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MINNESOTA DEPARTMENT OF  
**LABOR & INDUSTRY**

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January 21, 2009

Legislative Reference Library  
645 State Office Building  
100 Constitution Avenue  
St. Paul, Minnesota 55155

Re: In The Matter of the Proposed Amendment to the Rules of the State Department of Labor and Industry Governing the Minnesota State Mechanical and Fuel Gas Codes, Minnesota Rules, Chapter 1346; Governor's Tracking No. AR 316

Dear Librarian:

The Minnesota Department of Labor and Industry intends to adopt rule amendments governing the Minnesota State Mechanical and Fuel Gas Codes, Chapter 1346. We plan to publish a Notice of Intent to Adopt Rules Without a Public Hearing in the January 26, 2009 State Register.

The Department has prepared a Statement of Need and Reasonableness. As required by Minnesota Statutes, sections 14.131 and 14.23, the Department is sending the Library a copy of the Statement of Need and Reasonableness at the same time we are mailing our Notice of Intent to Adopt Rules Without a Public Hearing.

If you have questions, please contact me at (651) 284-5128.

Yours very truly,

A handwritten signature in black ink, appearing to read 'Patricia Munkel-Olson'. The signature is stylized and somewhat cursive.

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Enclosure: Statement of Need and Reasonableness

## **Minnesota Department of Labor and Industry**

### **Construction Codes and Licensing Division**

#### **STATEMENT OF NEED AND REASONABLENESS**

#### **Proposed Amendment to Rules Governing the Minnesota Mechanical and Fuel Gas Codes, *Minnesota Rules*, Chapter 1346.**

#### **INTRODUCTION**

The Commissioner of the Minnesota Department of Labor and Industry proposes to adopt amendments to Minnesota Rules, Chapter 1346, which incorporates by reference the 2006 International Mechanical Code (the “IMC”) and the 2006 International Fuel Gas Code (the “IFGC”), with amendments.<sup>1</sup> The proposed rules will clarify unclear provisions by making grammatical or mathematical corrections, and reflect changes to the numbering system used in the IMC and IFGC and update standards and references accordingly.

Due to time constraints, the Department did not utilize an advisory committee<sup>2</sup> to update the Mechanical and Fuel Gas Codes. Because the Department did not use an advisory committee in developing the proposed rules, modifications to the national model codes have been kept to a minimum. In concurrent rulemakings, the Department is also adopting the Residential Energy and Commercial Energy Codes.<sup>3</sup> Although, as independent rulemakings, the adoption of these rule chapters will occur on different dates, it is important that the three chapters have an simultaneous effective date because these codes work so closely together, there are multiple cross references between the three chapters, and an integration of existing rules into the three proposed rule chapters occurs, in some instances, through the use of repealers.

#### **ALTERNATIVE FORMAT**

Upon request, this Statement of Need and Reasonableness can be made available in an alternative format, such as large print, Braille, or cassette tape. To make a request, contact Carrie Rohling at the Department of Labor and Industry, Third Floor, 443 Lafayette Road North, St. Paul, MN 55155, e-mail at [DLI.rules@state.mn.us](mailto:DLI.rules@state.mn.us), telephone (651) 284-5006, or fax (651) 284-5725. TTY users may call (651) 297-4198.

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1 The IMC and IFGC are national model codes promulgated by the International Code Council.

2 As is its usual practice, the Department intends to convene an advisory committee when this administrative rule chapter is amended in the future.

3 The Residential Energy Code is proposed as Minnesota Rules, Chapter 1322, and the Commercial Energy Code is proposed as Minnesota Rules, Chapter 1323. The adoption of these chapters have similar and sometimes overlapping, yet distinct, subject matter and affected or interested parties. In order to maintain the integrity of the advisory committees and to focus the subject matter, the Department is engaged in three independent but concurrent rulemakings to adopt rules in chapters [proposed] 1322, [proposed] 1323, and 1346.

## STATUTORY AUTHORITY

Pursuant to the Department of Administration's Reorganization Order No. 193, dated April 4, 2005, the responsibilities of the Department of Administration in relation to State Building Codes and Standards as set forth in Minnesota Statutes, sections 16B.59 through 16B.76 (2004) were transferred to the Department of Labor and Industry.<sup>4</sup>

The Department's statutory authority to adopt rules is set forth in Minnesota Statutes, sections 326B.101, 326B.106, and 326B.13 (formerly numbered as 16B.59, 16B.61, 16B.64), and 326B.02.

Minnesota Statutes, section 326B.101, states:

The State Building Code governs the construction, reconstruction, alteration, and repair of buildings and other structures to which the code is applicable. The commissioner shall administer and amend a state code of building construction which will provide basic and uniform performance standards, establish reasonable safeguards for health, safety, welfare, comfort, and security of the residents of this state and provide for the use of modern methods, devices, materials, and techniques which will in part tend to lower construction costs. The construction of buildings should be permitted at the least possible cost consistent with recognized standards of health and safety.

Minnesota Statutes, section 326B.106, subdivision 1, states in pertinent part:

Subject to sections 326B.101 to 326B.194, the commissioner shall by rule and in consultation with the Construction Codes Advisory Council establish a code of standards for the construction, reconstruction, alteration, and repair of buildings, governing matters of structural materials, design and construction, fire protection, health, sanitation, and safety, including design and construction standards regarding heat loss control, illumination, and climate control... The code must conform insofar as practicable to model building codes generally accepted and in use throughout the United States... Model codes with necessary modifications and statewide specialty codes may be adopted by reference. The code must be based on the application of scientific principles, approved tests, and professional judgment. To the extent possible, the code must be adopted in terms of desired results instead of the means of achieving those results, avoiding wherever possible the incorporation of specifications of particular methods or materials. To that end the code must encourage the use of new methods and new materials. Except as otherwise provided in sections 326B.101 to 326B.194, the commissioner shall administer and enforce the provisions of those sections...

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<sup>4</sup> Reorganization Order No. 193 was effective upon filing with the Secretary of State on May 16, 2005, and shall remain in effect until amended, repealed, or superseded. For a copy of the reorganization order, please contact Carrie Rohling by email at [dli.rules@state.mn.us](mailto:dli.rules@state.mn.us), or phone to (651) 284-5006.

Minnesota Statutes, section 326B.106, subdivision 3, states in pertinent part:

“The commissioner shall adopt amendments to the mechanical code portion of the State Building Code to implement standards for process piping.”

Minnesota Statutes, section 326B.13, subdivision 6, states, “The commissioner shall approve any proposed amendments deemed by the commissioner to be reasonable in conformity with the policy and purpose of the code and justified under the particular circumstances involved....”

These sources of statutory authority were adopted and effective prior to January 1, 1996, and so Minnesota Statutes, section 14.125, does not apply. *See* 1995 Minnesota Laws, chapter 233, article 2, section 58.

As part of the codification of the reorganization order, Minnesota Statutes, section 326B.02, provides a general rulemaking authority to the Commissioner. This general authority states in pertinent part, “The commissioner may, under the rulemaking provisions of chapter 14 and as otherwise provided by this chapter, adopt, amend, suspend, and repeal rules relating to the Commissioner's responsibilities under this chapter...”<sup>5</sup>

Pursuant to Minnesota Statutes, section 14.125, the Department published a notice of intent to adopt rules within 18 months of the effective date of the law authorizing or requiring rules to be adopted.<sup>6</sup> Because the Department's notice of intent to adopt rules published within 18 months of the effective date of the law, the rulemaking authority has not expired.

Under these statutes, the Department has the necessary statutory authority to adopt the proposed rules.

## **REGULATORY ANALYSIS**

Minnesota Statutes, section 14.131, sets out seven factors for a regulatory analysis that must be included in the SONAR. Paragraphs (1) through (7) below repeat the factors and then give the agency's response.

**(1) a description of the classes of persons who probably will be affected by the proposed rule, including classes that will bear the costs of the proposed rule and classes that will benefit from the proposed rule:**

Those classes of persons who probably will be affected by the proposed rules include municipal building officials and fire inspection officials who must become familiar with and enforce the proposed rule as adopted. Others include professional engineers, designers, builders, and mechanical contractors who must become familiar with and incorporate the requirements of the proposed rule into a building's design and construction. Mechanical system product

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<sup>5</sup> 2007 Minn. Laws, Art. 2, Sec. 3 became effective May 26, 2007.

<sup>6</sup> The Department cited to the authority of Minn. Stat. § 326B.02 in rulemakings pertaining to two chapters of the State Building Code. *See* 33 SR 5 and 33 SR 250.

manufacturers probably will also be affected by the proposed rule because they are required to construct products that must meet minimum code requirements. Additionally, building owners and managers and other building users may be affected by proposed rule.

Those classes of persons who will bear the costs of the proposed rule include building owners, lessees, or tenants who may incur costs resulting from the proposed rule. Mechanical system suppliers and contractors may also incur costs for any additional materials and equipment necessary to comply with the proposed rule.

Those classes of persons who will benefit from the proposed rule include building owners and managers, lessees, and tenants, and ultimately the general public, because the proposed rule includes improved life safety standards and better environmental protection by providing up-to-date regulations governing the design and installation of mechanical systems.

**(2) the probable costs to the agency and to any other agency of the implementation and enforcement of the proposed rule and any anticipated effect on state revenues:**

The probable costs to the agency or any other agency for the implementation and enforcement of the proposed rule include costs associated with educating those who administer and enforce the code. The Department believes, however, that the costs associated with the proposed rule will not be significant compared to the existing code.

The Department does not anticipate any effect on state revenues.

**(3) a determination of whether there are less costly methods or less intrusive methods for achieving the purpose of the proposed rule:**

The Department has determined that there are no less costly methods for achieving the purpose of the proposed rule. Consistent with the requirements of Minnesota Statutes, section 326B.106 (formerly numbered 16B.61), the Department developed proposed rules that result in minimal costs for all affected parties.

The Department has also determined that amending this rule chapter is the least intrusive method for achieving the purpose of the proposed rule. The Department limited its modifications to the 2006 IMC and IFGC to the minimum necessary.

**(4) a description of any alternative methods for achieving the purpose of the proposed rule that were seriously considered by the agency and the reasons why they were rejected in favor of the proposed rule:**

The Department did not review any other national model codes because the IMC and IFGC are written to work with and compliment the national model codes that are incorporated by reference into the Residential Energy and Commercial Energy Codes. Additionally, in order to have the proposed rules effective on the same day as the Residential Energy and Commercial Energy Codes, the Department did not conduct a thorough review and comparison of other model codes.

**(5) the probable costs of complying with the proposed rule, including the portion of the**

**total costs that will be borne by identifiable categories of affected parties, such as separate classes of governmental units, businesses, or individuals:**

The probable costs of complying with the proposed rule are negligible and most likely to be associated with necessary updates to equipment, control devices, and materials to achieve and maintain industry standards. There may also be probable costs associated with obtaining training or education related to the amended portions of Mechanical and Fuel Gas Codes.

**(6) the probable costs or consequences of not adopting the proposed rule, including those costs or consequences borne by identifiable categories of affected parties, such as separate classes of government units, businesses, or individuals:**

The probable costs or consequences of not adopting the proposed rule could result in design and construction methods that are out-of-date and do not mirror methods in use nationally. Probable costs associated with not adopting the proposed rule could include manufacturers and installers having to retrofit newer equipment with a means to ensure equipment would comply with the requirements of Minnesota Rules, chapter 1346, as currently written. An additional consequence that will occur if these rules are not adopted is that cross-references between the Mechanical and Fuel Gas Codes and the Residential and Commercial Energy Codes will not be accurate.

**(7) an assessment of any differences between the proposed rule and existing federal regulations and a specific analysis of the need for and reasonableness of each difference:**

The Department is unaware of any existing federal regulations pertaining to the adoption of a mechanical or fuel gas code.

## **PERFORMANCE-BASED RULES**

Minnesota Statutes, section 326B.101 (formerly numbered 16B.59) states in pertinent part:

...The commissioner shall administer and amend a state code of building construction which will provide basic and uniform *performance* standards, establish reasonable safeguards for health, safety, welfare, comfort, and security of the residents of this state and provide for the use of modern methods, devices, materials, and techniques which will in part tend to lower construction costs. The construction of buildings should be permitted *at the least possible cost* consistent with *recognized standards* of health and safety. [*Emphasis added.*]

Minnesota Statutes, section 326B.106 (formerly numbered 16B.61), authorizes the Department to establish, by rule, a code of standards for construction. This statute requires the code to “conform insofar as practicable to model building codes generally accepted and in use throughout the United States.” At the same time, this statute mandates, that “*to the extent possible,*” the code be adopted in terms of desired results instead of the means of achieving those results, avoiding wherever possible, the incorporation of particular methods or materials. The Mechanical and Fuel Gas Codes, as proposed, establish minimum requirements for mechanical systems using prescriptive and performance-based provisions and are founded on

broad-based principles that make the use of new methods, materials, and construction practices possible. The proposed rules are intended to incorporate the philosophy required by Minnesota Statutes, sections 326B.101 and 326B.106.

## **ADDITIONAL NOTICE**

We will mail or email the Notice of Intent to Adopt Rules to interested persons. Those persons include:

- a. All certified building officials. This includes all municipal building officials that are responsible for the administration of the State Building Code;
- b. Members of the residential energy code advisory committee;
- c. Members of the commercial energy code advisory committee; and
- d. CDC Enterprises, Inc.

Our Notice Plan also includes giving notice required by statute. We will mail the Notice of Intent to Adopt Rules to everyone who has registered to be on the Department's rulemaking mailing lists that pertain to generally to all rulemakings related to the construction codes, and specifically to the incorporation of the International Building Code, the International Residential Code, and the Mechanical and Fuel Gas Codes, which are maintained pursuant to Minnesota Statutes, section 14.14, subdivision 1a.

We will also give notice to the Legislature per Minnesota Statutes, section 14.116.

We will also post the proposed rules, the Statement of Need and Reasonableness, and the Notice of Intent to Adopt Rules on the Department's rulemaking Web page, which is located at [http://www.doli.state.mn.us/rulemaking\\_activity.html](http://www.doli.state.mn.us/rulemaking_activity.html).

## **CONSULT WITH FINANCE ON LOCAL GOVERNMENT IMPACT**

As required by Minnesota Statutes, section 14.131, the Department has consulted with the Commissioner of Finance. We did this by sending Ryan Baumtrog, Executive Budget Officer at the Department of Finance, copies of the documents sent to the Governor's Office for review and approval by the Governor's Office prior to the Department publishing the Notice of Intent to Adopt. We sent the copies on November 17, 2008. The documents included: the Governor's Office Proposed Rule and SONAR Form; almost final draft rules; and almost final SONAR. Mr. Baumtrog sent a memorandum dated November 24, 2008, which included the following comments:

The proposed rules update and modify the current rules, incorporate the latest versions of the international model codes when applicable and coordinate the current rules with the other chapters of the Minnesota Building Code. The proposed rules are largely technical in nature and their introduction does not have any direct costs on local governments. The cost to local governments, as described by the SONAR, includes the costs of administering and enforcing the code. While it may be necessary to change training curricula, the rules do not require any building

remodeling to occur.

In my opinion, the proposed changes will not impose a significant cost on local governments.

## **COST OF COMPLYING FOR SMALL BUSINESS OR CITY**

### **Agency Determination of Cost**

As required by Minnesota Statutes, section 14.127, the Department has considered whether the cost of complying with the proposed rules in the first year after the rules take effect will exceed the \$25,000 for any small business or small city. The Department has determined that the cost of complying with the proposed rules in the first year after the rules take effect will not exceed \$25,000 for any small business or small city. These rules do not require any building or remodeling to occur. Costs will only be incurred when work regulated by the proposed rule is initiated by the small business or small city. Any increased cost associated with compliance with the rule will be passed from the mechanical contractor or installer to the building owner or homeowner, and will be recovered by the mechanical contractor or installer through increased installation cost.

### **LIST OF WITNESSES**

If these rules go to a public hearing, the Department anticipates having Construction Codes and Licensing Department staff testify in support of the need for and reasonableness of the rules.

### **RULE-BY-RULE ANALYSIS**

As stated in the introduction section, the proposed rules clarify unclear provisions by making grammatical or mathematical corrections, and reflect changes to the numbering system used in the IMC and IFCG and update references accordingly.

The proposed rules are necessary because the rules should correctly refer users of the Code to applicable statutes, State Building Code rules, and standards.

This section of the SONAR will only address those rule parts, and subparts, that are amended by the proposed rule.

### **1346.0050 TITLE; INCORPORATION BY REFERENCE.**

This rule part specifies the incorporation of the 2006 International Mechanical Code by reference, with amendments. Additional modifications identify that the 2006 IMC is copyright by the International Code Council, Inc.

The proposed rule also specifies the incorporation of Chapters 1 through 15 of the 2004 edition of the NFPA Standard for Ventilation Control and Fire Protection of Commercial Cooking Operations, with amendments. Additional modifications identify that the 2004 NFPA Standard for Ventilation Control and Fire Protection of Commercial Cooking Operations is copyright by



the National Fire Protection Association.

Finally, the proposed rule changes a reference to the commissioner of administration to the commissioner of labor and industry.

### **1346.0060 REFERENCES TO OTHER INTERNATIONAL CODE COUNCIL (ICC) CODES.**

**Subpart 11. Fire Code.** The proposed rule corrects a citation to the Minnesota State Fire Code, which was renumbered as Minnesota Rules, Chapter 7511, in a previous rulemaking.

### **1346.0101 SECTION 101 SCOPE.**

This rule part updates references to two ASME standards: ASME B31.3-2006, Process Piping Code; and ASME B31.9-2008, Building Services Piping Code. These amendments are made to refer the reader to the updated standards. In addition and to correct a typographical error in the proposed rules, the Department intends to update the citation to the Fuel Gas Code so that all of its rule parts will be included; the proposed rules will be changed at line 2.13 by changing 1346.6000 to 1346.614.

### **1346.0202 SECTION 202 GENERAL DEFINITIONS.**

The proposed rule deletes the following definitions, which are included in the 2006 IMC and are, therefore, no longer necessary. The deleted definitions are:

- Atmospherically vented gas or oil appliance;
- Commercial kitchen hoods (backshelf hood, double island canopy hood, eyebrow hood, single island canopy hood, and wall canopy hood);
- Commercial kitchen cooking appliances(extra heavy duty cooking appliance, heavy duty cooking appliance, light duty cooking appliance, and medium duty cooking appliance); and
- Direct vent appliance.

The proposed rules amend definitions for the terms “Decorative Solid Fuel Burning Appliance” and “Solid Fuel Appliance” by replacing the words “an atmospherically vented” with the words “a natural draft” to provide consistency with other definitions and national industry terminology.

### **1346.0301 SECTION 301 GENERAL.**

The proposed rule updates references to the most current standards.

### **1346.0306 SECTION 306 ACCESS AND SERVICE SPACE.**

The proposed rule corrects references to sections of the IMC that were renumbered in the 2006 edition of the model code.

The proposed rule also repeats a new subsection to the model code so that all of Section 306 will appear in the rule. Subsection 306.5.2, will read:

306.5.2 Electrical requirements. A receptacle outlet shall be provided at or near the equipment location in accordance with the ICC Electrical Code.

#### **1346.0401 SECTION 401 GENERAL.**

The proposed rule corrects references to sections of the IMC that were renumbered in the 2006 edition of the model code.

The proposed rule also includes a new subsection that is in the 2006 IMC. In order to include Section 401 with all of its subsections the new subsection was added to the proposed rule.

#### **1346.0403 SECTION 403 MECHANICAL VENTILATION.**

**Subpart 2. Section 403.2.** This subpart corrects a citation to the Residential Energy Code by replacing a cite to chapters 7670 and 7672, which are being repealed, with Minnesota Rules, Chapter 1322<sup>7</sup>.

**Subp. 2 through 4. Sections 403.2, 403.3, and 403.3.1.** The proposed rule modifies subparts 2 through 4 by correcting references to the ASHRAE standards cited within these subparts. This modification is responsive to ASHRAE's renumbering of the Standard.

#### **1346.0404 SECTION 404 GARAGES.**

**Subpart 1. Section 404.1.** The proposed subpart replaces the metric conversion method for minimum exhaust rates for enclosed parking garages. Although the numbers in the formula were changed, the new formula is actually equivalent to the previous formula. The rate/per time label was changed to simplify the formula, which, in turn, caused the multiplier used in calculating the formula to also change.

**Subp. 2. Section 404.2.** The proposed subpart replaces the metric conversion method for minimum exhaust rates for motor vehicle repair garages. Although the numbers in the formula were changed, the new formula is actually equivalent to the previous formula. The rate/per time label was changed to simplify the formula, which, in turn, caused the multiplier used in calculating the formula to also change.

The modification also deletes the reference to the rate specified in ASHRAE Standard 62-2001 because the new simplified rate referenced is contained in the 2004 version of the ASHRAE standard.

**Subp. 3. Section 404.3.** The proposed subpart references the 2004 ASHRAE standards and any

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<sup>7</sup> [Proposed] Minnesota Rules, Chapter 1322, is a concurrent, but independent, rulemaking. For more information see: [http://www.doli.state.mn.us/rulemaking\\_activity.html](http://www.doli.state.mn.us/rulemaking_activity.html).

renumbered sections in those standards to provide correct citations.

**Subp. 4. Section 404.4.** The proposed subpart deletes a reference to rule part 7676.1100, subpart 2, and replaces it with a citation to the Commercial Energy Code, which is proposed as Minnesota Rules, Chapter 1323. This modification is necessary because Chapter 1323 will replace Minnesota Rules, Chapter 7676.<sup>8</sup>

#### **1346.0501 SECTION 501 GENERAL.**

In addition to the modifications described below, the proposed subparts reflect the renumbering of the model code.

**Subpart 1. Section 501.2.** The proposed language deletes words associated with outdoor discharge and replaces them with new language, which is necessary to clarify that the system pertains to exhaust systems.

**Subp. 2. Section 501.3.** The proposed language corrects citations so that the correct version of the ASTM Standard is identified. In addition, the exception for dwellings constructed under chapter 7672 is deleted in 501.3.1 because the prescriptive requirements for makeup air are now located only in this subpart.

#### **1346.0504 SECTION 504 CLOTHES DRYER EXHAUST.**

This rule part pertains to ductless clothes dryers. Condensing (ductless) clothes dryers are a new technology gaining popularity in the state of Minnesota. This type of dryer may not require an exhaust system for moisture removal from interior spaces. Most of the moisture is condensed in the clothes dryer and discharged into the sanitary sewer system. However, up to 20% of the moisture from the clothes drying process is discharged into the room, which increases the relative humidity in the room. The room must be provided with a 70 cfm exhaust system vented to the exterior to remove excess humidity.

#### **1346.0505 SECTION 505 DOMESTIC KITCHEN EXHAUST EQUIPMENT.**

The proposed rule deletes the reference to “IMC Section 501.4” and replaces it with a citation rule part to 1346.0501 to provide a method for calculating the amount of makeup air for exhaust systems. This modification is necessary because it specifies the rule part that must be used to determine the amount of makeup air required for exhaust systems. Large capacity domestic exhaust systems ducted to the outdoors can create a significant amount of negative pressure within a house if adequate makeup air is not provided.

The proposed rule part also adds the words “primed and”, and a reference to ASTM D2564 to exception 2.5. It is common for PVC piping to be installed and serve as an underground duct system. The additional words and the reference are necessary to ensure that PVC piping will be

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<sup>8</sup> [Proposed] Minnesota Rules, Chapter 1323, is a concurrent, but independent, rulemaking. For more information see: [http://www.doli.state.mn.us/rulemaking\\_activity.html](http://www.doli.state.mn.us/rulemaking_activity.html).

installed in accordance with the piping manufacturers' recommendations and ASTM D2654. Installation utilizing this method will ensure that the piping system is both water- and air-tight to prevent leakage.

### **1346.0506 SECTION 506 COMMERCIAL KITCHEN HOOD VENTILATION SYSTEM DUCTS AND EXHAUST EQUIPMENT.**

For consistency with a change to the title of this section of the model code, the headnote of this rule part is amended to mirror the model code. In addition to the modifications described below, the proposed subparts reflect the renumbering of the model code.

**Subpart 1. Section 506.3.** The proposed subpart replaces the reference to NFPA 96-2001 with a reference to NFPA-2004 to refer to the correct standard.

**Subp. 2. Sections 506.3.1 to 506.3.12.3.** The proposed subpart replaces the reference to NFPA 96-2001 with a reference to NFPA 96-2004 to refer to the correct standard. The proposed subpart also deletes language regarding the use of flexible connectors. The current rule permits the use of flexible connectors, which conflicts with NFPA 96-2004 Section 7.5.2, which allows only welded or flanged connections. The proposed modification will clarify the application of this subpart and be consistent with the Standard.

**Subp. 3. Section 506.4.2.** The modification to item four of this subpart adds the words "subject to positive pressure" so that the ducts that serve a type II hood will not require a cumbersome pressure test unless the ducts are under positive pressure. If the ducts are under positive pressure, a pressure test is needed to assure the system does not leak.

### **1346.0507 SECTION 507 COMMERCIAL KITCHEN HOODS.**

Note: The proposed rules do not modify Subparts 6 to 8, and 10, so these subparts are not included here. Subparts 3, 5, 11, and 13 are proposed for repeal and appear in the Repealer section of the proposed rules because the 2006 IMC either includes the modifications contained in the current rule, thereby making the subpart unnecessary, or to coordinate with the renumbering of the 2006 IMC.

**Subpart 1. Section 507.1.** The proposed rule deletes language that is now included in the model code and adds subsection 507.1.1, which pertains to factory built systems with exhaust.

Subsection 507.1.1 addresses the sensible and latent heat from the systems and the maximum relative humidity of the kitchen space. If the moisture and heat loads are not handled appropriately in the HVAC design for kitchens, the relative humidity of the space could increase above 65% and promote bacterial growth.

**Subp. 2. Section 507.2.** This subpart consists of previous amendments to this section of the model code. The modification adds subsection 507.2.2, which is necessary because, if the moisture and heat loads together are not handled appropriately in the HVAC design for kitchen environments, then the relative humidity of the space could increase above 65% and promote bacterial growth. Modifications to subsection 507.2.2 of the model code are limited to exceptions 2-4.

Note: The language of Sections 507.2.1 and 507.2.1.1 of the 2006 model code are not being modified, but appear in the proposed rule so that Section 507.2 and its subsections are conveniently available for users of the Code within the same subpart. This will result in the repeal of subpart 3.

**Subp. 4. Section 507.2.3.** The proposed rule reflects the renumbering within the 2006 IMC.

**Subp. 9. Section 507.7.1.** The proposed subpart replaces the reference to NFPA 96-2001 with a reference to NFPA 96-2004 to refer to the correct standard. Further modification deletes the words “by adding a section” because Section 507.7.1 is not an added section.

**Subp. 12. Section 507.14.** Because of the renumbering of the 2006 IMC, the proposed rule modifies the headnote and the subpart in order to provide an accurate reference to the correct IMC section.

#### **1346.0508 SECTION 508 COMMERCIAL KITCHEN MAKEUP AIR.**

**Subpart 1. Section 508.1.** The proposed rule corrects references to the applicable section and subsection of the 2006 IMC, which is necessary due to the renumbering of the model code.

#### **1346.0510 SECTION 510 HAZARDOUS EXHAUST SYSTEMS.**

**Subpart 1. Section 510.1.** This amendment contains a modification that deletes and replaces a citation to an NFPA Standard to provide for the most current version of the standard in use.

**Subp. 2. Section 510.4; Subp. 3. Section 510.7** The proposed rules repeal these subparts because these sections of the 2006 IMC now include the language; therefore, the subparts are no longer necessary.

#### **1346.0602 SECTION 602 PLENUMS.**

The proposed rule adds a subsection to 2006 IMC Section 602.2.1 that pertains to piping in plenums. The modification requires piping carrying flammable or combustible gases within a concealed plenum to be welded or brazed to prevent leakage into a system that could distribute flammable or combustible gases throughout the building or a portion thereof. This change is necessary to provide safer conditions for piping in plenums.

#### **1346.0603 SECTION 603 DUCT CONSTRUCTION AND INSTALLATION.**

**Subpart 1. Section 603.2.** The proposed rule repeals this subpart because this section of the 2006 IMC now includes the language so the subpart is no longer necessary.

**Subp. 2. Section 603.4.** Because of the renumbering of the 2006 IMC, the proposed rule modifies the headnote and the subpart in order to correctly reference IMC Section 603.4 and its

subsections.

**Subp. 3. Section 603.7.** Because of the renumbering of the 2006 IMC, the proposed rule modifies the headnote and the subpart in order to correctly reference IMC Section 603.7.

**Subp. 4. Section 603.8.** Because of the renumbering of the 2006 IMC, the proposed rule modifies the headnote and the subpart in order to correctly reference IMC Section 603.8.

**Subp. 5. Section 603.8.1.** Because of the renumbering of the 2006 IMC, the proposed rule modifies the headnote and the subpart in order to correctly reference IMC Section 603.8.1.

**Subp. 6. Section 603.8.2.** Because of the renumbering of the 2006 IMC, the proposed rule modifies the headnote and the subpart in order to correctly reference IMC Section 603.8.2.

**Subp. 7. Section 603.8.3.** Because of the renumbering of the 2006 IMC, the proposed rule modifies the headnote and the subpart in order to correctly reference IMC Section 603.8.3.

The proposed subpart deletes language regarding drainage and relocates the language to subpart 8 of the proposed rule, and adds language regarding plastic ducts to include high density polyethylene materials, which permits the use of new materials. Language pertaining to plastic ducts and fittings in the 2006 IMC was relocated to IMC 603.8.4. As a result, the language related to drainage needed to be removed from this subpart.

**Subp. 8. Section 603.8.** The proposed rule adds subsection 603.8.4, which relocates the language regarding drainage as discussed above in subpart 7.

**Subp. 9. Section 603.9.** The proposed subpart deletes language regarding fastening and sealing transverse joints, longitudinal seams, and connections because the language has been incorporated into the 2006 IMC. So, the prior amendment to the model code is no longer needed.

The words “by adding a sentence and a table to the end of the section” are included in the proposed rule because they explain a change to the model code that was made during the last rulemaking cycle. The words should have been added during that rulemaking but were inadvertently omitted. Finally, the title “Duct Sealing” is added to the table because the table is currently untitled.

**Subp. 10. Section 603.17.** The proposed rule correctly references the appropriate 2006 IMC section, which was renumbered in 2006, and adds subsection 603.17.3, adjustment of volume dampers, to the model code.

Because most of the language of this subpart was incorporated in the model code, the proposed subpart deletes duplicative language pertaining to registers, grilles, and diffusers. The proposed rule includes current rule language that was not incorporated into the model code. This language pertains to the adjustment of volume dampers and was not modified from the existing rule.

## **1346.0604 SECTION 604 INSULATION.**

The proposed rule requires duct insulation to comply with 2006 IMC Sections 604.1 through 604.13, which is necessary to clarify that these sections also apply.

The proposed rule adds an exception to permit the use of ducts without insulation. This modification is necessary because these ducts have been proven to perform without increasing the energy requirements of the building.

There is also a modification to the requirement for ducts “within the cement slab or within the ground” from an R-5 to an R-3.5. This change is necessary to provide consistent requirements with that of ASHRAE Standard 90.1-2004, which is the nationally recognized standard proposed to be incorporated into the Commercial Energy Code, proposed as Minnesota Rules, chapter 1323.

Lastly, the proposed rule corrects a typographical error by deleting the word “installation” and replacing it with the word “insulation.”

#### **1346.0703 SECTION 703 OUTDOOR AIR.**

The proposed rule replaces the label “mm<sup>2</sup>/kW” with “mm<sup>2</sup>/kW/hr.” The Department intends to change the proposed rule by retaining/reinstating the language of the current rule without modification.

#### **1346.1004 SECTION 1004 BOILERS.**

**Subpart 1. Section 1004.1.** The proposed subpart replaces the reference to ASME standard CSD-1 with CSD-1-2006 and the reference to NFPA 85-2001 with NFPA-85-2007 to refer to the correct standards, and adds a reference to BPVC-2007 regarding the ASME Boiler and Pressure Vessel Code to provide the most current version of the standard.

#### **1346.1006 SECTION 1006 SAFETY AND PRESSURE RELIEF VALVES AND CONTROLS.**

The proposed rule does not modify subparts 1 or 2 of this rule part.

**Subp. 3. Section 1006.9.** The proposed subpart deletes language requiring a manually operated remote shutdown to be located “at the boiler room door and marked for easy identification. The emergency shutdown switch shall disable all power to the burner controls” and replaces it with “as required by ASME CSD-1-2004.” (Note: Referencing the 2004 standard is a typographical error that the Department intends to correct by changing the reference in the proposed rule to read ASME CSD-1-2006.) This change is necessary to provide consistency with the ASME CSD-1-2006, which is the referenced standard for boilers.

#### **1346.1500 CHAPTER 15, REFERENCED STANDARDS.**

The list of standards included in this rule is intended to be used as a source of detailed

information to supplement the requirements throughout the Mechanical Code. The proposed rule contains modifications that correctly reference the standards listed. Item Q has been modified to delete UL 2034-1996, Single and Multiple Station Carbon Monoxide Alarms, because there is no reference to or requirements for CO Detectors in the Code. Item Q is further modified to add NFPA 45-2004 *Standard on Fire Protection for Laboratories Using Chemicals*, to the list of referenced standards. The addition is necessary because the standard is referenced in Part 1346.0510, subpart 1.

## **MINNESOTA FUEL GAS CODE**

### **1346.5050 TITLE; INCORPORATION BY REFERENCE.**

This rule part incorporates the 2006 International Fuel Gas Code (IFGC) by reference and with amendments. Additional modifications identify that the 2006 IFGC is copyright by the International Code Council, Inc., and change a reference to the commissioner of administration to the commissioner of labor and industry.

### **1346.5301 SECTION 301 (IFGC) GENERAL.**

The proposed subpart replaces references to ASME CSD-1 with ASME CSD-1-2006 and NFPA 85-2001 with NFPA 85-2007 in order to refer to the correct standards.

### **1346.5304 SECTION 304 (IFGC) COMBUSTION, VENTILATION AND DILUTION AIR.**

Note: Subparts 2, 4 to 7, and 9, are proposed for repeal because the 2006 IFGC now includes previous modifications to the model code, which makes these subparts unnecessary.

**Subpart 1. Section 304.1.** The proposed subpart deletes language that is in the current rule, refers users of the Code to the language contained in the 2006 IFGC, and carries forward the reference to Appendix E.

The current rule adds subsections 304.1.1, equipment location, and 304.1.2, draft hood or regulator, to the model code. The proposed rule deletes these added subsections to the model code because the text is now included in the 2006 IFGC. Therefore, the subpart is no longer necessary.

**Subp. 3. Section 304.6.2.** The proposed rule correctly references the renumbered section so that the rule reflects the renumbering of the 2006 IFGC. The language for Section 304.3 and subsection 304.3.1 is stricken because the 2006 IFGC includes the language; therefore, it is no longer necessary.

**Subp. 8. Section 304.8.** The proposed subpart renumbers sections in the IFGC that were changed in the 2006 version, which will provide correct references in the rule to renumbered sections of the 2006 IFGC.

The propose subpart deletes a sentence that refers users to IMC Section 501.4 to eliminate a duplicative reference within the subpart.



### **1346.5402 SECTION 402 (IFGC) PIPE SIZING.**

**Subpart 1. Section 402.3.** This subpart is proposed for repeal because the 2006 IFGC includes the modifications contained in the current rule, thereby making the subpart unnecessary.

**Subp. 2. 402.4, Tables.** This subpart, as currently written, provides several gas piping tables that must be used for sizing. The proposed subpart deletes existing tables 402.3(35), 402.3(36), and 402.3(38) because they are now included in the 2006 IFGC. Table 402.3(37) is renumbered as 402.4(2)A, which will cause it to be appropriately located within the new grouping of tables in the 2006 IFGC.

### **1346.5406 SECTION 406 (IFGC) INSPECTION, TESTING AND PURGING.**

The proposed rules do not modify Subparts 1, or 3 to 5.

**Subpart 2. Section 406.1.5.** Because of the renumbering of the 2006 IFGC, the proposed rule modifies the subpart in order to provide an accurate reference to the correct IFGC section.

### **1346.5409 SECTION 409 (IFGC) SHUTOFF VALVES.**

**Subpart 1. Section 409.1.** The proposed rule renumbers sections to coordinate with the renumbering of the IFGC, which will provide correct references within the rule. The proposed rule also correctly identifies the addition of subsection 409.1.4, which was incorrectly identified as a change to section 409.1 in a previous rulemaking. The proposed rule also correctly titles subsection 409.1.4 as “Main shutoff valve,” and requires that this valve be located inside the building. The title change will match the title of this section to the 2006 IFGC. The language change is necessary to clarify that the main shutoff valve should be located inside a building to provide a single location to turn off the gas supply to all connected appliances and protect the valve from unintentional shutoff.

**Subp. 2. Section 409.2.** Because of the renumbering of the 2006 IFGC, the proposed rule modifies the subpart in order to provide an accurate reference to the correct IFGC section.

### **1346.5501 SECTION 501 (IFGC) GENERAL.**

The proposed rules do not modify subparts 1 or 3.

**Subp. 2. Section 501.8.** The proposed subpart adds a reference to Section 614 in item 4, to correct an oversight that occurred during a previous rulemaking, which should have included the reference to Section 614.

### **1346.5503 SECTION 503 (IFGC) VENTING OF EQUIPMENT.**

The proposed rule does not modify subparts 1, 3, 4, and 7. Subparts 2, 5, and 8 are proposed for repeal because the 2006 IFGC includes the language contained in the current rule, thereby

making these subparts unnecessary.

**Subp. 6. Section 503.6.9.1.** Currently, this subpart reflects the text of the 2000 IFGC, section 503.6.9.1, Category I Appliances, with the Department's modification to the draft hood outlet area calculation (changed from "seven times" to "four times" in exceptions 1 and 2). The proposed rule reflects the 2006 IFGC while retaining the draft hood outlet area calculation of the current rule.

**Subp. 9. Section 503.10.7.** The proposed subpart deletes language about the means of fastening piping joints and replaces it with three methods for fastening piping joints—one of which is the method that appears in the stricken language. The modification is necessary to provide a clarification of the requirements of the spacing of screws around the circumference of the vent connector. It also permits listed systems to be installed in accordance with the manufacturers' instructions.

#### **1346.5504 SECTION 504 (IFGC) SIZING OF CATEGORY 1 APPLIANCE VENTING SYSTEMS.**

The proposed rule does not modify subparts 1 or 2.

**Subp. 3. Section 504.3.17.** Because of the renumbering of the 2006 IFGC, the proposed rule modifies the subpart in order to provide an accurate reference to the correct IFGC section.

**Subp. 4. Section 504.3.19.** Because of the renumbering of the 2006 IFGC, the proposed rule modifies the subpart in order to provide an accurate reference to the correct IFGC section.

#### **1346.5621 SECTION 621 (IFGC) UNVENTED ROOM HEATERS.**

This newly proposed rule part reflects the renumbering of the 2006 IFGC, which renumbered IFGC Section 620 as IFGC Section 621. The proposed rule relocates the language of Minn. R. part 1346.5620, which is proposed for repeal because of the renumbering.

#### **1346.5630 SECTION 630 (IFGC) INFRARED RADIANT HEATERS.**

Subparts 1 and 2 of this rule part are proposed for repeal because their requirements appear in proposed rule part 1346.5631, which reflects the renumbering of the model code. The language of subpart 3 is from Minn. R. Part 1346.5629.

#### **1346.5631 SECTION 631 (IFGC) BOILERS.**

This proposed rule relocates the requirements of Minn. R. Part 1346.5631, subparts 1 and 2, with modifications to update the referenced standards. The modifications include a change to the headnote and updated references to the correct version of the standards i.e. ASME CSD-1-2006, NFPA 85-2007, and BPVC-2007.

**1346.5901 SECTION 901 (IFGC) GENERAL;  
1346.5902 SECTION 902 (IFGC) EQUIPMENT PLACEMENT;  
1346.5903 SECTION 903 (IFGC) PILOT OPERATION;  
1346.5904 SECTION 904 (IFGC) BURNER OPERATION;  
1346.5905 SECTION 905 (IFGC) METHOD OF TEST;  
1346.5906 SECTION 906 (IFGC) PRESSURE REGULATORS; and  
1346.5907 SECTION 907 (IFGC) EQUIPMENT INFORMATION.**

Proposed rule parts 1346.5901 to 1346.5907 reflect the renumbering of the 2006 IFGC, which in effect renumbers Minn. R. Part 1346.5801 to 1346.5807 to reflect the renumbering of IFGC Sections 801 to 807 as IFGC Sections 901 to 907. The modifications to these rule parts do not change or add any requirements to the current rule.

**1346.6000 SECTION 1000 (IFGC) MANUFACTURED HOME PARK/COMMUNITY FUEL GAS EQUIPMENT AND INSTALLATION.**

This proposed rule renumbers Minn. R. Part 1346.5900 as Part 1346.6000 so that the rule follows the renumbering of the 2006 IFGC. The proposed rule reflects the renumbering of chapter nine of the IFGC as chapter ten. The modifications to this rule part are numerical only and do not change or add any requirements to the current rule.

**1346.6010 IMC APPENDIX C, TABLE C-1;  
1346.0612 IFGC APPENDIX E, WORKSHEET E-1; and  
1346.0614 IFGC APPENDIX E, TABLE E-1.**

These three rule parts provide individual rule part numbers to appendices that are currently located in a single rule part. These appendices should be located in separate rule parts so that users can more easily find the applicable table. The content of appendices remains unchanged.

#### **REPEALER.**

The repealer section includes the rule parts and subparts where the requirements now appear in the 2006 IMC or 2006 IFGC, or are those rule parts that are no longer necessary due to the relocation of rules that occurred because of the renumbering of these model codes.

#### **EFFECTIVE DATE.**

*Minnesota Statutes* § 326B.13 (formerly 16B.64), subdivision 8, states:

A rule to adopt or amend the state's building code is effective 180 days after the filing of the rule with the secretary of state under section 14.16 or 14.26. The rule may provide for a different effective date if the commissioner or board proposing the rule finds that a different effective date is necessary to protect public health and

safety after considering, among other things, the need for time for training of individuals to comply with and enforce the rule.<sup>9</sup>

In order to protect public health and safety, the proposed rules specifically identify June 1, 2009 or five working days after publication of the notice of adoption is published in the State Register, whichever is later, as the effective date in order to be consistent with the effective date for amendments to Minn. R. Chapters 1322 (the Residential Energy Code) and 1323 (the Commercial Energy Code), which are concurrent rulemakings.<sup>10</sup> It is important that these three administrative rule chapters have the same effective date because they: are intended to work together, contain internal cross-references, and, when considered together, repeal administrative rule chapters 7670, 7672, 7674, 7676, and 7678.<sup>11</sup>

The Department supports the intent of Minn. Stat. § 326B.13, subd. 8, which will provide industry and affected parties with 180 days *after the language of the final rule is determined* to become familiar with the language of the final rule and with which to become knowledgeable about new or amended Code requirements. In this instance, with the importance of a simultaneous effective date for three independent rulemakings, the Department proposes June 1, 2009, which was arrived at after discussion with the Builder's Association of Minnesota—the coordinator of the submission of more than 25 requests for hearing that identified the effective date as the issue as it relates to the Residential Energy Code rules.

Minn. Stat. § 326B.13, subd. 8, as currently written,<sup>12</sup> does not permit the Department to easily

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<sup>9</sup> 2007 Minn. Laws, Chapter 140, Article 4, Section 11.

<sup>10</sup> The Department published separate Notices of Intent to Adopt Rules for the Residential Energy Code rules and the Commercial Energy Code rules. The proposed rules each included an effective date of “five working days after the notice of adoption is published in the State Register.” The Department received 33 requests for hearing in response to the Residential Energy Code notice on the issue of effective date and specific rule parts. Twenty-seven of the requests for hearing were submitted by member/supporters of the Builder's Association of Minnesota (BAM). In order to effectuate a withdrawal of these hearing requests the Department worked with BAM to resolve its concerns regarding the proposed rules with changes to the proposed rule, and to arrive at an effective date that recognizes the intent of Minn. Stat. § 326B.13, subd. 8, was acceptable to BAM in light of its publication and training initiatives.

The Department did not receive any requests for hearing related to the effective date proposed in the Commercial Energy Code. Since the rulemakings for chapters 1322, 1323, and 1346 were intended to have the same effective date, the Department's efforts to resolve any issues within the 1322 rulemaking necessarily impacts the effective dates for the 1323 and 1346 rulemakings.

<sup>11</sup> These chapters currently contain the State Building Code requirements related to energy. The Department intends to replace these five chapters with two chapters--the Residential Energy Code and the Commercial Energy Code. References to these chapters appear within the Mechanical & Fuel Gas Codes, Minn. R. ch. 1346. As a result, the 1346 rulemaking should have the same effective date as the two energy codes.

<sup>12</sup> Minn. Stat. § 326B.13, subd. 8, states in pertinent part: “A rule to adopt or amend the state's building code is effective *180 days after the filing of the rule with the secretary of state...*” The submission to the Secretary of State is made by the Office of Administrative Hearings. Minn. Stat. §§ 14.05 14.16, and 14.26. Because the filing is not made by the Department, we would have to carefully time our rulemakings, whether through hearing or no-hearing review, so that the Office of Administrative Hearing submission to the Office of the Secretary of State for every chapter that should have the same effective date in order to protect public health and safety *occurs on the same day*. For example, had Minn. Stat. § 326B.13, subd. 8, been effective during a previous rulemaking cycle, the Department would have necessarily been required to make seven rulemaking submissions to OAH on the same day, which could be overly burdensome in light of the Commissioner's statutory authority to determine an alternative effective date. See Footnote 13.

or predictably utilize a simultaneous effective date for multiple administrative rule chapters. The Department, in some instances, protects public health and safety by taking steps to ensure the functionality of the family of administrative rule chapters that comprise the Minnesota State Building Code.<sup>13</sup> In order to protect public health and safety, the effective date of these rules should be June 1, 2009, so that they are effective on the same day as the Residential Energy and Commercial Energy Codes.

## CONCLUSION

Based on the foregoing, the proposed rules are both needed and reasonable.

January 12, 2009  
Date

/s/Steve Sviggum  
Steve Sviggum  
Commissioner

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<sup>13</sup> E.g. During the last rulemaking cycle, State Building Code amendments to the following rule chapters were effective on the same date: 1300, Building Code Administration; 1303, Minnesota Provisions of the State Building Code; 1305, Adoption of the International Building Code; 1306, Fire Suppression Systems; 1309, Adoption of the International Residential Code; 1341, Minnesota Accessibility Code; and 7511, Minnesota State Fire Code.