for heating purposes at pressures  
18 not exceeding 160 pounds per square inch (1100 kPa) and at temperatures not exceeding  
19 250 ((°F.)) degrees F (121 ((°)) degrees C), and the water is then typically returned to the  
20 boiler.

21 **BOILER, LOW-PRESSURE STEAM-HEATING** ((is)) means a boiler furnishing  
22 steam for heating purposes at pressures not exceeding 15 pounds per square inch (103  
23 kPa).

1        ~~((BOILER, NON CODE is a boiler not constructed in accordance with the codes listed~~  
2        ~~in Section 170 of this code.~~

3        ~~BOILER, PACKAGE is any class of boiler defined herein and shall be a boiler~~  
4        ~~equipped and shipped listed as a boiler burner unit complete with fuel burning~~  
5        ~~equipment, automatic controls and accessories, and mechanical draft equipment, if~~  
6        ~~used.))~~

7        **BOILER, POWER HOT-WATER (HIGH-TEMPERATURE WATER BOILER)**

8        ((is)) means a boiler used for heating water or liquid to a pressure exceeding 160 psi  
9        (1100 kPa) or to a temperature exceeding 250 ((°F-)) degrees F (121 ((°)) degrees C).

10       **BOILER, POWER** ((is)) means a boiler ((in which)) that generates steam or vapor ((is  
11       generated)) at pressures exceeding 15 psi.

12       **BOILER, RENTAL** ((is)) means any type of boiler that is owned by an entity for the  
13       purpose of renting to other entities for temporary or long-term usage.

14       **BOILER, USED** ((shall mean)) means any boiler ((that is to be)) installed in Seattle that  
15       ((has been)) was in ((any)) previous service.

16       **BUILDING CODE** ((is)) means the Seattle Building Code.

17       **BURNER** ((is)) means a device ((to)) that conveys fuel and air ((/)) or steam into the  
18       combustion chamber of a boiler ((and)) to cause and maintain stable combustion.

19       **CHIMNEY** ((is)) means a primarily vertical structure containing one or more flues, for  
20       the purpose of carrying gaseous products of combustion and air from a fuel-burning  
21       appliance to the outside atmosphere.

1 **CODE OFFICIAL** is the Director of the Seattle Department of Construction and  
2 Inspections and the Director's designees, which include the Chief Pressure Systems  
3 Inspector and other authorized representatives.

4 **COMBUSTION AIR ((is))** means the air necessary for complete combustion of a fuel,  
5 including theoretical air and excess air.

6 ~~((CONFINED SPACE is a room or space having a volume less than 50 cubic feet per~~  
7 ~~1,000 Btu/h (4.83 L/W) of the aggregate input rating of all fuel-burning appliances~~  
8 ~~installed in that space.))~~

9 **DEPARTMENT** means the Seattle Department of Construction and Inspections.

10 ~~((DIRECT-VENT APPLIANCES are appliances which are constructed and installed so~~  
11 ~~that all air for combustion is derived from the outside atmosphere and all flue gases are~~  
12 ~~discharged to the outside atmosphere.~~

13 ~~**DIRECTOR** is the Director of the Department of Planning and Development and the~~  
14 ~~Director's authorized representatives.))~~

15 **DRAFT HOOD ((is))** means a nonadjustable device built into an appliance or made a  
16 part of the vent connector from an appliance, which is designed to:

- 17 1. Provide for the ready escape of the flue gases in the event of no draft, backdraft or  
18 stoppage beyond the draft hood;
- 19 2. Prevent a backdraft from entering the appliance; and
- 20 3. Neutralize the effect of stack action of the chimney or gas vent upon the operation  
21 of the appliance.

1       **DUCT** ~~((is))~~ means a tube or conduit for ~~((transmission of))~~ conveying air. ~~((This~~  
2       ~~definition shall not include the air passages of listed self-contained systems.))~~ The air  
3       passages of listed self-contained systems are not to be construed as air ducts.

4       **“E” OCCUPANCIES** are educational facilities. Details can be found in ~~((International))~~  
5       Seattle Building Code ((Section 305)) Chapter 3.

6       **ELECTRICAL CODE** is the Seattle Electrical Code.

7       **EXTERNAL INSPECTION** means an inspection of the outside and fireside of the  
8       boiler, including safety controls.

9       **“F” OCCUPANCIES** are factory and industrial uses. Details can be found in  
10       ~~((International))~~ Seattle Building Code ((Section 306)) Chapter 3.

11       **FIRE CODE** is the Seattle Fire Code.

12       **FUEL TRAIN** ~~((is))~~ means a series of valves, regulators, and controls, between the  
13       burner and the source of fuel, that regulates and controls the flow of fuel to the burner.

14       **“H” OCCUPANCIES** are high hazard uses. Details can be found in ~~((International))~~  
15       Seattle Building Code ((Section 307)) Chapter 3.

16       **HOT WATER HEATER, COMBINATION** means a potable hot water heater that is  
17       listed for the use of producing both space heat and potable hot water and includes only  
18       those appliances that do not exceed 210 degrees F (99 degrees C), maximum allowable  
19       working pressure (MAWP) of 160 psi (1103 kPa), volume of 120 gallons (454 L), or a  
20       heat input of 200,000 Btu/hr (58.6 kW). Appliances and equipment that exceed any one  
21       of these values are classified as boilers. The heat source for the equipment may be fired,  
22       electric, thermal, solar, or indirect.

1 **HOT WATER HEATER, POOL** means a potable hot water heater that is listed for use  
2 of heating water for pools, spas, saunas, and similar equipment and only includes those  
3 appliances that do not exceed 210 degrees F (99 degrees C), maximum allowable  
4 working pressure (MAWP) of 160 psi (1103 kPa), volume of 120 gallons (454 L), or a  
5 heat input of 200,000 Btu/hr (58.6 kW). Appliances and equipment that exceed any one  
6 of these values are classified as boilers.

7 **HOT WATER HEATER, POTABLE (FIRED, ELECTRIC, THERMAL, SOLAR,**  
8 **AND INDIRECT)** means any heating appliance or equipment that is listed for the use of  
9 heating potable water and supplies such water to the potable hot water distribution  
10 system, and includes only those appliances that do not exceed 210 degrees F (99 degrees  
11 C), maximum allowable working pressure (MAWP) of 160 psi (1103 kPa), volume of  
12 120 gallons (454 L), or a heat input of 200,000 Btu/hr (58.6 kW). Appliances and  
13 equipment that exceed any one of these values are classified as boilers.

14 **"I" OCCUPANCIES** are medical and institutional facilities. Details can be found in  
15 ((International)) Seattle Building Code ((Section 308)) Chapter 3.

16 **INSPECTOR** ((, depending on context, is)) means any of the inspector types defined by  
17 this code, ((as appropriate)) who examine internal and external boiler and pressure vessel  
18 parts and surfaces and who test the function of operating controls and safety devices for  
19 correct operation.

20 **INSPECTOR, CHIEF** ((is)) means the chief pressure systems inspector appointed by  
21 the ((Director)) code official.

22 **INSPECTOR, CITY** ((is)) means an inspector employed by the ((City of Seattle))  
23 Department.

1       **INSPECTOR, INSURANCE** ~~((is))~~ means an inspector employed by an ~~((Authorized~~  
2       ~~Insurance Company))~~ authorized insurance company as defined in this code.

3       **INSURANCE COMPANY, AUTHORIZED** ~~((is))~~ means an insurance company that  
4       has been authorized by the State of Washington to write and provide insurance coverage  
5       for loss of boilers or unfired pressure vessels.

6       **INTERNAL INSPECTION** means an inspection requiring that the water side of the  
7       boiler be looked at visually.

8       **JACKETED STEAM KETTLE** means a pressure vessel, with inner and outer walls,  
9       that is subject to steam pressure and is used to boil or heat liquids or to cook food.

10       ~~((JOINT, BRAZED, is a joint obtained by joining of metal parts with alloys which melt~~  
11       ~~at temperatures higher than 1000°F. (538°C.) but lower than the melting temperature of~~  
12       ~~the parts being joined.~~

13       ~~**JOINT, SOLDERED** is a gas-tight joint obtained by the joining of metal parts with~~  
14       ~~metallie mixtures of alloys which melt at a temperature below 1000°F. (538°C.) and~~  
15       ~~above 400°F. (204°C.);))~~

16       **LETHAL SUBSTANCES** ~~((are))~~ means a poisonous ~~((gases or liquids of such a nature))~~  
17       gas or liquid that in a very small amount is dangerous to life when inhaled or absorbed  
18       through the skin or membranes. It is the responsibility of the user or ~~((his))~~ the user's  
19       designated agent to determine and declare if contents are lethal substances.

20       **LANDMARK** means a building or structure that is subject to a requirement to obtain a  
21       certificate of approval from the City Landmarks Preservation Board before altering or  
22       making significant changes to specific features or characteristics, that has been nominated  
23       for designation and the City Landmarks Preservation Board has not issued a

1 determination regarding designation, that has been designated for preservation by the  
2 City Landmarks Preservation Board, that has been designated for preservation by the  
3 State of Washington, that has been listed or determined eligible to be listed in the  
4 National Register of Historic Places, or that is located in a landmark or special review  
5 district subject to a requirement to obtain a certificate of approval before making a  
6 change to the external appearance of a structure.

7 **LICENSED OPERATOR ((is))** means a person licensed to operate boilers in  
8 accordance with the Seattle Steam Engineer and Boiler Fireman License Law, SMC  
9 Chapter 6.420.

10 **LISTED ((is))** means that equipment, ~~((appliances or))~~ materials, products, or services  
11 are included in a list published by ((a nationally recognized testing laboratory, inspection  
12 agency or other organization concerned with product evaluation that maintains periodic  
13 inspection of production of listed equipment, appliances or materials, and whose listing  
14 states either that the equipment, appliances or material meets nationally recognized  
15 standards or has been tested and found suitable for use in a specified manner. Not all  
16 testing laboratories, inspection agencies and other organizations concerned with product  
17 evaluation use the same means for identifying listed equipment, appliances or materials.  
18 Some do not recognize equipment, appliances or materials as listed unless they are also  
19 labeled. The authority having jurisdiction shall utilize the system employed by the listing  
20 organization to identify a listed product.)) an organization acceptable to the code official.  
21 The listing organization provides an evaluation of products or services by performing  
22 periodic inspection during production of equipment or materials, or periodic evaluation of  
23 services. The resulting listing states either that the equipment, material, product, or

1 service meets identified standards, or was tested and found suitable for use in a specified  
2 manner.

3 “**M**” **OCCUPANCIES** are retail and wholesale facilities. Details can be found in  
4 ((International)) Seattle Building Code ((Section 309)) Chapter 3.

5 **MANUALLY OPERATED (FIRED) BOILER ((is))** means a boiler that requires  
6 constant attendance by an operator with no ((other)) duties other than the proper and safe  
7 operation of the boiler and its related equipment when the boiler is in operation.

8 ~~((NONCOMBUSTIBLE MATERIALS are materials that, when tested in accordance~~  
9 ~~with ASTM E 136, have at least three of four specimens tested meeting all of the~~  
10 ~~following criteria:~~

11 1. ~~— The recorded temperature of the surface and interior thermocouples shall not at~~  
12 ~~any time during the test rise more than 54°F (30°C) above the furnace temperature~~  
13 ~~at the beginning of the test.~~

14 2. ~~— There shall not be flaming from the specimen after the first 30 seconds.~~

15 3. ~~— If the weight loss of the specimen during testing exceeds 50 percent, the recorded~~  
16 ~~temperature of the surface and interior thermocouples shall not at any time during~~  
17 ~~the test rise above the furnace air temperature at the beginning of the test, and~~  
18 ~~there shall not be flaming of the specimen.))~~

19 **PERSON** means an individual, receiver, administrator, executor, assignee, trustee in  
20 bankruptcy, trust, estate, firm, partnership, joint venture, club, company, joint stock  
21 company, business trust, municipal corporation, political subdivision of the State of  
22 Washington, corporation, limited liability company, association, society, or any group of

1 individuals acting as a unit, whether mutual, cooperative, fraternal, nonprofit, or  
2 otherwise, and the United States or any instrumentality thereof.

3 **PILOT** ((is)) means a small burner that is used to light ((off)) (ignite) the main burner.

4 **PILOT, CONTINUOUS (also known as constant burning pilot)** ((,is)) means a pilot  
5 that burns without turndown during the entire time the boiler is in service, whether the  
6 main burner is firing or not.

7 **PILOT, INTERMITTENT** ((is)) means a pilot that is automatically lighted each time  
8 there is a call for heat ((-It)) and burns during the entire period the main burner is firing.

9 **PILOT, INTERRUPTED** ((is)) means a pilot that is automatically lighted each time  
10 there is a call for heat. The pilot fuel is cut off automatically ((at the end of)) once the  
11 main burner flame ((-establishing period)) is ignited.

12 ~~((POTABLE WATER HEATERS (FIRED, ELECTRIC, THERMAL, SOLAR,~~  
13 ~~AND INDIRECT)) are closed vessels, listed to a recognized listing agency, in which~~  
14 ~~potable water is heated by the combustion of fuels, electricity, or any other source, and~~  
15 ~~withdrawn for use external to the system and which do not exceed any of the following:~~  
16 ~~A heat input of 200,000 Btu/h, or a water temperature of 210°F, or a nominal water-~~  
17 ~~containing capacity of 120 gallons, or a pressure of 160 pounds per square inch.))~~

18 **PRESSURE VESSEL** ((is)) means a closed unfired container under internal pressure.

19 ~~((PRESSURE VESSEL, NON CODE, is a pressure vessel not constructed in~~  
20 ~~accordance with the codes listed in Section 170 of this code.))~~

21 **PRESSURE VESSEL, USED** ((shall)) means any pressure vessel that is ((to be))  
22 installed in Seattle that ((has been)) was in ((any previous)) service at a previous time.

1       **PURGE** ((is)) means to ((clear of)) blow air, fuel, water, or other foreign substances out  
2       of a container or confined space.

3       **“R” OCCUPANCIES** are residential facilities. Details can be found in ((International))  
4       Seattle Building Code ((Section 310)) Chapter 3.

5       **“S” OCCUPANCIES** are storage facilities. Details can be found in ((International))  
6       Seattle Building Code ((Section 311)) Chapter 3.

7       **“U” OCCUPANCIES** are accessory utility facilities such as private garages and  
8       ((sheds)) greenhouses. Details can be found in ((International)) Seattle Building Code  
9       ((Section 312)) Chapter 3.

10       ((**UNCONFINED SPACE** is a room or space having a volume equal to at least 50 cubic  
11       feet per 1,000 Btu/h (4.831 L/W) of the aggregate input rating of all appliances installed  
12       in that space. Rooms communicating directly with the space in which the appliances are  
13       installed, through openings not furnished with doors, are considered a part of the  
14       unconfined space.))

15       **VENT** ((is)) means a pipe or other conduit composed of factory-made components,  
16       containing a passageway for conveying combustion products and air to the atmosphere,  
17       listed and labeled for use with a specific type or class of appliance.

18       **VENT CONNECTOR** ((is)) means the pipe that connects an approved fuel-fired  
19       appliance to a vent.

Section 19. Section 170 of the Seattle Boiler and Pressure Vessel Code, last amended by Ordinance 121865, is amended and renumbered as follows:

**Section ~~((170))~~ 3 - ~~((Construction and))~~ Applicable Installation ~~((Code Requirements))~~ Codes, Listings, and Standards**

**3.1 Required codes.** Boilers and pressure vessels installed within The City of Seattle shall conform to this code and the minimum manufacturing standards, including any addenda, in effect on the date of manufacture as listed below.

~~((170.1 The construction of boilers and pressure vessels and the installation thereof shall conform to the minimum requirements for safety from structural and mechanical failure and excessive pressures. When any conflict exists))~~

A. Where differences occur between ~~((referenced codes in this section and))~~ the requirements of this code and the codes and standards referenced in Sections 3.1.1.A through 3.1.1.E, the ~~((requirements))~~ provisions of this code ~~((shall prevail))~~ apply.

~~((170.2))~~ **3.1.1 Applicable codes and standards.** ~~((Boilers and pressure vessels installed in the City of Seattle shall comply with))~~

A. The American Society of Mechanical Engineers (ASME) Boiler and Pressure Vessel Code, Sections I, III, IV, VIII, X, and PVHO-1, ~~((of the American Society of Mechanical Engineers' (A.S.M.E.) Boiler and Pressure Vessel Code and the))~~

B. The American National Standards Institute ((A.N.S.I.)) ANSI B31.1.0 Power Piping Code, ~~((together with addenda thereto. Boilers and pressure vessels shall comply with the edition of the code in effect at the~~

time the equipment was manufactured. Where this code calls for construction in accordance with any Section of the A.S.M.E. Boiler and Pressure Vessel Code, the exemptions listed in Section 100 of this code shall prevail over any and all exemptions listed in any Section of the A.S.M.E. Code. Appurtenances that are not within the scope of the A.S.M.E. codes may be constructed to a nationally recognized standard of construction that has been approved by the Director.))

C. Boilers with burner fuel input ratings of 12,500,000 Btu/hour or more shall comply with the fuel train requirements set forth in NFPA 85.

D. Appurtenances that are not within the scope of the ASME construction codes may be constructed to a nationally recognized standard of construction approved by the code official.

E. Jacketed steam kettle vessels that are equal to or greater than 1 ½ cubic feet in volume (11.22 gallons capacity) shall be ASME code stamped.

**3.2 Listing.** Appurtenances, such as safety controls, operating controls, burner assemblies, and fuel trains, shall bear the mark of a recognized listing agency or the appropriate certifications as listed by the manufacturer. Appurtenances shall be installed and operated in accordance with the requirements of the listing or the manufacturer's certification and written instructions. Electrical components and wiring shall bear the mark of a recognized listing agency and have a listing appropriate for the environment of the installation.

~~((170.3 A.S.M.E. CSD-1-2002. Except as otherwise stated herein, all fossil fuel fired boiler installations with fuel input ratings of less than 12,500,000 Btu/hr shall comply~~

1       ~~with the fuel train requirements of A.S.M.E. CSD-1-2002, Controls and Safety Devices~~  
2       ~~for Automatically Fired Boilers (CSD-1), which requirements are hereby adopted and~~  
3       ~~incorporated by reference. Alterations/modifications of existing burner controls require~~  
4       ~~compliance of the entire fuel train with CSD-1.~~

5       **~~170.4 Seattle Modifications to CSD-1.~~** CSD-1 is modified as follows:

6       A. ~~CG-110 Scope, paragraph (b). Chapter 100-A of this code exempts some pool~~  
7       ~~heaters. Those not exempted are not required to comply with CSD-1, but shall~~  
8       ~~comply with all other requirements of this code.~~

9       B. ~~CG-130 Exclusions. Installations of potable hot water heaters and lined hot water~~  
10      ~~supply boilers are not required to comply with CSD-1. However, installation of~~  
11      ~~lined hot water supply boilers shall comply with all other requirements of this~~  
12      ~~code.~~

13      C. ~~CG-220 Installation. CG-220 is adopted with the following modifications or~~  
14      ~~clarifications:~~

15      1. ~~Installation of boilers and burners, and certification of boilers as automatic~~  
16      ~~or monitored shall be done only under permit in compliance with the~~  
17      ~~requirements of Sections 220, 320, and 330 of this code.~~

18      2. ~~When the burner of an existing installation is replaced, or the existing~~  
19      ~~controls of a boiler have been altered or modified, the entire fuel train~~  
20      ~~shall comply with CSD-1.~~

21      3. ~~The requirements of Section 360 of this code shall apply in full.~~

22      4. ~~Under paragraph (d): when modules of a modular boiler are replaced, the~~  
23      ~~replacement shall also comply with the requirements of this code.~~

1        ~~D. — CG-260 Combustion Air. CG-260 is replaced in its entirety by the requirements,~~  
2        ~~of Section 290 of this code and the Seattle Mechanical Code. The following shall~~  
3        ~~apply when combustion air is provided by means other than natural air~~  
4        ~~circulation:~~

5        1. — ~~Louvers and grilles that are not fixed in the full open position shall be~~  
6        ~~interlocked with the boiler(s) so that the boiler(s) will not start the pre-~~  
7        ~~purge cycle unless the louvers/grilles are in the full open position. The~~  
8        ~~interlock shall be placed on the driven member.~~

9        2. — ~~Fans supplying air to the boiler room for combustion shall be interlocked~~  
10       ~~with the burner so that air flow is proven during boiler operation.~~

11       3. — ~~Fire dampers shall not be installed in the combustion air supply to the~~  
12       ~~boiler room.~~

13       E. — ~~CG-320 Installation. CG-320 is adopted with the following modification:~~

14       ~~Installation of boilers and burners, and certification of boilers as automatic or~~  
15       ~~monitored for the purpose of modifying licensed operator attendance shall be~~  
16       ~~done only under permit in compliance with the requirements of Section 220,~~  
17       ~~Section 320, and Section 330 of this code.~~

18       F. — ~~CG-610 Lockout. CG-610 is adopted with the following addition to the end of~~  
19       ~~paragraph CG-610: Resetting of safety controls from a place other than the boiler~~  
20       ~~on which the safety device is installed is prohibited.~~

G. ~~Part CF—Combustion Side Control. Part CF is adopted with the following additions:~~

1. ~~Fuel Piping: The fuel piping requirements of the Seattle Mechanical Code shall take precedence over the requirements of CSD-1.~~
2. ~~Boilers Certified as Automatic shall comply with the requirements of Sections 220 and 320 of this code.~~

~~170.5 NFPA 85. Boilers with fuel input ratings of 12,500,000 btu/hour or more shall comply with the fuel train requirements of NFPA 85 2004 edition together with applicable addenda.~~

~~170.6 Appurtenances such as safety controls, operating controls, burner assemblies, and boiler burner assemblies shall be listed by a nationally recognized testing agency and shall be installed in accordance with the requirements of the listing.~~

~~170.7 Boilers and pressure vessels shall comply with applicable requirements of the Seattle Energy Code.))~~

Section 20. Section 180 of the Seattle Boiler and Pressure Vessel Code, enacted by Ordinance 117723, is amended and renumbered as follows:

~~((Section 180—Registration Requirements))~~ **3.3 Symbol of construction and registration.** ~~((All boilers))~~ Boilers and pressure vessels shall bear the appropriate symbol of construction required by the ASME Boiler and Pressure Vessel Code, and shall be registered with the National Board of Boiler and Pressure Vessel Inspectors.

**Exception ((s)):** ~~((1))~~ Cast iron boilers and ~~((2) Pressure))~~ pressure vessels bearing the ~~((A.S.M.E.))~~ ASME ~~((“))~~ UM ~~((“))~~ stamp.

Section 21. Section 190 of the Seattle Boiler and Pressure Vessel Code, last amended by Ordinance 121865, is amended and renumbered as follows:

**Section ~~((190--Permits Required))~~ 4 - Installation Permits**

**~~((190.1))~~ 4.1 Installation permits required.** Except as otherwise specifically provided in this code, ((A)) a permit shall be obtained from the ((Director)) code official prior to commencement of the following work:

1. Installation or replacement of new or used boilers and pressure vessels.
2. Installation of rental boilers.
3. Certification of boilers as Automatic.
4. Certification of boilers as Monitored.
5. Alteration or modification of existing control systems on boilers certified as Automatic or Monitored.
6. Replacement or modification of fuel burners, changing fuels, or adding different fuel combinations.

**4.2 Exemption from installation permits.** A City installation permit is not required for the following boilers, pressure vessels, and other equipment:

1. Portable unfired pressure vessels that are inspected by the State of Washington as required by RCW Chapter 70.79;
2. Containers for liquefied petroleum gases regulated by the Seattle Fire Code;
3. Any boiler or pressure vessel subject to regular inspection by federal inspectors or licensed by a federal authority, such as the Department of Transportation (DOT);
4. Water storage tanks with no air cushion and no energy or heat source;

- 1        5. Boilers and pressure vessels under the direct ownership and operation of the State  
2                    of Washington that are inspected in accordance with Washington State boiler and  
3                    pressure vessel rules (RCW Chapter 70.79) and have a current Washington State  
4                    certificate to operate; and  
5        6. Potable hot water heaters.

**Note:** In Group A, E, and I occupancies a bi-annual in-service inspection of all potable hot water heaters is required even in cases where a King County plumbing installation permit was required for projects in Seattle City limits.

- 6        ~~((190.2))~~ **4.3 Application for installation permit.** To obtain an installation permit, the  
7        applicant shall first file an application ~~((in writing on a form furnished by the Director for~~  
8        ~~that purpose))~~ in a format determined by the code official. Every application shall:  
9        1. Identify and describe the work to be covered by the permit for which application  
10                    is made.  
11        2. Describe the land on which the proposed work is to be done by legal description,  
12                    property address, or similar description that will readily identify and ~~((definitely))~~  
13                    definitively locate the proposed building or work.  
14        3. Be accompanied by ~~((plans))~~ construction documents and/or specifications in the  
15                    standard ~~((A.S.M.E.))~~ ASME form (Manufacturers' Data Report) when required  
16                    by the code official.  
17        4. Be signed by the owner of the property or building, or the owner's authorized  
18                    agent, who may be required to submit evidence to indicate such authority.

5. ~~((Indicate))~~ Include the names, addresses, and phone numbers of the boiler owner, general contractor, and ~~((the name, address and phone number of a))~~ any other contractor or contact persons.

6. ~~((Give))~~ Provide additional ~~((such other))~~ data and information, including but not limited to the manufacturer name and serial number, as may be required by the ~~((Director))~~ code official.

~~((190.3))~~ **4.4 ~~((Plans and Specifications)) Construction documents.~~** The ~~((Director))~~ code official may require that one or more sets of construction documents including plans, computations, and specifications ~~((to))~~ be prepared and submitted to the ~~((Director))~~ City. Construction documents shall be submitted to the code official or designee at the time of the first boiler inspection. Nothing shall prevent the code official from requiring the submittal of construction documents prior to the issuance of the permit. Plans and specifications shall be drawn to a clearly indicated and commonly accepted scale in a format determined by the code official. The construction documents shall be ~~((of sufficient clarity to))~~ sufficiently clear for electronic storage and shall show that the proposed installation ~~((will))~~ conforms to the provisions of this code and to the provisions of all applicable laws, ordinances, rules, regulations, and orders.

~~((190.4))~~ **4.5 Emergency ~~((Repairs)) repairs.~~** In the case of an emergency, the installation, alteration, or repair of any boiler or pressure vessel system or equipment may be made without first applying for a permit. ~~((provided that notice))~~ The code official shall be given notice by email or voicemail of the work ~~((being))~~ performed ~~((shall be given to the Director))~~ within ~~((twenty-four))~~ 24 hours or ~~((within))~~ one ~~((working))~~ business day from the time when the emergency work was started.

1           ~~((Depending on the nature of the emergency, appropriate permits))~~ Permit  
2           applications shall be ~~((obtained))~~ submitted within ~~((five days of))~~ the later of 24 hours or  
3           one working day from the start of the emergency work or as directed by the ~~((Director))~~  
4           code official.

5           ~~((190.5 Permit Issuance))~~ **4.6 Application review and permit issuance.** ~~((190.5.1~~  
6           **General.**~~))~~ The application ~~((, plans, specifications, and other data filed by an applicant~~  
7           ~~for permit))~~ shall be reviewed by the ~~((Director))~~ code official or designee. The  
8           application ~~((Such plans))~~ may be reviewed by other departments of the City to check  
9           compliance with the laws and ordinances under their jurisdiction.

10           **4.6.1 Issuance of permit.** ~~((If the Director finds that))~~ The code official shall  
11           issue a permit to the applicant if the code official finds the following:

12           A.     ~~((the))~~ The work ~~((as))~~ described in ~~((an))~~ the application, ~~((for a permit~~  
13                   and the plans, specifications and other data filed therewith)) and other  
14                   construction documents when required by the code official prior to  
15                   issuance, substantially conforms to the requirements of this code and other  
16                   pertinent laws and ordinances; ~~((and that))~~

17           B.     ~~((the))~~ The permit fees specified in ~~((the Permit Fee Subtitle))~~ Seattle  
18                   Municipal Code, Title 22, Subtitle IX, Permit Fees, commonly known as  
19                   the Fee Subtitle, have been paid; and

20           C.     The applicant has complied with all requirements to be performed prior to  
21                   issuance of a permit for the work under other pertinent laws, ordinances,  
22                   or regulations or included in a master use permit, or otherwise imposed by

1                   the code official. ~~((the Director shall issue a permit therefor to the~~  
2                   applicant, who))

3                   When the permit is issued, the applicant or the applicant's authorized agent  
4                   becomes the permit holder ~~((or authorized agent)).~~

5                   **4.6.2 Compliance with approved construction documents.** When the code  
6                   official issues a permit, the code official shall endorse the permit in writing or in  
7                   electronic format and, where plans have been required, stamp the plans  
8                   "APPROVED." Such approved plans and permit shall not be changed, modified,  
9                   or altered without authorization from the code official, and all work shall be done  
10                  in accordance with the approved construction documents and permit except as  
11                  authorized by the code official during a field inspection to correct errors or  
12                  omissions, or as authorized by Section 4.6.3.

13                  **4.6.3 Revisions to the permit.** When changes to the approved work are made  
14                  during construction, approval of the code official shall be obtained prior to  
15                  execution. The boiler and pressure vessel inspector may approve minor changes  
16                  for work not reducing the structural strength or fire and life safety of the structure  
17                  or the integrity of the boiler or pressure vessel equipment or system. The inspector  
18                  shall determine if it is necessary to revise the approved construction documents. If  
19                  revised plans are required, changes shall be submitted to and approved by the  
20                  code official, accompanied by fees specified in the Fee Subtitle, Seattle Municipal  
21                  Code, Title 22, Subtitle IX, Permit Fees, prior to occupancy. All changes shall  
22                  conform to the requirements of this code and other pertinent laws and ordinances  
23                  and other issued permits.

Minor changes shall not incur additional fees if these changes do not (1) add to the general scope of work; (2) change the basic design concept; (3) involve major relocation of equipment, ducts, or pipes; (4) substantially alter approved equipment size; or (5) require extensive re-review of the plans and specifications.

**4.6.4 Cancellation of permit applications.** Applications may be cancelled if no permit is issued by the earlier of the following: (1) 12 months following the date of application; or (2) 60 days after the date of written notice that the permit is ready to be issued. After cancellation, construction documents may be returned to the applicant or destroyed by the code official.

The code official shall notify the applicant in writing at least 30 days before the application is cancelled. The notice shall specify a date by which a request for extension must be submitted to avoid cancellation. The date shall be at least two weeks prior to the date on which the application will be cancelled.

~~((190.5.2))~~ **4.7 Validity of permit.** The issuance or granting of a permit or approval of ~~((plans))~~ construction documents shall:

1. ~~((not))~~ Not be construed to be a permit for, or an approval of, any violation of any ~~((of the))~~ provisions of this code or any other pertinent laws and ordinances.
2. ~~((No permit presuming to give authority to violate or cancel the provisions of this code shall be valid, except insofar as the work or use which it authorizes is lawful.))~~ Not prevent the code official from requiring correction of conditions found to be in violation of this code or other pertinent laws and ordinances of the City.

3. ~~((The issuance of a permit shall not))~~ Not prevent the ~~((Director))~~ code official from ~~((thereafter))~~ requiring the correction of errors in the construction documents or from preventing building operations being carried on thereunder when in violation of this code or of other pertinent laws and ordinances of the City.

4. ~~((The issuance of a permit shall not prevent the Director from requiring correction of conditions found to be in violation of this code or other pertinent laws of the City, nor shall))~~ Not be construed to extend the period of time for which any such permit is issued ~~((be construed to extend))~~ or otherwise affect any period of time for compliance specified in any notice or order issued by the ~~((Director))~~ code official or other administrative authority requiring the correction of any such conditions.

~~((190.6))~~ **4.8 Permit Expiration.** ~~((190.6.1 Expiration.~~ Every permit issued by the Director under the provisions of this code shall)) Authority to do the work authorized by a permit expires 18 months from the date of issuance. An approved renewal extends the life of a permit for an additional 18 months from the prior expiration date. An approved reestablishment extends the duration of the permit for 18 months from the date the permit expired.

**Exceptions:**

1. Initial permits for major construction projects that require more than 18 months to complete may be issued for a period that provides reasonable time to complete the work, according to an approved construction schedule. The code official may authorize a permit expiration date not to exceed three years from the date of issuance.

2. The code official may issue ~~((Permits which))~~ permits that expire in less than ~~((eighteen))~~ 18 months ~~((may be issued where the Director))~~ if the code official determines a shorter period is appropriate to complete the work.

~~((190.6.2))~~ **4.9 Renewal of Permits.** ~~((Each permit))~~ Permits may be renewed ~~((one time))~~ and renewed permits may be further renewed by the code official, ~~((provided))~~ if the following conditions are met:

1. Application for renewal ~~((shall be))~~ is made within the ~~((thirty))~~ 30-day period immediately preceding the ~~((date of))~~ expiration date of the permit; and

2. ~~((The work authorized by the permit has been started and is progressing at a rate approved by the Director.))~~ The project has had an associated discretionary land use review and the land use approval has not expired; and

3. If the application for renewal is made more than 18 months after the date of mandatory compliance with a new or revised edition of this code, the permit shall not be renewed unless:

A. The code official determines that the permit complies, or is modified to comply with the Seattle Boiler and Pressure Vessel Code in effect on the date of application for renewal; or

B. The work authorized by the permit is substantially underway and progressing at a rate approved by the building official. "Substantially underway" means that normally required inspections have been approved for work such as foundations, framing, mechanical, and insulation and finish work is being completed on a continuing basis; or

1           C.       ~~((Permits may also be renewed where commencement))~~ Commencement  
2                               or completion of the work authorized by the permit is delayed by  
3                               litigation, appeals, strikes, or other causes related to the work authorized  
4                               by the permit ~~((;))~~ that are beyond the permit holder's control.

5       ~~((190.6.3 Suspension or Revocation. The Director may, by written order, suspend or~~  
6       ~~revoke a permit issued under the provisions of this code whenever the permit is issued in~~  
7       ~~error or on the basis of incorrect information supplied or in violation of any ordinances or~~  
8       ~~regulations or any provisions of this code.))~~

9       **4.10 Reestablishment of expired permits.** A new permit is required to complete work if  
10       a permit has expired and was not renewed.

11               **Exception:** A permit that expired less than one year prior to the date of a request  
12               for reestablishment may be reestablished without the issuance of a new permit  
13               upon approval of the code official if it complies with Items 2 and 3 of Section 4.9.  
14               Once re-established, the permit will not be considered to have expired. The new  
15               expiration date of a re-established permit shall be determined in accordance with  
16               Section 4.8.

17       **4.11 Revocation of boiler and pressure vessel permits.** Whenever the code official  
18       determines there are grounds for revoking a permit, the code official may issue a notice  
19       of revocation. The notice of revocation shall identify the reason for the proposed  
20       revocation, including, but not limited to, the violations, the conditions violated, and any  
21       alleged false or misleading information provided.

**4.11.1 Standards for revocation.** The code official may revoke a permit if:

- A. The code or the permit has been or is being violated and issuance of a notice of violation or stop work order has been or would be ineffective to secure compliance because of circumstances related to the violation; or
- B. The permit was obtained with false or misleading information.

**4.11.2 Service of notice of revocation.** The notice of revocation shall be served upon the owner, agent, or other responsible person by personal service or regular first class mail addressed to the last known address of such person, or if no address is available after reasonable inquiry, the notice may be posted in a conspicuous place on the premises. The notice may also be posted if served by personal service or first class mail.

**4.11.3 Effective date of revocation.** The code official shall identify in the notice of revocation a date certain on which the revocation will take effect. This date may be stayed pending complete review by the code official pursuant to Section 4.11.4.

**4.11.4 Review by the code official for notice of revocation.** Any person aggrieved by a notice of revocation may obtain a review by making a request in writing to the code official within three business days of the date of service of the notice of revocation. The review shall occur within five business days after receipt by the building official of the request for review. Any person affected by

1 the notice of revocation may submit additional information to the building official  
2 for consideration as part of the review at any time prior to the review.

3 A. Review procedure. The review will be made by a representative of the  
4 code official who will review all additional information received and may  
5 also request a site visit. After the review, the code official may:

6 1. Sustain the notice of revocation and affirm or modify the date the  
7 revocation will take effect;

8 2. Withdraw the notice of revocation;

9 3. Modify the notice of revocation and affirm or modify the date the  
10 revocation will take effect; or

11 4. Continue the review to a date certain.

12 B. Order of revocation of permit. The code official shall issue an order  
13 containing the decision within ten days after the review is completed and  
14 shall cause the same to be sent by regular first class mail to the person or  
15 persons requesting the review, any other person on whom the notice of  
16 revocation was served, and any other person who requested a copy before  
17 issuance of the order. The order of the building official is the final order of  
18 the City, and the City and all parties shall be bound by the order.

19 Section 22. Section 200 of the Seattle Boiler and Pressure Vessel Code, last amended by  
20 Ordinance 121865, is amended and renumbered as follows:

21 ~~((Section 200))~~ **4.12 Fees.** ~~((200.1 General. A fee for each permit and for other activities~~  
22 ~~related to the enforcement of this code shall be paid as set forth in the Permit Fee~~  
23 ~~Subtitles. Fees for the inspection of repairs or alterations of boilers and pressure vessels~~

are charged in half hour increments at the rate set in the Permit Fee Subtitle. DPD will send an invoice for the repair following completion of the work.)) A fee for each boiler and pressure vessel permit and for other activities related to the enforcement of this code shall be paid as set forth in the Fee Subtitle, Seattle Municipal Code, Title 22, Subtitle IX, Permit Fees. The permit fee covers the cost of the inspection to verify that the installation has been completed in accordance with the permit.

Section 23. Section 210 of the Seattle Boiler and Pressure Vessel Code, last amended by Ordinance 121865, is amended and renumbered as follows:

**~~((Section 210))~~ 4.13 Inspections: ~~((--))~~ General.**

**~~((210.1 General.))~~ 4.13.1 Inspection of work.** Boiler and pressure vessel systems for which a permit is required by this code shall be subject to inspection by the ~~((Director))~~ code official.

~~((It shall be the duty of the permit applicant to cause the boiler and pressure vessel systems to remain accessible and exposed for inspection purposes. Neither the Director nor the City shall be liable for expense entailed in the removal or replacement of any material required to permit inspection. When the installation of a boiler and pressure vessel system is complete, an additional and final inspection shall be made by the Director. Boiler and pressure vessel systems regulated by this code shall not be connected to the energy fuel supply lines until authorized by the Director.))~~

**4.13.2 Approval in error.** Approval ~~((as a result of))~~ resulting from an inspection shall not be construed to be an approval of a violation of the provisions of this code or of other ordinances of the City. Inspections presuming to give authority to

1 violate or cancel the provisions of this code or of other ordinances of the City  
2 shall not be valid.

3 ~~((210.2 Reinspections. The Director may require a reinspection when work for~~  
4 ~~which inspection is called is not complete, corrections called for are not made, the~~  
5 ~~inspection record is not properly posted on the work site, the approved plans are~~  
6 ~~not readily available to the inspector, deviations from plans which require the~~  
7 ~~approval of the Director have been made without proper approval, or for failure to~~  
8 ~~provide access on the date for which inspection is requested.~~

9 The Director may assess a reinspection fee as set forth in the Permit Fee  
10 Subtitle for any action listed above for which reinspection may be required,  
11 whether or not a reinspection is actually performed.

12 In instances where reinspection fees have been assessed, no additional  
13 inspection of the work shall be performed until the required fees have been paid.))

14 **4.13.3 Inspector qualifications.** City-employed inspectors holding a current  
15 inspector's commission with the National Board of Boiler and Pressure Vessel  
16 Inspectors may conduct the required inspections and shall use the current edition  
17 of the National Board Inspection Code (NBIC), Part 1, as a guide for conducting  
18 the inspection. When differences occur between the requirements of this code and  
19 other codes and standards, this code shall apply.

20 **4.13.4. Responsibility for inspection requests.** It is the duty of the owner of the  
21 property or the owner's authorized agent, or the person designated by the owner  
22 or agent to do the work authorized by a permit, to notify the code official that  
23 work requiring inspection as specified in this section is ready for inspection.

1           **4.13.5 Access for inspection.** The permit holder and the person requesting any  
2           inspections required by this code shall provide access to and means for proper  
3           inspection of such work. The work shall remain accessible and exposed for  
4           inspection purposes. Neither the code official nor the City shall be liable for  
5           expenses incurred in the removal or replacement of any material impeding the  
6           access necessary to perform required inspections. ~~Boiler and pressure vessel~~  
7           ~~systems regulated by this code shall not be connected to the energy fuel supply~~  
8           ~~lines until authorized by the Director.~~

9           **4.13.6 Posting permit.** The permit holder or permit holder's agent shall post the  
10          permit in a conspicuous place on the premises as directed by the code official.

11          **4.13.7 Approvals required.** No work shall be done on any part of the building or  
12          structure beyond the point indicated in each successive inspection without first  
13          obtaining the written approval of the code official.

14          A.     Effect of approval. Approval resulting from an inspection is not approval  
15                 of any violation of the provisions of this code or of other pertinent laws  
16                 and ordinances of the City. Inspections presuming to give authority to  
17                 violate or cancel the provisions of this code or of other pertinent laws and  
18                 ordinances of the City are not valid.

19          **4.13.8 Testing of equipment and systems.** The code official may require testing  
20          of equipment and systems as part of permit inspections.

21          **4.13.9 Inspections required.** The installation of boilers and pressure vessels must  
22          be inspected. The following inspections may be required by the code official:

A. Special investigation inspection. If work that requires a permit or approval is commenced or performed prior to making formal application and receiving the code official's permission to proceed, the code official may make a special investigation inspection before a permit is issued for the work. If a special investigation is made, a special investigation fee may be assessed in accordance with the Fee Subtitle, Seattle Municipal Code, Title 22, Subtitle IX, Permit Fees.

B. Pre-installation inspection. When the owner or the owner's authorized representative requests inspection of a boiler prior to its installation, the code official shall make the inspection. Any additional inspection outside the scope of the permit may be subject to additional fees in accordance with Fee Subtitle, Seattle Municipal Code, Title 22, Subtitle IX, Permit Fees.

C. Final Inspection. When the installation of a boiler, pressure vessel, or related system is complete, a final inspection shall be performed approving the boiler, pressure vessel, or system as ready for service.

D. Reinspection. The code official may require a reinspection if:

1. Work for which inspection is requested is not complete;
2. Required corrections called for are not made;
3. The permit record is not properly posted on the work site;
4. The approved plans are not readily available to the inspector;
5. Deviations from construction documents that require the approval of the code official have been made without proper approval;

6. Access is not provided on the date requested for the inspection; or

7. Other unforeseen hazards identified by the code official.

**4.13.10 Reinspection fees.** The code official may assess a reinspection fee as set forth in the Fee Subtitle, Seattle Municipal Code, Title 22, Subtitle IX, Permit Fees, for reinspection. In instances where reinspection fees have been assessed, no additional inspection of the work will be performed until the required fees are paid.

Section 24. Section 220 of the Seattle Boiler and Pressure Vessel Code, last amended by Ordinance 121865, is amended and renumbered as follows:

**((Section 220)) 4.14 ((Inspection)) Requirements ((-New Installations)) for new installations.**

1. On-site. The code official shall require:

**((220.1)) A.** Boiler installations ((upon completion shall have)) to have equipment controls set, adjusted, and tested by the installing contractor upon completion.

**B.** ((Documentation)) The following documentation to be on site and available to the inspector upon request: ((consisting of City of Seattle Installation Permit)) 1) the Department issued installation permit, 2) National Board or ASME Data Report(s), ((CSD-1 Report(s), complete control diagram of a permanent legible type, together with complete boiler operating)) and 3) manufacturer's installation and operation instructions. ((, shall be furnished by the installer for each installation. Rental boilers and used boilers are

1 subject to hydrostatic testing, non-destructive testing, or other  
2 special testing as may be required by the Director.

3 **220.2)) C.** ((It shall be the duty of the person or entity doing the work  
4 or installation authorized by a permit to notify the Director that  
5 such work or installation is ready for inspection and to prevent  
6 unauthorized use of equipment until such use has been authorized  
7 by the Director. The Director shall require such tests as he/she  
8 deems)) Tests deemed necessary to determine that the installation  
9 complies with the provisions of this code. Such tests shall be made  
10 in the presence of the ((Director's authorized representative)) code  
11 official.

12 **D.** ((It shall be the duty of the person requesting inspections required  
13 by this code to provide access)) Access to, and the means for,  
14 ((the)) safe inspection of the installation.

15 ((**220.3** When the owner or his authorized representative requests inspection of a  
16 boiler prior to its installation, the Director shall make such inspection. Additional  
17 inspection(s), or inspections outside the scope of the permit may be subject to  
18 additional fees in accordance with Section 200 of this code.))

19 **4.15 Testing rental and used boilers.** Rental boilers and used boilers are subject to  
20 hydrostatic testing, non-destructive testing, or other special testing as may be required by  
21 the code official.

Section 25. Section 230 of the Seattle Boiler and Pressure Vessel Code, last amended by Ordinance 121865, is repealed:

**~~((Section 230 – Existing Installations – Reinspection~~**

~~The Director shall inspect all boilers and pressure vessels operated under permit at such intervals as deemed necessary but in no event less frequently than noted below:~~

~~**Exception:** Boilers and pressure vessels under the direct ownership and operation of the State of Washington shall be installed in accordance with section 190 of this code, but are exempt from the re-inspection requirements of this code.~~

~~**230.1** Inspection of boilers, boiler controls, and boiler safety devices shall be as follows:~~

~~A. — External Inspections: All boilers shall be inspected externally annually. All required boiler controls and safety devices shall be tested during the external inspection to determine that they are operating properly.~~

~~B. — Internal Inspections: Where construction and operating conditions permit, boilers shall also be subject to an internal inspection as follows:~~

~~1. — Low pressure hot water heating boilers not using corrosion inhibitors shall be inspected internally at least every two years.~~

~~2. — Low pressure hot water heating boilers using corrosion inhibitors, glyeol, or oil shall be inspected at a frequency determined by the inspector depending upon such factors as history of the installation, adequacy of corrosion inhibitors, tightness of the system, and other factors observed and considered by the inspector; and~~

~~3. — All other boilers shall be inspected every year.~~

1 C. — For steam boilers, an internal inspection of the low water cutoff chamber and  
2 connecting piping is required in all cases.

3 ~~230.2 Unfired pressure vessels shall be inspected externally biennially. When subject to~~  
4 ~~corrosion and construction permits, they shall, in addition, be subject to inspection~~  
5 ~~internally biennially. At the discretion of the inspector, an ultrasonic examination of the~~  
6 ~~external side of the pressure vessel may substitute for an internal inspection.~~

7 ~~230.3 In Group A, E, or I Occupancies, potable water heaters, combination hot water~~  
8 ~~heaters, (fired, electric, thermal, solar, and indirect) and pool heaters shall be inspected~~  
9 ~~externally biennially for safe condition. As a minimum, the safety inspection shall consist~~  
10 ~~of an actual lifting of the safety relief try lever to determine free flow of the safety relief~~  
11 ~~valve and a visual inspection of the exterior of the vessel for leakage or physical damage.~~

12 ~~230.4 Inspection Results—Corrections Required.~~ The inspector shall notify the owner  
13 or authorized representative of the found defects or deficiencies which shall be promptly  
14 and properly corrected. If such corrections are not made, or if the operation of the boiler  
15 or pressure vessel is deemed unsafe by the Director, the permit to operate the boiler or  
16 pressure vessel shall be withheld until corrections have been made.

17 ~~230.5 Inspection by Authorized Insurance Companies.~~ Inspection of boilers and  
18 pressure vessels may be made by employees of an authorized insurance company. Such  
19 inspections shall be conducted in accordance with the requirements of this code and by  
20 persons holding an active commission from the National Board of Boiler and Pressure  
21 Vessel Inspectors.

22 1. — Authorized insurance companies must notify the Director in writing, annually, of  
23 those inspectors that will be conducting inspections within the City of Seattle.

Notification shall include the National Board Commission number and expiration of the inspectors current National Board Commission. Notification in writing may be on company letter head or by email. Authorization is subject to the approval of the Director.

2. Authorized inspectors shall make their reports to the Director on forms prescribed by the Director.

3. Authorized Insurance company inspectors shall notify the Director immediately of any suspension of insurance coverage due to dangerous conditions.

4. Authorized insurance companies providing insurance coverage of jurisdictional objects in the City of Seattle shall notify this office within 30 days for any new insurance in effect or any discontinuance of insurance coverage of jurisdictional objects.

#### **230.6 Preparation for Internal Inspection.**

**230.6.1** The owner or user shall prepare a boiler or pressure vessel for internal inspection by either the Director or insuring company to the extent deemed necessary by the inspector. For boilers, a typical preparation may include the following:

a) Water shall be drawn off and the boiler thoroughly washed.

b) Manhole and handhole plates and wash out plugs and water column connections shall be removed, the furnace and combustion chambers thoroughly cooled and cleaned.

c) All grates of internally fired boilers shall be removed.

d) — As required by the inspector, at each annual inspection, brickwork and/or refractory shall be removed in order to determine the condition of the boiler headers, furnace, supports or other parts.

e) — Any leakage of steam or hot water into the boiler shall be cut off by disconnecting the pipe or valve at the most convenient point.

f) — The low water cutout shall be disassembled to such a degree as the inspector shall require.

g) — Compliance with applicable lock-out / tag-out and confined space entry procedures as required.

~~230.6.2 If a boiler or unfired pressure vessel has not been properly prepared for an internal inspection, the inspector may decline to make the inspection or test and the certificate of inspection shall be withheld or canceled until the owner or user complies with the requirements.))~~

Section 26. Section 240 of the Seattle Boiler and Pressure Vessel Code, last amended by Ordinance 121865, is repealed:

**~~((Section 240 — Certificate of Inspection~~**

~~It shall be unlawful to operate any boiler or pressure vessel without first obtaining a valid certificate of inspection from the Director. Certificates of Inspection shall be displayed in a conspicuous place adjacent to boiler or vessel. The Certificate of Inspection shall not be issued until the equipment has been inspected and approved by the Director. A grace period of no longer than sixty (60) days beyond the expiration date of any Certificate of Inspection may be granted.~~

**Exceptions:**

- ~~1. The operation of steam heating boilers, low pressure hot water heating boilers, hot water supply boilers and pressure vessels in Group R Occupancies of less than six units and in Group U occupancies.~~
- ~~2. Boilers and pressure vessels under the direct ownership and operation of the State of Washington, and that are inspected in accordance with Washington State Boiler and Pressure Vessel rules, (RCW 70.79) and in possession of a current Washington State Certificate to Operate.))~~

Section 27. Section 250 of the Seattle Boiler and Pressure Vessel Code, last amended by Ordinance 121865, is repealed:

**~~((Section 250 – Repairs and Alterations~~**

~~**250.1** Where a repair is necessary or an alteration as defined in the National Board Inspection Code is desired, a City inspector shall be called for authorization prior to starting any work on the alteration or the repair. Completed repairs and alterations shall be subject to the approval of the inspector and the approval of the inspector responsible for in-service inspection, as applicable.~~

~~**250.2** Repairs and/or alterations to all boilers, unfired pressure vessels, and their appurtenances shall conform to the rules contained in the National Board Inspection Code (A.N.S.I. NB-23) wherever they apply. Repairs or alterations outside the scope of the National Board Inspection Code are subject to the prior approval of the director.))~~

Section 28. Section 260 of the Seattle Boiler and Pressure Vessel Code, last amended by Ordinance 121865, is repealed:

**~~((Section 260 – Removal from Service – Dangerous Conditions~~**

~~If the operation of a boiler or pressure vessel is deemed by the Director to constitute an immediate danger, the pressure on such boiler or pressure vessel shall be relieved and the boiler or pressure vessel secured at the owner's expense. Such unsafe boiler or pressure vessel shall be declared a nuisance and shall not be operated without approval of the Director.))~~

Section 29. Section 270 of the Seattle Boiler and Pressure Vessel Code, last amended by Ordinance 121865, repealed:

**~~((Section 270 – Accidents to be Reported~~**

~~In case of serious accident, such as explosion or an event which renders a boiler or pressure vessel unsafe to return to operation, notice shall be given immediately to the Director and neither the boiler nor unfired pressure vessel nor any parts thereof shall be removed or disturbed before an inspection has been made by a City inspector unless for the purpose of saving life.))~~

Section 30. Section 280 of the Seattle Boiler and Pressure Vessel Code, last amended by Ordinance 121865, is repealed:

**~~((Section 280 – Operation~~**

**~~280.1 General.~~** ~~Boilers and pressure vessels shall be operated and maintained in conformity with requirements for adequate protection of the public established by the Director in accordance with nationally recognized standards.~~

~~**280.2 Licensed Operator Requirements.** Boilers and pressure vessels shall be operated and maintained by an appropriately licensed boiler operator in accordance with the City of Seattle Steam Engineer and Boiler Fireman License Law, Seattle Municipal Code Chapter 6.420.))~~

Section 31. Section 290 of the Seattle Boiler and Pressure Vessel Code, last amended by Ordinance 121865, is amended and renumbered as follows:

~~((Section 290))~~ **4.16 Combustion air.** Combustion air shall be provided in accordance with Chapter 7 of the Seattle Mechanical Code.

Section 32. Section 300 of the Seattle Boiler and Pressure Vessel Code, last amended by Ordinance 121865, is amended and renumbered as follows:

~~((Section 300))~~ **4.17 Venting.** ~~((Except as noted below, venting))~~ Venting of ~~((the products of))~~ combustion byproducts shall be in accordance with Chapter 8 of the Seattle Mechanical Code.

Stack dampers on boilers fired with oil or solid fuel shall not close off more than 80 percent of the stack area when closed. ~~((, except on automatic boilers with pre-purge, automatic draft control and interlock.))~~ Operative dampers shall not be placed within any stack, flue, or vent of a gas-fired boiler. ~~((, except on an automatic))~~

**Exception:** Automatic boilers with pre-purge, automatic draft control, and interlock.

~~((Exception: Baffles, draft restrictors or regulators and dampers which are supplied by the manufacturer as part of a boiler design and which are welded into position or otherwise permanently affixed when adjusted at installation.))~~

Section 33. Section 310 of the Seattle Boiler and Pressure Vessel Code, last amended by Ordinance 121865, is amended and renumbered as follows:

~~((Section 310--))~~ **4.18 Controls, ((Safety Devices, and Instrumentation)) safety devices, and instrumentation. ((310.1 General.))** Required electrical, mechanical, safety, and operating controls shall carry approval of an approved testing agency. Electrical controls shall be of such design and construction as to be suitable for installation in the environment in which they are located.

**4.18.1 Valves.** No valve shall be placed between a safety device and the boiler or pressure vessel.

**4.18.2 Burners.**

**A.** ~~((310.2 Burners--Listing Required. Fuel))~~ **All** burners shall be listed by a nationally recognized testing agency. Burners that are integral parts of boilers shall be listed as part of the overall boiler-burner assembly.

**B.** ~~((310.3 Burners--Fuel Selector Switches))~~ **Burners** ~~((installed on or after June 1, 1987))~~ that are capable of burning two or more fuels and installed on or after June 1, 1987, shall be equipped with a fuel selector switch designed and constructed to prevent switching from one fuel to a different fuel without a physical stop in the center/off position.

~~((310.4))~~ **4.18.3 Gauges. ((General. Required))** The following gauges are required and shall be kept in good working ((order)) condition.

**A.** All steam boilers shall be provided with a pressure gauge and a water level glass. ~~((All water boilers shall be provided with a pressure gauge and a temperature indicator.))~~

B. All ~~((hot))~~ water ~~((supply/storage tanks))~~ boilers shall be provided with a pressure gauge and a temperature ~~((gauge))~~ indicator.

**4.18.4 Pressure and temperature relief.**

A. Safety relief valves. Safety relief valves on boilers and pressure vessels are required and shall be sized in accordance with the manufacturer's instructions or as approved by the code official.

B. Discharged liquid. ~~((310.5.1))~~ The discharge from liquid relief valves shall be piped to within 18 inches of the floor ~~((or))~~ to an open receptacle or floor drain. ~~((, and when the operating temperature is in excess of))~~ If the discharged liquid has the potential to exceed 140°F ~~((, shall be equipped with a means of tempering and cooling the discharge prior to entering the drainage system))~~ then the discharge shall be cooled prior to entering a drainage system in accordance with the requirements found in the Chapter 8 of the Seattle Plumbing Code. ~~((See Uniform Plumbing Code, Section 810.))~~

C. Safety valve discharge. ((310.5.2)) Safety valve discharge from boilers and pressure vessels containing steam shall be directed upward to a minimum of 6 feet above the boiler room floor or horizontally to an inaccessible area of the boiler room. ((When)) If the discharge from safety valves would result in a hazardous discharge of steam inside the boiler room, or ((when)) if the discharge of ((multiple)) safety valves on boilers exceeds the

capacity of 1,000 pounds of steam per hour, ~~((such))~~ the steam  
discharge shall be extended outside the boiler room to a safe  
location. No valve shall be placed on the discharge pipe between  
the safety relief valve and the atmosphere.

**((310.5.3)) 4.18.5 Emergency shutdown switch.** ~~((Boilers in the boiler room  
shall be provided with an))~~ An emergency shutdown switch shall be located  
outside the boiler room, or ~~((other))~~ in another location approved by the  
~~((Director))~~ code official. The ~~((purpose of such a))~~ switch ~~((is to))~~ shall allow  
~~((the))~~ shutdown of all ((boiler(s))) boilers in the boiler room without having to  
enter the boiler room. The emergency shutdown switch shall be suitable for the  
intended use.

~~((310.5.4 No valve of any description shall be placed between the safety  
relief valve and the boiler, nor on the discharge pipe between the safety  
relief valve and the atmosphere.))~~

**((310.6)) 4.18.6 ((Low Water Cutoff)) Low-water cutoff or flow-sensing  
devices.**

A. For Water Boilers. ~~((310.6.1 Every water))~~ Water boilers ~~((, other  
than manually fired,))~~ shall be equipped with a manual reset type  
low-water cutoff device. ~~((except that a boiler which requires  
forced circulation to prevent overheating shall have a flow-sensing  
device installed in lieu of the low-water cutoff. The required flow  
switch (if applicable) or the required manual reset type low-water  
cutoff shall be mounted in such a manner so as to prevent damage~~

1 to the boiler and to permit testing of the low water cutoff without  
2 draining the boiler system. Manually operated and power actuated  
3 isolation valves between the low water cutoff and the boiler are  
4 prohibited. Delay functions incorporated in any low water cut-off  
5 or flow switch device will require the pre-approval of the Director.  
6 Delay functions not installed in accordance with the  
7 manufacturer's approvals shall not be used.

8 **Exception:** Vertical tube hot water supply boilers, such as those  
9 bearing the A.S.M.E. "HLW" stamp, that are directly connected to,  
10 and pressurized by the public water supply, need not be equipped  
11 with a low water cutoff or flow switch.))

- 12 1. Low-water cutoff devices shall be mounted so that  
13 activation of the device does not damage the boiler or reset  
14 the device.
- 15 2. Low-water cutoff devices shall be capable of being tested  
16 without draining the boiler system.
- 17 3. Manually operated and power-actuated isolation valves  
18 between the low-water cutoff and the boiler are prohibited.
- 19 4. Delay functions incorporated in any low-water cut-off  
20 device requires pre-approval by the code official. Delay  
21 functions shall be installed in accordance with the  
22 manufacturer's instructions.

5. In installations where two or more low-water cutoffs are installed, the cutoffs shall be separately piped where feasible.

B. For forced circulation boilers. Boilers that require forced circulation to prevent overheating shall have a flow-sensing device installed.

1. Flow-sensing devices shall be mounted so that activation of the device does not damage the boiler or reset the device.

2. Flow sensing devices shall be testable without draining the boiler system.

3. Delay functions incorporated in any flow-sensing device require pre-approval by the code official. Approved delay functions shall be installed in accordance with the manufacturer's instructions.

C. For steam boilers. ((310.6.2)) Every steam boiler ((,other than manually fired,)) shall be equipped with two low-water cutoffs. The lower of the two cutoffs shall be equipped with a manual reset device.

1. The manual reset device shall be mounted so that activation of the device does not damage the boiler or reset the device.

2. The manual reset device shall be testable without draining the boiler system.

3. Manually operated and power-actuated isolation valves  
between the low-water cutoff and the boiler are prohibited.

4. Delay functions incorporated in any low-water cut-off  
device requires pre-approval by the code official. Approved  
delay functions shall be installed in accordance with the  
manufacturer's instructions.

5. In installations where two or more low-water cutoffs are  
installed, the cutoffs shall be separately piped where  
feasible.

**Exceptions to Items A through C:**

1. Manually fired water and steam boilers.

2. Hot water supply boilers, such as those bearing the  
ASME "HLW" stamp, that are directly connected to  
and pressurized by the public water supply.

~~((310.6.3))~~ **4.18.7 Additional required devices.** ~~((In installations where two or~~  
~~more low-water cutoffs are installed, the cutoffs shall be separately piped where~~  
~~feasible.))~~

A. Temperature. Temperature controls on all water and liquid boilers shall be  
equipped with two temperature controls, one of which shall have a manual  
reset device.

B. Pressure controls. Pressure controls on all steam and vapor boilers shall be  
equipped with two pressure controls, one of which shall have a manual  
reset device.

1           C.     ~~((310.6.4 Water Feeding Devices))~~ Automatic water feeding devices. All  
2           steam, vapor, ~~((ø))~~ and water boilers shall be equipped with an automatic  
3           water feeding device. For steam boilers and boilers having an operating  
4           water level, the water feeder shall be controlled by the actual water level  
5           in the boiler.

6                     **Exception:** Manually operated ~~((fired))~~ boilers that have a  
7                     qualified person in constant attendance of the boiler while it is in  
8                     operation to ensure adequate water feed.

9           D.     Blow-off tank. All steam boilers shall be equipped with a blow-off tank  
10           fabricated in accordance with the National Board of Boilers and Pressure  
11           Vessels Blow-off Equipment Standard NB-27. Blow-off tanks shall collect  
12           and temper water and steam discharged from safety relief valves and, as  
13           applicable, from blow-off and blowdown effluent and low-water fuel cut-  
14           off drains. Effluent shall not exceed 140 degrees F prior to entering  
15           building drains. (See Seattle Plumbing Code).

16                     **Exception:** An alternative means for safe discharge may be  
17                     approved by the code official.

18           E.     Expansion tanks. All closed hot water heating systems shall be provided  
19           with an expansion tank. Expansion tanks shall be fabricated to ASME  
20           Section IV Standard HG-709. Expansion tanks shall be sized appropriately  
21           and securely fastened to supports that are adequate to support twice the  
22           weight of the tank filled with water without placing strain on connecting  
23           pipings.

1        ~~((310.7 Pressure and Temperature Controls.~~

2                ~~310.7.1 Water / Liquid.~~ All water or liquid boilers shall be equipped with two  
3                ~~temperature controls one of which will be equipped with a manual reset device.~~

4                ~~310.7.2 Steam / Vapor.~~ All steam or vapor boilers shall be equipped with two  
5                ~~pressure controls, one of which will be equipped with a manual reset device.~~

6        ~~310.8 Retroactive Requirements.~~

7        The following requirements shall be retroactive:

8                ~~310.8.1~~ Every hot water boiler, other than manually fired, shall be equipped with  
9                ~~two temperature controls wired in series. Every steam heating boiler, other than~~  
10               ~~manually fired, shall be equipped with two pressure controls and a low water~~  
11               ~~cutoff. Each temperature or pressure control shall have an independent sensing~~  
12               ~~element. Shutoff valves of any type shall not be installed between a boiler and any~~  
13               ~~pressure or temperature control.~~

14               ~~310.8.2~~ Boilers and pressure vessels shall be provided with pressure relief valves  
15               ~~to ensure positive relief of over pressure in accordance with nationally recognized~~  
16               ~~standards.))~~

17        F.        ~~((310.8.3 Every mechanically fired boiler))~~ Mechanically fired boilers  
18               which require ((s)) manual ignition or lighting of the burner shall have a  
19               manual reset device to prevent automatic recycling in the event of any shut  
20               down.

21        G.        ~~((310.9 Energy Management Systems))~~ Energy management systems.  
22               Energy management systems ((of any description)) shall not have the  
23               ability to override ((any control or)) safety devices required by this code.

Such systems may only connect to a boiler control system at points provided by the manufacturer ((and intended)) for such use.

#### **4.19 Location of boilers and pressure vessels.**

**4.19.1 Clearance requirements.** When boilers and pressure vessels are installed or replaced, clearance shall be provided to allow access for safe operation, inspection, maintenance, and repair. Passageways around all sides of boilers and pressure vessels shall have an unobstructed width of not less than 18 inches. Clearance for repair and cleaning may be provided through a door or access panel into another area, provided the opening is of sufficient size.

**Exception:** When approved by the code official, boilers and pressure vessels may be installed with a side clearance of less than 18 inches provided that the lesser clearance does not inhibit inspection, maintenance, and repair or violate the terms of the listing or the manufacturer's installation instructions.

A. Power boilers having a steam generating capacity in excess of 5,000 pounds per hour or having a heating surface in excess of 1,000 square feet or inputs in excess of 5,000,000 Btu/h shall have a minimum clearance of 7 feet from the top of the boiler to the ceiling.

B. Steam heating boilers and hot water heating boilers which exceed one of the following limits: 5,000,000 Btu/h input, 5,000 pounds steam-per-hour capacity, or 1,000 square-foot heating surface; power boilers which do not exceed one of the following limits:

1                    5,000,000 Btu/h input, 5,000 pounds steam-per-hour capacity, or  
2                    1,000-square-foot heating surface; and all boilers with manholes  
3                    on top of the boiler, except those described in Items A and C, shall  
4                    have a minimum clearance of 3 feet from the top of the boiler to  
5                    the ceiling.

6                    C.     Package boilers, steam heating boilers, and hot-water heating  
7                    boilers with no manhole on top of shell and not exceeding one of  
8                    the limits contained in subsection 4.19.1.B shall have a minimum  
9                    clearance of 2 feet from the ceiling.

10                  D.     Manhole openings shall have a minimum of 5 feet clearance from  
11                  any outside obstruction.

12                  **4.19.2 Underground installations.** Boilers and pressure vessels installed  
13                  underground shall be enclosed in a concrete or masonry pit. A covered pit shall be  
14                  equipped with a removable cover so that adequate inspection can be made.  
15                  Requirements for clearances shall be the same as Section 4.19.1.

16                  **4.19.3 Boiler rooms.**

17                  A.     Construction. Boiler rooms shall be constructed in accordance with the  
18                  current edition of the Seattle Building or Residential Code. Equipment  
19                  shall be mounted to adequately support the vessel and its contents, and  
20                  keep the equipment level and safely anchored to prevent unwanted  
21                  movement and damage due to vibration. Floors shall be of noncombustible  
22                  materials or listed as appropriate for the equipment being mounted. Floors  
23                  shall have an adequate drain system or legal method of catching and

1                   holding liquid wastes incidental to cleaning, recharging, or discharging of  
2                   safety relief valves.

3           B.       Access platform. Platforms to conduct maintenance and inspection shall  
4                   be provided to allow safe access and egress to each boiler or pressure  
5                   vessel.

6           **4.19.4 Garage or warehouse locations.** Boilers and pressure vessels installed in  
7                   garages, warehouses, or other locations where damage from moving vehicles is  
8                   possible shall be protected with barriers or shall be elevated or located outside the  
9                   path of vehicles. Boilers, if fuel-fired and installed in garages, shall be at least 18  
10                  inches above the floor level. (See Seattle Mechanical Code Section 304.)

11                  **Exception:** Boilers and pressure vessels installed within a garage may be  
12                  enclosed in a separate approved compartment having access only from  
13                  outside the garage if the required combustion air is taken from and  
14                  discharged to the exterior of the garage.

15           **4.20 Pressure reducing valves.**

16                  **4.20.1. Limiting equipment pressure.** All the equipment downstream of the  
17                  boiler or pressure vessel shall:

18                  A.       Meet the pressure requirements for the maximum allowable working  
19                          pressure (MAWP) of the boiler or pressure vessel; or

20                  B.       Have a pressure reducing system that includes:

21                          1.       Safety relief valves. The low-pressure side of the pressure reducing  
22                                  valve shall be protected by one or more safety valves having  
23                                  adequate volume capacity and a set pressure not exceeding the

MAWP of equipment or piping installed downstream of the pressure reducing valve.

2. Pressure gauges. Pressure gauges shall be installed on the high and low pressure sides of the pressure reducing valve.

3. Venting. Proper protection shall be provided to prevent injury or damage caused by the discharge of the safety relief valves when vented to the atmosphere.

4. Bypass valves. The use of a hand-controlled bypass around the reducing valves is allowed. The capacity of the bypass valve shall not exceed the capacity of the reducing valve.

#### **4.21 Fuel piping**

**4.21.1. Manual shutoff valves.** An approved manual shutoff valve shall be installed upstream of all control devices on the main burner of a gas-fired boiler. The takeoff point for the gas supply to the pilot shall be valved separately and be upstream of the gas shutoff valve for the main burner. A union or other approved means of disconnect shall be provided immediately downstream from these shutoff valves.

**4.21.2. Gas pressure regulators.** An approved gas-pressure regulator shall be installed on gas-fired boilers if the gas supply pressure is higher than that at which the main burner is designed to operate. A separate approved gas-pressure regulator shall be installed to regulate the gas pressure to any pilot.

**Exceptions:** A separate regulator is not required if the pilot:

A. Is part of a manufacturer-assembled boiler-burner unit approved by the code official;

B. Serves a gas-fired boiler in Group R Occupancies of less than six units; or

C. Serves a gas-fired boiler in Group U Occupancies.

**4.21.3 Code compliant.** Fuel piping installation shall comply with the provisions of the current edition of the Seattle Fuel Gas Code.

**4.22 Steam and hydronic piping.** Steam and hydronic piping systems that are part of a boiler or heating system shall comply with the requirements of the Seattle Mechanical Code, Chapter 12, Hydronic Piping, and the requirements of this code. When piping falls outside the scope of the applicable sections of the above codes, a standard approved by the code official may be used.

**4.22.1 Materials and construction.**

A. Quality. All piping, tubing, valves, joints, fittings, devices, and materials shall be free of defects and shall comply with nationally recognized standards of construction listed in Section 3 of this code or as approved by the code official.

B. Prohibited. Galvanized piping and fittings are prohibited.

**4.23 Elevator machine rooms/spaces and hoistways.** No pipes conveying gases, vapors, or liquids that are not specifically used in the operation of the elevator shall be installed in any elevator hoistway, machine room, or machinery space.

1       **4.24 Alarms.** Alarms such as CO detectors, smoke detectors, CO<sub>2</sub> detectors, or other  
2       alarms required by this code or other codes are subject to inspection by the code official.  
3       Alarms shall be properly maintained and upon request by the code official shall be  
4       demonstrated to be in good working order.

5       Section 34. Section 320 of the Seattle Boiler and Pressure Vessel Code, last amended by  
6       Ordinance 121865, is amended and renumbered as follows:

7       ~~((Section 320))~~ **4.25 Boilers certified as automatic.** ~~((320.1 Boilers certified as~~  
8       ~~automatic shall be equipped with controls and limit devices as set forth in Table 320-A,~~  
9       ~~or ASME CSD-1, whichever is more restrictive.))~~ The Seattle Steam Engineer and Boiler  
10      Fireman License Law, Seattle Municipal Code Chapter 6.420, provides for reduced  
11      attendance requirements for boilers that are certified as automatic.

12             Boilers certified as automatic are required to have the following:

13             **4.25.1** Control and limit devices as set forth in Table 4.25 or as certified by the  
14             manufacturer if approved by the code official to be equivalent.

15             ~~((320.2))~~ **4.25.2** Feed water systems ~~((Boilers certified as automatic shall))~~ not  
16             ~~((require))~~ requiring ~~((any))~~ manual operation. ~~((of the feed water system and~~  
17             ~~shall also be equipped with the following gauges, as applicable:))~~

18             **4.25.3** Stack temperature gauges.

19             **4.25.4** ~~((1. Oil))~~ Oil temperature and oil suction pressure gauges ~~((;))~~ and/or ~~((2.~~  
20             high and low gas pressure gauges, as applicable. ~~((; and~~  
21             ~~3. stack temperature gauge.))~~

22             ~~((320.3))~~ **4.25.5** ~~((A copy of the approved wiring diagram for a boiler certified as~~  
23             ~~automatic shall be permanently and prominently displayed, under protective~~

1            covering, in the boiler room, or within the official log book in an approved  
2            fashion. If the safety devices are wired or in some fashion digital in nature, a  
3            schematic with sufficient detail for a repair or service person to effectively restore  
4            the boiler to service will be acceptable. Such diagram shall include the coding of  
5            the actual wiring by color or by number to permit a ready check of the system.))

6            The original equipment manufacturer's operating and installation manual,  
7            together with electrical schematics or diagrams.

8            **((320.4)) 4.25.6 Boilers 12.5 MM BTU/H and greater.** All boilers certified as  
9            automatic of 12,500,000 Btu/h input and ((over)) greater shall also comply with  
10           the installation requirements of the current edition of ((N.F.P.A.)) NFPA 85,  
11           ((2004 edition)) Boiler and Combustion Systems Hazards Code.

12           **((320.5)) 4.25.7 Solid fuel boilers.** The ((Director)) code official may approve  
13           solid-fuel-fired boilers that ((can)) meet the safety requirements for automatic  
14           gas- or oil-fired boilers.

Table 4.2.5-A, Parts 1 and 2 are below:

**Table ((320-A)) 4.25-A (Part 1 of 2)**

| Fuel Input <sup>1</sup><br>Range in<br>BTU/hr.<br>(inclusive) |          |                           | Type of Pilot <sup>2</sup>     | Safety Control Timing<br>(in seconds unless otherwise indicated) |                             |              |                                              |              | Assured<br>Fuel Supply<br>Control <sup>4</sup> | Assured<br>Fuel Supply<br>Control <sup>5</sup> |
|---------------------------------------------------------------|----------|---------------------------|--------------------------------|------------------------------------------------------------------|-----------------------------|--------------|----------------------------------------------|--------------|------------------------------------------------|------------------------------------------------|
|                                                               |          |                           |                                | Trial for<br>Pilot                                               | Trial for Main Burner Flame |              | Main Burner<br>Flame<br>Failure <sup>3</sup> |              |                                                |                                                |
|                                                               |          |                           |                                |                                                                  | Direct Electric<br>Ignition | Flame Pilot  |                                              |              |                                                |                                                |
| A                                                             | Gas      | 0 – 400,000               | Any type                       | 90                                                               | Not required                | 90           | 90                                           | Not required | Required                                       |                                                |
| B                                                             | Gas      | 400,001 –<br>2,500,000    | Any type                       | 15                                                               | 15                          | 15           | 2 – 4                                        | Not required | Required                                       |                                                |
| C                                                             | Gas      | 2,500,001 –<br>12,500,000 | Interrupted or<br>intermittent | 15                                                               | 15                          | 15           | 2 – 4                                        | Required     | Required                                       |                                                |
| D                                                             | Gas      | Over<br>12,500,000        | Interrupted                    | 15                                                               | 15                          | 15           | 2 – 4                                        | Required     | Required                                       |                                                |
| E                                                             | Oil      | 0 – 400,000               | Any type                       | Not required                                                     | 90                          | 90           | 90                                           | Not required | Required                                       |                                                |
| F                                                             | Oil      | 400,001 –<br>3,000,000    | Interrupted                    | Not required                                                     | 30                          | 30           | 2 – 4                                        | Required     | Required                                       |                                                |
| G                                                             | Oil      | 3,000,001 –<br>12,500,000 | Interrupted                    | Not required                                                     | 15                          | 15           | 2 – 4                                        | Required     | Required                                       |                                                |
| H                                                             | Oil      | Over<br>12,500,000        | Interrupted                    | 15                                                               | 15                          | 60           | 2 – 4                                        | Required     | Required                                       |                                                |
| K                                                             | Electric | All                       | Not required                   | Not required                                                     | Not required                | Not required | Not required                                 | Not required | Not required                                   |                                                |

**Table ((320-A)) 4.25-A (Part 2 of 2)**

| Boiler Group | Fuel     | Fuel Input Range in BTU/hr. (inclusive) <sup>1</sup> | Low Fire Start Up Control <sup>6</sup> | Pre-purging Control <sup>7</sup> | Hot Water Temperature and Low Water Limit Controls <sup>8</sup> | Steam Pressure and Low Water Limit Controls <sup>9</sup> | Approved Fuel Shutoff <sup>10</sup> | Control and Limit Device System Design <sup>11</sup> |
|--------------|----------|------------------------------------------------------|----------------------------------------|----------------------------------|-----------------------------------------------------------------|----------------------------------------------------------|-------------------------------------|------------------------------------------------------|
| A            | Gas      | 0 – 400,000                                          | Not Required                           | Not Required                     | Required                                                        | Required                                                 | Not Required                        | Required                                             |
| B            | Gas      | 400,001 – 2,500,000                                  | Not Required                           | Not Required                     | Required                                                        | Required                                                 | Not Required                        | Required                                             |
| C            | Gas      | 2,500,001 – 12,500,000                               | Required                               | Required                         | Required                                                        | Required                                                 | Required                            | Required                                             |
| D            | Gas      | Over 12,500,000                                      | Required                               | Required                         | Required                                                        | Required                                                 | Required                            | Required                                             |
| E            | Oil      | 0 – 400,000                                          | Not Required                           | Not Required                     | Required                                                        | Required                                                 | Not Required                        | Required                                             |
| F            | Oil      | 400,001 – 3,000,000                                  | Not Required                           | Not Required                     | Required                                                        | Required                                                 | Not Required                        | Required                                             |
| G            | Oil      | 3,000,001 – 12,500,000                               | Required                               | Required                         | Required                                                        | Required                                                 | Required                            | Required                                             |
| H            | Oil      | Over 12,500,000                                      | Required                               | Required                         | Required                                                        | Required                                                 | Required                            | Required                                             |
| K            | Electric | All                                                  | Not Required                           | Not Required                     | Required                                                        | Required                                                 | Not Required                        | Required                                             |

**Footnotes for Table ((320-A)) 4.25.**

1. Fuel input shall be determined by one of the following:

- (a) The maximum burner input as shown on the burner nameplate or as otherwise identified by the manufacturer.
- (b) The nominal boiler rating, as determined by the ((Director)) code official, plus 25 percent.
- (c) A permanently affixed meter to indicate fuel consumption, timed to determine the rate of fuel input.

2. Automatic boilers shall have one flame failure device on each burner which shall prove the presence of a suitable ignition source at the point where it will reliably ignite the main burner, except that boiler groups A, B, E, ~~((and))~~ F, and G which are equipped with direct electric ignition shall monitor the main burner, and all boiler groups using interrupted pilots shall monitor only the main burner after the prescribed limited trial and ignition periods. Continuous pilots used in boiler groups A and B shall accomplish 100 percent shutoff upon pilot flame failure. Intermittent pilots may be used in group C for atmospheric burners only, provided the input per combustion chamber does not exceed 5,000,000 Btu/h and modulating or high-low firing is not employed.

3. Continuous pilots provided on manufacturer assembled boiler-burner units must be ~~((approved))~~ tested by ((a-testing)) an approved agency complying with nationally recognized standards and approved by the ((Director)) code official.

4. Boiler groups C and D shall have controls interlocked to accomplish a non-recycling fuel shutoff upon detecting high or low gas pressure, ~~((and boiler))~~ Boiler groups F, G, and H using steam or air for fuel atomization shall have controls interlocked to accomplish a non-recycling fuel shutoff upon detecting low atomizing steam or air pressure. Boiler groups F, G, and H equipped with a preheated oil system shall have controls interlocked to provide fuel shutoff upon detecting low oil temperature.

5. Automatic boilers shall have controls interlocked to shut off the fuel supply in the event of draft failure if forced or induced draft fans are used or, in the event of low combustion air flow, if a gas power burner is used. In boiler groups C, D, G, and H failure to prove the air flow required shall result in a safety shutdown. Where a single motor directly driving both the fan and the oil pump is used, a separate control is not required.

- 1 6. Boiler groups C, D, G<sub>1</sub> and H<sub>1</sub> when firing in excess of 400,000 Btu per combustion chamber, shall be provided with low fire start
- 2 of its main burner system to permit smooth light-off. This will normally be a rate of approximately one-third of its maximum firing
- 3 rate.
- 4 7. Boiler groups B, C, D, G<sub>1</sub> and H shall not permit pilot or main burner trial for ignition operation before a purging operation of
- 5 sufficient duration to ~~((permit))~~ allow a minimum of four complete air changes through the furnace, including combustion chamber
- 6 and the boiler passes. Where this is not readily determinable, five complete air changes of the furnace, including combustion chamber
- 7 up to the first pass, ~~((will-be))~~ are considered equivalent. An atmospheric gas burner with no mechanical means of creating air
- 8 movement or an oil burner which obtains two-thirds or more of the air required for combustion without mechanical means of creating
- 9 air movement shall not require purge by means of four air changes so long as its secondary air openings are not provided with means
- 10 of closing. If such burners have means of closing secondary air openings, a time delay ~~((must))~~ shall be provided which puts these
- 11 closures in a normally open position for four minutes before ~~((an-attempt-for))~~ attempting ignition. An installation with a trapped
- 12 combustion chamber shall ~~((in-every-case))~~ always be provided with a mechanical means of creating air movement for purging. Purge
- 13 air flow in boiler groups C, D, G<sub>1</sub> and H shall be proved. Proof of purge air flow may be accomplished by providing:
- 14 (1) Air pressure and "open damper" interlocks for all dampers in the flow path, or
- 15 (2) Air flow interlock.
- 16 8. ~~((See-Section-310))~~ Shall comply with Section 4.18 of this code.
- 17 9. ~~((See-Section-310))~~ Shall comply with Section 4.18 of this code.

10. Automatic boilers firing gas or using gas pilots shall be equipped with an approved safety shutoff valve(s) in the main gas burner supply line ((and/)) or pilot gas burner supply line. The safety shutoff valve(s) shall be interlocked to the required programming control devices. ~~((required.))~~ Boilers in group C having an input per combustion chamber which does not exceed 5,000,000 Btu/h shall have two safety shutoff valves in series or one safety shutoff valve of the type incorporating a valve seal over travel interlock. Boilers in group C having an input per combustion chamber exceeding 5,000,000 Btu/h and boilers in group D shall have two safety shutoff valves in series ~~((of which))~~ and the downstream valve shall be of the type incorporating a valve seal over travel interlock. Boilers in groups C and D using gas in excess of one-half pound per square inch ( $\frac{1}{2}$  lb/in<sup>2</sup>) pressure shall be provided with a permanent and ready means for making periodic tightness checks of the main fuel safety shutoff valves. Boilers in group D shall have a normally open electrically operated valve in a vent line between the two safety shutoff valves. This vent shall be sized in accordance with an approved vent sizing table but shall not be less than three-quarters ( $\frac{3}{4}$ ) inch pipe size. On oil burners where the safety shutoff valve will be subjected to pressures in excess of 10 psi, a second safety shutoff valve shall be provided in series with the first. In boiler group H where a second safety shutoff valve is required, the upstream valve shall be of the 3-way bypass or recirculating type.

11. Control and limit device systems shall be grounded with operating voltage not to exceed 150 volts, except that upon approval by the ~~((Director))~~ code official, existing control equipment to be reused in an altered boiler control system may use 220-volt single phase with one side grounded, provided such voltage is used for all controls. Control and limit devices shall interrupt the ungrounded side of the circuit. A readily accessible means of manually disconnecting the control circuit shall be provided with controls ~~((se))~~ arranged so that when they are de-energized the burner shall be inoperative.

Section 35. Section 330 of the Seattle Boiler and Pressure Vessel Code, last amended by Ordinance 121865, is amended and renumbered as follows:

~~((Section 330 Monitored boilers~~

~~Note: The Seattle Steam Engineer and Boiler Fireman License Law, Seattle Municipal Code Chapter 6.420, provides for reduced attendance requirements for boilers that are certified as monitored.))~~

**4.26 Boilers certified as monitored.** Boilers certified as monitored shall comply with the reduced attendance requirements allowed by the Seattle Steam Engineer and Boiler Fireman License Law, Seattle Municipal Code Chapter 6.420. The boiler owner or lessee is responsible for compliance with this Section 4.26.

~~((330.1))~~ **4.26.1 Definitions related to monitored boiler systems.** For the purposes of this section, certain terms, phrases, words, and their derivatives shall be defined as follows:

**CENTRAL STATION AGENCY** ~~((:A))~~ means a 'Class A' Central Station Agency as defined and approved by the Seattle Fire Department.

**MONITORING SYSTEM** ~~((:An approved))~~ means a protective alarm signaling system ~~((approved by a nationally recognized testing agency))~~ used for surveillance of controls and limit devices required on certain automatic boilers.

~~((PROPRIETARY))~~ **ON-SITE MONITORED SYSTEM** ~~((:A))~~ means a monitoring system with constant supervision by competent and experienced personnel in a central supervising station ~~((at the property protected))~~ located on the site where the boiler is installed. The system ~~((is to include))~~ includes equipment and ~~((other))~~ facilities required to ~~((permit))~~ allow the boiler and

monitoring system operators to test and operate the system and, upon receipt of a signal, to take ~~((such))~~ responsive action. ~~((as is required.))~~

**~~((PROTECTIVE))~~ SIGNALING SYSTEMS ~~((Electrically))~~** means electrically operated circuits, instruments, and devices, together with the necessary electrical energy designed to transmit alarms and trouble signals ~~((necessary for))~~ to the monitoring system operators to effectively ~~((monitoring))~~ monitor boilers.

**~~((330.2)) 4.26.2 Approval of ((Monitoring Systems))~~ monitoring systems.**

- A. ~~((An installation permit is required to certify a boiler as monitored. The annual fee for such certification shall be as established in the Permit Fee Subtitle, Seattle Municipal Code Section 22.900E as applicable. Monitored Boiler status is available only to boilers certified by the Director as Automatic Boilers.))~~ Status. Monitored boiler status is available only to boilers certified by the code official as automatic boilers.
- B. Acceptance ~~((Tests))~~ tests. Upon completion of ~~((a))~~ system installation, a satisfactory test of the entire installation shall be made in the presence of the ~~((department))~~ City inspector. It shall be the responsibility of the applicant to demonstrate ~~((in the presence of the department inspector by testing of the apparatus, or such other means as may be appropriate,))~~ the operation and reliability of the ~~((subject))~~ monitoring system during the test of the equipment. The ~~((department))~~ City inspector may require additional tests ~~((as he/she deems))~~ if deemed necessary for the ~~((safe))~~

operation and proper maintenance of the monitoring system and the boiler plant ~~((s))~~ served by such system.

C. Inspection. An inspection by a ~~((department))~~ City inspector ~~((is required))~~ may be conducted annually for certification renewal.

D. ~~((Equipment))~~ Listing required. All ~~((Monitoring System))~~ monitoring system devices shall be ~~((approved))~~ listed and labeled by a nationally recognized testing agency.

~~((330.3))~~ **4.26.3 ((Alarms/Signals, Personnel and Reporting)) Signals, personnel, and reporting.**

A. Required ~~((Alarms))~~ signals. ~~((A monitoring system shall sense low water level and flame failure on all boilers, steam pressure at the upper limit setting on steam boilers or water temperature at the upper limit setting on hot water boilers.))~~ The following signals are required:

1. Low water level;

2. Flame failure; and

3. Steam pressure at the upper limit setting on steam boilers or water temperature at the upper limit setting on hot water boilers.

Upon sensing any of the above conditions, a ~~((manually reset relay device shall shut off the fuel supply to the boiler and shall relay an alarm))~~ signal shall be sent to the monitoring system. The monitoring system shall ~~((sense))~~ send a signal if existing limit controls and flame failure devices have caused the boiler to shut down.

- 1 B. Monitoring ~~((System Personnel))~~ system personnel. The monitoring  
2 station shall have sufficient personnel ~~((constantly))~~ on duty to assure  
3 immediate attention to all ~~((alarm))~~ signals received. ~~((The minimum age  
4 of all monitoring station operators shall be eighteen years. Operation and  
5 supervision shall be the primary functions of the monitoring station  
6 operators and no other interest or activity shall take precedence over the  
7 protective service.))~~
- 8 C. Report ~~((Availability))~~ availability. Reports of all ~~((alarm))~~ signals  
9 received by the monitoring station shall be made available ~~((upon request  
10 to the Director))~~ when requested by the code official and as required in  
11 this Section 4.26.3.
- 12 D. Disposition of ~~((Signals))~~ signals. ~~((1-))~~ Upon receipt of ~~((trouble signals))~~  
13 a signal ~~((or other signals))~~ pertaining solely to matters of equipment  
14 maintenance of the signaling systems, the monitoring station operating  
15 company shall: ~~((immediately investigate and, if possible, assure that the  
16 trouble is remedied at once.))~~
- 17 1. ~~((In all cases where service of the signaling system is interrupted  
18 and is corrected within 12 hours,))~~ Notify the property owner  
19 ~~((shall be notified immediately. This notification shall be  
20 confirmed by written notice with a copy sent to the Director.))~~  
21 when the function of signaling system is interrupted and is not  
22 corrected within 12 hours.

2. ~~((Upon receipt of an alarm signal, the monitoring station shall notify))~~ Notify the on-site ~~((boiler operating engineer, if any, or the boiler supervisor by telephone or by the quickest method available))~~ designated point of contact as soon as possible.

3. Notify the code official ~~((Upon))~~ upon receipt of ~~((an))~~ a ~~((alarm))~~ signal not caused by routine inspection and maintenance. ~~((the designated boiler supervisor shall notify the director.))~~

~~((4.))~~ E. ~~((Definite instructions))~~ Procedures to be available. Procedures for  
~~((the handling of alarms))~~ responding to signals shall be ~~((posted for the guidance of the operators of the monitoring system))~~ readily available to  
the on-site designated point of contact and shall include procedures for  
notifying the boiler supervisor and the code official.

~~((330.4))~~ F. Maintenance and ~~((Repair))~~ repair of monitoring equipment.

~~((A.))~~ 1. The monitoring station operating company shall have a person available within two-hours' travel who is competent to inspect, maintain, and repair the monitoring equipment.

~~((B.))~~ 2. Maintenance. All monitoring station systems shall be under the supervision of qualified persons. These persons shall cause proper tests and inspection to be made at prescribed intervals and shall have general charge of all alterations and additions to the monitoring system under their supervision or a satisfactory agreement on the maintenance, operation and efficiency of the system shall be provided.

**Section 5 - In-service inspections for existing installations.**

**5.1 Duty to inspect.** The code official shall inspect or have inspected all boilers and pressure vessels and listed potable hot water heaters. After satisfactory completion of inspections and upon receipt of fees as set forth in the Fee Subtitle, Seattle Municipal Code, Title 22, Subtitle IX, Permit Fees, the code official shall issue a Certificate of Inspection. Inspectors conducting in-service inspections must have current commissions issued by the National Board of Boiler and Pressure Vessel Inspectors. Inspectors can be either City inspectors or insurance company inspectors.

**5.2 In-service inspection.** In-service inspections are conducted in accordance with the current edition of the National Board Inspection Code (NBIC), Part 2. If differences occur between provisions of this code and referenced codes or standards, the provisions of this code apply. The code official shall keep a complete record of the type, dimensions, maximum allowable working pressure, age, condition, location, and date of the last recorded internal and external inspections of all boilers and pressure vessels regulated by this code.

**Exemptions from in-service inspection.** The following boilers, pressure vessels, and other equipment shall not be required to comply with in-service inspection requirements:

1. Portable. Portable unfired pressure vessels subject to regular inspection by the State of Washington (RCW Chapter 70.79).
2. LPG containers. Containers for liquefied petroleum gases regulated by the Seattle Fire Code.

- 1           3. Specific unfired pressure vessels. Unfired pressure vessels located in  
2           Group B, F, H, M, R, S, and U occupancies having a volume of 5 cubic  
3           feet or less and operated at pressures not exceeding 250 psi.
- 4           4. Small unfired pressure vessels. Regardless of occupancy, unfired pressure  
5           vessels that are:
  - 6           A. less than 1 ½ cubic feet in volume, (approx. 11.25 gallons).
  - 7           B. 6 inches in internal diameter with no limit as to length or pressure.
- 8           5. Pressure relief protected. Unfired pressure vessels of any size that are  
9           protected by approved pressure relief devices set to operate at a pressure  
10           not exceeding 15 psi or otherwise open to ambient atmospheric pressure.
- 11           6. DOT inspected. Any boiler or pressure vessel subject to regular inspection  
12           by federal inspectors or licensed by federal authorities, such as D.O.T.
- 13           7. Certain electric boilers. Electric boilers that meet all of the following  
14           criteria:
  - 15           A. Having a vessel volume not exceeding 1 ½ cubic feet; and
  - 16           B. Having a maximum allowable working pressure of one hundred  
17           (100) psi; and
  - 18           C. If constructed after June 10, 1994, the boiler was constructed to  
19           American Society of Mechanical Engineers Boiler and Pressure  
20           Vessel Code standards, or listed or otherwise certified by a  
21           nationally recognized testing agency or recognized foreign testing  
22           laboratory.

8. Storage tanks. Water storage tanks with no air cushion and no energy or heat source.

9. State Owned. Boilers and pressure vessels under the direct ownership and operation of the State of Washington, and that are inspected in accordance with Washington State Boiler and Pressure Vessel rules (RCW Chapter 70.79) and in possession of a current Washington State Certificate to Operate.

10. Group R and U occupancies. Steam heating boilers, low-pressure hot-water heating boilers, hot-water-supply boilers, and pressure vessels in Group R occupancies of less than six units and in Group U occupancies.

**5.3 In-service inspection frequency.** Inspection frequency shall, at a minimum, be as required by this Section 5.3. At the discretion of the inspector and as warranted by equipment conditions, the internal, external, or ultrasonic (UT) inspection frequency may be increased until the inspector is satisfied that conditions are corrected and that the minimum prescribed frequencies of inspection may resume.

**5.3.1 External inspections.**

A. Boiler inspections. Boilers are inspected externally annually. All required boiler controls and safety devices are tested during the external inspection to determine that they are operating properly.

B. Unfired pressure vessel inspections. Unfired pressure vessels are inspected externally biennially.

C. Potable water heaters and pool heaters. In Group A, E, and I occupancies, potable water heaters, combination hot water heaters (fired, electric,

1                   thermal, solar, and indirect), and pool heaters shall be inspected externally  
2                   biennially for safe condition. The safety inspection consists of lifting the  
3                   safety relief try-lever to verify free flow of the safety relief valve and of a  
4                   visual inspection of the exterior of the vessel for leakage or physical  
5                   damage.

6                   **5.3.2 Internal Inspections.** Boilers are subject to internal inspection as follows:

7                   A.       Annual inspections. High pressure boilers are inspected internally  
8                   annually.

9                   B.       Biennial inspections.

10                  1.       Low pressure hot water heating boilers not using corrosion  
11                   inhibitors are inspected internally at least once every two years.

12                  2.       Low pressure steam boilers shall be inspected internally at least  
13                   once every two years.

14                  3.       Unfired pressure vessels, when subject to corrosion and where  
15                   construction allows, are inspected internally at least once every  
16                   two years. Subject to the discretion of the inspector, an ultrasonic  
17                   examination of the external side of the pressure vessel may  
18                   substitute for an internal inspection.

19                  C.       Discretionary inspections. Low pressure hot water heating boilers using  
20                   corrosion inhibitors, glycol, or oil are inspected internally at a frequency  
21                   determined by the inspector. The inspector shall consider factors  
22                   including, but not limited to, history of the installation, adequacy of  
23                   corrosion inhibitors, and tightness of the system.

**5.4 Preparation for Inspection.**

**5.4.1 Boiler preparation.** The owner or user shall prepare a boiler for internal inspection as necessary to allow for a meaningful inspection.

1. Preparation shall include the following unless directed otherwise by the boiler inspector:

A. Water shall be drained and the boiler thoroughly cleaned.

B. Manhole and handhole plates and wash-out plugs and water column connections shall be removed.

C. Furnace and combustion chambers shall be thoroughly cooled and cleaned.

D. All grates of internally fired boilers shall be removed.

E. Brickwork or refractory shall be removed, if needed, to determine the condition of the boiler headers, furnace, supports or other parts.

F. Leakage of steam or hot water into the boiler shall be prevented while it is open for inspection.

G. Low water cutout shall be disassembled as necessary to allow for inspection.

H. Compliance with any lock-out or tag-out and confined space entry procedures shall be followed if required by the owner, operator, OSHA, WDOSH rules, and other regulations applying to the safety of personnel.

2. Unprepared. If a boiler or unfired pressure vessel has not been properly prepared for an internal inspection, the inspector may decline to make the

1                   inspection or test. The Certificate of Inspection will be withheld until the  
2                   owner or user complies with the inspector's requirements. At the  
3                   discretion of the inspector, an additional inspection fee may be charged  
4                   per the Fee Subtitle, Seattle Municipal Code, Title 22, Subtitle IX, Permit  
5                   Fees.

6                   **5.5 Inspection results - Corrections required.** The inspector shall notify the owner or  
7                   authorized representative of defects and deficiencies. It is the responsibility of the owner  
8                   to promptly and properly make the corrections required by the inspector. If such  
9                   corrections are not made, or if the operation of the boiler or pressure vessel is deemed  
10                  unsafe by the inspector, the Certificate of Inspection for the boiler or pressure vessel may  
11                  be withheld until the corrections are made.

12                  **5.6 Inspection by authorized insurance companies.** Inspection of boilers and pressure  
13                  vessels may be made by employees of an authorized insurance company. Such inspection  
14                  shall be conducted in accordance with the requirements of this code by persons holding  
15                  an active commission from the National Board of Boiler and Pressure Vessel Inspectors.

16                  1. Inspector list. Authorized insurance companies must annually notify the code  
17                  official, in writing, of those inspectors that will be conducting inspections within  
18                  The City of Seattle. Notification shall include the National Board Commission  
19                  number and expiration date of the inspectors' current National Board  
20                  Commission. Notification in writing may be on company letterhead or by email.  
21                  Authorization is subject to the approval of the code official.

22                  2. Reports. Authorized insurance inspectors shall make their reports to the code  
23                  official on forms or as prescribed by the Department.

3. Suspension of coverage. Authorized insurance inspectors shall immediately notify the code official of any suspension of insurance coverage.

4. New or discontinued coverage. Authorized insurance companies providing insurance coverage of equipment subject to inspection by the code official shall notify the code official within 30 days of any new insurance in effect or any discontinuance of insurance coverage of that equipment.

**5.7 Certificate of inspection.** It is unlawful to operate any boiler or pressure vessel without first obtaining a valid Certificate of Inspection from the code official. Certificates of Inspection shall be displayed in a conspicuous place adjacent to the boiler or vessel and a copy placed in the service manual. The Certificate of Inspection shall not be issued until the equipment passes inspection and is approved by the code official. A grace period of no longer than 60 days past the expiration date of a Certificate of Inspection may be granted.

**5.8 Removal from service due to dangerous conditions.** If the operation of a boiler or pressure vessel is deemed by the code official to constitute an imminent hazard, the pressure on such boiler or pressure vessel shall be relieved and the boiler or pressure vessel shall be secured at the owner's expense. The unsafe boiler or pressure vessel shall not be operated without approval of the code official, who may issue an emergency order pursuant to Section 1.6.7.

**5.9 Operation of boilers and pressure vessels.**

1. Operation. Boilers and pressure vessels shall be operated and maintained by an appropriately licensed boiler operator as required by the Seattle Steam Engineer and Boiler Fireman License Law, Seattle Municipal Code Chapter 6.420.

2. Maintenance. Boilers and pressure vessels shall be operated and maintained in a safe condition as required by the code official and in accordance with this code and nationally recognized standards. All safety devices, controls, and appurtenances shall be maintained and cared for throughout the life of the boiler or pressure vessel. When the devices are deemed to be non-functioning, they shall be immediately replaced or repaired and the vessel made whole and safe to operate.

**5.10 Accidents are required to be reported.** In case of an explosion or other event rendering a boiler or pressure vessel unsafe to return to operation, notice shall be given immediately to the code official. No boiler or unfired pressure vessel nor any parts shall be removed or disturbed before an inspection is made by a city inspector, except as necessary to prevent injury. The code official shall conduct an investigation to determine the cause of the accident and to recommend actions to prevent future occurrences.

## **Section 6 - Repairs and alterations**

### **6.1 Repairs and alterations of boilers and pressure vessel systems.**

**6.1.1. Pre-approval.** Repairs and alterations to in-service boilers and pressure vessels must be approved by the code official prior to proceeding with the repair or alteration. An installation permit may be required before proceeding with the repair or alteration if required by Section 4 of this code.

**6.1.2. Code compliance.** Repairs or alterations to pressure-retaining portions of the boiler or pressure vessel shall comply with the current edition of this code and the National Board Inspection Code (NBIC) Part 3, Repairs and Alterations. If there are conflicts between the two codes, this code applies.

1           **6.1.3. Significant repair.** If the repair or alteration is outside the scope of the  
2           NBIC, Part 3, then the boiler or pressure vessel shall be repaired to the  
3           satisfaction of the in-service inspector. The in-service inspector shall make a  
4           written report to the code official describing the repair or alteration, how it was  
5           completed, and whether it is satisfactory. If the code official determines the repair  
6           is satisfactory, a Certificate of Inspection is issued.

7           **6.1.4. Replacement.** Replacement of any boiler or pressure vessel shall comply  
8           with the requirements of this code for the type of boiler or pressure vessel being  
9           installed. The code official may agree to a variance that is equivalently safe when  
10          existing circumstances on site justify a variance.

11          **6.1.5. Notification.** The in-service inspector shall be notified of the nature of the  
12          repair or alteration and kept apprised of the progress until the inspector completes  
13          the required documentation. Once completed, the code official shall be notified  
14          that the boiler or pressure vessel is repaired, altered, or otherwise made whole  
15          again, and is ready to return to service.

16          **6.1.6. Approval.** A copy of the required inspection report shall be sent to the code  
17          official before the boiler or pressure vessel system is returned to service.

## 18          **Section 7 - Retroactive requirements**

19          **7.1 Retroactive requirements.** The following requirements apply to all boilers and  
20          pressure vessels whether new or existing:

21               **7.1.1** Power hot water boiler, other than manually fired, shall be equipped with at  
22               least two temperature controls wired in series.

1           7.1.2 Every steam heating boiler, other than manually fired, shall be equipped  
2           with at least two pressure controls and a low-water cutoff.

3           7.1.3 Each temperature or pressure control shall have an independent sensing  
4           element.

5           7.1.4 Every mechanically fired boiler that requires manual ignition of the burner  
6           shall have a manual reset device to prevent automatic recycling of the ignition in  
7           the event of any shut down.

8           Section 36. Section 340 of the Seattle Boiler and Pressure Vessel Code, last amended by  
9           Ordinance 121865, is repealed:

10           ~~((Section 340 – Expansion Tanks~~

11           ~~All hot water heating systems shall be provided with an air expansion tank securely~~  
12           ~~fastened to the structure. Supports shall be adequate to carry twice the weight of the tank~~  
13           ~~filled with water without placing any strain on connecting piping. Expansion tanks~~  
14           ~~exempted for size in Section 100 of this code shall conform to the requirements of ASME~~  
15           ~~Section IV, HG-709.))~~

16           Section 37. Section 350 of the Seattle Boiler and Pressure Vessel Code, last amended by  
17           Ordinance 121865, is repealed:

18           ~~((Section 350 – Blow-off Tanks~~

19           ~~The discharge from boilers shall not exceed a temperature of 140°F before entering the~~  
20           ~~drainage system. Some means of tempering and cooling the discharge prior to entering~~  
21           ~~the drainage system shall be provided. Proper care shall be made to prevent discharge of~~  
22           ~~liquids or chemicals that could damage drainage systems. (Reference Uniform Plumbing~~  
23           ~~Code, Section 810).~~

1       A. ~~Blow-off tanks, when used, shall be designed in accordance with the National~~  
2       ~~Board of Boilers and Pressure Vessels Blow-off Equipment Standard NB-27.~~

3       B. ~~For power boilers, blow-off tanks shall be used to receive effluent from the~~  
4       ~~bottom blow-off and low water cutoff drains unless an alternate means of safe~~  
5       ~~discharge can be provided. Any alternate method shall be approved by the~~  
6       ~~Director prior to installation.~~

7       C. ~~Blow-off tanks, being open vessels, are not required to have valid inspection~~  
8       ~~certificates. They are, however, included in the inspection of the boiler or boilers~~  
9       ~~that they serve.))~~

10       Section 38. Section 360 of the Seattle Boiler and Pressure Vessel Code, last amended by  
11       Ordinance 121865, is repealed:

12       **~~((Section 360 – Clearance Requirements~~**

13       ~~When boilers are installed or replaced, clearance shall be provided to allow access for~~  
14       ~~inspection, maintenance and repair. Passageways around all sides of boilers shall have an~~  
15       ~~unobstructed width of not less than 18 inches. Clearance for repair and cleaning may be~~  
16       ~~provided through a door or access panel into another area, provided the opening is of~~  
17       ~~sufficient size.~~

18       **~~Exception:~~** ~~Subject to the approval of the Director, boilers and pressure vessels~~  
19       ~~may be installed with a side clearance of less than 18 inches, provided that the~~  
20       ~~lesser clearance does not inhibit inspection, maintenance, and repair or violate the~~  
21       ~~terms of the listing or the manufacturer's installation instructions.~~

22       A. ~~Power boilers having a steam generating capacity in excess of 5000 pounds per~~  
23       ~~hour or having a heating surface in excess of 1000 square feet or input in excess~~

of 5,000,000 Btu/h shall have a minimum clearance of 7 feet from the top of the boiler to the ceiling.

B. — Steam heating boilers and hot water heating boilers which exceed one of the following limits: 5,000,000 Btu/h input; 5000 pounds steam per hour capacity or 1000 square foot heating surface; and power boilers which do not exceed one of the following limits: 5,000,000 Btu/h input; 5000 pound steam per hour capacity or 1000 square foot heating surface; and all boilers with manholes on top of the boiler, except those described in paragraphs A and C shall have a minimum clearance of 3 feet from the top of the boiler to the ceiling.

C. — Package boilers, steam heating boilers and hot water heating boilers with no manhole on top of shell and not exceeding one of the above limits shall have a minimum clearance of 2 feet from the ceiling.

D. — Adequate clearance for access and to permit entry shall be provided for pressure vessels. Pressure vessels equipped with manhole openings shall have a minimum of five feet clearance from any obstruction. All other inspection openings shall be at least 18 inches from any obstruction.))

Section 39. Section 370 of the Seattle Boiler and Pressure Vessel Code, last amended by Ordinance 119478, is repealed:

**((Section 370 — Underground Installations**

Where necessary to install a pressure vessel underground, it shall be enclosed in a concrete or masonry pit. If the pit is to be covered, it shall be equipped with a removable cover so that inspection of the entire shell and heads of the vessel can be made. Clearance requirements shall be in accordance with Section 360 of this code.))

Section 40. Section 380 of the Seattle Boiler and Pressure Vessel Code, last amended by Ordinance 121865, is repealed:

**~~((Section 380—Boiler Rooms / Enclosures~~**

~~Boiler rooms shall comply with Seattle Mechanical Code and Seattle Fire Code requirements for machinery rooms.~~

**~~380.1 Mounting.~~**

~~A.—— All equipment shall be set or mounted on a level base capable of supporting and distributing the weight contained thereon.~~

~~B.—— All boilers, tanks and equipment shall be securely anchored to the structure. This requirement does not prohibit the use of flexible mounts for vibration isolation or mounting devices that allow for thermal expansion.~~

~~C.—— Equipment requiring vibration isolation shall be installed as designed by a registered engineer to the satisfaction of the Director.~~

**~~380.2 Floors.~~**

~~Boilers shall be mounted on floors of non-combustible construction unless listed for mounting on combustible flooring.~~

**~~380.3 Drainage.~~**

~~For heating or hot water supply boiler applications, the boiler room shall be equipped with a floor drain or other means suitable for disposing of the accumulation of liquid wastes incident to cleaning, recharging and routine maintenance.~~

**~~380.4 Installation in Garages and Warehouses.~~**

~~A.—— Boilers and pressure vessels installed in garages, warehouses or other areas where they may be subjected to mechanical damage shall be suitably guarded against~~

such damage by being installed behind protective barriers or by being elevated or located out of the normal path of vehicles.

B. — Boilers located in a garage and which have an ignition source shall be installed with sources of ignition at least 18 inches above the floor level. See also Seattle Mechanical Code Section 304.3.

**Exception:** Installations within a garage enclosed in a separate approved compartment having access only from outside of the garage provided the required combustion air is taken from and discharged to the exterior of the garage.

### **380.5 Platforms Around Boilers and Pressure Vessels.**

Platforms shall be provided allowing safe access to each boiler or pressure vessel when the boiler controls, valves, manholes, or casing openings are over ten feet above the floor, including boilers and pressure vessels mounted in false ceilings.))

Section 41. Section 390 of the Seattle Boiler and Pressure Vessel Code, last amended by Ordinance 121865, is repealed:

#### **((Section 390 – Fuel Piping**

A. — Shutoff Valves. An approved manual shutoff valve shall be installed upstream of all control devices on the main burner of a gas-fired boiler. The takeoff point for the gas supply to the pilot shall be upstream of the gas shutoff valve of the main burner and shall be valved separately. A union or other approved means of disconnect shall be provided immediately downstream of these shutoff valves.

B. — Gas Pressure Regulators. An approved gas pressure regulator shall be installed on gas-fired boilers where the gas supply pressure is higher than that at which the main burner is designed to operate. A separate approved gas pressure regulator

1 shall be installed to regulate the gas pressure to the pilot or pilots. A separate  
2 regulator shall not be required for the pilot or pilots on manufacturer assembled  
3 boiler burner units which have been approved by the Director and on gas-fired  
4 boilers in Group R Occupancies of less than six units and in Group U  
5 Occupancies.

6 C. ~~Fuel piping installation shall conform to the provisions of the Seattle Fuel Gas~~  
7 ~~Code.))~~

8 Section 42. Section 400 of the Seattle Boiler and Pressure Vessel Code, last amended by  
9 Ordinance 121865, is repealed:

10 ~~((Section 400 – Steam and Hydronic Piping~~

11 ~~400.1 General. Steam and hydronic piping systems which are part of a boiler or heating~~  
12 ~~system shall conform to the requirements of the International Mechanical Code Chapter~~  
13 ~~12, and the codes listed in Section 170 of this code. When piping falls outside the scope~~  
14 ~~of the applicable sections of the above codes, a standard approved by the Director may be~~  
15 ~~used.~~

16 ~~400.2 Materials and Construction.~~

17 A. ~~All piping, tubing, valves, joints, fittings, devices and materials shall be free of~~  
18 ~~defects and comply with nationally recognized standards approved by the~~  
19 ~~Director.~~

20 B. ~~Galvanized piping and fittings are prohibited.))~~

Section 43. Section 410 of the Seattle Boiler and Pressure Vessel Code, last amended by Ordinance 121865, is repealed:

**~~((Section 410 – Pressure Reducing Valves~~**

A. ~~Where pressure reducing valves are used, one or more relief or safety valves and pressure gauges shall be provided on the low pressure side of the reducing valve. The relief or safety valves shall be located adjoining to or as close as possible to the reducing valve. Proper protection shall be provided to prevent injury or damage caused by the escaping steam from the discharge of relief or safety valves if vented to the atmosphere. The combined discharge capacity of the relief valves shall be such that the pressure rating of the lower pressure piping or equipment shall not be exceeded in case the reducing valve sticks open.~~

B. ~~The use of a hand controlled bypass around a reducing valves is permissible. The capacity of the bypass shall not exceed the capacity of the reducing valve. Unless all the equipment downstream of the reducing station meets the requirements of the high pressure system, the low pressure side shall be protected by one or more safety valves having adequate capacity.))~~

Section 44. Section 420 of the Seattle Boiler and Pressure Vessel Code, last amended by Ordinance 119478, is repealed:

**~~((Section 420 – Elevator Machine Rooms / Spaces and Hoistways~~**

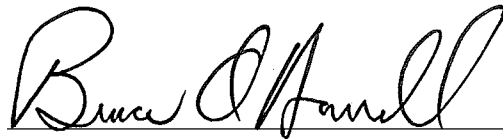
~~Pipes conveying gases, vapors or liquids which are not used in connection with the operation of the elevator shall not be installed in any hoistway, machine room or machinery space.))~~

Section 45. Beginning on the effective date of this ordinance and ending on June 1, 2017, permit applicants who submit a valid and fully complete building permit application during that period may elect to have the application reviewed under the provisions of Ordinance 121865 rather than this ordinance.

Section 46. The provisions of this ordinance are declared to be separate and severable. The invalidity of any clause, sentence, paragraph, subdivision, section or portion of this ordinance, or the invalidity of the application thereof to any person, owner, or circumstance shall not affect the validity of the remainder of this ordinance, or the validity of its application to other persons, owners, or circumstances.

Section 47. This ordinance shall take effect and be in force 30 days after its approval by the Mayor, but if not approved and returned by the Mayor within ten days after presentation, it shall take effect as provided by Seattle Municipal Code Section 1.04.020.

Passed by the City Council the 26<sup>th</sup> day of JUNE, 2017,  
and signed by me in open session in authentication of its passage this 26<sup>th</sup> day of  
JUNE, 2017.



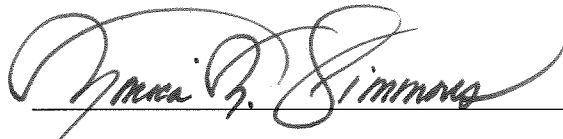
President \_\_\_\_\_ of the City Council

Approved by me this 30<sup>th</sup> day of JUNE, 2017.



Edward B. Murray, Mayor

Filed by me this 30<sup>th</sup> day of JUNE, 2017.



Monica Martinez Simmons, City Clerk

(Seal)

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STATE OF WASHINGTON -- KING COUNTY

--SS.

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351785

No. 125338, 125336

CITY OF SEATTLE, CLERKS OFFICE

**Affidavit of Publication**

The undersigned, on oath states that he is an authorized representative of The Daily Journal of Commerce, a daily newspaper, which newspaper is a legal newspaper of general circulation and it is now and has been for more than six months prior to the date of publication hereinafter referred to, published in the English language continuously as a daily newspaper in Seattle, King County, Washington, and it is now and during all of said time was printed in an office maintained at the aforesaid place of publication of this newspaper. The Daily Journal of Commerce was on the 12<sup>th</sup> day of June, 1941, approved as a legal newspaper by the Superior Court of King County.

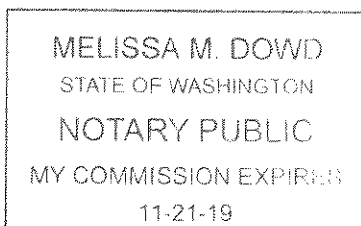
The notice in the exact form annexed, was published in regular issues of The Daily Journal of Commerce, which was regularly distributed to its subscribers during the below stated period. The annexed notice, a

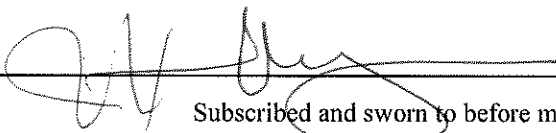
CT:TITLE ONLY 125337

was published on

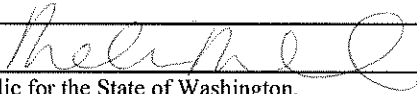
07/11/17

The amount of the fee charged for the foregoing publication is the sum of \$66.13 which amount has been paid in full.



  
Subscribed and sworn to before me on

07/11/2017

  
Notary public for the State of Washington,  
residing in Seattle

Affidavit of Publication

# State of Washington, King County

## City of Seattle

The full text of the following legislation,  
passed by the City Council

on June 26, 2017, and published below by  
title only, will be mailed

upon request, or can be accessed at <http://seattle.legistar.com>. For

information on upcoming meetings of the  
Seattle City Council, please

visit [http://www.seattle.gov/council/](http://www.seattle.gov/council/calendar)  
[calendar](http://www.seattle.gov/council/calendar).

Ordinance 125337

Council Bill 119001

AN ORDINANCE relating to the Seattle  
Boiler and Pressure Vessel Code; amending  
Section 22.450.010 of the Seattle Municipal  
Code and amending the Seattle Boiler and  
Pressure Vessel Code.

Ordinance 125338

Council Bill 118989

AN ORDINANCE amending Ordinance  
125207, which adopted the 2017 Budget,  
including the 2017-2022 Capital  
Improvement Program (CIP); changing  
appropriations to various departments and  
budget control levels, and from various  
funds in the Budget; revising project alloca-  
tions for certain projects in the 2017-2022  
CIP; all by a 3/4 vote of the City Council.

Ordinance 125336

Council Bill 119003

AN ORDINANCE appropriating money  
to pay certain audited claims and ordering  
the payment thereof.

Date of publication in the Seattle Daily  
Journal of Commerce, July 11, 2017.

7/11(351785)