

Introduced by: Mayor Cleworth  
Date: January 24, 2011

## ORDINANCE NO. 5830

### AN ORDINANCE TO AMEND FGC SECTIONS 10-136 AND 10-137 ADOPTING THE 2009 UNIFORM PLUMBING CODE WITH AMENDMENTS, AND SETTING AN EFFECTIVE DATE

WHEREAS, the Building Code Review and Appeals Commission has reviewed the 2009 Uniform Plumbing Code, and the amendments thereto, and has recommended adoption with local amendments; and

WHEREAS, the City Council desires to accept the recommendations of the Building Code Review and Appeals Commission,

NOW, THEREFORE, BE IT ENACTED BY THE CITY COUNCIL OF THE CITY OF FAIRBANKS, ALASKA, AS FOLLOWS:

Section 1. Fairbanks General Code Sections 10-136 and 10-137 are hereby repealed and re-enacted as follows, [**Substantive changes are shown in bold font**]:

Sec. 10-136. Adoption.

The Uniform Plumbing Code **2009** Edition, to include Appendix A, B, D, E, F, I, K, and L, as published by the International Association of Plumbing and Mechanical Officials, is hereby adopted by the City of Fairbanks.

Sec. 10-137. Amendments.

#### CHAPTER 1 ADMINISTRATION

Section 101.2 Purpose. Add subsections to read as follows:

101.2.1 Referenced Codes. The technical codes as referenced elsewhere in this code shall be considered part of the requirements of this code to the prescribed extent of each reference. References to *NFPA 54* and the *Uniform Mechanical Code* shall be replaced with adopted codes specified in sections 101.2.1.1 and 101.2.1.2.

101.2.1.1 Gas. The provisions of the *International Fuel Gas Code* shall apply to the installation of fuel gas piping from the point of delivery, gas appliances and related accessories as covered in this code. These requirements apply to gas piping systems extending

from the point of delivery to the inlet connections of appliances and installation and operation of residential and commercial gas appliances and related accessories.

101.2.1.2 Mechanical. The provisions of the *International Mechanical Code* shall apply to the installation, alterations, repairs and replacement of mechanical systems, including equipment, appliances, fixtures, fittings and/or appurtenances, including ventilating, heating, cooling, air-conditioning and refrigeration systems, incinerators and other energy-related systems.

101.2.1.3 Administrative. The provisions of the Administrative Code for the City of Fairbanks Building Department shall apply to the administration and enforcement of this code. Where provisions of the Administrative Code and this code conflict, the more restrictive test shall apply.

**101.2.1.4 Building. The provisions of the *International Building Code* shall apply where reference is made to the Building Code in this document.**

Section 101.4.1.4 Conflicts Between Codes. Delete this section in its entirety and replace with the following:

When conflicts occur between this code and other technical codes, those provisions providing the greater safety to life shall govern. In other conflicts, between this code and other codes or laws, where sanitation, life safety or fire safety are not involved, the most restrictive provisions shall govern.

Where in a specific case different sections of these codes specify different materials, methods of construction or other requirements, the most restrictive shall govern. When there is a conflict between a general requirement and a specific requirement, the specific requirement shall be applicable.

**Section 102.3.2 Penalties. Delete this section in its entirety and replace with the following.**

**Any person who violates a provision of this code or fails to comply with any of the requirements thereof or who erects, constructs, alters, or repairs any plumbing in violation of the approved construction documents or directive of the building official, or of a permit or certificate issued under the provision of this code or other codes adopted by this jurisdiction shall be subject to penalties prescribed by law.**

**Section 103.1.1 Permits required. Add the following subsection.**

**Section 103.1.1.1 Emergency Repairs. Where equipment or piping system replacement must be performed in an emergency situation, the permit application shall be submitted to the building official within 72 hours of such emergency. All required inspections shall be conducted.**

**Section 103.2 Application for Permit. Add the following subsection.**

**Section 103.2.4 Deferred Submittals. For the purposes of this section, deferred submittals are defined as those portions of the design which are not submitted at the time of the application and which are to be submitted to the building official within a specified period. Deferral of any submittal items shall have prior approval of the building official. The architect or engineer of record shall list the deferred submittals on the plans and shall submit the deferred submittal documents for review by the building official. Submittal documents for deferred submittal items shall be submitted to the architect or engineer of record who shall review them and forward them to the building official with a notation indicating that the deferred submittal documents have been reviewed and that they have been found to be in general conformance with the design of the building. The deferred submittal items shall not be installed until their design and submittal documents have been approved by the building official.**

**Section 103.3.1 (Permit) Issuance. Delete the second paragraph of this section and replace with the following.**

**When the building official issues a permit, the construction documents shall be approved by separate letter or plan review stating, or the plans shall be stamped as, "Reviewed and Approved for Code Compliance". Work shall be installed in accordance with the approved construction documents. Changes to the approved set of construction documents that affect code compliance are prohibited unless amended documents are resubmitted by the appropriate design professional for review and approval before such modification is constructed in the field.**

**Section 103.4.1 Permit Fees. Delete Section 103.4.1 in its entirety and refer to Table 3-D of the City of Fairbanks Administrative Code.**

**103.4.2 Plan Review Fees. Delete Section 103.4.2 in its entirety and replace with the following.**

When submittal documents are required by Section 103.2.2, a plan review fee shall be paid. The plan review fee shall be paid when the review has been completed. The plan review fee shall be paid in conjunction with the plumbing permit fee. The plan review fee is not required to be paid at the time of plan or application submittal. The plan review fee shall be 75 percent of the plumbing permit fee as shown in Table 3-D. The plan review fee for projects where plan are not received prior to commencement of construction will be charged a fast track rate equal to one hundred percent (100%) of the plumbing permit fee. When submittal documents are incomplete or changes so as to require additional plan review or when the project involves deferred submittal items as defined in Section 103.2.4, an additional plan review fee shall be charged at the rate shown in Table 3-D.

103.4.2.1 Plan Check Fee Identical Building Construction. Create a new subsection and title as follows.

Section 103.4.2.1 Plan Check Fee Identical Building Construction. The plan check fee for identical buildings with the same building construction shall be reduced by 75% of the initial plan check fee when the following conditions are met;

- a. The structural framing and floor plan are identical
- b. Construction is simultaneous or in immediate sequence.

Section 103.4.4.2 (Investigation Fees: Work Without a Permit.) Delete this subsection and substitute the following.

A penalty fee, in addition to the permit fee, shall be collected whether or not a permit is then or subsequently issued. The payment of such investigation fee shall not exempt an applicant from compliance with all other provisions of either this or other adopted codes of the Authority Having Jurisdiction, nor from the penalty prescribed by law. The penalty fee for performing work without the required permit is \$750.

Section 103.4.5 Fee Refunds. Delete Subsection 103.4.5.2 and substitute the following.

Section 103.4.5.2 The building official may authorize refunding of not more than 80 percent of the permit fee paid when no work has been done under a permit issued in accordance with this code.

**Section 103.5.2 Operation of Plumbing Equipment.** Delete this section in its entirety and substitute the following.

The requirements of this section shall not be considered to prohibit the operation of any plumbing installed to replace existing equipment or fixtures serving an occupied portion of the building in the event a request for inspection of such equipment or fixture has been filed with the Authority Having Jurisdiction not more than 48 hours after such replacement work is complete, and before any portion of such plumbing systems is concealed by any permanent portion of the building.

**Section 103.5.6.1 Corrections.** Delete the second paragraph of this section and substitute the following.

Refusal, failure, or neglect to comply with any such notice or order within (180) days of receipt thereof, or other time limit as set forth in the notice or order, shall be considered a violation of this code and shall be subject to the penalties set forth elsewhere in this code for violations.

**Section 103.5.6.3 Approval.** Delete this section in its entirety and substitute the following.

Upon the satisfactory completion and final test of the plumbing system, an approval for use shall be issued by the Authority Having Jurisdiction to the permittee.

**204.0 Building Thermal Envelope – Add the following definition to this section.**

**Building Thermal Envelope –** For purposes of the plumbing code: the basement walls, exterior walls, floors, roofs, and any other building elements that enclose conditioned spaces, and frost-protected foundations. For frost-protected foundations with required horizontal insulation, the thermal envelope shall be considered to extend from the warm-in-winter side, to the projection of the vertical insulation, cold-in-winter exterior surface. For thermal envelope assemblies enclosing conditioned spaces, the thermal envelope assembly includes any vapor retarders.

**205.0 Conditioned Space – Add the following Definition to this section.**

**Conditioned Space --** For purposes of the plumbing code, space within a building that is provided with heating equipment or systems capable of maintaining, through design or heat loss, 50 degrees F

during the heating season, or communicates directly with a conditioned space .

**210.0 Hot Water - Delete this definition and substitute the following.**

**Hot Water – Water at a temperature exceeding or equal to 110 degrees F.**

**303.0 Disposal of Liquid Waste. Add the following sentence to this section.**

**Pit privies (outhouses), as defined by Alaska D.E.C. 18 AAC 72.030 & 7 AAC 10.9990(46)(B), are prohibited.**

**Section 313.6 (Pipe Freezing Protection) Delete 313.6 in its entirety and substitute the following.**

**All water, soil, waste, vent, or roof drainage piping shall be installed on the warm-in-winter side of the Building Thermal Envelope assembly, including any vapor retarders.**

**Exception 1. Vent piping above the roof.**

**Exception 2. Vent piping, other than wet vents, may be installed within exterior walls or above the roof/ceiling assembly where enclosed within at least R-8.8 insulation. This insulation must be continuous from the piping penetration of the warm-in-winter surface of the thermal envelope to the underside of the piping's roof sheathing penetration. The insulation of the Building Thermal Envelope assembly may be used to meet this requirement.**

**Exception 3. Underground Building Drain or Water Distribution piping outside the Building Thermal Envelope installed according to the circulation and insulation provisions of the latest revised standards of the local Public Water & Sewer Utility for water & sewer services.**

**Exception 4. A system of frost protection that, is designed & sealed by a currently registered engineer or architect, including but not limited to heat trace installed according to Sections 301.1.1 & 310.4; and provided it is accessible for repair or replacement without excavation or removal of elements of construction.**

**Section 313.9 (Protection of Piping) Delete 313.9 and its Exception in their entirety and substitute the following.**

**In concealed locations where piping, other than cast-iron or steel, is installed through holes or notches in studs, joists, rafters or similar members less than 1½ inches from the nearest edge of the member, the pipe shall be protected by shield plates having a minimum thickness of 0.0575 inch (No. 16 gage) shall cover the area of the pipe where the member is notched or bored, and shall extend a minimum of 2 inches above sole plates and below top plates.**

**Section 313.12.4 (Rat proofing) Delete 313.12.4 in its entirety.**

**Section 407.5 Setting. Delete the Exception and substitute the following.**

**Exception: The installation of paper dispensers, sanitary napkin receptacles, or accessibility grab bars shall not be considered obstructions if located such that a minimum of 7 inches clearance is maintained in any direction from the outside surface of the usable portion of the fixture.**

**Section 408.2.2 (Water Closet Seats) Delete Subsection 408.2.2 and substitute the following:**

**Water closet seats for public use shall be of the elongated and open-front type.**

**Section 412.0 Minimum Number of Required Fixtures. Delete this section in its entirety and refer to Chapter 29 and Table 2902.1 as amended of the 2009 IBC.**

**Section 413.0 Fixtures and Fixture Fittings for Persons with Disabilities. Delete this section in its entirety and refer to Chapter 11 of the 2009 IBC and ICC/ANSI A117.1-2003.**

**Table 4-1 Minimum Plumbing Facilities. Delete this Table in its entirety and refer to table 2902.1 as amended of the 2009 IBC.**

**Section 501.0 General. Delete this section and substitute the following.**

**The regulations of this chapter shall govern the construction, location, and installation of fuel-burning and other water heaters heating potable water. All fuel and combustion air systems, chimneys, vents, and their connectors shall be regulated by the**

respective sections of the locally amended **2009** International Mechanical Code and the **2009** International Fuel Gas Code. The minimum capacity for water heaters shall be in accordance with the first hour rating listed in Table 5-1. All design, construction, and workmanship shall be in conformity with accepted engineering practices, manufacturer's installation instructions, and applicable standards and shall be of such character as to secure the results sought to be obtained by the respective Codes.

**Section 503.0 Permits.** Add the following exception.

**Exception:** Replacement of an existing, approved, non-fuel-fired electric water heater with one of like size, type and rating in a manner that maintains its approval shall not require a permit.

**Section 504.0 Inspection.** Delete this section and substitute the following.

A final water heater inspection shall be made after all work requiring a permit has been installed in addition to inspections required for other work regulated by the mechanical code and fuel gas code.

**Section 506.4.2 (Indirect-Fired Water Heaters)** Delete part (3) (b) of this subsection and substitute the following.

**(b) The pressure of the heat-transfer medium must be limited to a maximum of \_(labeled by installer and equal to the system safety or relief valve rating)\_ psig by an approved safety or relief valve and the potable water system must be maintained at a normal minimum operating pressure of at least \_(labeled by installer & 5 psig greater than the heat-transfer medium safety or relief valve rating).**

**Section 603.4.10 (Potable Water Makeup Connections)** Add the following exception.

**Exception:** Potable water makeup connections to boilers containing only heat-transfer mediums of water or other nontoxic fluid having a toxic rating or Class of 1 as listed in Clinical Toxicology of Commercial Products, 5<sup>th</sup> edition shall be permitted to be provided with a listed Backflow Preventer with Intermediate Atmospheric Vent.

**603.4.18 (Chemical Dispenser Backflow Protection)** Add the following to this subsection.



**Chemical Dispensers otherwise approved for connection to the potable water piping system shall not be connected to an Atmospheric Vacuum breaker hose thread in such a way that the Atmospheric Vacuum breaker is able to be pressurized, e.g. with a valve in the discharge piping.**

Section 609.4 Testing. Delete the third sentence and substitute the following.

A one hundred (100) pound per square inch air pressure test may be substituted for the water test.

Section 712.1 Media. Delete the first sentence and replace with the following.

The piping of the plumbing, drainage, and venting systems shall be tested with water or air.

Section 719.1 Cleanouts. Delete the first paragraph in its entirety and replace with the following:

Cleanouts shall be placed at the connection of the building sewer and building drain outside the building and extend to grade.

Section 719.2 Delete this section in its entirety.

**Section 807.4 (Domestic Dishwasher Airgap) Add the following subsection.**

**Section 807.4.1 When a compartment or space for a domestic dishwasher is provided, an approved dishwasher airgap fitting shall be installed.**

812.1 Elevator Pits. Add this new Subsection.

812.1 Elevator Pits. Where drains are not provided to prevent the accumulation of water in elevator pits, sumps are required. Drains connected directly to the sanitary system shall not be installed in elevator pits. Sumps in elevator pits, where provided, shall be covered and the cover shall be level with the pit floor. The pump shall be of sufficient capacity to prevent the accumulation of water in the pit. If the building is fire-sprinklered, the pump shall be sized of at least the capacity of one energized sprinkler head.

Section 906.7 Frost or Snow Closure. Replace the first sentence with the following.

Vent terminals shall be a minimum of 3 inches in diameter, but in no event smaller than the required vent pipe.

**1001.2 (Central Trap Location for multiple fixtures) Revise this section as follows.**

**One (1) trap shall be permitted to serve a set of not more than three (3) single compartment sinks or laundry tubs of the same depth or three (3) lavatories immediately adjacent to each other and in the same room if the waste outlets are not more than thirty inches apart.**

**1002.2 (Trap sizes and Trap Arm lengths) Add the following exception to this section.**

**Exception: The developed length of a trap arm from a two-inch outlet private floor drain in a garage bay serving a single dwelling unit shall be permitted to exceed the distances given in Table 10-1 if the floor drain trap and trap arm are increased to three-inch nominal size. When installed according to this exception the trap arm is required without any offsets or changes in direction and the vent shall be connected below, and extend vertically into or adjacent to the first garage wall under which the trap arm passes.**

Section 1101.5.1 Subsoil Drains. Delete 1101.5.1

Section 1101.11.1 Primary Roof Drainage. Delete the last sentence of this section and replace with the following.

Unless otherwise required by the Authority Having Jurisdiction, roof drains, gutters, vertical conductors or leaders, and horizontal storm drains for primary drainage shall be sized based on a maximum rainfall of one (1) inch per hour per square foot of roof area.

Section 1101.11.2.2.2 Combined System. Delete the second sentence in this subsection and replace with the following:

When the combined secondary and primary roof drain system connects to a building storm drain that connects to an underground storm sewer, a relief drain shall be installed to ensure positive common roof drain flow. **The connection of this relief drain to the common drain shall not divert or obstruct the primary drain.**

**Section 1109.2 Methods of Testing Storm Drainage Systems. Delete the first sentence of this section and substitute the following.**

**The piping of storm drain systems shall be tested upon completion of the rough piping installation by water or air and proved tight.**

Chapter 12 Fuel Piping. Delete this chapter in its entirety and refer to the *2006 International Fuel Gas Code* as amended.

Chapter 15 Firestop Protection. Delete this Chapter in its entirety and refer to the *International Building Code* as amended.

Appendix K Private Sewage Disposal System. Delete this section in its entirety and replace with the following:

Private Sewage Disposal Systems shall be designed and installed in accordance with the current standards as published by the State of Alaska Department of Environmental Conservation (D.E.C.). Written verification from D.E.C. or a State of Alaska-certified Septic System Installer of the D.E.C.'s approved installation shall be submitted to the Building Department. A Certificate of Occupancy shall not be issued until this written verification is submitted to the Building Department.

Appendix L.

**Section L 1.3 (required descriptive details) Add the following to this section.**

**For the plumbing systems in Appendix L, other than those of L2.0, L3.0, & L7.0, the design by a registered professional engineer is required where the work is not exempted by AS 08.48.331. A riser diagram or isometric indicating the provisions of Appendix L intended to be installed shall be submitted for review and approval by the Building Department prior to the work being commenced. The riser diagram or isometric is in addition to the other details or data that may be required by the Building Official.**

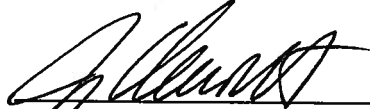
**Section L3.2 Single-wall heat exchangers. Delete part (3) of this subsection and substitute the following.**

**(3) The equipment is permanently labeled according to Section 506.4.2 (3) (b) as amended.**

Section L 8.1 Circuit Venting. Delete the 1<sup>st</sup> sentence of this subsection.


**Section L9.1 Single-Stack Vent System. Delete the 1<sup>st</sup> sentence of this subsection.**

**Section 2.** That the effective date of this Ordinance shall be the 19th day of February, 2011.

  
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Jerry Cleworth, Mayor

AYES: Matherly, Roberts, Stiver, Gatewood, Eberhart  
NAYS: None  
ABSTAIN:  
ABSENT: Bratcher  
ADOPTED: February 14, 2011

ATTEST:

  
\_\_\_\_\_  
Janey Hovenden, CMC, City Clerk

APPROVED AS TO FORM:

  
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Paul Ewers, City Attorney