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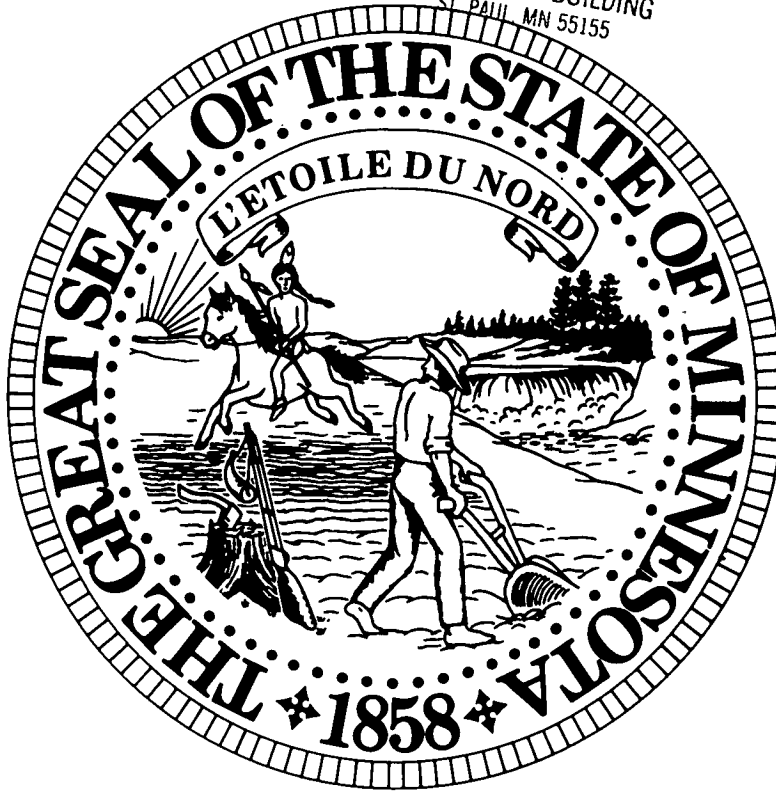
The Minnesota State Register

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The *State Register* is the official publication of the State of Minnesota, containing executive and commissioners' orders, proposed and adopted rules, official and revenue notices, professional, technical and consulting contracts, non-state bids and public contracts, and grants.

A *Contracts Supplement* is published Tuesday, Wednesday and Friday and contains bids and proposals, including printing bids.

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9	Monday 30 August	Monday 16 August	Monday 23 August
10	Tuesday 7 September	Monday 23 August	Monday 30 August
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Debra Rae Anderson, Commissioner
Department of Administration

Kathi Lynch, Director
Print Communications Division
Debbie George, Circulation Manager

Jane E. Schmidley, Acting Editor
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Commodity award results are available through the **Materials Management Helpline** 612/296-6963.

Minnesota Rules: Amendments and Additions

NOTICE: How to Follow State Agency Rulemaking in the State Register

The *State Register* is the official source, and only complete listing, for all state agency rulemaking in its various stages. State agencies are required to publish notice of their rulemaking action in the *State Register*. Published every Monday, the *State Register* makes it easy to follow and participate in the important rulemaking process. Approximately 75 state agencies have the authority to issue rules. Each agency is assigned specific *Minnesota Rule* chapter numbers. Every odd-numbered year the *Minnesota Rules* are published. This is a ten-volume bound collection of all adopted rules in effect at the time. Supplements are published to update this set of rules. Proposed and adopted emergency rules do not appear in this set because of their short-term nature, but are published in the *State Register*.

If an agency seeks outside opinion before issuing new rules or rule amendments, it must publish a NOTICE OF INTENT TO SOLICIT OUTSIDE OPINION in the *Official Notices* section of the *State Register*. When rules are first drafted, state agencies publish them as **Proposed Rules**, along with a notice of hearing, or notice of intent to adopt rules without a hearing in the case of noncontroversial rules. This notice asks for comment on the rules as proposed. Proposed emergency rules and withdrawn proposed rules are also published in the *State Register*. After proposed rules have gone through the comment period, and have been rewritten into their final form, they again appear in the *State Register* as **Adopted Rules**. These final adopted rules are not printed in their entirety in the *State Register*, only the changes made since their publication as Proposed Rules. To see the full rule, as adopted and in effect, a person simply needs two issues of the *State Register*, the issue the rule appeared in as proposed, and later as adopted. For a more detailed description of the rulemaking process, see the *Minnesota Guidebook to State Agency Services*.

The *State Register* features partial and cumulative listings of rules in this section on the following schedule: issues 1-13 inclusive; issues 14-25 inclusive; issue 26, cumulative for issues 1-26; issues 27-38 inclusive; issue 39, cumulative for 1-39; issues 40-51 inclusive; and issue 52, cumulative for 1-52. An annual subject matter index for rules appears in August. For copies of the *State Register*, a subscription, the annual index, the *Minnesota Rules* or the *Minnesota Guidebook to State Agency Services*, contact the Print Communications Division, 117 University Avenue, St. Paul, MN 55155 (612) 297-3000 or toll-free in Minnesota 1-800-657-3757.

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9510.1020; .1050; .1070; 9525.0004; .0008; .0012;		changed to "parts 9545.0755 to 9545.0855"	353
.0016; .0024; .0028; .0032; .0036; .0225; .0235; .0265;		9545.0750; .0760; .0770; .0780; .0790; .0800; .0810;	
.0295; .0305; .0325; .0335; .0345; .0900; .1210; .1220;		.0820; .0830 (proposed repealer)	353
.1230; .1240; .1500; .1520; .1550; .1560; .1570; .1600;		9565.5000; .5010; .5027; .5050; .5060; .5065; .5080;	
.1620; .1630; .1640; .1650; .1670; .1680; .1690; .1800;		.5090; .5100; .5110; .5120; .5130; .5140; .5150; .5160;	
		.5200 (proposed)	250
		9565.5010, s.6,7,13,23,24,33; .5025, s.4; .5030, s.23,8; .5040;	
		.5060, s.1,3,4,6,7; .5110, s.6,9,10 (proposed repealer)	271

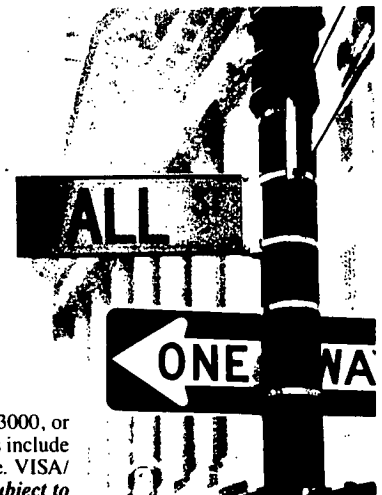
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Proposed Rules

Pursuant to Minn. Stat. §§ 14.22, an agency may propose to adopt, amend, suspend or repeal rules without first holding a public hearing, as long as the agency determines that the rules will be noncontroversial in nature. The agency must first publish a notice of intent to adopt rules without a public hearing, together with the proposed rules, in the *State Register*. The notice must advise the public:

1. that they have 30 days in which to submit comment on the proposed rules;
2. that no public hearing will be held unless 25 or more persons make a written request for a hearing within the 30-day comment period;
3. of the manner in which persons shall request a hearing on the proposed rules; and
4. that the rule may be modified if the modifications are supported by the data and views submitted.

If, during the 30-day comment period, 25 or more persons submit to the agency a written request for a hearing of the proposed rules, the agency must proceed under the provisions of §§ 14.14-14.20, which state that if an agency decides to hold a public hearing, it must publish a notice of intent in the *State Register*.

Pursuant to Minn. Stat. §§ 14.29 and 14.30, agencies may propose emergency rules under certain circumstances. Proposed emergency rules are published in the *State Register* and, for at least 25 days thereafter, interested persons may submit data and views in writing to the proposing agency.

Department of Commerce

Registration Division

Proposed Permanent Rules Governing the Petroleum Tank Release Compensation Fund

Notice of Intent to Adopt Rules Without a Public Hearing

The State Petroleum Tank Release Compensation Board intends to adopt a permanent rule without a public hearing following the procedures set forth in the Administrative Procedure Act, *Minnesota Statutes*, sections 14.22 to 14.28. You have 30 days to submit written comments on the proposed rule and, during that 30 day period, you may also submit a written request that a hearing be held on the rule.

Contact Person. Comments or questions on the rule and written requests for a public hearing on the rule must be submitted to:

Patricia L. Peterson
Minnesota Department of Commerce
133 East 7th Street
St. Paul, MN 55101
(612) 296-2284

Subject of Rule and Statutory Authority. The proposed rule is about the Petroleum Tank Release Compensation Fund. The statutory authority to adopt this rule is *Minnesota Statutes*, sections 115C.07, subdivision 3(a). The proposed rule is published in the *State Register* and attached to this notice as mailed.

Comments. You have until 4:30 p.m. on **September 30, 1993**, to submit written comment in support of or in opposition to the proposed rule or any part or subpart of the rule. Your comment must be in writing and received by the contact person by the due date. Comment is encouraged. Your comment should identify the portion of the proposed rule addressed, the reason for the comment, and any change proposed.

Request for a Hearing. In addition to submitting comments, you may also request that a hearing be held on the rule. Your request for a public hearing must be in writing and be received by the contact person by 4:30 p.m. on **September 30, 1993**. Your request for a public hearing must include your name and address. You are encouraged to identify the portion of the proposed rule which caused your request, the reason for the request, and any changes you want made to the proposed rule. If 25 or more persons submit a written request for a hearing, a public hearing will be held unless a sufficient number withdraw their requests in writing. If a public hearing is required, the board will follow the procedures in *Minnesota Statutes*, sections 14.131 to 14.20.

Modifications. The proposed rule may be modified as a result of public comment. The modifications must be supported by data and views submitted to the board and may not result in a substantial change in the proposed rule as printed in the *State Register*. If the proposed rule affects you in any way, you are encouraged to participate in the rulemaking process.

Statement of Need and Reasonableness. A statement of need and reasonableness is now available from the contact person. This

KEY: PROPOSED RULES SECTION — Underlining indicates additions to existing rule language. ~~Strike outs~~ indicate deletions from existing rule language. If a proposed rule is totally new, it is designated "all new material." **ADOPTED RULES SECTION** — Underlining indicates additions to proposed rule language. ~~Strike outs~~ indicate deletions from proposed rule language.

Proposed Rules

statement describes the need for and reasonableness of each provision of the proposed rules and identifies the data and information relied upon to support the proposed rule.

Small Business Considerations. The provisions of *Minnesota Statutes*, section 14.115, subdivision 4 have been reviewed and it has been determined that this proposed rule will not adversely affect small businesses.

Expenditure of Public Money by Local Public Bodies. The provisions of *Minnesota Statutes*, section 14.11, subdivision 1 have been reviewed and it has been determined that this proposed rule will not require the expenditure of public money by local public bodies greater than \$100,000 in the two years following rule adoption.

Impact on Agricultural Lands. The provisions of *Minnesota Statutes*, section 14.11, subdivision 2 have been reviewed and it has been determined that this proposed rule will not affect agricultural land.

Adoption and Review of the Rule. If no hearing is required, after the end of the comment period the board may adopt the rule. The rule and supporting documents will then be submitted to the attorney general for review as to legality and form to the extent form relates to legality. You may request to be notified of the date the rule is submitted to the attorney general or be notified of the attorney general's decision on the rule. If you want to be so notified, or wish to receive a copy of the adopted rule, submit your written request to the contact person listed above.

Dated: 13 August 1993

Patricia L. Peterson
Executive Director
Petroleum Tank Release Compensation Board

Rules as Proposed

2890.0010 DEFINITIONS.

[For text of subs 1 and 2, see M.R.]

Subp. 2a. **Applicant.** "Applicant" means a person seeking reimbursement of costs from the Minnesota petroleum tank release compensation fund.

Subp. 2b. **Board.** "Board" means the petroleum tank release compensation board.

[For text of subp 3, see M.R.]

Subp. 3a. **Consultant services.** "Consultant services" means the rendering of professional consulting, investigation, or design services opinion, advice, or analysis regarding a release.

[For text of subs 3b and 4, see M.R.]

Subp. 4a. **Limited use applicant.** "Limited use applicant" means an applicant who:

A. has not regularly sold petroleum to others;

B. seeks reimbursement for costs incurred in response to a release from a tank containing no more than 10,000 gallons of petroleum; and

C. is unlikely to have known of federal and state regulations applicable to the tank because of the nature of the applicant's business or use of the tank.

[For text of subs 5 to 7, see M.R.]

2890.0030 VICE-CHAIR.

A vice-chair shall be elected by the board at the first regular board meeting of each calendar year. The vice-chair shall preside at regular and special meetings in the absence of the chair and perform other duties assigned by the board. If the vice-chair position becomes vacant, a vice-chair shall be elected at the next regularly scheduled board meeting.

2890.0060 REIMBURSEMENT OF COSTS.

Subpart 1. **Generally.** Each responsible person applicant who has incurred reimbursable costs after June 4, 1987, in response to a release, and each volunteer who has incurred reimbursable costs on or after May 23, 1989, in response to a release, eligible for reimbursement may apply to the board for partial reimbursement of eligible costs.

[For text of subp 2, see M.R.]

Subp. 2a. [See repealer.]

Subp. 2b. [See repealer.]

Subp. 3. **Multiple responsible persons applicants.** If there is more than one responsible person or volunteer applicant who incurs

reimbursable costs for a single release or at a single corrective action site, each ~~responsible person or volunteer~~ applicant must apply separately for reimbursement. Not more than \$1,000,000 may be reimbursed for costs associated with a single release, regardless of the number of persons eligible for reimbursement.

Subp. 4. [See repealer.]

2890.0065 REDUCTION OF REIMBURSEMENT AMOUNT.

Subpart 1. **Amount of reduction.** Pursuant to *Minnesota Statutes*, section 115C.09, subdivision 2 ~~3~~, paragraph (f), the board shall reduce the amount of reimbursement to be made to a ~~noncompliant responsible person an~~ applicant as follows:

A. ~~The board shall reduce the amount of reimbursement for failure to comply with state and federal rules and regulations applicable to the tank; the board shall reduce the amount of reimbursement by ten to 25 percent upon consideration of the likely environmental impact of the failure to comply. Notwithstanding the foregoing, the board shall reduce the amount of reimbursement by five percent, with a minimum reduction of \$200, for failure to register a tank pursuant to *Minnesota Statutes*, section 116.48. as follows:~~

(1) by 15 percent for failure to provide adequate corrosion protection;

(2) by 15 percent for failure to provide release detection;

(3) by 15 percent for failure to provide spill or overfill control;

(4) by ten percent for failure to use a certified contractor;

(5) by ten percent for failure to provide prior notice of tank removal;

(6) by \$1,000 for failure to register an aboveground or underground tank. The amount of the reduction shall be \$200, rather than \$1,000, for a limited use applicant unaware of the registration requirement; and

(7) by up to 50 percent for failure to comply with any state or federal rules or regulations applicable to the tank not specifically cited in this subpart.

B. For failure to report a release as required by *Minnesota Statutes*, section 115.061, the board shall consider the timeliness of the release reporting in determining the amount of the reduction. The board shall reduce the amount of reimbursement by ten to 25 percent upon consideration of the likely environmental impact of the failure to report a minimum of \$1,000. The minimum amount of the reduction shall be \$200, rather than \$1,000, for a limited use applicant unaware of the reporting requirement.

C. For failure to cooperate with the agency in responding to the release, the board shall reduce the amount of reimbursement by ~~25 up to 50 percent upon consideration of the likely environmental impact of the failure to cooperate.~~

D. For failure to exercise due care with regard to operation of the tank, the board shall reduce the amount of reimbursement by ~~25 up to 50 percent upon consideration of the likely environmental impact of the failure to exercise due care.~~

Subp. 2. [See repealer.]

Subp. 2a. Calculations of reductions. Percentage or dollar reductions shall be applied as specified in this subpart. If the board imposes more than one dollar reduction on an application, the dollar amounts shall be added together and the total dollar amount of reduction shall be applied to the application. If the board imposes more than one percentage reduction on an application, the percentage amounts shall be added together and then applied to the reimbursement request to determine a dollar amount of the reduction. If the board imposes both percentage and dollar amount reductions on an application, the dollar amount reductions shall be applied after the percentage reductions.

Subp. 3. **Deviations.** The board may increase or decrease the amount of reduction by up to 50 percent of the original amount of reimbursement if ~~warranted upon consideration of, or use either dollar amounts or percentages for any reduction, based on the following factors:~~

A. ~~the public interest~~ likely environmental impact of the noncompliance;

[For text of items B and C, see M.R.]

D. whether the noncompliance was negligent, knowing, or willful.

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Proposed Rules

Subp. 4. Multiple applications.

A. When the board imposes a reduction in the form of a percentage, the percentage for that reduction shall continue to be imposed on all subsequent applications for the same release.

B. When the board imposes a reduction in the form of a dollar amount, the amount of the reduction shall be a one-time penalty. That dollar amount reduction shall not continue to be imposed on subsequent applications unless necessary to fully impose the reduction.

2890.0080 INELIGIBLE COSTS.

All costs associated with actions that do not minimize, eliminate, or clean up a release to protect the public health and welfare or the environment are ineligible costs. Ineligible costs include, but are not limited to, any costs related to the permanent repair or replacement of a tank, upgrading tanks, removal of tanks, loss of income, attorney's fees, permanent relocation of residents, decreased property values, reimbursement for the ~~responsible person's~~ applicant's own time spent in planning and administering a corrective action plan, aesthetic improvements, or any work performed that is not in compliance with safety codes including but not limited to Occupational Safety and Health Administration requirements, well codes, and fire codes. Other ineligible costs include corrective action costs which are covered under an insurance or other contract for initial and supplemental applications received by the board after October 21, 1991.

2890.0090 APPLICATION PROCESS.

Subpart 1. Applications. ~~A person who requests compensation from the fund~~ An applicant shall complete, sign, and submit to the board a written application. The application shall be made on a form prescribed by the board and shall contain at least the following:

[For text of items A to E, see M.R.]

[For text of subp 2, see M.R.]

Subp. 3. Subsequent applications. ~~An eligible responsible person or volunteer~~ applicant who has already ~~obtained partial reimbursement from~~ submitted to the board an application for reimbursement and who has incurred additional or continuing eligible costs ~~due to the same release~~ may reapply if:

~~A- the amount of the person's original reimbursement was less than 90 percent of the eligible costs or \$1,000,000, whichever is less.~~

B- apply for reimbursement of those costs by filing a subsequent application. An applicant may file a subsequent application only if the applicant has not submitted the costs on a previous application and the eligible costs submitted on a subsequent application are not related to any new releases at the site.

~~The total reimbursement to a responsible person or volunteer for a release shall not exceed 90 percent of the total eligible costs or \$1,000,000, whichever is less, regardless of the number of applications for reimbursement submitted by the responsible person or volunteer.~~

[For text of subp 4, see M.R.]

Subp. 5. Certification. A person who signs an application for reimbursement shall make the following certification: "I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete.

I certify that if I have submitted invoices for costs that I have incurred but that remain unpaid, I will pay those invoices within 30 days of receipt of reimbursement from the board. I understand that if I fail to do so, the board may demand return of all or any portion of reimbursement paid to me and that if I fail to comply with the board's demand, that the board may recover the reimbursement, plus administrative and legal expenses in a civil action in district court. I understand that I may also be subject to a civil penalty."

Additionally, if the ~~responsible person~~ applicant is not an individual, the person authorized under subpart 4 shall make the following certification: "I further certify that I am authorized to sign and submit this application on behalf of (entity)."

[For text of subp 6, see M.R.]

2890.0100 REVIEW AND DETERMINATION.

[For text of subs 1 and 2, see M.R.]

Subp. 3. Board determination. The board shall determine the amount of the reimbursement based on those costs it finds are eligible, actually incurred, and reasonable. The determination shall be made on the basis of the written record. The board may also allow supplemental information explaining the application to be presented orally. The board may establish a fair and reasonable limit on time allowed for oral presentation.

The applicant shall be notified in writing within ten business days of the board's decision. If the board rejects any portion of the request for reimbursement, a statement of the reasons for rejection shall be included with the notification.

2890.0110 RIGHT TO APPEAL.

A person may appeal within 30 days a determination by the board as a contested case hearing under *Minnesota Statutes*, chapter 14.

REPEALER. *Minnesota Rules*, parts 2890.0060, subparts 2a, 2b, and 4; and 2890.0065, subpart 2, are repealed.

Department of Commerce

Proposed Permanent Rules Relating to Credit Unions

Notice of Intent to Adopt Rules Without a Public Hearing

The Minnesota Department of Commerce intends to adopt a permanent rule without a public hearing following the procedures set forth in the Administrative Procedure Act, *Minnesota Statutes*, sections 14.22 to 14.28. You have 30 days to submit written comments on the proposed rule and, during that 30 day period, you may also submit a written request that a hearing be held on the rule.

Agency Contact Person. Comments or questions on the rule and written requests for a public hearing on the rule must be submitted to:

Donna M. Watz, Staff Attorney
Minnesota Department of Commerce
133 East 7th Street
St. Paul, MN 55101
(612) 297-1118

Subject of Rule and Statutory Authority. The proposed rules amend provisions regulating credit unions and reflect changes in federal and state law that impact accounting standards and documentation necessary to operate federally insured depository institutions. The statutory authority to adopt this rule is *Minnesota Statutes*, sections 46.01, subdivision 2 and 45.023. The proposed rule is published in the *State Register* and attached to this notice as mailed.

Comments. You have until 4:30 p.m. on **September 30, 1993**, to submit written comment in support of or in opposition to the proposed rule or any part or subpart of the rule. Your comment must be in writing and received by the agency contact person by the due date. Comment is encouraged. Your comment should identify the portion of the proposed rule addressed, the reason for the comment, and any change proposed.

Request for a Hearing. In addition to submitting comments, you may also request that a hearing be held on the rule. Your request for a public hearing must be in writing and be received by the agency contact person by 4:30 p.m. on **September 30, 1993**. Your request for a public hearing must include your name and address. You are encouraged to identify the portion of the proposed rule which caused your request, the reason for the request, and any changes you want made to the proposed rule. If 25 or more persons submit a written request for a hearing, a public hearing will be held unless a sufficient number withdraw their requests in writing. If a public hearing is required, the agency will follow the procedures in *Minnesota Statutes*, sections 14.131 to 14.20.

Modifications. The proposed rule may be modified as a result of public comment. The modifications must be supported by data and views submitted to the agency and may not result in a substantial change in the proposed rule as printed in the *State Register*. If the proposed rule affects you in any way, you are encouraged to participate in the rulemaking process.

Statement of Need and Reasonableness. A statement of need and reasonableness is now available from the agency contact person. This statement describes the need for and reasonableness of each provision of the proposed rules and identifies the data and information relied upon to support the proposed rule.

Small Business Considerations. The provisions of *Minnesota Statutes*, section 14.115, subdivision 4 have been reviewed and it has been determined that this proposed rule will not adversely affect small businesses.

Expenditure of Public Money by Local Public Bodies. The provisions of *Minnesota Statutes*, section 14.11, subdivision 1 have

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Proposed Rules

been reviewed and it has been determined that this proposed rule will not require the expenditure of public money by local public bodies greater than \$100,000 in the two years following rule adoption.

Impact on Agricultural Lands. The provisions of *Minnesota Statutes*, section 14.11, subdivision 2 have been reviewed and it has been determined that this proposed rule will not affect agricultural land.

Adoption and Review of the Rule. If no hearing is required, after the end of the comment period the agency may adopt the rule. The rule and supporting documents will then be submitted to the attorney general for review as to legality and form to the extent form relates to legality. You may request to be notified of the date the rule is submitted to the attorney general or be notified of the attorney general's decision on the rule. If you want to be so notified, or wish to receive a copy of the adopted rule, submit your written request to the agency contact person listed above.

Dated: 16 August 1993

Patrick L. Nelson
Commissioner of Commerce (Acting)

Rules as Proposed

2675.6100 BOOKS, RECORDS, AND REPORTS.

[For text of subps 2 to 5a, see M.R.]

Subp. 5b. **Inactive and segregated accounts.** If the board determines that an account is inactive and ~~segregated~~ identifies the account by code or some other means, it must be issued a statement at least annually. Statements on inactive accounts must be issued under the control of the supervisory committee.

[For text of subp 5c, see M.R.]

Subp. 6. **Issuing account numbers.** A number as determined by the board of directors in a predetermined set pattern must be assigned to each member ~~in sequence upon that person's~~ upon that person's election to membership, and that number may never be reissued to another member. Each member's assigned number must appear on the member's individual record of accounts for shares, deposits, and loans.

2675.6120 OTHER REAL ESTATE.

Subpart 1. **Transfers.** Whenever real estate is acquired by a credit union through foreclosure or by deed in lieu of foreclosure, it must be transferred from loans to an account titled "Other Real Estate" on the date ~~upon which the credit union actually acquired title of sheriff's certificate or other conveyance.~~

[For text of subps 2 to 4, see M.R.]

Subp. 5. [See repealer.]

Subp. 6. **Unsold other real estate.** Other real estate that is not sold must be charged off annually through earnings at the rate of at least ten percent of the original amount. The charge-off period begins at the end of the redemption period if the other real estate was acquired through foreclosure or on the date of the deed if the other real estate was acquired via a deed in lieu of foreclosure. The first charge off shall be prorated based upon the number of full months in the first year since the charge-off period began.

2675.6141 REAL ESTATE MORTGAGES.

Subpart 1. **Loans.** Credit unions may make loans upon the security of real estate if it is a first lien on the real estate. Additionally, credit unions may take a junior lien if the loan is made:

A. to secure debts previously contracted;

B. if at least 80 percent of the principal balance is guaranteed or insured by a governmental agency or nationally recognized insurer; or

C. to secure a loan if the total unpaid aggregate of all outstanding liens against the same real estate, including the credit union's proposed lien, does not exceed 80 percent of its appraised value. A loan made under *Minnesota Statutes*, section 52.165, is deemed to comply with this ~~rule part~~ if it was in compliance at the date of its origination.

Subp. 1a. **Written policy.** A credit union taking a lien on real estate as security must maintain a written policy approved annually by its board of directors which at a minimum addresses:

A. written appraisal or valuation reports made in conjunction with federal, state, and board requirements;

B. description of fee title, validity of the credit union's lien, position of the lien, and documentation of methods used to make these determinations;

C. evidence of adequate insurance with loss payable clause payable to the credit union; and

D. exemption of documentation requirements, for any single loan or class of loans, if the loan documents reflect that the lien

has been taken as collateral solely through an abundance of caution and where the terms of the transaction as a consequence have not been made more favorable than they would have been in the absence of a lien.

Subp. 2. [See repealer.]

Subp. 3. [See repealer.]

Subp. 4. [See repealer.]

Subp. 5. [See repealer.]

Subp. 6. [See repealer.]

2675.6142 PERSONAL LOANS.

Subpart 1. Fees. Charges, other than interest authorized by law, may not be made for any non-real estate loan except that there may be charged to the borrower or included in the amount financed: As specified by board resolution, a credit union may require members to pay fees in connection with the making, closing, disbursing, extending, readjusting, or renewing of any loan. The board resolution establishing these fees must be conspicuously posted at the principal office of the credit union for so long as the fees are in effect.

A. Fees paid or to be paid by the credit union to any public officer for filing, recording, or releasing in a public office an instrument securing the loan.

B. Premiums or charge for insurance protecting the lender against the risk of loss from not filing or recording a security agreement or financing statement and in lieu of filing the agreement or statement. The premium or charge may not exceed the actual premium or charge made by the insurance company to the lender or the actual costs if the documents were filed, recorded, or released in any public office.

C. The premium on any life, accident and health, property, or other insurance written upon or in connection with a loan; provided notification is given in writing that the borrower has the option of furnishing this coverage through existing policies of insurance owned or controlled by the borrower or of furnishing the coverage through any insurer authorized to transact business in this state. The premium may not be included as part of the loan and must be accounted for as a separate receivable unless advanced as part of the principal at the time of origination or payments are increased to provide amortization of the premium within the original maturity of the loan.

Subp. 1a. Other charges. The borrower may be charged, or included in the amount financed, the premium on any life, accident and health, property, or other insurance written upon or in connection with a loan if notification is given in writing that the borrower has the option of furnishing this coverage through existing policies of insurance owned or controlled by the borrower or furnishing the coverage through any insurer authorized to transact business in this state. The premium may not be included as part of the loan and must be accounted for as a separate receivable unless advanced as part of the principal at the time of origination or payments are increased to provide amortization of the premium within the original maturity of the loan.

Subp. 2. [See repealer.]

Subp. 3. Written policy. A written loan policy is required to be reviewed and approved annually by the board. A detailed description of the frequency and depth of financial review of various classes of loans must be included in the policy.

2675.6143 DELINQUENT LOANS.

[For text of subs 1 to 3, see M.R.]

Subp. 4. Delinquent loan report. A detailed report on delinquent loans must be reviewed at each board meeting and made a part of the minutes. The report must include a summary of collection activity, the number of new additions to the delinquent loan list, and a review of loans on the prior month's delinquent loan list which have been extended or rewritten. The board shall verify by direct examination or otherwise that the record of delinquent loans is reasonably accurate. Each credit union board will develop and implement a program to ensure that the board is kept informed on the status of delinquent loans and collection actions monthly.

Subp. 5. [See repealer.]

Subp. 5a. Loan reserve requirements and dividends. Before declaration of a dividend, the board of directors shall ascertain that:

A. the allowance for a loan losses account is funded as determined by the board's internal risk rating system to present fairly the financial position and meet the requirements of the agreement for insurance of accounts; and

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Proposed Rules

B. that statutory reserve transfers are made in accordance with statute.

Notification to the commissioner of commerce of dividends paid will be required if the dividends paid exceed earnings for the period declared. Accrual accounting adjustments may be made for those credit unions operating on a cash, modified cash, or partial accrual account basis.

[For text of subp 6, see M.R.]

2675.6250 FIDELITY BONDS.

[For text of subpart 1, see M.R.]

Subp. 3. **Minimum provisions.** The board of directors shall at least once a year approve the amount of fidelity insurance to be carried for the ensuing year. ~~The board of directors may establish minimum amounts of bond coverage and maximum deductible amounts.~~

REPEALER. Minnesota Rules, parts 2675.6120, subpart 5; 2675.6141, subparts 2, 3, 4, 5, and 6; 2675.6142, subpart 2; 2675.6143, subpart 5; 2675.6200; 2675.6260; and 2675.6301, are repealed.

Department of Public Safety

State Fire Marshal Division

Proposed Permanent Rules Relating to Fire Protection Systems

Dual Notice: Notice of Intent to Adopt Rules Without a Public Hearing Unless 25 or More Persons Request a Hearing, and Notice of Hearing if 25 or More Requests for Hearing are Received

Introduction. The Minnesota Department of Public Safety intends to adopt permanent rules without a public hearing following the procedures set forth in the Administrative Procedure Act, *Minnesota Statutes*, sections 14.22 to 14.28. If, however, 25 or more persons submit a written request for a hearing on the rules within 30 days or by 4:30 p.m. on Wednesday, September 29, 1993, a public hearing will be held on Tuesday, October 12, 1993. To find out whether the rules will be adopted without a hearing or if the hearing will be held, you should contact the agency contact person after September 29, 1993, and before October 12, 1993.

Agency Contact Person. Comments or questions on the rules and written requests for a public hearing on the rules must be submitted to: Robert James, State Fire Marshal Division, 450 North Syndicate Street, #285, St. Paul, Minnesota 55104, telephone 612-643-3591.

Subject of Rules and Statutory Authority. The proposed rules relate to fire protection (sprinkler) systems. The statutory authority to adopt the rules is *Minnesota Statutes*, section 299M.04. A copy of the proposed rules is published in the *State Register*. The proposed rules implement *Minnesota Statutes*, chapter 299M, which sets up a regulatory framework for the fire protection industry. Chapter 299M requires licensing of fire protection contractors, certification of journeyman sprinkler fitters, and registration of apprentice sprinkler fitters. Also under chapter 299M, the State Fire Marshal will begin performing plan reviews and inspections of fire protection systems in areas of the state not already covered by municipal inspection programs. The rules set out qualifications and work requirements for contractors, journeymen, and apprentices. The rules also set out license, certification, registration, permit, and surcharge fees that will cover the costs of the program. A free copy of the rules is available upon request from Robert James.

Effective Date. Part 7512.0300 of the proposed rules states that the effective date of the rules is June 1, 1993. Since this date has already passed, it cannot be the actual effective date. The actual effective date of these rules will be determined using *Minnesota Statutes*, section 14.18. The actual effective date can be calculated only after the adoption process is almost complete and the rules are approved by the Attorney General or the Administrative Law Judge. At that time, the Department intends to change "June 1, 1993," to reflect the actual effective date. Part 7512.0300 also sets out a two-month application period and a two-year exemption period for certain fire protection contractors and journeyman sprinkler fitters to be exempt from examination. Both of these time periods use specific dates that are keyed to the June 1, 1993, effective date. At the time of adoption of these rules, all specific dates in part 7512.0300 will be adjusted so that there will be a two-month application period and a two-year exemption period keyed to the actual effective date of the rules.

Comments. You have until 4:30 p.m., Wednesday, September 29, 1993, to submit written comment in support of or in opposition to the proposed rules or any part or subpart of the rules. Your comment must be in writing and received by the agency contact person by the due date. Comment is encouraged. Your comment should identify the portion of the proposed rules addressed, the reason for the comment, and any change proposed.

Request for a Hearing. In addition to submitting comments, you may also request that a hearing be held on the rules. Your request for a public hearing must be in writing and must be received by the agency contact person by 4:30 p.m. on Wednesday, September 29, 1993. Your written request for a public hearing must include your name, address, and telephone number. You are encouraged to

identify the portion of the proposed rules which caused your request, the reason for the request, and any changes you want made to the proposed rules. If 25 or more persons submit a written request for a hearing, a public hearing will be held unless a sufficient number withdraw their requests in writing.

Modifications. The proposed rules may be modified, either as a result of public comment or as a result of the rule hearing process. Modifications must not result in a substantial change in the proposed rules as printed in the *State Register* and must be supported by data and views submitted to the Department or presented at the hearing. If the proposed rules affect you in any way, you are encouraged to participate in the rulemaking process.

Cancellation of Hearing. The hearing scheduled for October 12, 1993, will be canceled if the Department does not receive requests from 25 or more persons that a hearing be held on the rules. If you request a public hearing, the Department will notify you before the scheduled hearing whether or not the hearing will be held. You may also call Robert James at 612-643-3591 after September 29, 1993, to find out whether the hearing will be held.

Notice of Hearing. If 25 or more persons submit written requests for a public hearing on the rules, a hearing will be held following the procedures in *Minnesota Statutes*, sections 14.131 to 14.20. The hearing will be held on Tuesday, October 12, 1993, in Room 5 of the State Office Building, 100 Constitution Avenue, St. Paul, Minnesota 55155. (The State Office Building is west of the State Capitol, across Constitution Avenue from the State Capitol. The State Office Building has a red roof and is just north of the Transportation Building.) The hearing will begin at 9:00 a.m. and will continue until all interested persons have been heard. The hearing will continue, if necessary, at additional times and places as determined during the hearing by the Administrative Law Judge. The Administrative Law Judge assigned to conduct the hearing is George Beck. Judge Beck can be reached at the Office of Administrative Hearings, 100 Washington Square, Suite 1700, Minneapolis, Minnesota 55401-2138, telephone 612-341-7601.

Hearing Procedure. If a hearing is held, you and all interested or affected persons including representatives of associations or other interested groups, will have an opportunity to participate. You may present your views either orally at the hearing or in writing at any time prior to the close of the hearing record. All evidence presented should relate to the proposed rules. You may also mail written material to the Administrative Law Judge to be recorded in the hearing record for five working days after the public hearing ends. This five-day comment period may be extended for a longer period not to exceed 20 calendar days if ordered by the Administrative Law Judge at the hearing. Comments received during this period will be available for review at the Office Of Administrative Hearings. You and the Department may respond in writing with rebuttal arguments or material within five business days after the submission period ends to any new information submitted after the hearing. All written materials and responses submitted to the Administrative Law Judge during the rebuttal period must be received at the Office Of Administrative Hearings no later than 4:30 p.m. on the due date. No additional evidence may be submitted during the five-day rebuttal period. This rule hearing procedure is governed by *Minnesota Rules*, parts 1400.0200 to 1400.1200, and *Minnesota Statutes*, sections 14.131 to 14.20. Questions about procedure may be directed to the Administrative Law Judge.

Statement of Need and Reasonableness. A Statement Of Need And Reasonableness is now available. This Statement describes the need for and reasonableness of each provision of the proposed rules. It also includes a summary of all the evidence and argument which the Department anticipates presenting at the hearing, if one is held. A free copy of the Statement may be obtained from Robert James at the address and telephone number listed above. The Statement may also be reviewed and copies obtained at the cost of reproduction from the Office Of Administrative Hearings.

Small Business Considerations. In preparing these rules, the Department has considered the requirements of *Minnesota Statutes*, section 14.115, in regard to the impact of the proposed rules on small businesses. The rules will have a direct effect on small businesses that perform fire protection-related work. Under the rules, fire protection contractors will have to obtain a license to continue performing fire protection-related work. Contractors will have to pay an annual license fee and will have to maintain insurance and a bond. Contractors will have to obtain a permit and pay a surcharge on all fire protection-related work they perform. The rules will replace the current system of regulation of the fire protection system industry which is done on a municipality-by-municipality basis. Instead of separate licensing and insurance and bond requirements for each municipality that a contractor works in, the contractor will now have to meet only one set of requirements. The Department's evaluation of the applicability of the methods contained in *Minnesota Statutes*, section 14.115, subdivision 2, for reducing the impact of the proposed rules is addressed in the Statement Of Need And Reasonableness.

Expenditure of Public Money by Local Public Bodies. *Minnesota Statutes*, section 14.11, subdivision 1, does not apply because adoption of these rules will not result in additional spending by local public bodies in excess of \$100,000 per year for the first two years following adoption of the rules.

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Proposed Rules

Impact on Agriculture Lands. *Minnesota Statutes*, section 14.11, subdivision 2, does not apply because adoption of these rules will not have an impact on agricultural land.

Notice to Department of Finance. In accordance with *Minnesota Statutes*, section 16A.1285, subdivision 5, pertaining to departmental charges, the Department has notified the Commissioner of Finance of the Department's intent to adopt rules in the above-entitled matter. A copy of the Department's notice and the Commissioner of Finance's comments and recommendations are included in the Statement Of Need And Reasonableness.

Notice to Chairs of Certain Legislative Committees. In accordance with *Minnesota Statutes*, section 16A.1285, subdivision 4, the Department has sent a copy of this notice and a copy of the proposed rules to the Chairs of the House Ways And Means Committee and the Senate Finance Committee prior to submitting this notice to the *State Register*.

Lobbyist Registration. *Minnesota Statutes*, chapter 10A, requires each lobbyist to register with the Ethical Practices Board. Questions regarding this requirement should be directed to the Ethical Practices Board at First Floor South, Centennial Building, 658 Cedar Street, St. Paul, Minnesota 55155, telephone (612) 296-5148 or 1-800-657-3889.

Adoption Procedure if No Hearing. If no hearing is required, after the end of the comment period the Department may adopt the rules. The rules and supporting documents will then be submitted to the Attorney General for review as to legality and form to the extent form relates to legality. You may request to be notified of the date the rules are submitted to the Attorney General or be notified of the Attorney General's decision on the rules. If you want to be so notified, or wish to receive a copy of the adopted rules, submit your request to Robert James at the address listed above.

Adoption Procedure After a Hearing. If a hearing is held, after the close of the hearing record, the Administrative Law Judge will issue a report on the proposed rules. You may request to be notified of the date on which the Administrative Law Judge's report will be available, after which date the Department may not take any final action on the rules for a period of five working days. If you want to be notified about the report, you may so indicate at the hearing. After the hearing, you may request notification by sending a written request to the Administrative Law Judge. You may also request notification of the date on which the rules are adopted and filed with the Secretary of State. The Department's Notice of Adoption must be mailed on the same day that the rules are filed. If you want to be notified of the adoption, you may so indicate at the hearing or send a request in writing to the agency contact person at any time prior to the filing of the rules with the Secretary of State.

Dated: 12 August 1993

Michael S. Jordon, Commissioner
Department of Public Safety

Rules as Proposed (all new material)

7512.0100 DEFINITIONS.

Subpart 1. **Scope.** The terms used in parts 7512.0100 to 7512.2800 have the meanings given them in this part and in *Minnesota Statutes*, section 299M.01.

Subp. 2. **Authority having jurisdiction.** "Authority having jurisdiction" means the governmental organization, office, or individual responsible for approving equipment and installation or a procedure.

Subp. 3. **Board member.** "Board member" means a director in a corporation and a governor in a limited liability company.

Subp. 4. **Building code.** "Building code" means the Minnesota State Building Code adopted pursuant to *Minnesota Statutes*, section 16B.61, subdivision 1, and includes future amendments to the building code.

Subp. 5. **Commissioner.** "Commissioner" means the commissioner of public safety, acting directly or through the state fire marshal and other authorized agents.

Subp. 6. **Days.** "Days" means calendar days when referring to the amount of time when the performance or doing of any act, duty, matter, payment, or thing is ordered, directed, or prescribed. A period of time measured in days, except as otherwise provided, must be computed so as to exclude the first and include the last day of the prescribed or fixed period or duration of time. When the last day of the period falls on a Saturday, Sunday, or legal holiday, that day must be omitted from the computation.

Subp. 7. **Federal approval agency.** "Federal approval agency" means the United States Department of Labor, Bureau of Apprenticeship and Training.

Subp. 8. **Fire code.** "Fire code" means the Minnesota Uniform Fire Code adopted pursuant to *Minnesota Statutes*, section 299F.011, subdivision 1, and includes future amendments to the fire code.

Subp. 9. **Fire protection-related work.** "Fire protection-related work," when applied to a licensed fire protection contractor, means the sale, design, installation, modification, or inspection of a fire protection system, its parts, or related equipment, or the offer to do so. Fire protection-related work, when applied to a journeyman sprinkler fitter or an apprentice sprinkler fitter, means the installation, connection, alteration, repair, or addition to a fire protection system.

Subp. 10. **Inspect or inspection.** "Inspect" or "inspection" means conducting a final acceptance test; trip test of dry pipe, deluge, or preaction valves; or a test that an authority having jurisdiction requires to be conducted under the supervision of a contractor.

Subp. 11. **Officer.** "Officer" means an officer of a corporation and a manager of a limited liability company.

Subp. 12. **Owner.** "Owner" means the sole proprietor of a sole proprietorship, a partner in a partnership, a shareholder holding an interest of five percent or more in a corporation, and a member holding an interest of five percent or more in a limited liability company.

Subp. 13. **Potable water source.** "Potable water source" means a gravity tank, fire pump, reservoir or pressure tank, well, city main, or any combination of these that provides a reliable, constant, and sufficient supply of water capable of being used for human consumption.

Subp. 14. **State approval agency.** "State approval agency" means the Department of Labor and Industry.

7512.0200 PURPOSE.

The purpose of parts 7512.0100 to 7512.2800 is to provide fire protection (sprinkler and standpipe) system rules relating to persons who sell, design, inspect, install, modify, alter, add to, repair, or connect the systems to ensure readiness intended for protecting life and property from fire and relating to the administration and enforcement of *Minnesota Statutes*, chapter 299M.

7512.0300 SCOPE; EFFECTIVE DATE.

Parts 7512.0100 to 7512.2800 are intended to be consistent with *Minnesota Statutes*, chapter 299M. Parts 7512.0100 to 7512.2800 govern regulation by municipalities; permit, filing, inspection, certificate, and license fees; qualifications, examination, and licensing of fire protection contractors; certification of journeyman sprinkler fitters; registration of apprentices; and the administration and enforcement of parts 7512.0100 to 7512.2800 and *Minnesota Statutes*, chapter 299M.

The effective date of parts 7512.0100 to 7512.2800 is June 1, 1993. A person who submits satisfactory proof to the commissioner of actively engaging in full-time fire protection system installation either as a fire protection contractor or journeyman sprinkler fitter for a period of five years before June 1, 1993, and who applies for a license or certificate on or before August 1, 1993, is eligible for licensure or certification without examination until June 1, 1995. A person who is exempt from examination for the two-year period, fulfills all other requirements under this chapter and under *Minnesota Statutes*, chapter 299M, and pays the required annual fee must be granted the appropriate license or certificate. A person who is exempt from examination by this part must pass the examination by June 1, 1995, or surrender the license or certificate. A license or certificate obtained without examination is not renewable on or after June 1, 1995, until the appropriate examination is passed.

FIRE PROTECTION CONTRACTOR

7512.0400 CONTRACTOR LICENSE REQUIRED; EXCEPTIONS.

Subpart 1. **License required.** Except as provided in subpart 2, a person must have a fire protection contractor license to perform fire protection-related work.

Subp. 2. **Exceptions.** A person does not need a fire protection contractor license for the following activities:

A. A person does not need a contractor license to sell fire protection system parts or related equipment to a licensed contractor.

B. A person does not need a contractor license to install or service a special agent fire suppression system that is not connected to a potable water source. A special agent fire suppression system uses extinguishing agents other than water and includes such systems as dry chemical systems, carbon dioxide systems, halogenated and gaseous agent systems, foam systems, and wet chemical systems.

C. A person does not need a contractor license when acting in an official capacity as a building official, fire official, or insurance inspector.

D. A person licensed as a plumber under *Minnesota Statutes*, section 326.40, does not need a contractor license to sell, design, install, modify, or inspect a standpipe or hose system only.

E. A person licensed as a professional engineer under *Minnesota Statutes*, section 326.03, who is competent in fire protection system design does not need a contractor license to perform activities authorized by the professional engineer license.

F. A person licensed as an alarm and communication contractor under *Minnesota Statutes*, section 326.2421, does not need a fire protection contractor license to perform activities authorized by the alarm and communication contractor license.

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Proposed Rules

G. A person does not need a contractor license to maintain a fire protection system. For purposes of this item, "maintain" means the scheduled activities to keep a fire protection system operable. Maintain also means to make emergency repairs to correct an emergency impairment of a fire protection system, until such time as permanent repairs can be done by a licensed fire protection contractor.

7512.0500 INITIAL APPLICATION FOR CONTRACTOR LICENSE.

Subpart 1. **Contents of application.** An initial application for a fire protection contractor license must be on a form provided or approved by the commissioner and must meet the following requirements:

A. The application must contain the name, address, and telephone number of the applicant. The application must also contain each additional name and address that the applicant will use to conduct business transactions.

B. The application must indicate whether the applicant is an individual, partnership, corporation, or limited liability company. The application must also list each owner, officer, and board member.

C. The application must give the name of the managing employee for the contractor.

D. The application must contain the full name, date of birth, and driver's license number of each person named on the application. If a person does not have a driver's license, the application must contain the identification card number of that person. If a person's driver's license or identification card was issued by another state or country, the application must list the name of the state or country.

E. The application must contain a history of fire protection contractor licensure of each person, partnership, corporation, and limited liability company named on the application. The history must be of each license applied for or issued by Minnesota or by another jurisdiction and must include the issuance and expiration dates of the license. If the jurisdiction refused to issue, revoked, or suspended a license, the history must give the date and the reason.

F. The application must give the name of the provider and the policy number of the applicant's insurance required under part 7512.1000. The application must be accompanied by documentation showing that the insurance meets the requirements of part 7512.1000. The documentation must be in the form of a certificate of insurance executed by an insurer authorized to do business in Minnesota and countersigned by an insurance agent licensed in Minnesota.

G. The application must be accompanied by a bond meeting the requirements of part 7512.1000.

H. The application must be accompanied by a completed tax information form required by the commissioner of revenue under *Minnesota Statutes*, section 270.72.

I. The application must be accompanied by documentation showing compliance with the workers' compensation insurance coverage requirement of *Minnesota Statutes*, section 176.181, subdivision 2. The documentation must contain the name of the insurance company, the policy number, and dates of coverage, or the permit to self-insure.

J. The application must be accompanied by a license fee of \$575.

K. The application must contain or be accompanied by other information requested by the commissioner as necessary to determine whether the applicant meets the requirements for a contractor of parts 7512.0100 to 7512.2800 and *Minnesota Statutes*, chapter 299M.

L. Each person named on the application shall sign the application, verifying that the information in the application is true.

Subp. 2. **Issuing license.** The commissioner shall issue a fire protection contractor license to the applicant, unless there is a reason to refuse to issue. The commissioner shall refuse to issue a license for any of the following reasons:

A. The application or the items filed with the application do not meet the requirements of subpart 1.

B. The person designated on the application as managing employee does not meet the requirements of a managing employee set out in parts 7512.1300 to 7512.1600.

C. The applicant is currently under revocation or suspension as a contractor or managing employee.

D. A person named on the application was an owner, officer, board member, or managing employee of a fire protection contractor whose license was revoked under part 7512.2600. After the revocation period has elapsed, an applicant is not disqualified.

E. The commissioner of revenue notifies the commissioner of public safety under *Minnesota Statutes*, section 270.72, that the applicant owes the state delinquent taxes, penalties, or interest.

F. The applicant does not meet the requirements for a contractor set out in parts 7512.0400 to 7512.1200 and *Minnesota Statutes*, chapter 299M.

7512.0600 CONTRACTOR LICENSE RENEWAL.

Subpart 1. **License expiration date.** A fire protection contractor license expires at midnight on June 30 of each year. A license is valid upon renewal until the following June 30.

Subp. 2. **Renewal application.** A renewal application for a contractor license must be on a form provided or approved by the commissioner and must contain the following information and items:

A. The application must contain the contractor's name and contractor number.

B. The application must verify that the contractor information is accurate as of the date of renewal. Contractor information includes information or items submitted with the contractor's initial license application, as amended by a notice of change.

C. The application must be accompanied by documentation showing compliance with the workers' compensation insurance coverage requirement of *Minnesota Statutes*, section 176.181, subdivision 2. The documentation must contain the name of the insurance company, the policy number, and dates of coverage, or the permit to self-insure.

D. The application must be accompanied by a license renewal fee of \$500. If the application is submitted on or after June 1, the application must also be accompanied by a late fee of \$50.

E. The application must contain or be accompanied by other information requested by the commissioner as necessary to determine whether the applicant meets the requirements for a contractor of parts 7512.0400 to 7512.1200 and *Minnesota Statutes*, chapter 299M.

F. One person named on the application shall sign the application, verifying that the information on the application is true.

Subp. 3. **Reasons to refuse renewal.** To renew a contractor license, the contractor shall submit a completed license renewal application to the commissioner. The commissioner shall accept a renewal application any time on or before June 30. A person shall not perform fire protection-related work after the license has expired and before a renewal license is issued. The commissioner shall renew the license, unless there is a reason to refuse to renew. The commissioner shall refuse to renew for any of the following reasons:

A. The application does not meet the requirements of subpart 2.

B. The applicant is currently under revocation or suspension.

C. The commissioner of revenue notifies the commissioner of public safety under *Minnesota Statutes*, section 270.72, that the applicant owes the state delinquent taxes, penalties, or interest.

Subp. 4. **Application after lapse.** Within one year after a contractor license has expired, a former contractor may obtain another license by following the renewal procedures of this part. A contractor whose license has been expired for more than one year shall comply with all requirements and procedures of part 7512.0500 in order to obtain another license. A person may not perform fire protection-related work after the license has expired and before another license is issued.

7512.0700 CHANGE IN CONTRACTOR LICENSE CONDITIONS.

Subpart 1. **Notice of change.** A fire protection contractor shall notify the commissioner of a change in contractor information. Contractor information is the current information that the commissioner has concerning a contractor. This information is based upon the information or items submitted by the contractor in its initial license application or updated change notices.

Subp. 2. **Form of notice.** A notice of change must be made on a form provided or approved by the commissioner and must meet the following conditions:

A. The notice of change must indicate the contractor information that has changed.

B. The notice of change must be accompanied by initial license items that have changed.

C. One owner, officer, board member, or managing employee shall sign the notice, verifying that the information on the notice is true.

D. A person who is removed as an owner, officer, board member, or managing employee shall sign the notice, verifying that the person has been removed. If it is not possible for this person to sign, the notice of change must contain the reason.

Subp. 3. **Timing of notice.** The contractor shall submit the notice of change so that it is received by the commissioner before the change occurs, unless this is not possible, in which case the contractor shall submit the notice as soon as reasonable.

Subp. 4. **License not transferable.** A fire protection contractor license may not be transferred from one person or organization to another. A successor contractor may not perform fire protection-related work until after the successor contractor has obtained another license. In addition, the successor contractor shall obtain a bond that is separate and distinct from the bond under the original license.

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Proposed Rules

A contractor license issued to an individual, partnership, corporation, or limited liability company does not transfer to a new business entity created by a change in the form of ownership of the business.

A contractor license issued to a partnership becomes invalid when an original partner leaves the partnership or a new partner is brought into the partnership.

A contractor license issued to a corporation becomes invalid when the corporation is dissolved. A contractor license remains valid when a shareholder of the corporation or the name of the corporation is changed.

A contractor license issued to a limited liability company becomes invalid when the limited liability company is dissolved. A contractor license remains valid when a member of the limited liability company or the name of the limited liability company is changed.

7512.0800 CONTRACTOR'S MANAGING EMPLOYEE REQUIREMENTS.

Subpart 1. **Employment of managing employee.** A fire protection contractor shall employ a person who meets the requirements for a managing employee contained in parts 7512.1300 to 7512.1600. The managing employee shall supervise the performance of all fire protection-related work by the contractor.

Subp. 2. **Exceptions.** Except as provided in subparts 3 to 6, a contractor shall not perform fire protection-related work after the contractor loses its managing employee. A contractor loses its managing employee when the managing employee is no longer employed by the contractor or when the managing employee no longer meets the requirements of parts 7512.1300 to 7512.1600. The limitations and conditions of subparts 3 to 6 no longer apply to a contractor after the contractor employs a new managing employee who meets the requirements of parts 7512.1300 to 7512.1600.

Subparts 3 to 6 must not be interpreted to require the commissioner to issue a contractor license to an applicant for an initial contractor license who does not have a managing employee.

Subp. 3. **Notice to commissioner.** The contractor shall notify the commissioner within three days after the contractor loses its managing employee.

Subp. 4. **Fourteen-day grace period.** The contractor may continue performing fire protection-related work for a period of 14 days after the contractor loses its managing employee, provided the contractor:

A. notifies the commissioner under subpart 3; and

B. sufficiently supervises its work to ensure that the work is performed in compliance with the fire code and the building code and that worker safety is not compromised.

Subp. 5. **Continuing grace period.** The contractor may continue performing fire protection-related work after the end of the 14-day period under subpart 4 and until seven days after the results of the next managing employee examination are issued, if the contractor meets the following conditions:

A. the contractor designates an employee as acting managing employee;

B. the person designated by the contractor meets the qualifications of part 7512.1300 to take the managing employee examination;

C. the person designated by the contractor submits an application to take the next managing employee examination; and

D. the commissioner determines that the person designated by the contractor will likely pass the managing employee examination, based on the person's qualifications and experiences.

Subp. 6. **Deadline to designate new managing employee.** Within seven days after the results of the next managing employee examination are issued, the contractor either shall designate a new managing employee who meets the qualifications of parts 7512.1300 to 7512.1600 or shall discontinue performing fire protection-related work.

7512.0900 CONTRACTOR OPERATING REQUIREMENTS.

Subpart 1. **Posting of license.** A contractor shall post its contractor license issued under parts 7512.0500 and 7512.0600 in a conspicuous place in the contractor's place of business. A contractor shall display its contractor license number on all bids, proposals, offers, and installation drawings for fire protection systems.

Subp. 2. **Compliance with codes.** A contractor shall perform fire protection-related work so that the work is in compliance with the fire code and the building code.

Subp. 3. **Contractor employees.** A fire protection contractor may not employ a person to perform fire protection-related work unless the person is a managing employee, certified journeyman, or registered apprentice.

Subp. 4. **Supervision of apprentices.** A fire protection contractor shall ensure that an apprentice sprinkler fitter working for the contractor is under the direct supervision of a managing employee or journeyman sprinkler fitter. Direct supervision means that a

managing employee or journeyman ensures that the apprentice is regularly engaged in learning the sprinkler fitter trade and oversees and directs the fire protection-related work performed by the apprentice such that:

- A. the managing employee or journeyman actually reviews the work performed by the apprentice;
- B. the managing employee or journeyman is on the job site and immediately available to the apprentice at all times for assistance and direction; and
- C. the managing employee or journeyman is able to and does determine that work performed by the apprentice is performed in compliance with the fire code and the building code.

7512.1000 INSURANCE AND BOND.

Subpart 1. **Insurance.** A fire protection contractor shall have a general liability insurance policy meeting the following requirements:

- A. The policy must include products and completed operations coverage.
- B. The limits of insurance coverage of the policy must be at least \$250,000 per person and \$500,000 per occurrence and property damage insurance with limits of at least \$100,000.
- C. The policy must be conditioned to pay, on behalf of the insured, those amounts that the insured is legally obligated to pay as damages because of bodily injury and property damage caused by an occurrence involving the insured or the insured's servant, officer, agent, or employee in the performance of fire protection-related work.
- D. The term of the policy must be concurrent with the term of the license.
- E. The policy must be executed by an insurer authorized to do business in Minnesota and countersigned by an insurance agent licensed in Minnesota.
- F. The policy must contain a stipulation that the insurance may not be canceled, terminated, or changed in a way so that it no longer meets the requirements of this subpart, except upon 30 days' prior written notice to the commissioner.

Subp. 2. **Bond.** A contractor must have a bond meeting the following requirements:

- A. The bond must be for the total penal sum of \$30,000 conditioned upon the faithful and lawful performance of all work entered upon within the state.
- B. The bond must be for the benefit of persons injured or suffering financial loss by reason of failure of performance.
- C. The term of the bond must be concurrent with the term of the license.
- D. The bond must be written by a corporate surety licensed to do business in the state, be a cash bond, or be an irrevocable line of credit.
- E. The bond must contain a stipulation that the bond may not be canceled, terminated, or changed in a way so that it no longer meets the requirements of this subpart, except upon 30 days' prior written notice to the commissioner.

Subp. 3. **Failure to have insurance or bond.** Except as provided in subpart 4, a fire protection contractor shall not perform fire protection-related work if the contractor does not have insurance meeting the requirements of subpart 1 and a bond meeting the requirements of subpart 2.

Subp. 4. **Exceptions to insurance or bond requirements.** A fire protection contractor may, without the insurance or bond required by this part, perform fire protection-related work on premises or that part of premises actually occupied by the contractor and owned by the contractor or leased by the contractor for a period of at least one year.

7512.1100 PERMIT.

Subpart 1. **Authority having jurisdiction; permit requirements.** In areas of the state where a municipality reviews plans and inspects installations of fire protection systems, the municipality or the office or individual in the municipality responsible for plan review and inspection is the authority having jurisdiction. In all other areas of the state, the commissioner is the authority having jurisdiction for purposes of plan review and inspection. When required by the authority having jurisdiction, a fire protection contractor shall obtain a permit to perform fire protection-related work.

Subp. 2. **Cost of fire protection system.** When applying for a permit, the contractor shall give an estimate of the total cost of the components and labor of the fire protection system to the authority having jurisdiction. If the actual cost of the system is greater than the estimated cost, the contractor shall notify the authority having jurisdiction of this fact at the time of the final acceptance test.

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Subp. 3. **Permit fee.** A fee for a permit to perform fire protection-related work may be charged at the discretion of and in an amount determined by the authority having jurisdiction. When the authority having jurisdiction is the commissioner, the contractor shall pay a permit fee to the commissioner. The permit fee must be the actual cost of the labor and components of the fire protection system multiplied by .012. When applying for the permit, the contractor shall pay an estimated fee based on the estimated cost of the system. If the actual cost of the system is greater than the estimated cost, the contractor shall pay any additional fee amount before the final acceptance test.

7512.1200 SURCHARGE.

Subpart 1. **Surcharge fee.** A fire protection contractor shall pay a surcharge fee on all fire protection-related work performed by the contractor. The amount of the surcharge fee must be the actual cost of the labor and components of the fire protection system multiplied by .002. The contractor shall pay the surcharge fee to the commissioner.

Subp. 2. **Fee payment schedule.** The contractor shall pay the surcharge fee as follows:

A. If a bid is required for the project, the contractor shall pay the surcharge fee before starting the project. The amount of the fee must be based on the amount of the bid. If the actual cost of the fire protection system is greater than the amount of the bid, the contractor shall pay an additional surcharge fee prior to the final acceptance test of the fire protection system. The amount of the fee must be based on the difference between the actual cost of the fire protection system and the amount of the bid.

B. If a bid is not required for the project, the contractor shall pay the surcharge fee prior to the final acceptance test of the fire protection system. The amount of the fee must be based on the actual cost of the fire protection system.

Subp. 3. **Surcharge fee account.** A contractor may prepay surcharge fees to the commissioner. The commissioner shall hold any prepaid fees in an account in the contractor's name and shall use the account only for surcharge fees on fire protection systems by the contractor.

MANAGING EMPLOYEE

7512.1300 MANAGING EMPLOYEE EXAMINATION.

Subpart 1. **Application for examination.** An application for a managing employee examination must be on a form provided or approved by the commissioner and must meet the following requirements:

A. The application must contain the name, address, telephone number, date of birth, and driver's license number of the applicant. If the applicant does not have a driver's license, the application must contain the identification card number. If the applicant's driver's license or identification card was issued by another state or country, the application must list the name of the state or country.

B. The application must contain a history of fire protection contractor licensure or managing employee certification of the applicant. The history must be of each fire protection contractor license or managing employee certificate applied for or issued by Minnesota or by another jurisdiction and must include the issuance and expiration dates of the license or certificate. If the jurisdiction refused to issue, revoked, or suspended a license or certificate, the history must give the date and the reason.

C. The application must be accompanied by documentation that the applicant meets the qualifications to take the managing employee examination, as set out in subpart 2.

D. The application must be accompanied by a completed tax information form required by the commissioner of revenue under *Minnesota Statutes*, section 270.72.

E. The application must contain or be accompanied by other information requested by the commissioner as necessary to determine whether the applicant meets the requirements of parts 7512.1300 to 7512.1600 for a managing employee.

F. The applicant shall sign the application, verifying that the information in the application is true.

Subp. 2. **Qualifications for examination.** A person may take the managing employee examination if the person submits a completed application for examination and if the person meets one of the following qualifications:

A. The person has 10,000 hours of experience in designing, installing, modifying, or inspecting fire protection systems.

B. The person holds a Level III or IV certification by the National Institute for Certification in Engineering Technologies, in the field of fire protection, and in the subfield of automatic sprinkler system layout.

C. The person is licensed as a professional engineer under *Minnesota Statutes*, section 326.03, and is competent in fire protection system design.

7512.1400 MANAGING EMPLOYEE CERTIFICATE.

Subpart 1. **Issuing certificate.** The commissioner shall issue a managing employee certificate and card to a person who is designated as a managing employee by a fire protection contractor, unless there is a reason to refuse to issue. The commissioner shall refuse to issue for any of the following reasons:

- A. The person has not passed the managing employee examination and the person is not exempt under part 7512.0300 from the requirement to pass the examination.
- B. The person has not met all continuing education requirements since passing the managing employee examination.
- C. The person is not employed by the contractor.
- D. The person is currently a managing employee for another contractor.
- E. The person is currently under revocation or suspension as a fire protection contractor or managing employee.
- F. The commissioner of revenue notifies the commissioner of public safety under *Minnesota Statutes*, section 270.72, that the person owes the state delinquent taxes, penalties, or interest.
- G. The person does not meet the requirements for a managing employee set out in parts 7512.1300 to 7512.1600.

Subp. 2. **List of qualified managing employee candidates.** The commissioner shall maintain a list of persons who pass the managing employee examination, but who are not designated as a managing employee by a fire protection contractor. To remain on the list, a person shall fulfill continuing education requirements as they occur.

7512.1500 MANAGING EMPLOYEE CERTIFICATE RENEWAL.

Subpart 1. **Certificate expiration date.** A managing employee certificate expires at midnight on June 30 of each year. A certificate is valid upon renewal until the following June 30.

Subp. 2. **Renewal application.** A renewal application for a managing employee certificate must be on a form provided or approved by the commissioner and must contain the following information:

- A. The application must contain the managing employee's name and managing employee number.
- B. The application must list any changes to the managing employee's address, telephone number, and driver's license number.
- C. The application must be accompanied by documentation showing that the managing employee has met the continuing education requirements of subpart 5.
- D. The application must be accompanied by a certificate renewal fee of \$75. If the application is submitted on or after June 1, the application must also be accompanied by a late fee of \$50.
- E. The application must contain or be accompanied by other information requested by the commissioner as necessary to determine whether the applicant meets the requirements of parts 7512.1300 to 7512.1600 for a managing employee.
- F. The applicant shall sign the application, verifying that the information on the application is true.

Subp. 3. **Reasons to refuse renewal.** To renew a managing employee certificate, the managing employee shall submit a completed certificate renewal application to the commissioner. The commissioner shall accept a renewal application any time on or before June 30. A person shall not perform fire protection-related work after the certificate expires and before a renewal certificate is issued. The commissioner shall renew the certificate, unless there is a reason to refuse to renew. The commissioner shall refuse to renew for any of the following reasons:

- A. The application does not meet the requirements of subpart 2.
- B. The applicant has not met the continuing education requirements of subpart 5.
- C. The applicant obtained an initial certificate without passing an examination and the examination exemption period has expired without the applicant having passed the examination.
- D. The applicant is currently under revocation or suspension.
- E. The commissioner of revenue notifies the commissioner of public safety under *Minnesota Statutes*, section 270.72, that the applicant owes the state delinquent taxes, penalties, or interest.

Subp. 4. **Application after lapse.** Within one year after a managing employee certificate has expired, a former managing employee may obtain another certificate by following the renewal procedures of this part. A managing employee whose certificate has been expired for more than one year shall comply with all requirements and procedures of parts 7512.1300 and 7512.1400 in order to obtain another certificate. A person may not perform fire protection-related work after the expiration of a certificate and before another certificate is issued.

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Subp. 5. **Continuing education.** During each licensing year, a managing employee shall attend ten hours of continuing education courses on the performance of fire protection-related work and on laws and rules governing the performance of fire protection-related work.

7512.1600 CARD REQUIREMENT.

A managing employee shall carry the managing employee card and a picture identification while working as a managing employee. The managing employee shall make both the managing employee card and the picture identification available upon request by the commissioner or an authority having jurisdiction. The managing employee card is not transferable.

JOURNEYMAN SPRINKLER FITTER

7512.1700 JOURNEYMAN SPRINKLER FITTER EXAMINATION.

Subpart 1. **Application for examination.** An application for a journeyman sprinkler fitter examination must be on a form provided or approved by the commissioner and must meet the following requirements:

A. The application must contain the name, address, telephone number, date of birth, and driver's license number of the applicant. If the applicant does not have a driver's license, the application must contain the identification card number. If the applicant's driver's license or identification card was issued by another state or country, the application must list the name of the state or country.

B. The application must be accompanied by documentation that the applicant meets the qualifications to take the journeyman examination, as set forth in subpart 2.

C. The applicant shall sign the application, verifying that the information in the application is true.

Subp. 2. **Qualifications for examination.** A person may take the journeyman examination if the person submits a completed application for examination and if the person meets one of the following qualifications:

A. The person has 8,000 hours of experience in performing fire protection-related work.

B. The person has completed a sprinkler fitter program where the person was regularly engaged in learning the trade under the direct supervision of a licensed fire protection contractor or journeyman sprinkler fitter, while registered with a state or federal approval agency.

7512.1800 JOURNEYMAN SPRINKLER FITTER CERTIFICATE.

Subpart 1. **Certificate required.** A journeyman sprinkler fitter shall obtain a journeyman sprinkler fitter certificate before performing fire protection-related work.

Subp. 2. **Application for certificate.** An initial application for a journeyman sprinkler fitter certificate must be on a form provided or approved by the commissioner and must meet the following requirements:

A. The application must contain the full name, address, telephone number, date of birth, and driver's license number of the applicant. If the applicant does not have a driver's license, the application must contain the identification card number. If the applicant's driver's license or identification card was issued by another state or country, the application must list the name of the state or country.

B. The application must contain a history of journeyman sprinkler fitter certification of the applicant. The history must be of each journeyman sprinkler fitter certificate applied for or issued by Minnesota or by another jurisdiction and must include the issuance and expiration dates of the certificate. If the jurisdiction refused to issue, revoked, or suspended a certificate, the history must give the date and the reason.

C. The application must be accompanied by documentation that the applicant passed the journeyman sprinkler fitter examination or that the applicant is exempt from examination under part 7512.0300.

D. The application must be accompanied by a completed tax information form required by the commissioner of revenue under *Minnesota Statutes*, section 270.72.

E. The application must be accompanied by a certificate fee of \$75.

F. The application must contain or be accompanied by other information requested by the commissioner as necessary to determine whether the applicant meets the requirements for a journeyman of parts 7512.1700 to 7512.2000 and *Minnesota Statutes*, chapter 299M.

G. The applicant shall sign the application, verifying that the information in the application is true.

Subp. 3. **Issuing certificate.** Except as provided in subparts 4 and 5, the commissioner shall use the provisions of this subpart to determine whether to issue a journeyman sprinkler fitter certificate and card. The commissioner shall issue a journeyman certificate and card to an applicant, unless there is a reason to refuse to issue. The commissioner shall refuse to issue for the following reasons:

A. The application or items filed with the application do not meet the requirements of subpart 2.

B. The applicant has not passed the journeyman sprinkler fitter examination and the applicant is not exempt under part 7512.0300 from the requirement to pass the examination.

C. The applicant is currently under revocation or suspension.

D. The commissioner of revenue notifies the commissioner of public safety under *Minnesota Statutes*, section 270.72, that the applicant owes the state delinquent taxes, penalties, or interest.

E. The applicant does not meet the requirements for a journeyman set out in parts 7512.1700 to 7512.2000 and *Minnesota Statutes*, chapter 299M.

Subp. 4. Limited certificate. The commissioner shall issue a limited journeyman sprinkler fitter certificate and card to an applicant who is certified as competent to perform fire protection-related work by a licensed fire protection contractor who is the applicant's employer. To obtain a limited journeyman certificate, the applicant shall submit to the commissioner an application for a journeyman certificate. In addition to the information and items required by subpart 2, the application must contain the employer's certification that the applicant is competent to perform fire protection-related work, the types of fire protection-related work that the applicant is competent to perform, and documentation of the applicant's training and experience showing that the applicant is competent to perform the listed types of fire protection-related work. The application does not need to contain documentation that the applicant has passed the journeyman examination. A journeyman with a limited certificate is limited to working on premises or that part of premises actually occupied by the journeyman's employer and owned by the employer or leased by the employer for a period of at least one year. A journeyman with a limited certificate is limited to working in areas of competence, as certified and documented by the journeyman's employer. A journeyman with a limited certificate may not perform fire protection-related work unless the journeyman is under the supervision of the employer's managing employee. The commissioner shall indicate the work limitations on the journeyman certificate and card.

Subp. 5. Conditional certificate. The commissioner shall issue a conditional journeyman sprinkler fitter certificate and card to an applicant who meets all the qualifications to take the journeyman sprinkler fitter examination, but who has not yet passed the examination. To obtain a conditional journeyman certificate, an applicant shall submit to the commissioner an application for a journeyman certificate and an application to take the journeyman examination. A journeyman with a conditional certificate may not perform fire protection-related work unless the journeyman is under the direct supervision of a journeyman who holds an unconditional and unlimited certificate. The commissioner shall indicate the condition on the journeyman certificate and card. A journeyman with a conditional certificate may work under the conditional certificate for a maximum period of six months, after which the person shall either pass the journeyman examination or discontinue performing fire protection-related work. A person who has obtained a conditional certificate may not obtain another conditional certificate for at least three years after the previous conditional certificate was issued.

7512.1900 JOURNEYMAN SPRINKLER FITTER CERTIFICATE RENEWAL.

Subpart 1. Certificate expiration date. A journeyman sprinkler fitter certificate expires at midnight on June 30 of each year. A certificate is valid upon renewal until the following June 30.

Subp. 2. Renewal application. A renewal application for a journeyman certificate must be on a form provided or approved by the commissioner and must contain the following information:

A. The application must contain the journeyman's name and journeyman number.

B. The application must list any changes to the journeyman's address, telephone number, and driver's license number.

C. The application must be accompanied by documentation showing that the journeyman has met the continuing education requirements of subpart 5.

D. The application must be accompanied by a certificate renewal fee of \$75. If the application is submitted on or after June 1, the application must also be accompanied by a late fee of \$50.

E. The application must contain or be accompanied by other information requested by the commissioner as necessary to determine whether the applicant meets the requirements for a journeyman of parts 7512.1700 to 7512.2000 and *Minnesota Statutes*, chapter 299M.

F. The applicant shall sign the application, verifying that the information on the application is true.

Subp. 3. Reasons to refuse renewal. To renew a journeyman certificate, the journeyman shall submit a completed certificate renewal application to the commissioner. The commissioner shall accept a renewal application at any time on or before June 30. A

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person may not perform fire protection-related work after the certificate expires and before a renewal certificate is issued. The commissioner shall renew the certificate, unless there is a reason to refuse to renew. The commissioner shall refuse to renew for any of the following reasons:

- A. The application does not meet the requirements of subpart 2.
- B. The applicant has not met the continuing education requirements of subpart 5.
- C. The applicant obtained an initial certificate without passing an examination and the examination exemption period has expired without the applicant having passed the examination.
- D. The applicant is currently under revocation or suspension.
- E. The commissioner of revenue notifies the commissioner of public safety under *Minnesota Statutes*, section 270.72, that the applicant owes the state delinquent taxes, penalties, or interest.

Subp. 4. Application after lapse. Within one year after a journeyman certificate has expired, a former journeyman may obtain another certificate by following the renewal procedures of this part. A journeyman whose certificate has been expired for more than one year shall comply with all requirements and procedures of parts 7512.1700 and 7512.1800 in order to obtain another certificate. A person may not perform fire protection-related work after the expiration of a certificate and before another certificate is issued.

Subp. 5. Continuing education. During each licensing year, a journeyman shall attend ten hours of continuing education courses on the performance of fire protection-related work and on laws and rules governing the performance of fire protection-related work.

7512.2000 JOURNEYMAN WORK REQUIREMENTS.

Subpart 1. Competence. A journeyman sprinkler fitter must be competent to perform fire protection-related work.

Subp. 2. Card. A journeyman sprinkler fitter shall carry the journeyman sprinkler fitter card and a picture identification while working as a journeyman. The journeyman shall make both the journeyman card and the picture identification available upon request by the commissioner or an authority having jurisdiction. The journeyman card is not transferable.

APPRENTICE SPRINKLER FITTER

7512.2100 APPRENTICE SPRINKLER FITTER REGISTRATION.

Subpart 1. Registration required. An apprentice sprinkler fitter shall register with the commissioner before performing fire protection-related work.

Subp. 2. Application for registration. An initial application for an apprentice sprinkler fitter registration must be on a form provided or approved by the commissioner and must meet the following requirements:

- A. The application must contain the full name, address, telephone number, date of birth, and driver's license number of the applicant. If the applicant does not have a driver's license, the application must contain the identification card number. If the applicant's driver's license or identification card was issued by another state or country, the application must list the name of the state or country.
- B. The application must be accompanied by documentation that the applicant is in a sprinkler fitter program where the applicant is regularly engaged in learning the trade under the direct supervision of a licensed fire protection contractor or journeyman sprinkler fitter.
- C. The application must be accompanied by documentation that the applicant is registered with a state or federal approval agency.
- D. The application must be accompanied by a completed tax information form required by the commissioner of revenue under *Minnesota Statutes*, section 270.72.
- E. The application must be accompanied by a registration fee of \$15.
- F. The application must contain or be accompanied by other information requested by the commissioner as necessary to determine whether the applicant meets the requirements for an apprentice of parts 7512.2100 to 7512.2300 and *Minnesota Statutes*, chapter 299M.
- G. The applicant shall sign the application, verifying that the information in the application is true.

Subp. 3. Issuing registration. The commissioner shall issue an apprentice sprinkler fitter registration and card to an applicant, unless there is a reason to refuse to issue. The commissioner shall refuse to issue for the following reasons:

- A. The application or items filed with the application do not meet the requirements of subpart 2.
- B. The applicant is not regularly engaged in learning the trade under the direct supervision of a licensed fire protection contractor or journeyman sprinkler fitter.
- C. The applicant is not registered with a state or federal approval agency.

D. The applicant is currently under revocation or suspension.

E. The commissioner of revenue notifies the commissioner of public safety under *Minnesota Statutes*, section 270.72, that the applicant owes the state delinquent taxes, penalties, or interest.

F. The applicant does not meet the requirements for an apprentice set forth in parts 7512.2100 to 7512.2300 and *Minnesota Statutes*, chapter 299M.

7512.2200 REGISTRATION RENEWAL.

Subpart 1. **Registration expiration date.** An apprentice sprinkler fitter registration expires at midnight on June 30 of each year. A registration is valid upon renewal until the following June 30.

Subp. 2. **Renewal application.** A renewal application for an apprentice registration must be on a form provided or approved by the commissioner and must contain the following information:

A. The application must contain the apprentice's name and apprentice number.

B. The application must list any changes to the apprentice's address, telephone number, and driver's license number.

C. The application must be accompanied by documentation of progress in the apprentice's sprinkler fitter program.

D. The application must be accompanied by a registration renewal fee of \$15. If the application is submitted on or after June 1, the application must also be accompanied by a late fee of \$15.

E. The application must contain or be accompanied by other information requested by the commissioner as necessary to determine whether the applicant meets the requirements for an apprentice of parts 7512.2100 to 7512.2300 and *Minnesota Statutes*, chapter 299M.

F. The applicant shall sign the application, verifying that the information on the application is true.

Subp. 3. **Reasons to refuse renewal.** To renew an apprentice registration, the apprentice shall submit a completed registration renewal application to the commissioner. The commissioner shall accept a renewal application at any time on or before June 30. A person may not perform fire protection-related work after the registration expires and before a renewal registration is issued. The commissioner shall renew the registration, unless there is a reason to refuse to renew. The commissioner shall refuse to renew for any of the following reasons:

A. The application does not meet the requirements of subpart 2.

B. The applicant fails to make satisfactory progress in the applicant's sprinkler fitter program.

C. The applicant is currently under revocation or suspension.

D. The commissioner of revenue notifies the commissioner of public safety under *Minnesota Statutes*, section 270.72, that the applicant owes the state delinquent taxes, penalties, or interest.

Subp. 4. **Application after lapse.** Within one year after an apprentice registration has expired, a former apprentice may obtain another registration by following the renewal procedures of this part. An apprentice whose registration has been expired for more than one year shall comply with all requirements and procedures of part 7512.2100 in order to obtain another registration. A person may not perform fire protection-related work after the registration expires and before another registration is issued.

7512.2300 APPRENTICE WORK REQUIREMENTS.

Subpart 1. **Active in approved program.** An apprentice shall annually make satisfactory progress in the apprentice's sprinkler fitter program.

Subp. 2. **Card.** An apprentice sprinkler fitter shall carry an apprentice sprinkler fitter card and a picture identification while working as an apprentice. An apprentice shall make both the apprentice card and the picture identification available upon request by the commissioner or an authority having jurisdiction. The apprentice card is not transferable.

EXAMINATIONS

7512.2400 EXAMINATIONS.

Subpart 1. **Examination specifications.** An examination must test for knowledge of the statutes and rules regulating the managing

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employee or journeyman and for the knowledge and ability to perform fire protection-related work in a competent, lawful, and safe manner.

Subp. 2. **Examination administration.** The commissioner shall develop and administer the examination. The commissioner may contract with a professional examination service to develop and administer the examination.

Subp. 3. **Examination application.** A completed examination application must include a nonrefundable examination fee.

Subp. 4. **Retesting.** An examinee who fails an examination one time may not repeat the examination for 60 days from the date of the failed examination. An examinee who fails the examination more than once may not repeat the examination for 180 days from the date of the failed examination.

REVOCAION AND SUSPENSION

7512.2500 ACTS ATTRIBUTED TO CONTRACTOR.

The commissioner shall revoke or suspend the fire protection contractor license of a partnership, corporation, or limited liability company if an owner, officer, board member, or managing employee acts or fails to act as would be cause to revoke or suspend the license of that person as an individual.

A contractor is responsible for an act of a person while that person is acting as an employee of the contractor, if the contractor authorizes or ratifies the act or if the contractor retains the benefits of the act after actual knowledge of the act.

7512.2600 REVOCATION.

Subpart 1. **Grounds for revocation.** The commissioner shall revoke a contractor license, managing employee certificate, journeyman certificate, or apprentice registration when the person holding the license, certificate, or registration has committed an act or has failed to perform a duty that constitutes grounds for revocation, which include the following:

A. The person knowingly or negligently performs fire protection-related work in a manner that would result in an immediate threat to life if a fire were to occur.

B. The person commits an act or fails to perform a duty that is grounds for suspension under part 7512.2700 and there are three suspensions on the person's record within the past five years.

C. The person submits a fraudulent application.

D. The person is convicted of a felony or gross misdemeanor related to the business of fire protection systems.

E. The person performs fire protection-related work during a suspension imposed under part 7512.2700.

Subp. 2. **Additional grounds for contractor license revocation.** In addition to those grounds listed in subpart 1, grounds for revocation of a fire protection contractor license include the following:

A. The contractor performs fire protection-related work during a period of time when the contractor's insurance or bond fails to meet the requirements of part 7512.1000.

B. The certificate of the managing employee of the contractor is revoked.

Subp. 3. **Additional grounds for managing employee certificate revocation.** In addition to those grounds listed in subpart 1, grounds for revocation of a managing employee certificate include: The license of the contractor of the managing employee is revoked.

Subp. 4. **Revocation period and effect.** A contractor license, managing employee certificate, journeyman certificate, or apprentice registration is not valid after it is revoked. A person may not perform fire protection-related work during a revocation. An owner, officer, board member, or managing employee of a revoked contractor may not be an owner, officer, board member, or managing employee of another contractor during a revocation. When a license, certificate, or registration is revoked, the person holding the license, certificate, or registration shall immediately surrender it. The length of revocation is as follows:

A. The commissioner shall use this item to determine the length of revocation if the revocation is based solely or in part on a conviction of crime or crimes as defined in *Minnesota Statutes*, section 364.02, subdivision 5. The revocation lasts until competent evidence is presented to the commissioner that the person convicted has been sufficiently rehabilitated under the criteria of *Minnesota Statutes*, section 364.03, subdivision 3.

B. If the length of revocation is not determined under item A, the length of revocation is one year.

7512.2700 SUSPENSION.

Subpart 1. **Grounds for suspension.** The commissioner shall suspend a contractor license, managing employee certificate, journeyman certificate, or apprentice registration when the person holding the license, certificate, or registration has committed an act or has failed to perform a duty that constitutes grounds for suspension. Grounds for suspension include the following:

A. The person willfully violates a provision of this chapter or *Minnesota Statutes*, chapter 299M, that is not specifically set out in part 7512.2600.

B. The person willfully violates or refuses to comply with a lawful request or order of the commissioner.

C. The person is convicted of a misdemeanor related to the business of fire protection systems.

Subp. 2. **Additional grounds for contractor license suspension.** In addition to those grounds listed in subpart 1, grounds for suspension of a fire protection contractor license include the following:

A. The certificate of the managing employee of the contractor is suspended.

B. The contractor adds an owner, officer, board member, or managing employee who would be ineligible to hold a contractor license as an individual. This provision does not constitute grounds for suspension if the contractor acted without knowledge of the person's ineligibility and if the contractor removes the person before the date scheduled for the hearing on the suspension.

C. The contractor fails to pay the commissioner a surcharge fee due from the contractor within ten days after the notice that a surcharge fee is required to be paid.

Subp. 3. **Additional grounds for managing employee certificate suspension.** In addition to those grounds listed in subpart 1, grounds for suspension of a managing employee certificate include: The license of the contractor of the managing employee is suspended.

Subp. 4. **Description of willfully.** For purposes of this part, the term "willfully":

A. describes an intentional act or omission by a person when the person knows or should reasonably know that the act or omission violates a law, rule, request, or order and the person is able to comply with the law, rule, request, or order; and

B. also describes an act or omission by a person, whether intentional or unintentional, when:

(1) the person uses a business or construction practice that makes it likely that the act or omission will occur;

(2) the commissioner has given written notice to the person within the past three years that the person's license, certificate, or registration may be suspended or revoked if the business or construction practice is not corrected;

(3) the person has failed to correct the business or construction practice within a reasonable time after receiving the notice; and

(4) the person's failure to correct the business or construction practice is a significant factor in causing the act or omission.

Subp. 5. **Suspension period and effect.** A contractor license, managing employee certificate, journeyman certificate, or apprentice registration is not valid during a suspension. A person may not perform fire protection-related work during a suspension. When a license, certificate, or registration is suspended, the person holding the license, certificate, or registration shall immediately surrender it. After a suspension period ends, the commissioner shall return the license, certificate, or registration. A suspension period ends after the last day of the period regardless of whether this day falls on a Saturday, Sunday, or legal holiday. The suspension period is as follows:

A. The suspension period is seven days, if there are no suspensions on the person's record within the past five years. This suspension period may be shortened if there are mitigating circumstances that indicate a shorter suspension period is appropriate. The suspension period must be at least three days.

B. The suspension period is 14 days, if there is one suspension on the person's record within the past five years. This suspension period may be shortened if there are mitigating circumstances that indicate a shorter suspension period is appropriate. The suspension period must be at least seven days.

C. The suspension period is 28 days, if there are two suspensions on the person's record within the past five years. This suspension period may be shortened if there are mitigating circumstances that indicate a shorter suspension period is appropriate. The suspension period must be at least 14 days.

D. When a suspension period is shortened based on mitigating circumstances, the commissioner shall in writing identify the mitigating circumstances and give the reasons for shortening the suspension period.

E. The suspension of a contractor, in addition to being on the record of the suspended contractor, is also on the record of another contractor if an owner, officer, board member, or managing employee of the other contractor was an owner, officer, board member, or managing employee of the suspended contractor at the time of the acts leading to the suspension.

F. When a suspension is imposed for a continuing violation, the suspension must last until the suspension period determined under items A to E expires or until the violation is corrected, whichever is later.

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Proposed Rules

MUNICIPAL PERMIT PROGRAMS

7512.2800 MUNICIPAL PERMIT PROGRAM.

Subpart 1. Permits required by ordinance. A municipality, through local ordinance, may require a permit to perform fire protection-related work. The municipality shall submit to the commissioner a copy of ordinances pertaining to fire protection system permits. For ordinances adopted before June 1, 1994, a copy must be submitted by July 1, 1994. For ordinances adopted on or after June 1, 1994, a copy must be submitted within 30 days of the date of adoption of the ordinance. The submittal must include documentation of training for the persons who will conduct the plan reviews and inspections.

Subp. 2. Plan review and inspection program. When a municipality issues a permit, the municipality shall provide a competent plan review conducted by a person trained in fire protection system plan review. The municipality shall also provide a competent inspection conducted by a person trained in fire protection system inspection. The municipality shall document the permit program and make it available to the commissioner for review.

Subp. 3. Municipal reporting. At least once a year, a municipality issuing permits shall submit a report to the commissioner indicating all permits that have been issued by the municipality for fire protection systems. This report must include the name, address, type of fire protection system installed, contractor license number, and occupancy type of the structure for which the permit was issued.

Department of Public Service

Energy Division

Proposed Permanent Rules Relating to Once-Through Cooling System; Energy Efficiency

Notice of Intent to Adopt a Rule Without a Public Hearing

The Minnesota Department of Public Service intends to adopt a permanent rule without a public hearing following the procedures set forth in the Administrative Procedures Act, *Minnesota Statutes* section 14.22 to 14.28. You have 30 days (until October 1, 1993) to submit written comments on the proposed amendment and may also submit a written request that a hearing be held on the rule.

Agency Contact Person. Comments or questions on the rule and written requests for a public hearing on the rule must be submitted to:

Narv Somdahl, Principal Engineer
Department of Public Service, Energy Division
121 7th Place East Suite 200
St. Paul, MN 55101-2145
phone (612) 297-2117 fax (612) 297-1959

Subject of Rule and Statutory Authority. The proposed rule will establish efficiency criteria for replacement cooling systems covered by the once through cooling conversion loans. The statutory authority to adopt this rule is *Minnesota Statute* Section 446A.21, subdivision 2. A copy of the proposed rule is published in the *State Register* and attached to this notice as mailed.

Comments. You have until 4:00 p.m., October 1, 1993, to submit written comment in support of or in opposition to the proposed rule or any part or subpart of the rule. Your comment must be in writing and received by the agency contact person by the due date. Comment is encouraged. Your comment should identify the portion of the proposed rule addressed, the reason for the comment, and any change proposed.

Request for a Hearing. In addition to submitting comments, you may also request that a hearing be held on the rule. Your request for a public hearing must be in writing and must be received by the agency contact person by 4:00 p.m. on October 1, 1993. Your written request for a public hearing must include your name and address. You are encouraged to identify the portion of the proposed rule which caused your request, the reason for the request, and any changes you want made to the proposed rule. If 25 or more persons submit a written request for a hearing, a public hearing will be held unless a sufficient number withdraw their requests in writing. If a public hearing is required, the agency will follow the procedures in *Minnesota Statutes*, sections 14.131 to 14.20.

Modifications. The proposed rule may be modified as a result of public comment. The modifications must be supported by data and views submitted to the agency and may not result in a substantial change in the proposed rule as attached and printed in the *State Register*. If the proposed rule affects you in any way, you are encouraged to participate in the rulemaking process.

Statement of Need and Reasonableness. A statement of need and reasonableness is now available from the agency contact person. This statement describes the need for and reasonableness of each provision of the proposed rule and identifies the data and information relied upon to support the proposed rule.

Adoption and Review of Rule. If no hearing is required, after the end of the comment period the agency may adopt the rule. The rule and supporting documents will then be submitted to the attorney general for review as to legality and form to the extent form relates to legality. You may request to be notified of the date the rule is submitted to the attorney general or be notified of the attorney general's decision on the rule. If you want to be so notified, or wish to receive a copy of the adopted rule, submit your request to the agency contact person listed above.

Dated: 12 August 1993

Krista L. Sanda, Commissioner
Department of Public Service

Rules as Proposed (all new material)

7685.0100 AUTHORITY, APPLICABILITY, AND PURPOSE.

Subpart 1. **Authority.** The commissioner is authorized by *Minnesota Statutes*, section 446A.21, subdivision 2, to establish energy efficiency criteria for replacement cooling systems.

Subp. 2. **Applicability.** This chapter applies to all applications for loans for replacement of once-through cooling systems with environmentally acceptable cooling systems under *Minnesota Statutes*, section 446A.21.

Subp. 3. **Purpose.** Loans for replacement of once-through cooling systems with environmentally acceptable cooling systems under *Minnesota Statutes*, section 446A.21, must not be approved unless the system complies with the energy efficiency criteria of part 7685.0130.

7685.0120 DEFINITIONS.

Subpart 1. **Scope.** The definitions in this part apply to parts 7685.0100 to 7685.0140.

Subp. 2. **CFC.** "CFC" means a chlorofluorocarbon refrigerant.

Subp. 3. **Commissioner.** "Commissioner" means the commissioner of public service.

Subp. 4. **Cooling efficiency.** "Cooling efficiency" means an expression of energy or energy performance in items A to C.

A. Kilowatts per ton (kW/ton) is the total electrical input (kW) divided by the net cooling capacity (in tons).

B. Coefficient of performance is the net cooling capacity divided by the energy input rate, when both are expressed in the same unit of measure.

C. One ton of cooling capacity equals 12,000 Btu per hour, or 3.516 kilowatts.

Subp. 5. **Once-through cooling system.** "Once-through cooling system" means a once-through system that has been issued a permit by the Department of Natural Resources to use in excess of 5,000,000 gallons of water annually from a groundwater source.

Subp. 6. **Once-through system.** "Once-through system" means a space heating, ventilation, air conditioning (HVAC), or refrigeration system used for any type of temperature or humidity control application, using groundwater that circulates through the system and is then discharged without reusing it for a higher priority purpose.

7685.0130 ENERGY EFFICIENCY CRITERIA.

Subpart 1. **Cooling efficiency.** All systems must meet the cooling efficiency criteria established in this subpart.

A. The cooling efficiency of a new centrifugal or rotary screw chiller must be 0.61 kW/ton or less at standard rating conditions specified in ARI Standard 550-1992.

B. The cooling efficiency of a previously used (existing) centrifugal or rotary screw chiller that has been rebuilt or modified must be 0.70 kW/ton or less at standard rating conditions specified in ARI Standard 550-1992.

C. The coefficient of performance of a new absorption chiller must be at least 0.90 at standard rating conditions specified in ARI Standard 560-1992.

D. The cooling efficiency of district cooling systems must be at least one kW/ton based on seasonal performance of the district coding system.

Subp. 2. **Noncompliance of CFC systems.** A system using CFC refrigerants does not comply with the energy efficiency criteria of this part.

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Proposed Rules

Subp. 3. **Cooling efficiency certification.** The cooling efficiency of a system must be certified by a mechanical engineer registered in Minnesota using data provided by the equipment manufacturer.

7685.0140 INCORPORATIONS BY REFERENCE.

Subpart 1. **Incorporated items.** The standards in items A and B are incorporated by reference.

A. ARI Standard 550-1992, Standard for Centrifugal and Rotary Screw Water-Chilling Packages.

B. ARI Standard 560-1992, Standard for Absorption Water Chilling and Water Heating Packages.

Subp. 2. **Availability.** The standards incorporated by reference are available for public inspection at the Minnesota State Law Library and through the Minitex interlibrary loan system. In addition, ARI standards are available through the Air-Conditioning & Refrigeration Institute, 4301 North Fairfax Drive, Suite 425, Arlington, VA 22203.

Department of Public Service

Energy Division

Proposed Permanent Rules Relating to the Minnesota Energy Code

Notice of Intent to Adopt a Rule Without a Public Hearing Unless 25 or More Persons Request a Hearing, and Notice of Hearing if 25 or More Requests for a Hearing are Received

Introduction. The Minnesota Department of Public Service intends to adopt a permanent rule without a public hearing following the procedures set forth in the Administrative Procedure Act, *Minnesota Statutes*, sections 14.22 to 14.28. If, however, 25 or more persons submit a written request for a public hearing on the rule within 30 days (or by October 1, 1993), a public hearing will be held on October 11, 1993. To find out whether the rule will be adopted without a public hearing, or whether a hearing will be held, you should contact the department after October 1 and before October 11, 1993. Contact either the agency contact person or call the Department of Public Service Energy Information Center between the hours of 8:00 a.m. and 4:00 p.m. at 296-5175 or Minnesota toll free 800-657-3710.

Agency Contact Person. Comments or questions on the rule and written requests for a public hearing on the rule must be submitted to:

Burce Nelson, Senior Engineer
Department of Public Service
121 East 7th Place, Suite 200
St. Paul, MN 55101
phone (612) 297-2313 fax (612) 297-1959

Subject of Rule and Statutory Authority. The proposed rule is about amending the Minnesota Energy Code, a part of the State building code. The statutory authority to adopt this rule is in *Minnesota Statute* section 216C.19, subdivision 8. A copy of the proposed rule is published in the *State Register* and attached to this notice as mailed.

Comments. You have until 4:30 p.m. on October 1, 1993, to submit written comment in support of or in opposition to the proposed rule or any part or subpart of the proposed rule. Your comment must be in writing and received by the agency contact person by the due date. Comment is encouraged. Your comment should identify the portion of the proposed rule addressed, the reason for the comment, and any change proposed.

Request for a Hearing. In addition to submitting comments, you may also request that a hearing be held on the rule. Your request for a public hearing must be in writing and must be received by the agency contact person by 4:30 p.m. on October 1, 1993. Your written request for a public hearing must include your name, address and telephone number. You are encouraged to identify the portion of the proposed rule which caused your request, the reason for the request, and what changes you want made to the proposed rule. If 25 or more persons submit a written request for a hearing, a public hearing will be held unless a sufficient number withdraw their requests in writing.

Modifications. The proposed rule may be modified, either as a result of public comment or as a result of the rule hearing process. Modifications must not result in a substantial change in the proposed rule as attached and printed in the *State Register* and must be supported by data and views submitted to the agency or presented at the hearing. If the proposed rule affects you in any way, you are encouraged to participate in the rulemaking process.

Cancellation of Hearing. The hearing scheduled for October 11 will be canceled if the agency does not receive requests from 25 or more persons that a hearing be held on the rule. If you requested a public hearing, the agency will notify you before the scheduled hearing whether or not a hearing will be held. You may also call either Bruce Nelson at 612/297-2313; or the Department of Public

Service Energy Information Center between the hours of 8:00 a.m. and 4:00 p.m. at 296-5175 or Minnesota toll free 800-657-3710 after October 1 to find out whether the hearing will be held.

Notice of Hearing. If 25 or more persons submit written requests for a public hearing on the rule, a hearing will be held following the procedures in *Minnesota Statutes*, sections 14.22 to 14.28. The hearing will be held on October 11, 1993 in the State Office Building, Room 400 South, 100 Constitution Avenue, St. Paul, Minnesota at 9:00 a.m. and continuing until all interested persons have an opportunity to be heard. The hearing will continue, if necessary, at additional times and places as determined during the hearing by the administrative law judge. The administrative law judge assigned to conduct the hearing is Bruce D. Campbell. Judge Campbell can be reached at the Office of Administrative Hearings, 100 Washington Square, Suite 1700, Minneapolis, MN 55402; telephone (612) 341-7602.

Hearing Procedure. If a hearing is held, you and all interested or affected persons including representatives of associations or other interested groups, will have an opportunity to participate. You may present your views either orally at the hearing or in writing at any time prior to the close of the hearing record. All evidence presented should relate to the proposed rule. You may also mail written material to the administrative law judge to be recorded in the hearing record for five working days after the public hearing ends. This five-day comment period may be extended for a longer period not to exceed 20 calendar days if ordered by the administrative law judge at the hearing. Comments received during this period will be available for review at the Office of Administrative Hearings. You and the agency may respond in writing within five business days after the submission period ends to any new information submitted. All written materials and responses submitted to the administrative law judge must be received at the Office of Administrative Hearings no later than 4:30 p.m. on the due date. No additional evidence may be submitted during the five-day period. This rule hearing procedure is governed by *Minnesota Rules*, parts 1400.0200 to 1400.1200 and *Minnesota Statutes*, sections 14.15 to 14.50. The rule hearing is governed by *Minnesota Statutes*, section 14.14 to 14.20. Questions about procedure may be directed to the administrative law judge.

Statement of Need and Reasonableness. A statement of need and reasonableness is now available from the agency contact person. This statement describes the need for and reasonableness of each provision of the proposed rule. It also includes a summary of all the evidence and argument which the agency anticipates presented at the public hearing, if one is held. The statement may also be reviewed and copies obtained at the cost of reproduction from the Office of Administrative Hearings.

Lobbyist Registration. *Minnesota Statutes*, Chapter 10A requires each lobbyist to register with the State Ethical Practices Board. Questions regarding this requirement should be directed to the Ethical Practices Board, 625 North Robert Street, St. Paul, Minnesota 55101; telephone 612-296-5148.

Adoption Procedure if No Hearing. If no hearing is required, after the end of the comment period the agency may adopt the rule. The rule and supporting documents will then be submitted to the attorney general for review as to legality and form to the extent that form relates to legality. You may request to be notified of the date the rule is submitted to the attorney general or be notified of the attorney general's decision on the rule. If you want to be so notified, or wish to receive a copy of the adopted rule, submit your request to Mr. Nelson at the address listed above.

Adoption Procedure After the Hearing. If a hearing is held, after the close of the hearing record, the administrative law judge will issue a report on the proposed rule. You may request notification of the date on which the administrative law judge's report will be available, after which date the agency may not take final action on the rules for a period of five working days. If you want to be notified about the report, you may so indicate at the hearing. After the hearing, you may request notification by sending a written request to the administrative law judge. You may also request notification of the date on which the rule is adopted and filed with the Secretary of State. The agency's notice must be mailed on the same day the rule is filed. If you want to be notified of the adoption, you may so indicate at the hearing or send a request in writing to the agency contact person at any time prior to filing the rules with the Secretary of State.

Dated: 10 August 1993

Krista L. Sanda, Commissioner
Department of Public Safety

Rules as Proposed

7670.0100 AUTHORITY; SCOPE; APPLICABILITY.

Subpart 1. **Authority.** This chapter is adopted pursuant to *Minnesota Statutes*, section 216C.19, subdivision 8.

KEY: PROPOSED RULES SECTION — Underlining indicates additions to existing rule language. ~~Strike outs~~ indicate deletions from existing rule language. If a proposed rule is totally new, it is designated "all new material." **ADOPTED RULES SECTION** — Underlining indicates additions to proposed rule language. ~~Strike outs~~ indicate deletions from proposed rule language.

Proposed Rules

Subp. 2. **Scope.** Under *Minnesota Statutes*, section 216C.19, subdivision 8, This chapter is a part of the State Building Code, adopted according to *Minnesota Statutes*, sections 16B.59 to 16B.73.

Subp. 3. **Applicability.** Buildings covered by this chapter must comply with the Model Energy Code as amended by parts 7670.0260 to 7670.1000. This chapter also applies to driveways, walkways, entrances, parking lots, and grounds. Enforcement of this chapter shall not abridge safety, health, or environmental requirements under other applicable codes or ordinances.

EXCEPTION:

Subp. 4. Exempt buildings.

A. This chapter does not cover buildings, structures, or portions of buildings or structures whose peak design rate of energy usage is less than 3.4 Btu per hour per square foot or 1.0 watt per square foot of floor area for all purposes.

B. Relocated residential buildings need not comply with this chapter, except that, where available, an energy audit must be conducted on the a relocated building.

Subp. 5. Application to existing buildings.

A. Additions, alterations, and repairs. Additions, alterations, and repairs to existing buildings or structures may be made without making the entire building or structure comply, provided that the additions, alterations, and repairs comply with all the requirements of this chapter.

B. Historic buildings. Buildings that have been specifically designated as historically significant by the state or local governing body or listed or determined to be eligible for listing in the National Register of Historic Places are exempt from this code.

C. Mixed occupancy. If a building houses more than one occupancy, each portion of the building must conform to the requirements for the occupancy housed in that portion. If minor accessory uses do not occupy more than ten percent of the area of any floor of a building, the major use is considered the building occupancy.

7670.0130 INCORPORATIONS BY REFERENCE.

Subpart 1. **Incorporated items.** The following standards and references are incorporated by reference:

A. Chapter 4 of the Model Energy Code, 1989 Edition, as published by the Council of American Building Officials (Falls Church, Virginia), as amended by parts 7670.0260 to 7670.1000.

B. Code of Federal Regulations, title 10, part 435, Energy Conservation Voluntary Performance Standards for New Commercial and Multi-Family High Rise Residential Buildings; Mandatory for New Federal Buildings-

~~C. Code of Federal Regulations, title 10, and part 430, National Appliance Energy Conservation Act of 1987.~~

~~D. C. LTGSTD, lighting prescriptive and system performance compliance calculation program, a computer program developed by Battelle Pacific Northwest Laboratories.~~

~~E. ANSI/ASHRAE Standard 119-1988, Air Leakage Performance for Detached Single-Family Residential Buildings-~~

~~F. AAMA Standard 1503.1-88, Voluntary Test Method for Thermal Transmittance and Condensation Resistance of Windows, Doors and Glazed Wall Sections-~~

~~G. ASTM C 236-87, Standard Test Method for Steady State Thermal Performance of Building Assemblies by means of a Guarded Hot Box-~~

~~H. ASTM C 976-82, Standard Test Method for Thermal Performance of Building Assemblies by means of a Calibrated Hot Box-~~

~~D. ENVSTD, Envelope System Performance Compliance Calculation program, a computer program developed by Batelle Pacific Northwest Laboratories.~~

~~E. ASTM E779-87, Standard Test Method for Determining Air Leakage Rate by Fan Pressurization.~~

~~F. ASTM E283-84, Standard Method of Test for Rate of Air Leakage Through Exterior Windows, Curtain walls, and Doors.~~

~~G. NFRC 100-91: Procedure for Determining Fenestration Product Thermal Properties (Currently Limited to U-values).~~

~~H. ASHRAE, 1993 Handbook of Fundamentals, chapters 25, 26, and 27.~~

~~I. ASHRAE Standard 55-1992, Thermal Environmental Conditions for Human Occupancy.~~

~~J. ASHRAE Standard 62-1989, Ventilation for Acceptable Indoor Air Quality.~~

~~K. ASHRAE Standard 84-1991, Method of Testing Air-to-Air Heat Exchangers.~~

~~L. R-2000 Home Program Technical Requirements for homes enrolled after September 1992, Canadian Home Builders' Association.~~

Subp. 2. **Availability.** All standards and documents incorporated by reference are available for public inspection at the Minnesota State Law Library and through the Minitex interlibrary loan system. In addition:

A. ASHRAE and ANSI/ASHRAE documents and standards are available from the American Society of Heating, Refrigerating and Air-Conditioning Engineers - Publication Sales, 1791 Tullie Circle NE, Atlanta, GA 30329;

B. AAMA standards are available from the American Architectural Manufacturers Association, 2700 River Road, Des Plaines, IL 60018;

C. ASTM standards are available from ASTM, 1916 Race Street, Philadelphia, PA 19103; and

D. The WINDOW computer program is C. NFRC standards are available from Bostik Construction Products, 1740 County Line, Huntington Valley, PA 19006 National Fenestration Rating Council, 962 Wayne Avenue #750, Silver Spring, MD 20910.

7670.0260 MATERIALS AND EQUIPMENT.

Section 102 of the Model Energy Code is amended by adding a paragraph to read:

Subpart 1. Identification. Materials and equipment must be identified in order to show compliance with this chapter.

Subp. 2. Maintenance information. Required regular maintenance actions must be clearly stated and incorporated on a readily accessible label. The label may be limited to identifying, by title or publication number, the operation and maintenance manual for that particular model and type of product. Maintenance instructions must be furnished for equipment that requires preventive maintenance for efficient operation.

~~102.3~~ Subp. 3. Thermal insulation. Thermal insulation used in residential buildings three stories or less in height must conform to chapter 7640, Minnesota Thermal Insulation Standards, adopted by the Department of Public Service. All thermal insulation must achieve stated performance at 75 degrees Fahrenheit mean temperature and no less than stated performance at winter design conditions.

EXCEPTION: Thermal insulation designed to reduce summer cooling load only is not required to achieve stated performance at winter design conditions.

7670.0325 AMENDMENTS TO SECTION 201: DEFINITIONS.

~~Subpart 1. Thermal transmittance (U). In section 201 of the Model Energy Code, the definition of "Thermal transmittance (U)" is amended to read: Thermal transmittance (U): The coefficient of heat transmission (air to air). It is the time rate of heat flow per unit area and unit temperature differential between the warm side and cold side air films (Btu/h ft² F).~~

~~Thermal transmittance of opaque wall components (U_w) and roof/ceiling components (U_c) calculation methods are defined in the references indicated:~~

~~(1) Parallel heat flow method: Model Energy Code, chapter 5, equations 1 and 2, substituting the framing and insulated cavity components of the opaque wall or roof/ceiling for the elements designated by subscripts in these equations.~~

~~(2) Series-parallel method: Page 20.8 of Standard RS-1 listed in chapter 7.~~

~~(3) Parallel path correction factor method: Standard RS-24 listed in chapter 7.~~

~~(4) Thermal bridges in sheet metal construction method: Standard RS-25 listed in chapter 7.~~

~~(5) Zone method: Pages 22.10 and 22.11 of Standard RS-1 listed in chapter 7.~~

Subpart 1. Definitions. The terms used in this chapter have the meanings given them in this part.

Subp. 2. Accessible or readily accessible. "Accessible" means admitting close approach because not guarded by locked doors, elevation, or other effective means. "Readily accessible" means capable of being reached quickly for operation, renewal, or inspections, without requiring those to whom ready access is requisite to climb over or remove obstacles or to resort to portable ladders, chairs, or similar aids.

Subp. 3. Advanced framing.

A. "Advanced area framing" means framing techniques used to minimize the amount of uninsulated area that is required for proper structural support consistent with requirements of the Uniform Building Code, including section 2517.

B. "Advanced wall framing" means two inch by six inch stud spacing of 24 inches on center, insulated headers, two-stud corners using approved backing for the attachment of facing materials, full insulation wherever possible between partition wall

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Proposed Rules

intersections with exterior walls, and, when foam insulated sheathing is used, replacement of cripples with hangers whenever possible. "Standard framing" means wall framing that is not advanced framing.

C. "Advanced ceiling framing" means achieving full insulating value to the outside of exterior walls.

Subp. 4. Air conditioning comfort. "Air conditioning comfort" means the process of treating air so as to control simultaneously its temperature, humidity, cleanliness, and distribution to meet requirements of the conditioned space.

Subp. 5. Automatic. "Automatic" means self-acting, operating by its own mechanism when actuated by some impersonal influence, for example, a change in current strength, pressure, temperature, or mechanical configuration.

Subp. 6. Boiler capacity. "Boiler capacity" means the rate of heat output in Btu per hour measured at the boiler outlet, at the design inlet and outlet conditions, and rated fuel/energy input.

Subp. 7. Building envelope. "Building envelope" means the elements of a building which enclose conditioned spaces through which thermal energy may be transferred to or from the exterior.

Subp. 8. Building project. "Building project" means a building or group of buildings, including on-site energy conversion or electric-generating facilities, which utilize a single submittal for a construction permit or are within the boundary of a contiguous area under one ownership.

Subp. 9. Comfort envelope. "Comfort envelope" means the area on a psychometric chart enclosing all those conditions described in Figure No. 2, ASHRAE Standard 55-1992 Thermal Environment Conditions for Human Occupancy.

Subp. 10. Conditioned floor area. "Conditioned floor area" means the horizontal projection of that portion of interior space which is contained within exterior walls and which is conditioned directly or indirectly by an energy-using system.

Subp. 11. Conditioned space. "Conditioned space" means space within a building which is provided with heated and/or cooled air or surfaces and, where required, with humidification or dehumidification means so as to be capable of maintaining a space condition falling within the comfort zone defined in ASHRAE Standard 55-1981 Thermal Environment Conditions for Human Occupancy.

Subp. 12. Cooled space. "Cooled space" means space within a building which is provided with a positive cooling supply.

Subp. 13. Deadband. "Deadband" means the temperature range in which no heating or cooling is used.

Subp. 14. Degree day, heating. "Degree day, heating" means a unit, based upon temperature difference and time, used in estimating fuel consumption and specifying nominal heating load of a building in winter. For any one day, when the mean temperature is less than 65°F there exist as many degree days as there are Fahrenheit degrees difference in temperature between the mean temperature for the day and 65°F.

Subp. 15. Dwelling unit. "Dwelling unit" means a single housekeeping unit comprised of one or more rooms providing complete, independent living facilities for one or more persons, including permanent provisions for living, sleeping, eating, cooking, and sanitation.

Subp. 16. Efficiency, combustion. "Efficiency, combustion" means 100 percent minus flue loss.

Subp. 17. Efficiency, HVAC system. "Efficiency, HVAC system" means the ratio of useful energy, at the point of use, to the energy input for a designated time period, expressed in percent.

Subp. 18. Efficiency, thermal. "Efficiency, thermal" means the results of a thermal efficiency test referenced in Code of Federal Regulations, title 10, part 430 or 435.

Subp. 19. Energy, kWh and Btu. "Energy" means the capacity for doing work; taking a number of forms which may be transformed from one into another, such as thermal (heat), mechanical (work), electrical, and chemical; in customary units, measured in kilowatt-hours (kWh) or British thermal units (Btu).

Subp. 20. Energy efficiency ratio (EER). "Energy efficiency ratio (EER)" means the ratio of net equipment cooling capacity in Btu per hour to total rate of electric input in watts under designated operating conditions.

Subp. 21. Gross floor area. "Gross floor area" means the sum of the areas of the several floors of the building, including basements, cellars, mezzanine and intermediate floored tiers, and penthouses of headroom height, measured from the exterior faces of exterior walls or from the center line of walls separating buildings, but excluding:

A. covered walkways, open roofed-over areas, porches and similar spaces; and

B. pipe trenches, exterior terraces or steps, chimneys, roof overhangs, and similar features.

Subp. 22. Gross wall area. "Gross wall area" means the normal projection of the building envelope wall area bounding interior space which is conditioned by an energy-using system, including opaque wall, window, and door area.

The gross area of walls consists of all opaque wall areas, including between floor spandrels, peripheral edges of floors, window areas including sash, and door areas, where such surfaces are exposed to outdoor air and enclose a heated or mechanically cooled

space including interstitial areas between two such spaces. For basement walls with an average below-grade area less than 50 percent of the total wall area, including openings, the entire wall, including the below-grade portion, is included as part of the gross wall area. Nonopaque areas, such as windows and doors of all basement walls are included in the gross wall area.

Subp. 23. Heat. "Heat" means the form of energy that is transferred by virtue of a temperature difference.

Subp. 24. Heated slab. "Heated slab" means slab-on-grade construction in which the heating elements or hot air distribution system is in contact with or placed within the slab or the subgrade.

Subp. 25. Heated space. "Heated space" means space within a building which is provided with a positive heat supply. Finished living space within a basement with registers or heating devices designed to supply heat to a basement space shall automatically define that space as heated space.

Subp. 26. HVAC. "HVAC" means heating, ventilating, and air conditioning.

Subp. 27. HVAC system. "HVAC system" means a system that provides either collectively or individually the processes of comfort heating, ventilating, and/or air conditioning within or associated with a building.

Subp. 28. Infiltration. "Infiltration" means the uncontrolled inward air leakage through cracks and interstices in any building element and around windows and doors of a building caused by the pressure effects of wind and/or the effect of differences in the indoor and outdoor air density.

Subp. 29. Manual. "Manual" means capable of being operated by personal intervention.

Subp. 30. Mechanical ventilation system, residential. "Mechanical ventilation system, residential" means a system that, by mechanical means, is capable of introducing and distributing outdoor air to all habitable rooms and removes indoor air at a rate of not less than 0.35 air changes per hour, or 15 cubic feet per minute per bedroom plus an additional 15 cubic feet per minute, whichever is greater.

Subp. 31. Multifamily dwelling. "Multifamily dwelling" means a building containing three or more dwelling units.

Subp. 32. Natural ventilation. "Natural ventilation" means the movement of outdoor air into a space through intentionally provided openings, such as windows and doors or through nonpowered ventilators.

Subp. 33. New energy. "New energy" means energy, other than recovered energy, used for the purpose of heating or cooling.

Subp. 34. Once-through system. "Once-through system" means a HVAC or refrigeration system used for any type of temperature or humidity control application, utilizing groundwater, that circulates through the system and is then discharged without reusing it for a higher priority purpose.

Subp. 35. Opaque areas. "Opaque areas" means all exposed areas of a building envelope which enclose conditioned space, except openings for windows, skylights, doors, and building service systems.

Subp. 36. Positive cooling supply. "Positive cooling supply" means mechanical cooling deliberately supplied to a space, such as through a supply register.

Subp. 37. Positive heat supply. "Positive heat supply" means heat deliberately supplied to a space by design, such as a supply register, radiator, or heating element.

Subp. 38. Recooling. "Recooling" means the removal of heat by sensible cooling of the supply air, directly or indirectly, that has been previously heated above the temperature to which the air is to be supplied to the conditioned space for proper control of the temperature of that space.

Subp. 39. Recovered energy. "Recovered energy" means energy utilized which would otherwise be wasted, for example, not contribute to a desired end use, from an energy utilization system.

Subp. 40. Reheat. "Reheat" means the application of sensible heat to supply air that has been previously cooled below the temperature of the conditioned space by either mechanical refrigeration or the introduction of outdoor air to provide cooling.

Subp. 41. Renewable energy sources. "Renewable energy sources" means sources of energy, excluding minerals, derived from incoming solar radiation, including natural daylighting and photosynthetic processes; from phenomena resulting therefrom, including wind, waves and tides, lake or pond thermal differences; and energy derived from the internal heat of the earth, including nocturnal thermal exchanges.

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Proposed Rules

Subp. 42. Reset. “Reset” means adjustment of the set point of a control instrument to a higher or lower value automatically or manually to conserve energy.

Subp. 43. Roof assembly. “Roof assembly” means all components of the roof/ceiling envelope through which heat flows, thus creating a building transmission heat loss or gain, where such assembly is exposed to outdoor air and encloses a heated or mechanically cooled space.

The gross area of a roof assembly consists of the total interior surface of such assembly, including skylights exposed to the heated or mechanically cooled space.

Subp. 44. Service water heating. “Service water heating” means the supply of hot water for domestic or commercial purposes other than comfort heating.

Subp. 45. Shading coefficient (SC). “Shading coefficient (SC)” means: SC = Solar Heat Gain of Fenestration/Solar Heat Gain. Conditions must be as specified in ASHRAE, 1993 Handbook of Fundamentals, chapter 27.

Subp. 46. Thermal conductance. “Thermal conductance” means time rate of heat flow through a body, frequently per unit area, from one of its bounding surfaces to the other for a unit temperature difference between the two surfaces, under steady conditions (Btu/h ft² °F)

Subp. 47. Thermal resistance (R). “Thermal resistance (R)” means the reciprocal of thermal conductance (h ft² °F/Btu).

Subp. 48. Thermal transmittance (U). “Thermal transmittance (U)” means the coefficient of heat transmission (air-to-air). It is the time rate of heat flow per unit area and unit temperature differential between the warm side and cold side of air films (Btu/h ft² °F). The U-factor of an element is calculated by items A to E, as appropriate.

A. Parallel heat flow method. The parallel heat flow U-factor is the area weighted average of the thermal transmittance of the subelements of an element, as computed with the equations below.

Equation for thermal transmittance of an element:

$$U = (A_1/R_1 + A_2/R_2 + A_3/R_3 + \dots)/A_o$$

Where:

A₁, A₂, A₃, ... = the cross-sectional area of the different subelements

R₁, R₂, R₃, ... = the cross-sectional R-value of the different subelements

A_o = the gross area of the element or overall component

B. Series-parallel heat flow method. The series-parallel heat flow method is a procedure that accounts for the fact that heat does not always flow straight through a wall.

Equations for series-parallel thermal transmittance:

$$U = 1/R_o$$

$$R_o = R_f + (R_w \times R_c)/(A_w \times R_w) + (A_w \times R_c) + R_{film}$$

Where:

R_f = thermal resistance of faces

R_w = thermal resistance of the web

R_c = thermal resistance of the core

A_w = fraction of the total area perpendicular to heat flow of the web (conductive)

A_c = fraction of the total area perpendicular to heat flow of the core (insulated)

C. Parallel path equivalent R-value method. The parallel path equivalent R-value method employs tables giving equivalent R-values of opaque elements containing metal framing. The following equations must be used to determine the thermal transmittance of the opaque element.

Equations for the thermal transmittance of the opaque element:

$$U = 1/R_o$$

$$R_o = R_i + R_e$$

Where:

R_o = the total resistance of the opaque assembly

R_i = the resistance of the series elements (for i = 1 to n), excluding the parallel path elements

R_e = the equivalent R-value of the element containing the parallel path

Equivalent R-values for metal stud (16 gauge or thinner) insulated wall cavities

<u>Size of studs</u>	<u>Spacing of studs, inches on center</u>	<u>Cavity Insulation R-value</u>	<u>Insulated wall cavity equivalent R-value</u>
<u>2 x 4</u>	<u>16</u>	<u>R-11</u>	<u>R-5.5</u>
<u>2 x 4</u>	<u>16</u>	<u>R-13</u>	<u>R-6.0</u>
<u>2 x 4</u>	<u>16</u>	<u>R-15</u>	<u>R-6.4</u>
<u>2 x 4</u>	<u>24</u>	<u>R-11</u>	<u>R-6.6</u>
<u>2 x 4</u>	<u>24</u>	<u>R-13</u>	<u>R-7.2</u>
<u>2 x 4</u>	<u>24</u>	<u>R-15</u>	<u>R-7.8</u>
<u>2 x 6</u>	<u>16</u>	<u>R-19</u>	<u>R-7.1</u>
<u>2 x 6</u>	<u>16</u>	<u>R-21</u>	<u>R-7.4</u>
<u>2 x 6</u>	<u>24</u>	<u>R-19</u>	<u>R-8.6</u>
<u>2 x 6</u>	<u>24</u>	<u>R-21</u>	<u>R-9.0</u>
<u>2 x 8</u>	<u>16</u>	<u>R-25</u>	<u>R-7.8</u>
<u>2 x 8</u>	<u>24</u>	<u>R-25</u>	<u>R-9.6</u>

D. Draped insulation effective assembly R-value method. The draped insulation effective assembly R-value method employs a table of effective R-values (R_e) of metal wall or roof assemblies with insulation draped over purlins or girts where insulation is compressed between the outside skin and purlin or girt.

Equation for draped insulation effective assembly R-value thermal transmittance calculation:

$$U = 1/(R_i + R_e)$$

Where:

R_i = the R-values of series elements excluding the draped insulation and framing

R_e = the effective assembly R-value

Air film coefficients included in table values.

Assembly effective R-values (R_e)

<u>Batt Insulation R-value</u>	<u>One Fastener Per Linear Foot of Purlin/Girt Purlin/Girt Spacing (Feet)</u>			
	<u>5</u>	<u>4</u>	<u>3</u>	<u>2</u>
<u>R-38</u>	<u>11.61</u>	<u>10.18</u>	<u>8.45</u>	<u>6.30</u>
<u>R-30</u>	<u>11.08</u>	<u>9.79</u>	<u>8.21</u>	<u>6.20</u>
<u>R-26</u>	<u>10.80</u>	<u>9.59</u>	<u>8.08</u>	<u>6.14</u>
<u>R-22</u>	<u>10.06</u>	<u>9.04</u>	<u>7.73</u>	<u>5.99</u>
<u>R-19</u>	<u>9.95</u>	<u>8.95</u>	<u>7.67</u>	<u>5.97</u>

<u>Batt Insulation R-value</u>	<u>Two Fasteners Per Linear Foot of Purlin/Girt Purlin/Girt Spacing in (Feet)</u>			
	<u>5</u>	<u>4</u>	<u>3</u>	<u>2</u>
<u>R-38</u>	<u>9.96</u>	<u>8.64</u>	<u>7.07</u>	<u>5.19</u>
<u>R-30</u>	<u>9.56</u>	<u>8.36</u>	<u>6.91</u>	<u>5.12</u>
<u>R-26</u>	<u>9.35</u>	<u>8.21</u>	<u>6.81</u>	<u>5.09</u>
<u>R-22</u>	<u>8.80</u>	<u>7.80</u>	<u>6.56</u>	<u>4.98</u>
<u>R-19</u>	<u>8.71</u>	<u>7.74</u>	<u>6.52</u>	<u>4.96</u>

E. Zone method. The zone method is a procedure in which the thermal transmittance of a surface is computed by dividing the surface into its "highly conductive" and "remaining" areas. The "highly conductive" area is a function of the width or diameter of the metal heat path terminal and the distance from the panel surface to the metal. The respective thermal transmittance of the two areas are separately computed, combined, and then divided by the total cross-sectional area.

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Proposed Rules

Equation for zone method thermal transmittance:

$$U = (U_1 A_1 + U_2 A_2) / A_2$$

Where:

For the highly conductive area

A_1 = the highly conductive area

U_1 = the thermal transmittance of the highly conductive area

For the remainder of the area

A_2 = the remainder of the area

U_2 = the thermal transmittance of the remaining area

A_2 (cross-sectional area of the element) = $A_1 + A_2$

Equation for areas:

$$A_1 = m + 2d, A_2 = A_2 - A_1$$

Where:

m = width or diameter of the metal heat path terminal

d = distance from panel surface to metal

Subp. 49. **Thermal transmittance, overall (U_o).** "Thermal transmittance, overall (U_o)" means the overall thermal transmittance of an exterior building envelope component, such as a wall, floor, or roof/ceiling. The value of U_o is calculated by the parallel path heat flow method using the areas and thermal transmittance values of the various elements, such as windows, doors, and opaque surfaces that comprise the gross area of the building component.

Subp. 2-50. **Vapor retarder.** Section 204 of the Model Energy Code is amended by adding a new definition to read: "Vapor retarder" means a material to retard air and water vapor passage designed to meet a maximum perm permeability rating of 1.0 grain per hour per ft² square foot per inch Hg pressure differential. Polyethylene material that is not cross laminated which is used to meet the requirements of this paragraph must be designed to have a minimum thickness of four mills.

Subp. 51. **Ventilation.** "Ventilation" means the process of supplying or removing air by natural or mechanical means to or from any space. Such air may or may not have been conditioned.

Subp. 3-52. **Wind wash.** Section 204 of the Model Energy Code is amended by adding a new definition to read: WIND WASH. "Wind wash is" means the passage of unconditioned air through thermal insulation of the building envelope.

Subp. 4-53. **Window area.** Section 204 of the Model Energy Code is amended by adding a new definition to read: WINDOW AREA. "Window area, or glazing area, is equal to" means the rough opening less installation clearances.

Subp. 5. **Advanced framing.** Section 204 of the Model Energy Code is amended by adding a new definition to read:

ADVANCED FRAMING. Advanced area framing means framing techniques used to minimize the amount of uninsulated area that is required for proper structural support consistent with requirements of the Uniform Building Code, including section 2517. Advanced wall framing means 2 x 6 stud spacing of 24" on center, insulated headers, two-stud corners using approved backing for the attachment of facing materials, full insulation wherever possible between partition wall intersections with exterior walls, and, when foam insulated sheathing is used, replacement of cripples with hangers whenever possible. Advanced ceiling framing means achieving full insulating value to the outside of exterior walls.

7670.0400 AMENDMENT TO SECTION 302: DESIGN CONDITIONS.

Footnote 1 of section 302.1 of the Model Energy Code is amended to read:

1 **Subpart 1. General.** The criteria of this chapter establish the design conditions upon which the minimum thermal design of the HVAC system must be based.

Subp. 2. **Heating and cooling.** A building designed to be both heated and cooled must meet the more stringent of the heating or cooling requirements as provided in this chapter when requirements of the exterior envelope differ.

Subp. 3. **Exterior design temperature.** The exterior design temperature must be selected from the "Design Conditions" columns shown in Table 302.1 this subpart.

EXCEPTION: Where necessary to assure the prevention of damage to the building or to material and equipment within the building, the values listed in Table 302.1 this subpart under "extreme conditions" may be used.

Table 302.1
Exterior Design Temperatures

CITY	DESIGN CONDITIONS		EXTREME CONDITIONS	
	SUMMER DB/WB	WINTER DB	SUMMER DB/WB	WINTER DB
Albert Lea	87/72	-17	90/74	
Alexandria	88/72	-22	90/72	-28.0
Bemidji	85/69	-31	88/69	-36.9
Brainerd	87/71	-20	90/73	
Duluth	82/68	-21	85/70	-27.4
Faribault	88/72	-17	91/74	-24.3
Fergus Falls	88/72	-21	91/72	-27.8
International Falls	83/68	-29	85/68	-36.5
Mankato	88/72	-17	91/72	
Minneapolis	89/73	-16	92/75	-22.0
Rochester	87/72	-17	90/74	
St. Cloud	88/72	-15	91/74	
St. Paul	89/73	-16	92/75	-22.0
Virginia	83/68	-25	85/69	-33.0
Willmar	88/72	-15	91/74	-24.3
Winona	88/73	-14	91/75	

“DB” = dry bulb temperature, degrees Fahrenheit

“WB” = wet bulb temperature, degrees Fahrenheit

Heating degree days must be selected from Standard RS-23 listed in chapter 7.

Adjustments may be made as determined by the building official to reflect local climates which differ from the tabulated temperatures or local weather experience.

Subp. 4. Interior design conditions.

A. Indoor design temperature. Indoor design temperature must be 72°F for heating and 78°F for cooling.

EXCEPTION: Other design temperatures may be used for equipment selection if it results in a lower energy usage.

B. Humidification. If humidification is provided during heating, it must be designed for a maximum relative humidity of 30 percent. When comfort air conditioning is provided, the actual design relative humidity within the comfort envelope must be selected for minimum total HVAC system energy use.

7670.0450 AMENDMENT TO SECTION 303: VENTILATION.

Section 303.1 of the Model Energy Code is amended to read:

~~303.1 Ventilation.~~ Ventilation systems must be designed to conform with ASHRAE Standard RS-3 listed in chapter 7 62-1989.

EXCEPTION: Infiltration does not satisfy the requirement for ventilation in residential construction. Enclosed parking garages and auto repair rooms must be ventilated with outdoor air as required by chapter 1305.

7670.0460 BUILDING DESIGN BY SYSTEMS ANALYSIS.

Building design by systems analysis must comply with the Model Energy Code, chapter 4.

7670.0470 AMENDMENTS TO SECTION 502: ENVELOPE THERMAL TRANSMITTANCE FOR ALL BUILDINGS.

Subpart 1. Section 502.1 of the Model Energy Code is amended by adding a paragraph to read: **General.**

Buildings that are heated or mechanically cooled must be constructed so as to provide the required thermal performance of the various components.

A building that is designed to be both heated and cooled must meet the more stringent of the heating or cooling requirements as provided in this chapter when requirements of the exterior envelope differ.

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Proposed Rules

Subp. 2. Total heat gain or loss for entire building. The value of U_o for any assembly such as roof/ceiling, wall, or floor may be increased and the value of U_o for other components decreased, provided that the total heat gain or loss for the entire building envelope does not exceed the total resulting from conformance to the values of U_o specified in parts 7670.0470, 7670.0480, 7670.0490, and 7670.0495.

Subp. 3. Thermal mass of building components. The proposed design may take into account the thermal mass of the building components in considering energy conservation. This applies only for walls in locations less than 8,000 heating degree days (base temperature of 65°F) with heat capacity equal to or exceeding 6.7 Btu/ft² °F. The required wall thermal transmittance may be adjusted in accordance with the table below:

<u>Required Value of U_w without Consideration of Thermal Mass</u>	<u>Required Value of U_w with Consideration of Mass (position of insulation)</u>		
	<u>Exterior of wall mass</u>	<u>Interior of wall mass</u>	<u>Integral with wall mass</u>
0.20	0.22	0.21	0.22
0.18	0.20	0.19	0.20
0.16	0.18	0.17	0.18
0.14	0.15	0.14	0.16
0.12	0.13	0.13	0.13
0.10	0.11	0.10	0.11
0.08	0.09	0.08	0.09
0.06	0.07	0.06	0.07
0.04	0.05	0.04	0.05

502.1.4 Subp. 4. Thermal transmittance of opaque components.

A. When return air ceiling plenums are employed, the roof/ceiling assembly must:

- (1) for thermal transmittance purposes, not include the ceiling proper nor the plenum space as part of the assembly; and
- (2) for gross area purposes, be based upon the interior face of the upper plenum surface.

B. Thermal transmittance of opaque wall components and, roof/ceiling, and floor components. Thermal transmittance of opaque wall components (U_w) and roof/ceiling components (U_r) must be calculated using the following methods:

- (1) Wood frame: Parallel heat flow method.
- (2) Masonry blocks with insulation inserts or filled cores and other envelope assemblies containing nonmetal framing: Series-parallel method.
- (3) Metal framing bonded on one or both sides to a metal skin or covering: Thermal bridges in sheet metal construction Wall or roof assemblies with insulation draped over purlins or girts (insulation compressed between the outside skin and purlin or girt): Draped insulation effective assembly R-value method.
- (4) Nonmetal surface with metal framing:
 - (a) Metal stud walls: Parallel path equivalent R-value method.
 - (5) For elements not identified in Standard RS-24 listed in chapter 7, the parallel path correction factor subitem (1), (2), (3), or (4): Zone method.
 - (b) For elements not identified in Standard RS-24 listed in chapter 7, the zone method.

Subp. 2. Section 502.1 of the Model Energy Code is amended by adding a paragraph to read:

502.1.5 5. Thermal transmittance of window area and skylight elements. Thermal transmittance of window area (U_w) and skylight elements (U_s) must be determined in accordance with one of the following methods:

- (1) A. representative U-values U-factors for fenestration products, pages 27-16 to 27-18 of Standard RS-1 listed in chapter 7 systems, ASHRAE, 1993 Handbook of Fundamentals, chapter 27, table 5; or
- (2) Standard RS-26 listed in chapter 7;
- (3) Standard RS-27 or RS-28 listed in chapter 7 using design conditions specified in footnote (a) of table 13, chapter 27 of Standard RS-1; or
- (4) Standard RS-20 listed in chapter 7.

B. NFRC 100-91: Procedure for determining Fenestration Product Thermal Properties (Currently Limited to U-Values).

Subp. 3. **Alternative compliance 6. Effectiveness of required thermal insulation.** Section 502.2.1 of the Model Energy Code is amended by adding a new section to read:

502.2.1.7 **Alternative compliance.** Alternative methods of compliance with sections 502.2.1.1, 502.2.1.2, and 502.2.1.3 for one- and two-family residential buildings. Building assemblies are required to maintain the thermal performance of required insulation and the integrity of building materials against cold weather water vapor condensation and intrusion of unconditioned air.

A. Requirements for buildings. This item classifies two categories of buildings, identifying which elements of subpart 6 are required and when a mechanical ventilation system must be installed. Additional requirements for all buildings are contained in subparts 1 to 5 and 7 to 11.

(1) Table of requirements

Reference in subpart 6

<u>(a) Vapor retarder</u>	<u>Item B</u>
<u>(b) Continuous air barrier at all plumbing and heating penetrations</u>	<u>Item C (1)</u>
<u>(c) Fire stops must be installed to block air movement</u>	<u>Item C (2)</u>
<u>(d) Penetrations in the building envelope for electrical and telecommunications equipment must be sealed to prevent air leakage</u>	<u>Item C (3)</u>
<u>(e) Wind wash barrier required at the exterior edge of attic insulation</u>	<u>Item D (1)</u>
<u>(f) Wind wash barrier required at cantilevered floors and bay windows</u>	<u>Item D (2)</u>
<u>(g) All exterior joints that may be sources of air intrusion must be sealed</u>	<u>Item D (3)</u>
<u>(h) Rim joists must be sealed to prevent air leakage</u>	<u>Item C (4)</u>
<u>(i) The top of interior partition walls must be sealed to prevent air leakage</u>	<u>Item C (5)</u>

(2) Category 1: All buildings, except those classified as category 2 below, must meet all nine requirements in the table above. Residential buildings meeting all nine requirements listed in the table above must have a residential mechanical ventilation system.

(3) Category 2: Buildings where infiltration and natural ventilation are relied on to provide necessary year-round ventilation must meet requirements (a) to (f) in the table above. Category 2 buildings may also be equipped with a mechanical ventilation system. If measures (g), (h), or (i) in the table above are also installed in a residential building, a residential mechanical ventilation system must be installed.

B. Vapor retarder. A vapor retarder must be installed between the interior surface and the winter design condition dew point location within each building envelope surface to prevent diffusion of moisture into thermal insulation.

(1) If the vapor retarder is also intended to serve as the air leakage barrier, then the vapor retarder must be continuously sealed.

(2) EXCEPTION: A vapor retarder need not be installed on rim joist insulation not susceptible to condensation from moisture diffusion.

C. Air leakage barrier. A barrier against air leakage must be installed to prevent the leakage of moisture-laden air from the conditioned space into the building envelope.

(1) Plumbing and heating penetrations. An air barrier must be continuous at all plumbing and heating penetrations of interior surface of the building envelope. If a tub or shower is located on an exterior wall, an air barrier must be provided at the interior surface of the building envelope behind the tub or shower.

(2) Fire stops. When mineral fiber or glass fiber materials are used as fire stop construction at ceilings and wall cavities separating conditioned and unconditioned spaces, the fire stop must be installed to block air movement.

(3) Penetrations for electrical equipment. All penetrations in the building envelope for electrical and telecommunication equipment, including, but not limited to, the service entrance, wires, conduit, cables, boxes, panels, and recessed light fixture installations, must be sealed to prevent air leakage.

(4) Rim joists. Rim joists, band joists, and where floor joists or trusses meet the building envelope must be sealed to prevent air leakage.

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Proposed Rules

(5) Interior partition walls. The top of interior partition walls that join insulated ceilings must be sealed to prevent air leakage.

D. Air intrusion barrier. An air-impermeable barrier must be provided where thermal insulation is susceptible to intrusion of outdoor air.

(1) Attic edge. A baffle must be installed at the exterior edge of attic insulation to mitigate wind wash. Baffles must be rigid material resistant to wind driven moisture.

(2) Overhangs. A barrier must be installed at cantilevered floors and bay windows, including corners with adjoining walls above and below, to mitigate wind wash.

(3) Exterior joints. Exterior joints in the building envelope that may be sources of air intrusion must be caulked, gasketed, joined over solid blocking, or otherwise sealed.

Subp. 7. Air leakage.

A. Doors and windows. Exterior doors and windows must have air infiltration rates not exceeding those shown in this subpart. The allowable air infiltration rates are tested at a pressure differential of 1.567 pounds per square foot, which is equivalent to the impact pressure of a 25-mile per hour wind.

Allowable Air Infiltration Rate

<u>Elements</u>	<u>Value</u>	<u>Dimensional Unit</u>
<u>Windows</u>	<u>0.34</u>	<u>cfm per foot of operable sash crack</u>
<u>Residential doors</u>	<u>0.5</u>	<u>cfm per square foot of door area</u>
<u>Nonresidential doors</u>	<u>1.25</u>	<u>cfm per square foot of door area</u>

For doors, compliance with the criteria for air leakage must be determined by ASTM E283-84.

B. Joints. Joints in the building conditioned envelope that are sources of air leakage such as around window and door frames; between wall cavities and window or door frames; between wall assemblies or their rim joists, sill plates, and foundations; between wall and roof/ceilings and between separate wall panels; openings at any utility and service penetrations through the building envelope shall be sealed with compatible, durable caulking, foam, gasketing, weatherstripping, or other materials.

C. Performance alternative. As an alternative to the prescriptive requirements of item B, detached single-family residential buildings must meet the requirements of this item.

(1) The air leakage rate must be 0.24 cubic feet per minute per square foot of conditioned space or less at 50 pascals when tested in accordance with ASTM 779-87; and

(2) A residential mechanical ventilation system must be installed, and the ventilation rate must be verified by measurement.

Subp. 8. Slab on grade floors. Slab on grade floors must be insulated around the perimeter of the floor. The thermal insulation must be continuous and must be not less than the values in this subpart for buildings located in zones defined in part 1305.5400. The insulation must extend from the top of the slab downward to either the design frost line or to the bottom of the slab then horizontally beneath the slab for a total distance equal to the design frost line.

Zone I (Northern Minnesota)

<u>Heated slab on grade</u>	<u>R-9.0</u>
<u>Unheated slab on grade</u>	<u>R-7.0</u>

Zone II (Southern Minnesota)

<u>Heated slab on grade</u>	<u>R-10.0</u>
<u>Unheated slab on grade</u>	<u>R-8.0</u>

Subp. 9. Foundation walls.

A. Foundation walls enclosing conditioned spaces must be insulated.

B. The thermal resistance of the insulation on the opaque foundation wall must be not less than R-10 from the top of the wall down to the top of the footing.

C. All insulation used in or on foundation walls must be approved for the intended use. The insulation must be installed in accordance with the approved manufacturer's specifications.

D. If foundation wall insulation is on the exterior, the portion from the top of the foundation wall to six inches below grade must be covered by an approved protective coating finish to protect the insulation from deterioration due to sunlight and physical abuse.

E. If foundation wall insulation is on the interior, a moisture barrier must be located between the insulation and the foundation wall from the floor to grade.

Subp. 10. Floors over unheated spaces. Floors over unheated spaces must have a maximum overall thermal transmittance of 0.04.

Subp. 11. Performance and identification of loose fill insulation.

A. Loose fill insulation installed to meet the requirements of this chapter must provide the required performance at 75°F mean temperature and no less than the required performance at winter design conditions.

B. The insulation installer shall place identification in accordance with this subpart in accessible attics of all buildings with loose fill insulation. Such identification shall be used by the code official to verify the claimed insulation.

C. A means must be provided to verify the claimed insulation level by either:

(1) installing insulation thickness markers labeled with a minimum of one-inch increments at approximately ten-foot spacing throughout the attic space at points visible from the attic access point; or

(2) affixing a label or other unique portion of each bag containing the insulation blown into the attic to the attic card.

D. A completed insulation receipt attic card must be attached to the framing near the access opening in a clearly visible place. The attic card must identify the type of insulation installed, the manufacturer, the installer, the R-value, the design settled thickness, the square footage of attic coverage area, and the number of bags installed, and must be signed and dated by the installer.

7670.0480 WALL AND ROOF CRITERIA FOR ONE- AND TWO-FAMILY RESIDENTIAL BUILDINGS.

Subpart 1. Scope. One- and two-family residential buildings that are heated or mechanically cooled must comply with the requirements of subpart 2 or 3.

Subp. 2. Prescriptive criteria. Minimum performance for components of Type A-1 (one- and two-family) buildings:

A. Minimum thermal resistance of the insulation in the roof/ceilings ceilings with attics: R-38 with advanced ceiling framing, or R-49, and in ceilings without attics is R-38 between framing plus R-7 sheathing. Minimum thermal resistance of the insulation in floors not over conditioned space: R-21.

B. Minimum thermal resistance of the insulation in rim joists: R-19.

C. Maximum thermal transmittance of doors: U = 0.20 Btu/h ft² °F.

D. Maximum window and door area as a percentage of overall exposed wall area with the combination of framing technique, R-value of insulation within the insulated cavity, sheathing, R-value, insulation on exposed foundation wall, and window overall U-value as indicated below: U-factor required in this subpart.

MAXIMUM WINDOW AND DOOR AREA AS A PERCENT OF OVERALL EXPOSED WALL

			R-5 Foundation Wall Insulation			
			Window U-Value U-Factor			
Framing	Cavity Insulation	Sheathing	0.49	0.36	0.31	0.27
STANDARD	R-15	≥R-5	11.2%	15.7%	18.6%	21.9%
STANDARD	R-21	<R-5	11.1%	15.5%	18.4%	21.7%
STANDARD	R-21	≥R-5	12.9%	17.8%	21.1%	24.7%
ADVANCED	R-21	<R-5	12.0%	16.7%	19.7%	23.2%
ADVANCED	R-21	≥R-5	13.4%	18.5%	1.8%	25.5%
			R-10 Foundation Wall Insulation			
			Window U-Value			
			0.49	0.36	0.31	0.27
STANDARD	R-13	≥R-7	12.7%	17.8%	21.1%	24.8%
STANDARD	R-15	≥R-5	12.5%	17.6%	20.9%	24.6%
STANDARD	R-18	<R-5	11.7%	16.5%	19.6%	23.2%
STANDARD	R-18	≥R-5	13.7%	19.0%	22.5%	26.4%

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Proposed Rules

Framing	Cavity Insulation	Sheathing	0.49	0.36	0.31	0.27
ADVANCED	R-18	<R-5	12.6%	17.6%	20.9%	24.6%
ADVANCED	R-18	≥R-5	14.1%	19.7%	23.2%	27.2%
STANDARD	R-21	<R-5	12.4%	17.4%	20.6%	24.3%
STANDARD	R-21	≥R-5	14.1%	19.7%	23.2%	27.2%
ADVANCED	R-21	<R-5	13.3%	18.5%	21.9%	25.8%
ADVANCED	R-21	≥R-5	14.7%	20.3%	24.0%	28.0%

Notes:

- 1) maximum of 12 inches foundation wall exposed, excluding window wells.
- 2) E. Foundation windows must be insulated glass, 1/2-inch between panes and wood or vinyl frame, or equivalent.
- 3) standard framing is wall framing that is not advanced as defined in section 201 of the Model Energy Code.

Subp. 3. Performance criteria. The combined thermal transmittance (U_w) factors for walls, roof/ceilings, and floors over unheated spaces must be less than or equal to:

- A. 0.110 Btu/h ft² °F for walls; and
- B. 0.026 Btu/h ft² °F for roof/ceilings.

7670.0490 WALL AND ROOF CRITERIA FOR MULTIFAMILY RESIDENTIAL BUILDINGS, THREE STORIES OR LESS.

Subpart 1. Scope. Residential buildings that are not one- or two-family and are three stories or less in height must comply with the requirements of subpart 2 and either subpart 3 or 4, as applicable.

Subp. 2. Roof assembly. The gross area of the roof/ceiling assembly must have a combined thermal transmittance (U_w) factor not exceeding 0.026 Btu/°F ft².

EXCEPTION: Alterations and repairs to an existing built-up roof must have a thermal transmittance value not exceeding 0.033 Btu/°F ft².

Subp. 3. Zone I walls. For buildings in Zone I (northern Minnesota) as defined in part 1305.5400, the gross area of the exterior walls must have a combined thermal transmittance (U_w) factor not exceeding 0.145 Btu/°F ft².

Subp. 4. Zone II walls. For buildings in Zone II (southern Minnesota) as defined in part 1305.5400, the gross area of the exterior walls must have a combined thermal transmittance (U_w) factor not exceeding 0.150 Btu/°F ft².

7670.0495 ROOF AND WALL CRITERIA FOR ALL OTHER BUILDINGS.

Subpart 1. Scope. Buildings not regulated by part 7670.0480 or 7670.0490 must comply with the requirements of subpart 2 or 3.

Subp. 2. Prescriptive criteria.

A. Zone I. Buildings located in Zone I (northern Minnesota) as defined in part 1305.5400 must comply with this part. The combined thermal transmittance factor (U_w) for the roof/ceiling must not exceed 0.045 Btu/h ft² °F. The maximum window area as a percentage of exposed wall must not exceed the values given in the table below using the thermal transmittance of the opaque wall, thermal transmittance of the window, and shading coefficient (SC) of the window. Interpolations to intermediate values are permitted.

		Maximum Window Area			
Glass $U =$		0.3	0.4	0.5	0.6
Opaque Wall $U = 0.6$					
SU 0.8		32%	27%	23%	20%
SC 0.6		38%	30%	25%	21%
SC 0.4		44%	33%	26%	22%
Opaque Wall $U = 0.7$					
SC 0.8		30%	26%	22%	18%
SC 0.6		36%	29%	23%	19%
SC 0.4		42%	31%	24%	20%
Opaque Wall $U = 0.8$					
SC 0.8		29%	24%	20%	17%
SC 0.6		34%	27%	21%	17%
SC 0.4		40%	29%	22%	18%

<u>Glass U =</u>	<u>0.3</u>	<u>0.4</u>	<u>0.5</u>	<u>0.6</u>
<u>Opaque Wall U = 0.9</u>				
<u>SC 0.8</u>	<u>27%</u>	<u>22%</u>	<u>18%</u>	<u>15%</u>
<u>SC 0.6</u>	<u>32%</u>	<u>24%</u>	<u>19%</u>	<u>16%</u>
<u>SC 0.4</u>	<u>37%</u>	<u>26%</u>	<u>20%</u>	<u>16%</u>

B. Zone II. Buildings located in Zone II (southern Minnesota), as defined in part 1305.5400, must comply with this part. The combined thermal transmittance factor (U_c) for the roof/ceiling must not exceed 0.040 Btu/h ft² °F. The maximum window area as a percentage of exposed wall must not exceed the values given in the table below using the thermal transmittance of the opaque wall, thermal transmittance of the windows, and shading coefficient (SC) of the windows. Interpolations to intermediate values are permitted.

	<u>Maximum Window Area</u>			
<u>Glass U =</u>	<u>0.3</u>	<u>0.4</u>	<u>0.5</u>	<u>0.6</u>
<u>Opaque Wall U = .06</u>				
<u>SC 0.8</u>	<u>23%</u>	<u>22%</u>	<u>20%</u>	<u>18%</u>
<u>SC 0.6</u>	<u>30%</u>	<u>27%</u>	<u>24%</u>	<u>21%</u>
<u>SC 0.4</u>	<u>40%</u>	<u>33%</u>	<u>29%</u>	<u>25%</u>
<u>Opaque Wall U = .07</u>				
<u>SC 0.8</u>	<u>23%</u>	<u>21%</u>	<u>19%</u>	<u>18%</u>
<u>SC 0.6</u>	<u>29%</u>	<u>25%</u>	<u>23%</u>	<u>20%</u>
<u>SC 0.4</u>	<u>38%</u>	<u>32%</u>	<u>27%</u>	<u>23%</u>
<u>Opaque Wall U = .08</u>				
<u>SC 0.8</u>	<u>22%</u>	<u>20%</u>	<u>18%</u>	<u>16%</u>
<u>SC 0.6</u>	<u>28%</u>	<u>24%</u>	<u>21%</u>	<u>19%</u>
<u>SC 0.4</u>	<u>37%</u>	<u>31%</u>	<u>26%</u>	<u>22%</u>
<u>Opaque Wall U = .09</u>				
<u>SC 0.8</u>	<u>21%</u>	<u>19%</u>	<u>17%</u>	<u>16%</u>
<u>SC 0.6</u>	<u>27%</u>	<u>23%</u>	<u>20%</u>	<u>18%</u>
<u>SC 0.4</u>	<u>35%</u>	<u>29%</u>	<u>24%</u>	<u>21%</u>

Subp. 3. Performance criteria. The envelope criteria for buildings located anywhere in Minnesota may be determined by the Envelope System Performance Compliance Calculation program.

BUILDING MECHANICAL SYSTEMS

7670.0610 AMENDMENTS TO SECTION 503: BUILDING MECHANICAL SYSTEMS.

Subpart 1. General.

A. Scope. Building mechanical systems must be designed and constructed in accordance with this part. Standards and definitions for building mechanical systems are located in Code of Federal Regulations, title 10, parts 430 and 435, Energy Conservation Standards for Consumer Products, and Energy Conservation Voluntary Performance Standards for new buildings.

B. Exception. Special applications, including, but not limited to, hospitals, laboratories, thermally sensitive equipment rooms, computer rooms, and facilities with open refrigerated display cases may be exempted from certain requirements of this part when approved by the building official.

Subp. 2. Heated commercial parking garages. An enclosed structure or portion of an enclosed structure constructed after January 1, 1978, and used primarily as a commercial parking facility for three or more motor vehicles may not be heated. Incidental heating resulting from building exhaust air passing through a parking facility is not prohibited if substantially all useful heat previously has been removed from the air.

EXCEPTION: Parking facilities that are appurtenant to dwelling unit occupancies.

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Proposed Rules

Subp. 3. Calculation procedures. Section 503.2.1 of the Model Energy code is amended to read: 503.2.1 Calculation procedures.

A. Design loads. Heating and cooling system design loads for the purpose of sizing systems and equipment must be determined in accordance with the procedures described in Standard RS-1 listed in chapter 7 ASHRAE, 1993 Handbook of Fundamentals, chapters 25 and 26.

503.2.1.1 B. Safety factor. Design loads may at the designer's option be increased by as much as ten percent to account for unexpected loads or changes in space usage.

503.2.1.2 C. Pick-up loads. Transient loads such as warm-up or cool-down loads that occur after off-hour setback or shutoff may be calculated from principles based on the heat capacity of the building and its contents, the degree of setback, and desired recovery time; or may be assumed to be up to 30 percent for heating and ten percent for cooling of the steady-state design loads. The steady-state load may include a safety factor in accordance with section 503.2.1.1 item B.

Subp. 2. 4. System and equipment sizing. Section 503.2 of the Model Energy Code is amended by adding a paragraph to read: 503.2.3

A. Standard. System and equipment sizing. HVAC systems and equipment must be sized to provide no more than the space and system loads calculated in accordance with 503.2.1 subpart 3.

B. Exceptions:

(a) (1) Equipment capacity may exceed the design load if the equipment selected is the smallest size needed to meet the load within available options of the desired equipment line.

(b) (2) Equipment whose capacity exceeds the design load may be specified if oversizing the equipment can be shown to not increase the overall annual energy costs.

(c) (3) Stand-by equipment may be installed if controls and devices are provided that allow stand-by equipment to operate automatically only when the primary equipment is not operating.

(d) (4) Multiple units of the same equipment type, such as multiple chillers and boilers, with combined capacities exceeding the design load may be specified to operate concurrently only if controls are provided that sequence or otherwise optimally control the operation of each unit based on load.

(e) (5) For a single piece of equipment that has both heating and cooling capability, only one function, either the heating or the cooling, need meet the requirements of this section part. Capacity for the other function must be, within available equipment options, the smallest size necessary to meet the load.

Subp. 3. Air systems. Section 503.5.1 of the Model Energy Code is amended to read:

Subp. 5. Simultaneous heating and cooling.

A. General. Use of simultaneous heating and cooling by reheating or recooling supply air or by concurrent operation of independent heating and cooling systems serving a common zone must be restricted according to items B to D.

B. Recovered energy. Recovered energy in excess of the new energy expended in the recovery process may be used for control of temperature and humidity.

C. New energy for humidity control. New energy may be used to prevent relative humidity from rising above 60 percent for comfort control or to prevent condensation on terminal units or outlets, or functioning of special equipment.

D. New energy for temperature control. New energy may be used for temperature control if minimized in accordance with subitems (1) to (5).

(1) Reheat systems. Systems employing reheat and serving multiple zones, other than those employing variable air volume for temperature control, must be provided with control that will automatically reset the system cold-air supply to the highest temperature level that will satisfy the zone requiring the coolest air. Single-zone reheat systems must be controlled to sequence reheat and cooling.

(2) Dual duct and multizone systems. These systems, other than those employing variable air volume for temperature control, must be provided with control that will automatically reset:

(a) the cold-deck air supply to the highest temperature that will satisfy the zone requiring the coolest air; and

(b) the hot-deck air supply to the lowest temperature that will satisfy the zone requiring the warmest air.

(3) Recooling systems. Systems in which heated air is recooled, directly or indirectly, to maintain space temperature must be provided with control that will automatically reset the temperature to which the supply air is heated to the lowest level that will satisfy the zone requiring the warmest air.

(4) Multiple zones. For systems with multiple zones, one or more zones may be chosen to represent a number of zones with similar heating/cooling characteristics. A multiple zone system that employs reheating or recooling for control of not more than

5,000 cfm, or 20 percent of the total supply air of the system, whichever is less, must be exempt from the supply-air-temperature reset requirement of subitems (1) to (3).

(5) Concurrent operation. Concurrent operation of independent heating and cooling systems serving common spaces and requiring the use of new energy for heating or cooling must be minimized by:

(a) providing sequential temperature control of both heating and cooling capacity in each zone; or

(b) limiting the heat energy input through automatic reset control of the heating medium temperature, or energy input rate, to only that necessary to offset heat loss due to transmission and infiltration and, where applicable, to heat the ventilation air supply to the space.

Subp. 6. Heat-operated water chiller packages. Double-effect, heat-operated water chilling packages must be used in lieu of single-effect equipment.

EXCEPTION: Single-effect equipment may be used when the energy input is from low temperature waste-heat or renewable energy sources.

Subp. 7. Heat pumps.

A. Heat pumps must be provided with a control to prevent supplementary heater operation when the operating load can be met by the heat pump alone.

B. Supplementary heater operation is permitted during transient periods, such as start-ups, following room thermostat set-point advance, and during defrost. A two-stage thermostat, which controls the supplementary heat on its second stage, must be accepted as meeting this requirement. The cut-on temperature for the compression heating must be higher than the cut-on temperature for the supplementary heat, and the cut-off temperature for the compression heating must be higher than the cut-off temperature for the supplementary heat.

Subp. 8. Mechanical ventilation.

A. Requirement. Both supply and exhaust ducts of mechanical ventilation systems must be equipped with a means for shutoff or volume reduction and shutoff when ventilation is not required. Automatic or gravity dampers that close when the system is not operating must be provided for outdoor air intakes and exhausts. Automatic or manual dampers installed for the purpose of shutting off ventilation systems must be designed with tight shutoff characteristics to minimize air leakage.

B. EXCEPTIONS:

(1) Manual dampers for outdoor air intakes may be used in the following cases:

(a) for single-family and multifamily residential buildings; and

(b) if the fan system capacity is less than 2,500 cfm.

(2) Dampers are not required when the ventilation system is designed for continuous operation.

~~503-5.5 Air systems.~~ Subp. 9. Transport energy. The power required by motors of constant air volume fan systems must not exceed 0.8 W/cfm of supply air at design conditions.

The power required by motors of variable air volume fan systems must not exceed 1.25 W/cfm of supply air at design conditions.

~~Subp. 4-~~ 10. Pumping system design criteria. ~~Section 503-5.2 of the Model Energy Code is amended to read: 503-5.2 Piping friction loss.~~ Piping systems must be designed at a friction pressure loss rate of no more than 4.0 ft- ~~feet~~ of water per 100 equivalent ft- ~~feet~~ of pipe where a "C-factor" of 125 is used.

~~Subp. 5-~~ 11. Variable flow pumping. ~~Section 503-5 of the Model Energy Code is amended by adding a paragraph to read: 503-5.3 Variable flow pumping.~~ Pumping systems serving control valves designed to modulate or step open and closed as a function of load must be designed for variable fluid flow. The system must be capable of reducing system flow to 50 percent of design flow or less.

EXCEPTIONS: Pumping loops where a minimum flow greater than 50 percent of the design flow is required for the proper operation of equipment served by the system, such as chiller loops and systems that serve no more than one control valve.

~~Subp. 6-~~ 12. Balancing. ~~Section 503-6 of the Model Energy Code is amended to read: 503-6 Balancing.~~ Means must be provided to balance air and water systems in accordance with this ~~section~~ part.

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Proposed Rules

503-6-1 A. Air system balancing. Air systems must be balanced. Fan speed must be adjusted to meet design air system flow.

EXCEPTION: Speed adjustment is not required for air system balancing with fan motors of 1 hp or less.

503-6-2 B. Hydronic system balancing. Hydronic systems must be balanced. Pump impellers must be trimmed or pump speed must be adjusted to meet design system flow.

EXCEPTION: Impeller trimming or speed adjustment is not required for hydronic system balancing with pump motors of 5 hp or less.

503-6-3 C. Systems balancing reports. Systems balancing reports must be submitted to the building official upon request.

Subp. 13. Economizer cycle.

A. Requirement. Each fan system must be designed to use up to and including 100 percent of the fan system capacity for cooling with outdoor air automatically whenever its use will result in lower usage of new energy. Activation of the economizer cycle must be controlled by sensing outdoor air enthalpy or outdoor air dry-bulb temperature alone or alternate means approved by the building official.

B. EXCEPTIONS: Cooling with outdoor air is not required if:

- (1) the fan capacity is less than 5,000 cfm or total cooling capacity is less than 134,000 Btu per hour;
- (2) the quality of the outdoor air is so poor as to require extensive treatment of the air and approval by the building official;
- (3) the need for humidification or dehumidification requires the use of more energy than is conserved by the outdoor air cooling on an annual basis;
- (4) the use of outdoor air cooling may affect the operation of other systems so as to increase the overall energy consumption of the building;
- (5) energy recovered from an internal/external zone heat recovery system exceeds the energy conserved by outdoor air cooling on an annual basis;
- (6) all space cooling is accomplished by a circulating liquid which transfers space heat directly or indirectly to a heat rejection device such as a cooling tower without the use of a refrigeration system;
- (7) the use of 100 percent outside air will cause coil frosting, controls may be added to reduce the quantity of outside air; however, the intent of this exception is to use 100 percent air in lieu of mechanical cooling when less energy usage will result and this exception applies only to direct expansion systems when the compressors are running;
- (8) the fan system will regularly be operated for less than 30 hours per week;
- (9) the total design sensible cooling load is less than 6.8 Btu/h/ft² of floor area; or
- (10) the building is a single-family or multifamily residential building.

Subp. 7- 14. Controls. Section 503-8 of the Model Energy Code is amended by adding paragraphs to read:

A. Temperature control. Each system must be provided with at least one adjustable thermostat for the regulation of temperature. Each thermostat must be capable of being set by adjustment or selection of sensors as follows:

- (1) when used to control heating only, it must be capable of being set from 55 to 75 degrees Fahrenheit;
- (2) when used to control cooling only, it must be capable of being set from 70 to 85 degrees Fahrenheit;
- (3) when used to control both heating and cooling, it must be capable of being set from 55 to 85 degrees Fahrenheit and must be capable of operating the system heating and cooling in sequence. The thermostat or control system must have an adjustable deadband of up to ten degrees Fahrenheit or more except as allowed by subpart 5, item D, subitem (5), unit (b).

B. Humidity control.

- (1) A humidistat must be provided if a system is equipped with a means for adding moisture to maintain specific selected relative humidities in spaces or zones.
- (2) A humidistat must be provided to control ventilating systems serving pool and spa areas.
- (3) Humidistats must be capable of being set to prevent new energy from being used to produce space-relative humidity above 30 percent. When a humidistat is used in a system for controlling moisture removal to maintain specific selected relative humidities in spaces or zones, it must be capable of being set to prevent new energy from being used to produce a space-relative humidity less than 60 percent.

EXCEPTION: Special occupancies requiring different relative humidities may be permitted by the building official.

C. Zoning for temperature control.

(1) One- and two-family dwellings. At least one thermostat for regulation of space temperature must be provided for each separate system. In addition, a readily accessible manual or automatic means must be provided to partially restrict or shut off the heating or cooling input to each zone or floor.

(2) Multifamily dwellings. For multifamily dwellings, each individual dwelling unit must have at least one thermostat for regulation of space temperature. A readily accessible manual or automatic means must be provided to partially restrict or shut off the heating or cooling input to each room. Spaces other than living units must meet the requirements of subitem (3).

(3) Other types of buildings or occupancies. At least one thermostat for regulation of space temperature must be provided for:

(a) each separate system; or

(b) each separate zone as defined in part 7670.0325. As a minimum, each floor of a building must be considered as a separate zone. In a multistory building where the perimeter system offsets only the transmission losses of the exterior wall, an entire side of uniform exposure may be zoned separately. A readily accessible manual or automatic means must be provided to partially restrict or shut off the heating or cooling input to each floor.

(4) Control setback and shutoff.

(a) Residential occupancy groups. One- and two-family and multifamily dwellings: the thermostat required in subitems (1) and (2) or an alternate means, including, but not limited to, a switch or a clock, must provide a readily accessible manual or automatic means for reducing the energy required for heating and cooling during periods of nonuse or reduced need including, but not limited to, unoccupied periods and sleeping hours. Lowering thermostat set points to reduce energy consumption of heating systems must not cause energy to be expended to reach the reduced setting.

(b) Other buildings and occupancies. Each system must be equipped with a readily accessible means of shutting off or reducing the energy used during periods of nonuse or alternate uses of the building spaces or zone served by the system. Acceptable means include, but are not limited to:

i. manually adjusted automatic timing devices;

ii. manual devices for use by operating personnel; and

iii. automatic control systems.

503-8-4 D. Variable air volume (VAV) fan controls. VAV fans with motors 75 hp and larger must provide controls for the fan motor to demand no more than 50 percent of design wattage at 50 percent of design air volume, based on manufacturer's test data.

503-8-6 E. HVAC control system testing. HVAC control systems must be tested to assure that control elements are calibrated, adjusted, and in proper working condition.

Subp. 8-15. Air-handling Duct system insulation. Section 503-9-1 of the Model Energy Code is amended by modifying the definition of delta t to read:

Where delta t = Ducts must be insulated in accordance with this subpart.

Minimum Required Duct Insulation
(see table notes for letter interpretations)

<u>Duct Location</u>	<u>Cooling only or heating and cooling</u>	<u>Heating only</u>
<u>Exterior of building, attics, garages, and ventilated crawl spaces</u>	<u>C, V, and W</u>	<u>C and W</u>
<u>Inside of building and in unconditioned spaces! TD less than 25°F</u>	<u>None required</u>	<u>None required</u>
<u>TD greater than 25°F and less than 40°F</u>	<u>A and V</u>	<u>A</u>
<u>TD greater than 40°F</u>	<u>B and V</u>	<u>B</u>
<u>Within conditioned space or in basements with insulated walls</u>	<u>None required</u>	<u>None required</u>

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Proposed Rules

<u>Duct Location</u>	<u>Cooling only or heating and cooling</u>	<u>Heating only</u>
<u>Intake and exhaust ducts²</u>	<u>A and V</u>	<u>A</u>
<u>Within cement slab or within ground</u>	<u>B</u>	<u>B</u>

NOTES:

¹Duct insulation is not required at the following locations:

(a) ceilings which form plenums; and

(b) for that portion of the duct which is located within a wall or a floor-ceiling space with conditioned space on both sides.

²Exhaust ducts within a heated space must be insulated for a distance of three feet from the duct outlet.

A = A material with installed minimum thermal resistance of R-3.3. Examples:

1.5-inch, 0.60 lb/cu ft mineral fiber, slag, or fiberglass blankets;

one-inch, 1.5 to 3.0 lb/cu ft mineral fiber blanket duct liner;

one-inch, 3.0 to 10.0 lb/cu ft mineral fiber board.

B = A material with installed minimum thermal resistance of R-5.0. Insulation encased in cement or within ground must be approved for that application and be installed on the bottom and sides of plenums. Examples:

2.5-inch, 0.60 lb/cu ft mineral fiber, slag, or fiberglass blankets;

1.5-inch, 1.5 to 3.0 lb/cu ft mineral fiber blanket duct liner;

1.5-inch, 3.0 to 10.0 lb/cu ft mineral fiber board;

one-inch, 1.35 lb/cu ft extruded polystyrene board.

C = A material with installed minimum thermal resistance of R-8.0. Examples:

four-inch, 0.60 lb/cu ft mineral fiber, slag, or fiberglass blankets;

two-inch, 1.5 to 3.0 lb/cu ft mineral fiber blanket duct liner;

two-inch, three to ten lb/cu ft mineral fiber board.

The example of materials listed under each type is not meant to limit other available thickness or density combinations with the equivalent installed resistance based on the insulation only.

V = Vapor retarder with all joints sealed.

W = Approved weatherproof barrier.

TD = the design temperature differential between the air in the duct and the ambient temperature outside of the duct.

Subp. 9-16. Duct construction. Section 503.10 of the Model Energy Code is amended to read: 503.10 Duct construction. Ductwork must be constructed and erected in accordance with chapter 1346, Uniform Mechanical Code, adopted by the Department of Administration.

503.10.1 Duct leakage test. Ductwork designed to operate at static pressure in excess of 3 in. we. must be leak tested and classified in a duct leakage class equal to or less than leakage Class 6 according to Standard RS-18 listed in chapter 7.

503.10.2 Additional sealing. Where supply air ducts and plenums that are designed to operate at static pressures from 0.25 in. to 3 in. we. inclusive are located outside of conditioned space or in return plenums, joints must be sealed in accordance with Seal Class B as defined in Standards RS-17, RS-18, and RS-19 listed in chapter 7. All other ducts and plenums operating from 0.25 in. to 3 in. we. inclusive Ducts must be sealed in accordance with Seal Class C this subpart. Pressure sensitive tape must not be used as the primary sealant where for ducts are designed to operate at static pressure of 1 in. we. water gauge or greater. All joints between dissimilar duct materials must be sealed.

Minimum Required Sealing

<u>Location</u>	<u>Design Static Pressure</u>	<u>Sealing Required</u>
<u>All locations</u>	<u>Greater than three inches water gauge</u>	<u>Joints, seams, and all wall penetrations must be sealed. If requested by the building official, ductwork must achieve a leakage test result no less than Class 6 in accordance with SMACNA HVAC Duct Leakage Test Manual.</u>

<u>Location</u>	<u>Design Static Pressure</u>	<u>Sealing Required</u>
<u>Outside conditioned space</u>	<u>3.0 inches water gauge and less</u>	<u>All transverse joints and seams must be sealed.</u>
<u>All locations</u>	<u>3.0 inches water gauge and less</u>	<u>All transverse joints must be sealed.</u>

Subp. 17. Pipe insulation.

A. Piping installed to service buildings and within buildings must be thermally insulated in accordance with this subpart. For service water-heating systems, see part 7670.0710.

EXCEPTIONS: Piping insulation is not required if:

- (1) piping is installed within HVAC equipment;
- (2) piping is at fluid temperatures between 55 and 120°F when not required for energy conservation purposes;
- (3) the heat loss or heat gain of the piping without insulation does not increase the energy requirement of the building; and
- (4) piping is installed in basements, cellars, or unventilated crawl spaces having insulated walls in one- and two-family dwellings.

B. Other insulation thicknesses. Insulation thicknesses in the minimum HVAC System Pipe Insulation table are based on insulation having thermal resistivity in the range of 4.0 to 4.6 h ft² °F/Btu per inch of thickness on a flat surface at a mean temperature of 75°F.

Minimum insulation thickness must be increased for materials having values less than 4.0, or may be reduced for materials having values greater than 4.6 as follows:

For materials with thermal resistivity greater than 4.6, the minimum insulation thickness may be reduced as follows:

New Minimum Thickness = [4.6 x Thickness from Table] ÷ Actual thermal resistance.

For materials with thermal resistivity less than 4.0, the minimum insulation thickness must be increased as follows:

New Minimum Thickness = [4.0 x Thickness from Table] ÷ Actual thermal resistance.

Minimum HVAC System Pipe Insulation

INSULATION THICKNESS FOR PIPE SIZES¹ (INCHES)

<u>PIPING SYSTEM TYPES</u>	<u>FLUID TEMPERATURE RANGE, °F</u>	<u>Runouts² 2"</u>	<u>1" and Less</u>	<u>1-1/4" to 2"</u>	<u>2-1/2" to 4"</u>	<u>5" to 6"</u>	<u>8" and larger</u>
HEATING SYSTEMS							
<u>Steam and Hot Water</u>							
<u>high pressure/temp.</u>	<u>306 - 450</u>	<u>1-1/2</u>	<u>2-1/2</u>	<u>2-1/2</u>	<u>3</u>	<u>3-1/2</u>	<u>3-1/2</u>
<u>med. pressure/temp.</u>	<u>251 - 305</u>	<u>1-1/2</u>	<u>2</u>	<u>2-1/2</u>	<u>2-1/2</u>	<u>3</u>	<u>3</u>
<u>low pressure/temp.</u>	<u>201 - 250</u>	<u>1</u>	<u>1-1/2</u>	<u>1-1/2</u>	<u>2</u>	<u>2</u>	<u>2</u>
<u>low temperature</u>	<u>120 - 200</u>	<u>1/2</u>	<u>1</u>	<u>1</u>	<u>1-1/2</u>	<u>1-1/2</u>	<u>1-1/2</u>
<u>Steam and Condensate (for feed water)</u>	<u>Any</u>	<u>1</u>	<u>1</u>	<u>1-1/2</u>	<u>2</u>	<u>2</u>	<u>2</u>
COOLING SYSTEMS							
<u>Chilled water</u>	<u>40 - 55</u>	<u>1/2</u>	<u>1/2</u>	<u>3/4</u>	<u>1</u>	<u>1</u>	<u>1</u>
<u>Refrigerant or Brine</u>	<u>Below 40</u>	<u>1</u>	<u>1</u>	<u>1-1/2</u>	<u>1-1/2</u>	<u>1-1/2</u>	<u>1-1/2</u>

¹For piping exposed to outdoor air, increase thickness by one-half inch.

²Runouts not exceeding 12 feet in length to individual terminal units.

C. Vapor retarders. Additional insulation with vapor retarder must be provided to prevent condensation.

EXCEPTION: The vapor retarder may be omitted when it can be demonstrated that condensation is not a problem.

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Proposed Rules

Subp. 10-18. Operation and maintenance manual. Section 503 of the Model Energy Code is amended by adding a paragraph to read:

~~503.12 Operation and maintenance manual.~~ An operation and maintenance manual must be provided. The manual must include basic data relating to the operation and maintenance of HVAC systems and equipment. Required routine maintenance actions must be clearly identified. Where applicable, HVAC controls information such as diagrams, schematics, control sequence descriptions, and maintenance and calibration information must be included.

7670.0660 AMENDMENT TO SECTION 503: EQUIPMENT EFFICIENCY.

Subpart 1. HVAC equipment efficiency performance requirements. Section 503.4 of the Model Energy Code, with the exception of sections 503.4.2.3 and 503.4.4, is amended to read:

503.4 HVAC equipment performance requirements. HVAC equipment must meet minimum efficiency requirements specified in Standard RS-10 listed in chapter 7 with the following exceptions: this part.

(1) Table 8-3-6 is amended to cite the reference standard for air conditioners, air cooled as ARI 360-86; to cite the reference standard for air conditioners, water/evaporatively cooled as ARI 360-86; and efficiency requirements added as follows: Standards and definitions for HVAC equipment are located in Code of Federal Regulations, title 10, parts 430 and 435, Energy Conservation Standards for Consumer Products, and Energy Conservation Voluntary Performance Standards for new buildings.

Air Conditioners (air cooled)	≥760,000 Btu/h 8.5 EER	>760,000 Btu/h 8.2 EER
Heat Pumps (cooling) (air cooled)	<760,000 Btu/h 8.5 EER	≥760,000 Btu/h 8.7 EER

(2) Table 8-3-7 is amended to read:

WATER COOLED	CFC	NON-CFC
Centrifugal	0.63 KW/Ton	0.73 KW/Ton
Helical rotary (screw)	0.75 KW/Ton	0.80 KW/Ton
Reciprocating or Scroll	0.93 KW/Ton	
AIR COOLED (any type)		
≥150 Ton	1.41 KW/Ton	
<150 Ton	1.30 KW/Ton	

503.4.4 Heat-operated water chilling packages.

Double-effect, heat-operated water chilling packages must be used in lieu of single-effect equipment, except where the energy input is from low temperature waste-heat or renewable energy sources.

Subp. 2. Electrically operated, air-cooled equipment. Unitary air conditioners and heat pumps air-cooled, electrically operated must meet the requirements of this subpart.

<u>EQUIPMENT CATEGORY</u>	<u>EQUIPMENT SIZES & MODE</u>	<u>RATING CONDITION</u>	<u>EFFICIENCY</u>
<u>One Phase Single Package</u>	<u><65,000 Btu/h Cooling Capacity Cooling Mode</u>	<u>Seasonal Rating</u>	<u>9.7 SEER</u>
<u>Split System</u>			<u>10.0 SEER</u>
<u>Three Phase Split System & Single Package</u>	<u><65,000 Btu/h Cooling Capacity Cooling Mode</u>	<u>Standard Rating (95°F db) Integrated Part Load Value (80°F db)</u>	<u>9.5 EER 8.5 IPLV*</u>
<u>All Phase Split System & Single Package</u>	<u>≥65,000<135,000 Btu/h Cooling Mode</u>	<u>Standard Rating (95°F db) Integrated Part Load Value (80°F db)</u>	<u>8.9 EER 8.3 IPLV*</u>
<u>One Phase Split System</u>	<u><65,000 Btu/h Cooling Capacity Heating Mode</u>	<u>Seasonal Rating</u>	<u>6.8 HSPF**</u>
<u>Single Package</u>			<u>6.6 HSPF**</u>

<u>EQUIPMENT CATEGORY</u>	<u>EQUIPMENT SIZES & MODE</u>	<u>RATING CONDITION</u>	<u>EFFICIENCY</u>
<u>Three Phase Split System & Single Package</u>	<u><65,000 Btu/h Cooling Capacity Heating Mode</u>	<u>High Temperature Rating (47°F db/43°F wb)</u> <u>Low Temperature Rating (17°F db/15°F wb)</u>	<u>3.0 COP</u> <u>2.0 COP</u>
<u>All Phases Split System & Single Package</u>	<u>≥65,000<135,000 Btu/h Cooling Capacity Heating Mode</u>	<u>High Temperature Rating (47°F db/43°F wb)</u> <u>Low Temperature Rating (17°F db/15°F wb)</u>	<u>3.0 COP</u> <u>2.0 COP</u>

*IPLV - Integrated Part Load Value.

**HSPF - Heating Seasonal Performance Factor.

Subp. 3. **Efficiency requirements Electrically operated, evaporatively cooled equipment.** HVAC system heating and cooling equipment regulated by the National Appliance Energy Conservation Act of 1987 must conform to the efficiency requirements of Standard RS-5 listed in chapter 7. Unitary air conditioners and heat pumps evaporatively cooled, electrically operated must meet the requirements of this subpart.

<u>EQUIPMENT CATEGORY</u>	<u>EQUIPMENT SIZES & MODE</u>	<u>RATING CONDITION</u>	<u>EFFICIENCY</u>
<u>All Equipment</u>	<u><65,000 Btu/h Cooling Capacity</u>	<u>Indoor Temperature (80°F db/67°F wb)</u> <u>Outdoor Temperature (95°F db/75°F wb)</u> <u>Integrated Part Load Value (80°F db/67°F wb)</u>	<u>9.3 EER</u> <u>8.5 IPLV</u>
	<u>≥65,000<135,000 Btu/h Cooling Capacity</u>	<u>Indoor Temperature (80°F db/67°F wb)</u> <u>Outdoor Temperature (95°F db/75°F wb)</u> <u>Integrated Part Load Value (80°F db/67°F wb)</u>	<u>10.5 EER</u> <u>9.7 IPLV</u>

Subp. 4. **Water-cooled equipment.** Water-cooled air conditioners and heat pumps must meet the requirements of this subpart. Minnesota Statutes, section 103G.001, subdivision 13a, prohibits once-through systems.

<u>EQUIPMENT CATEGORY</u>	<u>EQUIPMENT SIZES</u>	<u>RATING CONDITION</u>	<u>EFFICIENCY</u>
<u>Water-Source Heat Pumps</u>	<u><65,000 Btu/h Cooling Capacity</u>	<u>Standard Rating Indoor Air (80°F db/67°F wb) and Entering Water (85°F)</u> <u>Low Temperature Rating Indoor Air (80°F db/67°F wb) and Entering Water (75°F)</u>	<u>9.3 EER</u> <u>10.2 EER</u>

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Proposed Rules

<u>EQUIPMENT CATEGORY</u>	<u>EQUIPMENT SIZES</u>	<u>RATING CONDITION</u>	<u>EFFICIENCY</u>
	$\geq 65,000 < 135,000$ Btu/h <u>Cooling Capacity</u>	<u>Standard Rating</u> <u>Indoor Air (80°F db/ 67°F wb) and</u> <u>Entering Water (85°F)</u>	<u>10.5 EER</u>
<u>Groundwater-Cooled Heat Pumps</u>	$< 135,000$ Btu/h <u>Cooling Capacity</u>	<u>Standard Rating</u> <u>Entering Water (70°F)</u> <u>Low Temperature</u> <u>Rating</u> <u>Entering Water (50°F)</u>	<u>11.0 EER</u> <u>11.5 EER</u>
<u>Water-Cooled Unitary Air Conditioners</u>	$< 65,000$ Btu/h <u>Cooling Capacity</u>	<u>Standard Rating</u> <u>Indoor Air (80°F db/ 67°F wb) and</u> <u>Entering Water (85°F)</u> <u>Integrated Part</u> <u>Load Value</u> <u>Entering Water (75°F)</u>	<u>9.3 EER</u> <u>8.3 IPLV</u>
	$\geq 65,000 < 135,000$ Btu/h <u>Cooling Capacity</u>	<u>Standard Rating</u> <u>Indoor Air (80°F db/ 67°F wb) and</u> <u>Entering Water</u> <u>(85°F)</u>	<u>10.5 EER</u>

Subp. 5. Packaged terminal equipment. Packaged terminal air conditioners and heat pumps air-cooled, electrically operated must meet the requirements of this subpart.

<u>EQUIPMENT CATEGORY</u>	<u>EQUIPMENT SIZES & MODE</u>	<u>RATING CONDITION</u>	<u>EFFICIENCY</u>
<u>PTAC & PTAC H.P.'s</u>	<u>All Capacities Cooling Mode</u>	<u>Standard Rating</u> <u>(95°F db)</u> <u>Low Temperature</u> <u>Rating (82°F db)</u>	<u>10.0 - (.16 x Cap. 1,000) EER</u> <u>12.2 - (.20 x Cap. 1,000) EER</u>
<u>PTAC H.P.'s</u>	<u>All Capacities Heating Mode</u>	<u>Standard Rating</u> <u>(47°F db/43°F wb)</u>	<u>2.9 - (.026 x Cap. 1,000) COP</u>

Where: "Cap." is the rated cooling capacity in Btu/h.

Subp. 6. Room equipment. Room air conditioners and room air conditioner heat pumps must meet the requirements of this subpart.

<u>EQUIPMENT CATEGORY</u>	<u>EQUIPMENT SIZES & MODE</u>	<u>EFFICIENCY</u>
<u>Without Reverse Cycle and</u> <u>With Louvered Sides</u>	$< 6,000$ Btu/h $\geq 6,000 < 8,000$ Btu/h $\geq 8,000 < 14,000$ Btu/h $\geq 14,000 < 20,000$ $\geq 20,000$ Btu/h	<u>8.0 EER</u> <u>8.5 EER</u> <u>9.0 EER</u> <u>8.8 EER</u> <u>8.2 EER</u>
<u>Without Reverse Cycle and</u> <u>Without Louvered Sides</u>	$< 6,000$ Btu/h $> 6,000 < 20,000$ Btu/h $> 20,000$ Btu/h	<u>8.0 EER</u> <u>8.5 EER</u> <u>8.2 EER</u>
<u>With Reverse Cycle and</u> <u>With Louvered Sides—</u> <u>All Capacities</u>		<u>8.5 EER</u>
<u>With Reverse Cycle and</u> <u>Without Louvered Sides—</u> <u>All Capacities</u>		<u>8.0 EER</u>

Subp. 7. Water-source equipment. Water-source and groundwater source heat pumps electrically operated must meet the requirements of this subpart. Minnesota Statutes, section 103G.001, subdivision 13a, prohibits once-through systems.

<u>EQUIPMENT CATEGORY</u>	<u>EQUIPMENT SIZES</u>	<u>RATING CONDITION</u>	<u>EFFICIENCY</u>
<u>Water-Source Heat Pumps</u>	<u><135,000 Btu/h</u>	<u>Standard Rating</u> <u>Entering Water (70°F)</u>	<u>3.8 COP</u>
<u>Groundwater-Source Heat Pumps</u>	<u><135,000 Btu/h</u>	<u>High Temperature Rating</u> <u>Entering Water (70°F)</u> <u>Low Temperature Rating</u> <u>Entering Water (50°F)</u>	<u>3.4 COP</u> <u>3.0 COP</u>

Subp. 8. Large unitary equipment. Large unitary air conditioners and heat pumps electrically operated must meet the requirements of this subpart.

<u>EQUIPMENT CATEGORY</u>	<u>EQUIPMENT SIZES</u>	<u>RATING CONDITION</u>	<u>EFFICIENCY</u>
<u>Air Conditioners</u>	<u>>135,000 Btu/h</u>		<u>8.5 EER</u>
<u>Air-Cooled</u>	<u><760,000 Btu/h</u>		<u>7.5 IPLV</u>
	<u>>760,000 Btu/h</u>		<u>8.2 EER</u> <u>7.5 IPLV</u>
<u>Air Conditioners</u> <u>Water/Evap. — Cooled</u>	<u>>135,000 Btu/h</u>		<u>9.6 EER</u> <u>9.0 IPLV</u>
<u>Heat Pumps</u> <u>Air-Cooled</u> <u>Cooling</u>	<u>>135,000 Btu/h</u> <u><760,000 Btu/h</u> <u>≥760,000 Btu/h</u>		<u>8.5 EER</u> <u>7.5 IPLV</u> <u>8.7 EER</u> <u>7.5 IPLV</u>
<u>Heat Pumps</u> <u>Air-Cooled</u> <u>Heating</u>	<u>≥135,000 Btu/h</u>	<u>Entering Air (47°F)</u> <u>Entering Air (17°F)</u>	<u>2.9 COP</u> <u>2.0 COP</u>
<u>Condensing Units</u> <u>Air-Cooled</u> <u>Condensing Units</u> <u>Water/Evap.-Cooled</u>	<u>≥135,000 Btu/h</u> <u>≥135,000 Btu/h</u>		<u>9.9 EER</u> <u>11.0 IPLV</u> <u>12.9 EER</u> <u>12.9 IPLV</u>

Subp. 9. Gas-fired and oil-fired equipment. Gas-fired and oil-fired boilers, furnaces, and unit heaters and combination furnace/air conditioner units must meet the requirements of this subpart.

<u>EQUIPMENT CATEGORY</u>	<u>EQUIPMENT SIZES</u>	<u>RATING CONDITION</u>	<u>EFFICIENCY</u>
<u>Gas-Fired Boilers</u>	<u><300,000 Btu/h</u> <u>300,000</u>	<u>Seasonal Rating</u> <u>Both Maximum and Minimum Rated Capacity</u>	<u>80% AFUE</u> <u>80% Ec*</u>
<u>Gas-Fired Furnaces</u>	<u><225,000 Btu/h</u> <u>>225,000 Btu/h</u>	<u>Seasonal Rating</u> <u>Maximum Rated Capacity</u> <u>Minimum Rated Capacity</u>	<u>78% AFUE</u> <u>80% Et**</u> <u>78% Et</u>
<u>Gas-Fired Duct Furnaces</u>	<u>All Sizes</u>	<u>Minimum Rated Capacity</u> <u>Minimum Rated Capacity</u>	<u>78% Et</u> <u>75% Et</u>

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Proposed Rules

<u>EQUIPMENT CATEGORY</u>	<u>EQUIPMENT SIZES</u>	<u>RATING CONDITION</u>	<u>EFFICIENCY</u>
<u>Gas-Fired Unit Heaters</u>	<u>All Sizes</u>	<u>Maximum Rated Capacity</u>	<u>78% Et</u>
		<u>Minimum Rated Capacity</u>	<u>74% Et</u>
<u>Oil-Fired Furnaces</u>	<u><225,000 Btu/h</u> <u>>225,000 Btu/h</u>	<u>Seasonal Rating</u> <u>Both Maximum and Minimum Rated Capacity</u>	<u>78% AFUE</u> <u>81% Et**</u>
<u>Oil-Fired Boilers</u>	<u><300,000 Btu/h</u> <u>>300,000 Btu/h</u>	<u>Seasonal Rating</u> <u>Both Maximum and Minimum Rated Capacity</u>	<u>80% AFUE</u> <u>83% Ec*</u>
<u>Oil-Fired Boilers (Residual)</u>	<u>>300,000 Btu/h</u>	<u>Both Maximum and Minimum Rated Capacity</u>	<u>83% Ec</u>
<u>Oil-Fired Unit Heaters</u>	<u>All Sizes</u>	<u>Both Maximum and Minimum Rated Capacity</u>	<u>81% Et</u>

*Ec = Combustion Efficiency

**Et = Thermal Efficiency

Subp. 10. Mobile home equipment. Mobile home furnaces, steam boilers, and direct heating equipment must meet the requirements of this subpart.

<u>EQUIPMENT CATEGORY</u>	<u>EQUIPMENT SIZES</u>	<u>EFFICIENCY AFUE</u>
<u>Mobile Home Furnaces</u>		<u>75</u>
<u>Gas Steam Boilers</u>		<u>75</u>
<u>Gas Fueled Direct Heating Equipment</u>		
<u>Vented Wall Furnaces</u>	<u><42,000 Btu/h</u>	<u>73</u>
<u>Fan Type</u>	<u>≥42,000 Btu/h</u>	<u>74</u>
<u>Vented Wall Furnaces</u>	<u>≥10,000 Btu/h</u>	<u>59</u>
<u>Gravity Type</u>	<u>≥10,000 <12,000 Btu/h</u>	<u>60</u>
	<u>≥12,000 <15,000 Btu/h</u>	<u>61</u>
	<u>≥15,000 <19,000 Btu/h</u>	<u>62</u>
	<u>≥19,000 <27,000 Btu/h</u>	<u>63</u>
	<u>≥27,000 <46,000 Btu/h</u>	<u>64</u>
	<u>≥46,000 Btu/h</u>	<u>65</u>
<u>Vented Floor Furnaces</u>	<u>≥37,000 Btu/h</u>	<u>56</u>
	<u>≥37,000 Btu/h</u>	<u>57</u>
<u>Vented Room Heaters</u>	<u>≥18,000 Btu/h</u>	<u>57</u>
	<u>≥18,000 <20,000</u>	<u>58</u>
	<u>≥20,000 <27,000 Btu/h</u>	<u>63</u>
	<u>≥27,000 <46,000 Btu/h</u>	<u>64</u>
	<u>≥46,000 Btu/h</u>	<u>65</u>

Subp. 11. Water chilling packages. Water chilling packages - water- and air-cooled, electrically operated must meet requirements of this subpart.

<u>WATER-COOLED</u>	<u>CFC</u>	<u>NON-CFC</u>
<u>Centrifugal</u>	<u>0.63 KW/Ton</u>	<u>0.73 KW/Ton</u>
<u>Helical-rotary (screw)</u>	<u>0.75 KW/Ton</u>	<u>0.80 KW/Ton</u>
<u>Reciprocating or scroll</u>	<u>0.93 KW/Ton</u>	

AIR-COOLED (any type)

>150 Ton	1.41 KW/Ton
<150 Ton	1.30 KW/Ton

7670.0710 AMENDMENTS TO SECTION 504: SERVICE WATER HEATING.

Subpart 1. Ice-making water supply. Water supplies to ice-making machines and residential refrigerators shall be taken from a cold-water line of the water distribution system.

Subp. 2. Efficiency requirements. Section 504.2 of the Model Energy Code is amended to read:

504.2 Efficiency requirements- Service water heating equipment must meet the minimum efficiency requirements listed in RS-6 with the following exceptions: in this subpart. Standards for service water heating equipment are located in Code of Federal Regulations, title 10, parts 430 and 435, Energy Conservation Standards for Consumer Products, and Energy Conservation Voluntary Performance Standards for new buildings.

Efficiency Requirements for Water Heaters Regulated by NAECA

<u>Fuel Type (Size)</u>	<u>Energy Factor</u>
<u>Gas (<75,000 Btuh)</u>	<u>0.62 - (0.0019 x Vv)</u>
<u>Oil (<75,000 Btuh)</u>	<u>0.59 - (0.0019 x Vv)</u>
<u>Electric (<12 kw)</u>	<u>0.93 - (0.00132 x Vv)</u>

Where: Vv is the rated storage volume in gallons.

Efficiency Requirements for Water Heaters Not Regulated by NAECA

<u>Fuel Type</u>	<u>Input Rating > or Volume</u>	<u>Input to Volume Ratio (Btuh/gal)</u>	<u>Efficiency</u>	<u>Standby Loss (%/hour)</u>
Electric	>12 KW			$0.30 + 27 \div Vt$
Gas/Oil	$\leq 155,000$ Btuh	<4,000	80 percent	$1.3 + 114 \div Vt$
Gas/Oil	>155,000 Btuh	<4,000	80 percent	$1.3 + 95 \div Vt$
Gas/Oil	<u>AH ≥ 10 gal</u>	$\geq 4,000$	80 percent	$2.3 + 67 \div Vt$
Gas/Oil	<10 gal	$\geq 4,000$	80 percent	
<u>Unfired storage Instantaneous</u>	<u>All</u>			<u><6.5</u>
<u>Gas</u>	<u>All</u>		<u>80 percent Et</u>	
<u>Oil</u>	<u>All</u>		<u>83 percent Ec</u>	
<u>Pool Heaters</u>	<u>All</u>		<u>78 percent Et</u>	

Where:

Vt is the measured storage volume in gallons.

Et = thermal efficiency.

Ec = combustion efficiency.

Test procedures for electric, gas, and oil water heaters not regulated by the National Appliance Energy Conservation Act (NAECA) of 1987 must follow procedures prescribed in ANSI Z21.10.3-1990.

Subp. 2. Time clocks. Section 504.5 of the Model Energy Code is amended by deleting section 504.5.3.

Subp. 3. Automatic controls. Service water-heating systems must be equipped with automatic temperature controls capable of adjustment from the lowest to the highest acceptable temperature settings for the intended use. Temperature setting range must be in accordance with this subpart.

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Representative Hot Water Utilization Temperatures

Use	Temperature	
	°F	(°C)
<u>Lavatory</u>		
<u>Hand washing</u>	105	(40.6)
<u>Shaving</u>	115	(46.1)
<u>Showers and tubs</u>	110	(43.3)
<u>Therapeutic baths</u>	95	(35.0)
<u>Commercial and institutional dishwashing</u>		
<u>Wash</u>	140	(60.0)
<u>Sanitizing rinse</u>	180	(82.2)
<u>Commercial and institutional laundry</u>	180	(82.2)
<u>Residential dishwashing and laundry</u>	140	(60.0)
<u>Surgical scrubbing</u>	110	(43.3)

Subp. 4. Shutdown. A separate switch must be provided to permit turning off the energy supplied to electric service water-heating systems. A separate valve must be provided to permit turning off the energy supplied to the main burners of all other types of service water-heating systems.

Subp. 5. Swimming pools and spas.

A. Control. All pool and spa heaters must be equipped with a readily accessible ON/OFF switch to allow shutting off the operation of the heater without adjusting the thermostat setting and to allow restarting without relighting the pilot light.

B. HVAC systems serving all indoor pool and spa areas must conform to part 7670.0610, subpart 14, item B. Additionally, heated indoor swimming pools and spas must provide for energy conservation by one of the following methods:

(1) the pool or spa must be equipped with a cover;

(2) the ventilating system serving the pool and spa area must provide a heat recovery of 70 percent as calculated by ASHRAE Standard 84-1991 at winter design conditions; or

(3) renewable energy sources must be capable of providing at least 50 percent of the heating energy required over an operating season.

C. Heated outdoor swimming pools and spas must either be provided with a cover, or the heating system must use renewable energy sources to provide at least 50 percent of the heating energy required over an operating season.

Subp. 6. Pump operation. Circulating hot-water systems must be arranged so that the circulation pumps can be conveniently turned off, automatically or manually, when the hot-water system is not in operation.

Subp. 7. Pipe insulation. Section 504.7 of the Model Energy Code is amended by deleting the exception and by adding a paragraph to read:

A. Recirculating systems. For recirculating systems, the minimum pipe insulation must be in accordance with this item.

EXCEPTION: Piping insulation is not required when the heat loss of the pipeline, without insulation, does not increase the annual energy requirements of the building.

Service Water Heating Minimum Pipe Insulation Insulation Thickness for Pipe Sizes*

Service Water Heating Temperatures	Noncirculating Runouts				Circulating Mains and Runouts		
	°F	Up to 1" Inches	Up to 1 1/4" Inches	1 1/2" to 2" Inches	Over 2" Inches	Over 2" Inches	Over 2" Inches
170-180		0.5	1.0	1.5	2.0		
140-160		0.5	0.5	1.0	1.5		
100-130		0.5	0.5	0.5	1.0		

*Nominal iron pipe size and insulation thickness.

Conductivity K = .27

504.7.1 B. Nonrecirculating systems. Either the first eight feet of both inlet and outlet pipe from the storage tank must be insulated in accordance with ~~table No. 504.7 item A~~, or heat traps must be installed on both inlet and outlet pipes with pipe insulation between the storage tank and heat traps installed in accordance with ~~table No. 504.7 item A~~.

Subp. 4. Devices to limit temperature. Section 504.8.2 of the Model Energy Code is amended by deleting section 504.8.2.2.

Subp. 5. **Efficiency requirements.** Service water heating equipment regulated by the National Appliance Energy Conservation Act of 1987 must conform to the efficiency requirements of Standard RS-5 listed in chapter 7.

ELECTRICAL POWER AND LIGHTING

7670.0800 AMENDMENTS TO SECTION 505: ~~ELECTRIC~~ ELECTRICAL POWER AND LIGHTING.

Subpart 1. **Electric Electrical energy determination.** Section 505.2 of the Model Energy Code is amended to read:

A. Multifamily electrical metering. In new multifamily dwellings, ~~provision must be made to determine~~ the electrical energy consumed by each tenant by separately metering individual dwelling units unit must be separately metered with individual metering readily accessible to the individual occupants.

EXCEPTION: Motels, hotels, college dormitories, other transient facilities, and buildings intended for occupancy primarily by persons who are 62 years of age or older or handicapped, or which contain a majority of units not equipped with complete kitchen facilities.

~~505.2.1~~ **B. Electrical distribution monitoring.** In electrical panels of buildings other than residential buildings three stories or less in height, all feeder wiring and the panel feeder must be capable of accepting a clamp-on ammeter.

Subp. 2. **Lighting power budget.** The lighting requirements of sections 505.3 and 505.4 of the Model Energy Code are amended to read:

The lighting power budget must be the upper limit of the power to provide the lighting needs in accordance with the 1993 criteria and calculation procedure specified in Standard RS-29 listed in chapter 7 with the following exceptions:

- (1) at each occurrence, the words "sections 11 and 12" are amended to read "Chapter 4 of the Model Energy Code";
- (2) each time the word "shall" is used in reference to an inanimate object, "shall" is changed to "must";
- (3) all recommendations identified by "may" or "should" are deleted;
- (4) section 3.1.6.2 is amended to reference equation 3.4.1;
- (5) section 3.2 is deleted;
- (6) section 3.3.1.2.2 is amended to read:

A. General.

(1) This subpart contains a set of minimum requirements for all lighting, exterior lighting power requirements, and two alternative compliance procedures for building interior lighting and lighting control systems. The procedures in this subpart are solely for use in establishing lighting power budgets and are not intended for use as lighting design procedures.

(2) Scope. The following are covered by this subpart:

- (a) interior spaces of buildings;
- (b) building exteriors and exterior areas, such as entrances, exits, and loading docks; and
- (c) roads, grounds, parking, and other exterior areas where lighting is energized through the building electrical service.

(3) EXEMPTIONS. All fluorescent lamp ballasts must meet the requirements of item B, subitem (2). The following are exempt from the lighting power budget standards:

- (a) manufacturing, processing facilities, and commercial greenhouses;
- (b) lighting power for theatrical production studios and stages, television broadcasting, audio-visual presentation, and entertainment facilities in spaces such as stages, hotel ballrooms, nightclubs, discos, and casinos, and where lighting is an essential technical element for the function performed;
- (c) specialized luminaires for medical and dental purposes;
- (d) outdoor athletic facilities;
- (e) lighting power for display lighting required for art exhibits or displays in galleries, museums, and monuments;
- (f) exterior lighting for public monuments;

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- (g) special lighting needs for research;
 - (h) lighting power for lighting used solely for indoor plant growth during the hours of 10:00 p.m. to 6:00 a.m.;
 - (i) emergency lighting that is automatically off during normal operation;
 - (j) high risk security areas or any area identified by local ordinances or regulations or by security or safety personnel as requiring additional lighting;
 - (k) lighting power densities for spaces with enhanced lighting specifically designed for primary use by the visually impaired, hard of hearing, or for senior citizens;
 - (l) lighting for one- and two-family detached dwellings and the dwelling portion of multifamily buildings;
 - (m) lighting for signs;
 - (n) storefront exterior-enclosed display windows in retail facilities; and
 - (o) lighting power for internally illuminated exit signs.
- (4) Outdoor display lighting. Outdoor display lighting is regulated by chapter 7625.

(5) Credit for daylighting. Daylighting credit, for reduced use of electric lighting energy resulting from the use of automatic lighting control devices in conjunction with fenestration, for example, windows and skylights, may be taken in this subpart. However, if such daylighting credit is to be applied to other building subsystems, such as use of additional fenestration area, part 7670.0450 must be used.

(6) Compliance. A building must be considered in compliance with this subpart if the following conditions are met:

- (a) the minimum requirements of item B are met;
- (b) the exterior lighting power to be installed is not greater than the exterior lighting power allowance required in item C; and
- (c) the interior connected lighting power to be installed is not greater than the interior lighting power allowance, based on either the prescriptive criteria in item D or the systems performance criteria in item E.
 - i. The connected lighting power includes permanently installed lighting plus supplemental or task-related lighting provided by movable or plug-in luminaires.
 - ii. The connected lighting power for luminaires with incandescent medium base sockets is the higher of the following two wattages: the total lamp wattage proposed for the luminaire; or 50 percent of the listed lighting power capacity of the luminaire in watts.
 - iii. The connected lighting power for track lights is the higher of the following three wattages: the total lamp wattage proposed for the track; 50 percent of the total listed power capacity of the elements proposed for the track; or 45 watts per foot of track.

(7) Tradeoffs. Tradeoffs between interior lighting power allowance and exterior lighting power allowance are not allowed. Tradeoffs of the interior lighting power budgets among interior spaces are allowed as long as the total adjusted lighting power within the building does not exceed the interior lighting power allowance and lighting power control credits are used only for connected lighting power in those spaces for which credit is claimed. Tradeoffs of exterior lighting power budgets among exterior areas are allowed as long as the total connected lighting power of exterior lighting does not exceed the exterior lighting power allowance and the allowance for the building exterior surfaces is not exceeded.

(8) Multibuilding facilities. The total lighting power allowances for each building in a multibuilding facility must be calculated separately.

(9) Acronyms. The following are acronyms found in this subpart.

- (a) AF = area factor;
- (b) ALP = adjusted lighting power, watts;
- (c) CLP = connected lighting power, watts;
- (d) CLPC = connected lighting power for the luminaires controlled by the automatic control device, watts;
- (e) ELPA = exterior lighting power allowance, watts;
- (f) GLA = gross lighted area, square feet;
- (g) GLAF = gross lighted area for each qualifying secondary function, square feet;
- (h) ILPA = interior lighting power allowance, watts per square feet;

- (i) LPB = lighting power budgets, watts;
- (j) LPCC = lighting power control credits, watts;
- (k) LSA = listed space area, square feet;
- (l) PAF = power adjustment factor;
- (m) ULPA = unit lighting power allowance, watts per square feet; and
- (n) UPD = unit power density, watts per square feet.

B. Minimum requirements.

(1) Lighting controls.

(a) General. All lighting must be provided with manual, automatic, or programmable controls.

EXCEPTION: controls for emergency or exit lighting.

(b) Minimum number of lighting controls. Each space enclosed by walls or ceiling-height partitions must be provided with controls that, together or alone, are capable of controlling all lights within that space, excluding those requiring continuous operation for security purposes.

(c) The minimum number of controls must not be less than one lighting control for each space and one lighting control for each task or group of task locations within an area of 450 square feet or less.

3-3-1.2-2 i. Equivalent number of controls. A reduction in the minimum number of controls is permitted by using an equivalent number of controls from Table No. 3-3-1, where control types used in Table No. 3-3-1 are used indicated in the table below. However, The minimum number of controls must not be less than one for each 20 ampere circuit.

(7) section 3-3-1.2.3(a) is amended to read: 3-3-1.2.3

Equivalent Number of Controls

<u>TYPE OF CONTROL</u>	<u>EQUIVALENT NUMBER OF CONTROLS</u>
<u>Manually operated ON/OFF switch</u>	<u>1</u>
<u>Occupancy sensor</u>	<u>2</u>
<u>Programmable timer readily accessible from the space being controlled</u>	<u>2</u>
<u>Three level, including off, step control or preset dimming</u>	<u>2</u>
<u>Four level, including off, step control or preset dimming</u>	<u>3</u>
<u>Automatic or continuous dimming</u>	<u>3</u>

ii. EXCEPTIONS:

(a) (A) Lighting for spaces that must be used as a whole, such as public lobbies of office buildings, hotels, and hospitals; retail and department stores; and warehouses, storerooms, and service corridors under centralized supervision may is permitted to be controlled by a lesser number of controls, but not less than one control for each 20 ampere circuit or a total of three controls, whichever is greater, of connected lighting power.

(8) sections 3-3-2-1 and 3-3-2-2 are amended to read: (B) Hotel and motel guest rooms must have one or more master controls at the main entry door that turn off all permanently wired lighting fixtures and lighting and television receptacles. For multiple room suites, controls at the entry of each room, in lieu of a master switch, will meet these requirements. (C) Control of the same load from more than one location must not be credited as additional control points.

(d) All lighting controls must be readily accessible to personnel occupying or using the space. Exceptions are automatic controls, programmable controls, lighting for safety hazards and security, controls requiring trained operators, and those controls for spaces that must be used as a whole.

(e) Controls provided for task areas, if readily accessible, may be mounted as part of the task lighting luminaire.

(f) Exterior lighting must be automatically controlled by timer, photocell, or combination of timer and photocell. Timers

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must be of the automatic type capable of adjustment for seven days and for seasonal daylight schedule variations. All time-controllers must be equipped with back-up mechanisms to keep time during a four-hour power outage.

(g) When the building is served by an energy management system, programmable controls, shared tenant services that affect interior environments, or "intelligent building" systems, provisions must be made to incorporate lighting controls into the system if a separate automatically controlled lighting system is not provided.

(2) Fluorescent lamp ballasts.

(a) Fluorescent lamp ballasts must comply with Standard RS-5 listed in chapter 7 of the Model Energy Code;

(9) section 3.5.5 is amended by changing the units of Interior Power Allowance in equation 3.5-3 to Watts;

(10) section 3.5.5 is amended to calculate "unlisted space" by subtracting the Listed Space Area (LSA) from the Gross Lighting Area (GLA);

(11) Table 3.5-2 is amended to read: *Code of Federal Regulations*, title 10, part 435.103, section 3.3.2, Fluorescent Lamp Ballast Standards.

EXCEPTION: Ballasts specifically designed for use with dimming controls.

(b) One-lamp or three-lamp fluorescent luminaires must be tandem wired to eliminate unnecessary use of single lamp ballasts if they are used for general lighting; recess mounted within ten feet center-to-center of each other; or pendant or surface mounted within one foot of each other, and within the same room. Tandem wiring consists of pairs of luminaires operating within one lamp in a luminaire powered from a single two-lamp ballast contained in a second luminaire.

EXCEPTION: Three-lamp ballasts may be used.

(c) Fluorescent lamp ballasts must have a power factor equal to or greater than 80 percent.

EXCEPTION: Ballasts for circline lamps and high intensity discharge lamps of less than 100 watts.

C. Exterior lighting power allowance.

(1) Scope. Building exteriors, exterior areas, roads, grounds, and parking must have a lighting power density not to exceed the exterior lighting power allowance of this item.

(2) Procedure. The exterior lighting power allowance is the sum of the allowances for each of the area descriptions below, as calculated in accordance with this item, using unit power densities from the table in this item.

$$ELPA = \sum DO_i \times UPD_{D_i} + \sum A_i \times UPD_{A_i}$$

Where:

DO = Door opening, linear feet.

i = Numerical subscript (1,2,...,n) for each occurrence of doors or exterior areas of the building.

UPD_D = UPD for the door.

A = Exterior area for each separate UPD, square feet.

UPD_A = UPD for the area.

(3) Exterior lighting unit power density table.

Exterior Lighting Unit Power Density

AREA DESCRIPTION

Exit (with or without canopy)

Entrance (without canopy)

Entrance (with canopy)

High Traffic (retail, hotel, airport, theater, etc.)

Light Traffic (hospital, office, school, etc.)

Loading area

Loading door

Building Exterior Surfaces/Facades

Storage and nonmanufacturing work areas

UNIT POWER DENSITY

25 W/Lin.ft. of door opening

30 W/Lin.ft. of door opening

10 W/ft² of canopied area

4 W/ft² of canopied area

0.40 W/ft²

20 W/Lin.ft. of door opening

0.25 W/ft² of surface area to be illuminated

0.20 W/ft²

AREA DESCRIPTION

UNIT POWER DENSITY

Other activity areas for casual use such as picnic grounds, gardens, parks, and other landscaped areas

0.10 W/ft²

Private driveways/walkways

0.10 W/ft²

Public driveways/walkways

0.15 W/ft²

Private Parking lots

0.12 W/ft²

Public Parking lots

0.18 W/ft²

D. Lighting; prescriptive procedure.

(1) Scope. This item provides a procedure for determining the interior lighting power allowance for specific types of buildings. It is intended for use with buildings having simple lighting requirements and where the minimum amount of calculation and effort to achieve compliance is of primary concern. For other building types, to receive credit for switching, daylighting, or other tradeoffs, or to receive credit for lighting optimization, use item E or part 7670.0450.

(2) Interior lighting power allowance table.

Prescriptive Unit Lighting Power Allowance, W/ft²

<u>BUILDING TYPE/ AREA FUNCTION</u>	<u>GROSS LIGHTED AREA</u>					
	<u>0 to 2,000 ft²</u>	<u>2,001 to 10,000 ft²</u>	<u>10,001 to 25,000 ft²</u>	<u>25,001 to 50,000 ft²</u>	<u>50,001 to 250,000 ft²</u>	<u>>250,000 ft²</u>
<u>Food Service</u>						
<u>Fast Food/Cafeteria</u>	<u>0.92</u>	<u>0.85</u>	<u>0.82</u>	<u>0.81</u>	<u>0.81</u>	<u>0.80</u>
<u>Leisure Dining/Bar</u>	<u>1.60</u>	<u>1.56</u>	<u>1.52</u>	<u>1.48</u>	<u>1.44</u>	<u>1.40³⁾</u>
<u>Offices</u>	<u>1.40</u>	<u>1.34</u>	<u>1.27</u>	<u>1.22</u>	<u>1.16</u>	<u>1.11</u>
<u>Retail</u>						
<u>Retail General</u>	<u>2.70</u>	<u>2.52</u>	<u>2.32</u>	<u>2.05</u>	<u>1.87</u>	<u>1.72</u>
<u>Mall Concourse Multistore Service</u>	<u>0.69</u>	<u>0.68</u>	<u>0.65</u>	<u>0.63</u>	<u>0.61</u>	<u>0.60</u>
<u>Service Establishment</u>	<u>2.81</u>	<u>2.03</u>	<u>1.78</u>	<u>1.65</u>	<u>1.54</u>	<u>1.46</u>
<u>Garages</u>	<u>0.25</u>	<u>0.24</u>	<u>0.23</u>	<u>0.22</u>	<u>0.21</u>	<u>0.20</u>
<u>Schools</u>	<u>1.77</u>	<u>1.72</u>	<u>1.60</u>	<u>1.49</u>	<u>1.36</u>	<u>1.26</u>
<u>Warehouse/Storage</u>	<u>0.60</u>	<u>0.50</u>	<u>0.42</u>	<u>0.36</u>	<u>0.32</u>	<u>0.30</u>

(3) The interior lighting power allowance may be used if the predominant function of the proposed building is one of the building types listed in this item. If not, item E or part 7670.0460 must be used. If the building has secondary functions that are ten percent or more of the gross lighted area of the building that are listed in subitem (2), then the interior lighting power allowance may be calculated using the predominant building function in subitem (4), or subitem (5) may be used.

(4) Procedure for single function buildings.

(a) Scope. This procedure may be used if the proposed building has only one function, has no secondary functions with ten percent or more of the gross lighted area, or the primary function of the building is used to determine the interior lighting power allowance.

(b) Procedure. The unit lighting power allowance is the value for the appropriate building type and the gross lighted area of the building in subitem (2). The interior lighting power allowance is determined by multiplying the unit lighting power

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allowance by the gross lighted area as follows:

$$ILPA = ULPA \times GLA$$

(5) Procedure for multifunction buildings.

(a) Scope. This procedure may be used if a building has more than one function listed in the prescriptive unit power density table with more than ten percent of the gross lighted area.

(b) Procedure. The gross lighted area for the area of the predominate function in the building, and the gross lighted area for each qualifying secondary function in the building must be determined. The unit lighting power allowance for the predominate functional area and each secondary functional area are indicated in the table in subitem (2). The lighting power allowance for each functional area is determined by multiplying the unit lighting power allowance of each functional area by its gross lighted area. The sum of the lighting power allowance for each functional area is the building interior lighting power allowance. This may be performed using the equation:

$$ILPA = ULPA_p \times GLA_p + \sum (ULPA_i \times GLA_i)$$

Where:

ULPA_p = ULP allowance of the predominant function based on the gross lighted area of the predominant function

GLA_p = GLA of the predominant function of the proposed building

ULPA_i = ULPA of qualifying secondary functions based on the gross lighted area of the specific function

GLA_i = GLA of each qualifying secondary function

i = Numerical subscript (1,2,...n) for each secondary function with ten percent or more of the gross lighted area of the building

(6) Interior lighting power allowance in partially defined speculative buildings.

(a) Scope. The interior lighting power allowance for defined functional areas of partially defined speculative buildings must be determined by this subitem.

(b) Single function buildings. For single function buildings, the interior lighting power allowance must be based on the gross lighted area of the entire building.

(c) Multifunction buildings. For multifunction buildings with secondary functions with more than ten percent of the gross lighted area, the interior lighting power allowance must be based on the gross area of each secondary function.

E. Lighting; system performance procedure.

(1) Scope. This procedure for determining the maximum lighting power allowance for building interiors allows credit for the use of daylighting and other lighting controls. It also serves as a basis for estimating the lighting heat gain and lighting energy if part 7670.0460 is used.

(2) Procedure. The total adjusted lighting power in a building must not exceed the sum of the interior lighting power allowances. The adjusted lighting power is equal to the connected lighting power minus the lighting power controls credit.

(3) Compliance for lighting in partially defined speculative buildings. The total adjusted lighting power in defined areas of partially defined speculative buildings must not exceed the interior lighting power allowance for the defined areas of the building.

(4) Lighting power budget.

(a) The lighting power budget of each interior space must be determined in accordance with the following equation:

$$LPB = A_{wp} \times UPD_b \times AF$$

Where:

A_{wp} = Area of the room at the horizontal lighted working plane

UPD_b = Base UPD

(b) The base unit power density must be selected from the table in this item. For applications to areas or activities other than those given, select values for similar areas or activities.

(c) The area factor must be determined by the equation or table in this unit based on the floor area and ceiling height of the room. Rooms with identical ceiling height and activities, and with similar size may be treated as a group. The area factor of such a group of rooms must be determined from the average area of the rooms.

The equation for area factor (AF) is as follows:

$$AF = [0.2 + 0.8 \text{ EXP}\{[10.21 \times (CH - 2.5) - 1] \times 0.1054\}] / \sqrt{A}$$

Where:

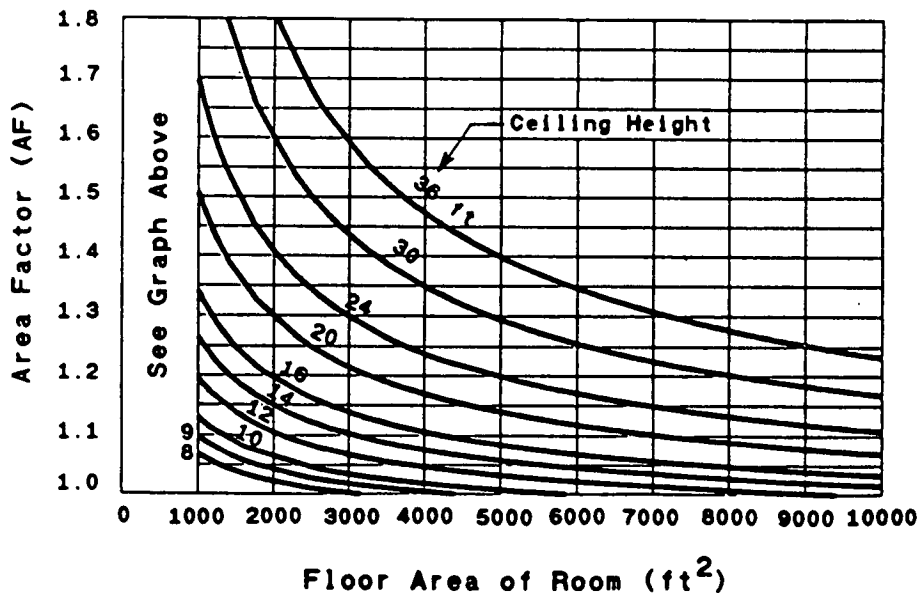
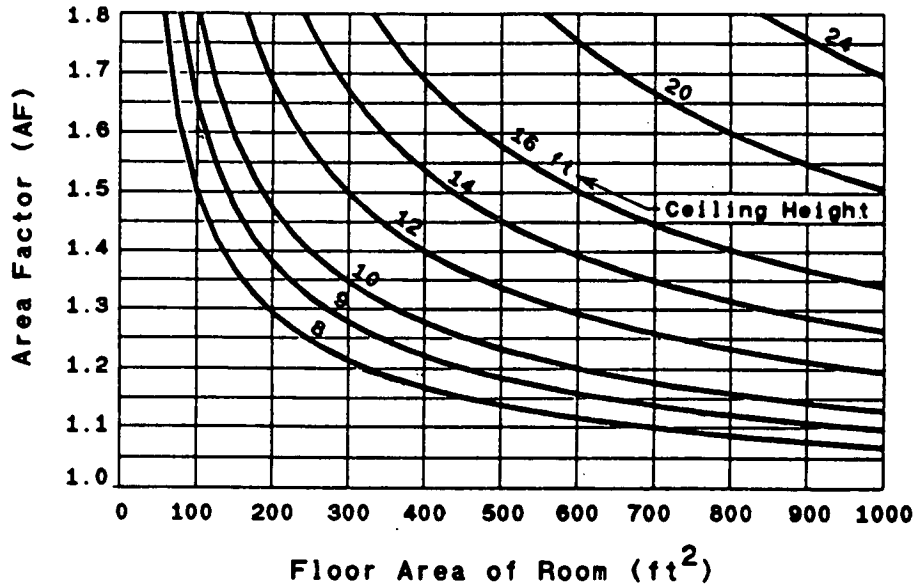
CH = Ceiling height, feet

A_r = Floor area of room, square feet calculated from the inside dimensions of the room

If AF < 1.0 then AF = 1.0

If AF < 1.8 then AF = 1.8

Area Factor



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(d) Performance procedure unit power density table.

Performance Procedure Unit Power Density

<u>AREA/ACTIVITY</u>	<u>UPD</u>	<u>NOTE</u>
<u>COMMON ACTIVITY AREAS</u>		
<u>Auditorium</u>	<u>1.4</u>	<u>(c)</u>
<u>Corridor</u>	<u>0.8</u>	<u>(a)</u>
<u>Classroom/Lecture Hall</u>	<u>1.7</u>	
<u>Elec/Mech Equipment Room</u>		
<u>General</u>	<u>0.7</u>	<u>(a)</u>
<u>Control Rooms</u>	<u>1.5</u>	<u>(a)</u>
<u>Food Service</u>		
<u>Fast Food/Cafeteria</u>	<u>0.8</u>	
<u>Leisure Dining</u>	<u>1.4</u>	<u>(b)</u>
<u>Bar/Lounge</u>	<u>1.3</u>	<u>(b)</u>
<u>Kitchen</u>	<u>1.4</u>	
<u>Recreation/Lounge</u>	<u>0.5</u>	
<u>Stairs</u>		
<u>Active Traffic</u>	<u>0.6</u>	
<u>Emergency Exit</u>	<u>0.4</u>	
<u>Toilet & Washroom</u>	<u>0.5</u>	
<u>Garage</u>		
<u>Auto/Pedestrian Circulation</u>	<u>0.25</u>	
<u>Parking Area</u>	<u>0.2</u>	
<u>Laboratory</u>	<u>2.2</u>	
<u>Library</u>		
<u>Audio Visual</u>	<u>1.1</u>	
<u>Stack Area</u>	<u>1.5</u>	
<u>Card File & Cataloging</u>	<u>0.8</u>	
<u>Reading Area</u>	<u>1.0</u>	
<u>Lobby (General)</u>		
<u>Reception & Waiting</u>	<u>0.55</u>	
<u>Elevator Lobbies</u>	<u>0.4</u>	
<u>Atrium (multistory)</u>		
<u>First 3 Floors</u>	<u>0.4</u>	
<u>Each Additional Floor</u>	<u>0.15</u>	
<u>Locker Room & Shower</u>	<u>0.6</u>	
<u>Offices</u>		
<u>Enclosed Offices of less than 900 ft² and all open plan offices w/out partitions or w/partitions lower than 4.5 ft below ceiling.</u>		<u>(f)</u>
<u>Reading, Typing, and Filing</u>	<u>1.3</u>	<u>(e)</u>
<u>Drafting</u>	<u>2.2</u>	<u>(e)</u>
<u>Accounting</u>	<u>1.8</u>	<u>(e)</u>
<u>Open plan offices, 900 ft² or larger, w/medium height partitions 3.5 to 4.5 ft below ceiling.</u>		<u>(f)</u>
<u>Reading, Typing, and Filing</u>	<u>1.5</u>	<u>(a)</u>
<u>Drafting</u>	<u>2.6</u>	<u>(a)</u>
<u>Accounting</u>	<u>2.1</u>	<u>(a)</u>
<u>Open plan offices, 900 ft² or larger, w/partitions higher than 3.5 ft below ceiling.</u>		<u>(f)</u>
<u>Reading, Typing, and Filing</u>	<u>1.7</u>	<u>(a)</u>
<u>Drafting</u>	<u>3.0</u>	<u>(a)</u>
<u>Accounting</u>	<u>2.4</u>	<u>(a)</u>

<u>AREA/ACTIVITY</u>	<u>UPD</u>	<u>NOTE</u>
COMMON ACTIVITY AREAS		
<u>Common Activity Areas</u>		
<u>Conferences/Meeting Room</u>	<u>1.3</u>	(c)
<u>Computer/Office Equipment</u>	<u>2.1</u>	
<u>Filing, Inactive</u>	<u>1.0</u>	
<u>Mail Room</u>	<u>1.8</u>	
<u>Shop (Nonindustrial)</u>		
<u>Machinery</u>	<u>2.5</u>	
<u>Electrical/Electronic</u>	<u>2.5</u>	
<u>Painting</u>	<u>1.6</u>	
<u>Carpentry</u>	<u>2.3</u>	
<u>Welding</u>	<u>1.2</u>	
<u>Storage & Warehouse</u>		
<u>Inactive Storage</u>	<u>0.2</u>	
<u>Active Storage, Bulky</u>	<u>0.3</u>	
<u>Active Storage, Fine</u>	<u>0.9</u>	
<u>Material Handling</u>	<u>1.0</u>	
<u>Unlisted Space</u>		
<u>Unlisted Space</u>	<u>0.2</u>	
<u>Airport, Bus, and Rail Station</u>		
<u>Baggage Area</u>	<u>0.75</u>	
<u>Concourse/Main Thruway</u>	<u>0.45</u>	
<u>Ticket Counter</u>	<u>1.3</u>	
<u>Waiting & Lounge Area</u>	<u>0.6</u>	
<u>Bank</u>		
<u>Customer Area</u>	<u>0.8</u>	
<u>Banking Activity Area</u>	<u>2.2</u>	
<u>Barber & Beauty Parlor</u>		
<u>Barber & Beauty Parlor</u>	<u>1.6</u>	
<u>Church, Synagogue, Chapel</u>		
<u>Worship/Congregational</u>	<u>1.3</u>	
<u>Preaching & Sermon/Choir</u>	<u>1.8</u>	
<u>Dormitory</u>		
<u>Bedroom</u>	<u>0.6</u>	
<u>Bedroom with Study</u>	<u>1.3</u>	
<u>Study Hall</u>	<u>0.9</u>	
<u>Fire & Police Department</u>		
<u>Fire Engine Room</u>	<u>0.7</u>	
<u>Jail Cell</u>	<u>0.4</u>	
<u>Hospital/Nursing Home</u>		
<u>Corridor</u>	<u>0.9</u>	(a)
<u>Dental Suite/Exam/Treatment</u>	<u>1.4</u>	
<u>Emergency</u>	<u>2.0</u>	
<u>Laboratory</u>	<u>1.7</u>	
<u>Lounge/Waiting Room</u>	<u>0.6</u>	
<u>Medical Supplies</u>	<u>2.4</u>	
<u>Nursery</u>	<u>1.6</u>	
<u>Nurse Station</u>	<u>1.8</u>	
<u>Occu./Physical Therapy</u>	<u>1.4</u>	
<u>Patient Room</u>	<u>0.9</u>	
<u>Pharmacy</u>	<u>1.5</u>	
<u>Radiology</u>	<u>1.8</u>	

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Proposed Rules

<u>AREA/ACTIVITY</u>	<u>UPD</u>	<u>NOTE</u>
<u>COMMON ACTIVITY AREAS</u>		
<u>Surgical & O.B. Suites</u>		
<u>General Area</u>	<u>1.8</u>	
<u>Operating Room</u>	<u>6.0</u>	
<u>Recovery</u>	<u>2.0</u>	
<u>Hotel/Conference Center</u>		
<u>Banquet Room/Multipurpose</u>	<u>1.4</u>	(c)
<u>Bathroom/Powder Room</u>	<u>0.6</u>	
<u>Guest Room</u>	<u>0.7</u>	
<u>Public Area</u>	<u>0.8</u>	
<u>Exhibition Hall</u>	<u>1.3</u>	
<u>Conference/Meeting</u>	<u>1.5</u>	(c)
<u>Lobby</u>	<u>1.3</u>	
<u>Reception Desk</u>	<u>2.4</u>	
<u>Laundry</u>		
<u>Washing</u>	<u>0.6</u>	
<u>Ironing & Sorting</u>	<u>1.3</u>	
<u>Museum & Gallery</u>		
<u>General Exhibition</u>	<u>1.2</u>	
<u>Inspection/Restoration</u>	<u>3.0</u>	
<u>Storage (Artifacts)</u>		
<u>Inactive</u>	<u>0.25</u>	
<u>Active</u>	<u>0.5</u>	
<u>Post Office</u>		
<u>Lobby</u>	<u>0.8</u>	
<u>Sorting & Mailing</u>	<u>2.1</u>	
<u>Service Station/Auto Repair</u>	<u>0.8</u>	
<u>Theater</u>		
<u>Performance Arts</u>	<u>1.1</u>	
<u>Motion Picture</u>	<u>0.75</u>	
<u>Lobby</u>	<u>1.0</u>	
<u>Retail Establishments</u>		
<u>(Merchandising & Circulation Area) Applicable to all lighting, including accent and display lighting, installed in merchandising and circulation areas</u>		
<u>Type A</u>	<u>6.0</u>	(d)
<u>Type B</u>	<u>2.9</u>	(d)
<u>Type C</u>	<u>2.7</u>	(d)
<u>Type D</u>	<u>2.5</u>	(d)
<u>Type E</u>	<u>2.4</u>	(d)
<u>Type F</u>	<u>2.6</u>	(d)
<u>Mall Concourse</u>	<u>0.6</u>	
<u>Retail Support Area</u>		
<u>Tailoring</u>	<u>2.1</u>	
<u>Dressing/Fitting Room</u>	<u>1.1</u>	
<u>Seating Area, All Sports</u>	<u>0.4</u>	(a)
<u>Badminton</u>		
<u>Club</u>	<u>0.5</u>	(a)
<u>Tournament</u>	<u>0.8</u>	(a)
<u>Basketball/Volleyball</u>		
<u>Intramural</u>	<u>0.8</u>	(a)
<u>College/Professional</u>	<u>1.9</u>	(a)
<u>Bowling</u>		
<u>Approach Area</u>	<u>0.5</u>	(a)
<u>Lanes</u>	<u>1.1</u>	(a)

<u>AREA/ACTIVITY</u>	<u>UPD</u>	<u>NOTE</u>
<u>COMMON ACTIVITY AREAS</u>		
<u>Boxing or Wrestling (platform)</u>		
<u>Amateur</u>	2.4	(a)
<u>Professional</u>	4.8	(a)
<u>Gymnasium</u>		
<u>General Exercising & Recreation Only</u>	1.0	(a)
<u>Handball/Racquetball/Squash</u>		
<u>Club</u>	1.3	(a)
<u>Tournament</u>	2.6	(a)
<u>Hockey, Ice</u>		
<u>Amateur</u>	1.3	(a)
<u>College or Professional</u>	2.6	(a)
<u>Skating Rink</u>		
<u>Recreational</u>	0.6	(a)
<u>Exhibition/Professional</u>	2.6	(a)
<u>Swimming</u>		
<u>Recreational</u>	0.9	(a)
<u>Exhibition</u>	1.5	(a)
<u>Underwater</u>	1.0	(a)
<u>Tennis</u>		
<u>Recreational (Class III)</u>	1.3	(a)
<u>Club/College (Class II)</u>	1.9	(a)
<u>Professional (Class I)</u>	2.6	(a)
<u>Tennis, Table</u>		
<u>Club</u>	1.0	(a)
<u>Tournament</u>	1.6	(a)

NOTES:

- (a) Use an area factor of 1.0 these spaces.
- (b) Base UPD includes lighting power required for cleanup purpose.
- (c) A 1.5 adjustment factor is applicable for multifunctional spaces.
- (d) "Retail establishments" means, for the purpose of determining lighting power limit, buildings, the primary functions of which are designed to be:
 - Type A: Jewelry merchandising, where the minute display and examination of merchandise is critical.
 - Type B: Fine merchandising includes fine apparel and accessories, china, crystal and silver, and art galleries, where the detailed display and examination of merchandise is important.
 - Type C: Mass merchandising, where focused display and detailed examination of merchandise is important.
 - Type D: General merchandising includes general apparel, variety, stationery, books, sporting goods, hobby, cameras, gift, and luggage, where general display and examination of merchandise are adequate.
 - Type E: Food and miscellaneous includes bakeries, hardware and housewares, grocery, appliances and furniture, where appetizing appearance is important.
 - Type F: Service establishments, where functional performance is important.
- (e) Area factor must not exceed 1.55.
- (f) Minimum of 90 percent of all work stations must be enclosed with partitions of the height prescribed.

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Proposed Rules

(5) Special spaces and activities.

(a) Multifunction rooms. For rooms serving multifunctions, such as hotel banquet or meeting rooms and office conference or presentation rooms, an adjustment factor of 1.5 times the base UPD may be used if a supplementary lighting system is actually installed to serve the secondary function of the room and the design meets the following conditions:

i. the installed power for the supplementary system must not be greater than 33 percent of the adjusted lighting power budget calculated for that room; and

ii. independent controls must be installed for the supplementary lighting system.

(b) Simultaneous activities. In rooms containing multiple simultaneous activities, such as a large general office having separate accounting and drafting areas within the same room, the LPB for the rooms must be the weighted average of the activities in proportion to the areas being served.

(c) Indoor sports. The floor area of indoor sports activities areas must be considered as the area within the playing boundaries of the sport, plus the floor area ten feet beyond the playing boundaries, not to exceed the total floor area of the indoor room less the spectator seating area.

(6) Calculation of interior lighting power allowance. The interior lighting power allowance must include a 0.20 watts per square foot allowance for unlisted spaces. The system performance interior lighting power allowance must be calculated in accordance with the equation below:

$$ILPA = LPB_1 + LPB_2 + \dots + LPB_n + 0.2 \text{ W/ft}^2 \times (\text{Unlisted space})$$

Where:

$$\text{Unlisted space} = \text{GLA} - \text{LSA}$$

(7) Adjusted lighting power. The adjusted lighting power in a building must not exceed the sum of the interior lighting power allowances. The adjusted lighting power is the connected lighting power minus the lighting power controls credit.

(8) Lighting power controls credit and adjustment factor. Credit for luminaires automatically controlled by occupancy sensors, daylight sensors, programmable timing controls, or lumen maintenance controls must be determined in accordance with the equation:

$$LPCC = CLPC \times PAF$$

Table 3.5-2

Power Adjustment Factor

Automatic Control Device(s)	Power Adjustment Factor
Daylight Sensing Controls (DS), continuous dimming	0.30
DS, multiple step dimming	0.20
DS, ON/OFF	0.10
DS, continuous dimming and programmable timing	0.35
DS, multiple step dimming and programmable timing	0.25
DS, ON/OFF and programmable timing	0.15
DS, continuous dimming, programmable timing, and lumen maintenance	0.40
DS, multiple step dimming, programmable timing, and lumen maintenance	0.30
DS, ON/OFF, programmable timing, and lumen maintenance	0.20
Lumen maintenance	0.10
Lumen maintenance and programmable timing control	0.15
Programmable timing control	0.15
Occupancy sensor	0.30
Occupancy sensor DS, continuous dimming	0.40
Occupancy sensor DS, multiple step dimming	0.35
Occupancy sensor DS, ON/OFF	0.35
Occupancy sensor, DS, continuous dimming, and lumen maintenance	0.45
Occupancy sensor, DS, multiple step dimming, and lumen maintenance	0.40
Occupancy sensor, DS, ON/OFF, and lumen maintenance	0.35
Occupancy sensor and lumen maintenance	0.35
Occupancy sensor and programmable timing control	0.35

(a) The lighting power control credits are limited to the specific luminaires controlled by the automatic control device.

(b) Only one adjustment factor may be used for each building space or luminaire, and 50 percent or more of the controlled luminaire must be within the applicable space to qualify for the power adjustment factor.

(c) Controls must be installed in series with the lights and in series with all manual switching devices in order to qualify for an adjustment factor.

(d) Daylight sensing controls must be capable of reducing electrical power consumption for lighting, continuously or in steps, to 50 percent or less of maximum power consumption.

(e) Daylight sensing controls must control all luminaires to which the power adjustment factor is applied and that direct a minimum of 50 percent of their light output into the daylight zone.

(f) Programmable timing controls used for credit in conjunction with this item must be:

i. programmable for different schedules for occupied and unoccupied days;

ii. accessible for temporary override by occupants of individual zones, spaces, or tasks, with automatic return to the original schedules; and

iii. capable of keeping time during power outages for a minimum of four hours.

Standard RS-31 listed in chapter 7 (9) LTGSTD, Lighting Prescriptive and System Performance Compliance Calculation program is an acceptable method for determining demonstrating compliance of the lighting system design with this subpart.

EXCEPTION: One- and two-family detached dwellings and the dwelling portion of multifamily buildings.

[For text of subp 3, see M.R.]

Subp. 4. **Electric motor efficiencies.** All permanently wired, single-speed, Design A and B, polyphase induction motors of 1 hp or more and expected to operate more than 500 hours per year must have National Electrical Manufacturers Association nominal efficiencies not less than those listed in the table below.

Electrical Motor Efficiencies

HORSE POWER	-----OPEN-----				-----ENCLOSED-----			
	3600 RPM	1800 RPM	1200 RPM	900 RPM	3600 RPM	1800 RPM	1200 RPM	900 RPM
1 to 4	82.5%	82.5%	80.0%	74.0%	82.5%	82.5%	80.0%	74.0%
5 to 9	85.5%	87.5%	87.5%	87.5%	87.5%	87.5%	87.5%	85.5%
10 to 19	88.5%	89.5%	90.2%	89.5%	89.5%	89.5%	89.5%	88.5%
20 to 49	90.2%	91.0%	91.0%	90.2%	90.2%	91.0%	90.2%	89.5%
50 to 99	92.4%	93.0%	93.0%	91.7%	92.4%	93.0%	93.0%	91.7%
100 to 124	93.0%	94.1%	94.1%	93.6%	93.6%	94.5%	94.1%	93.0%
125 and greater	93.6%	94.5%	94.1%	93.6%	94.5%	94.5%	94.1%	93.6%
1.0		82.5	77.0	72.0		80.5	75.5	72.0
1.5	80.0	82.5	82.5	75.5	78.5	81.5	82.5	75.5
2.0	82.5	82.5	84.0	85.5	81.5	82.5	82.5	82.5
3.0	82.5	86.5	85.5	86.5	82.5	84.0	84.0	81.5
5.0	85.5	86.5	86.5	87.5	85.5	85.5	85.5	84.0
7.5	85.5	88.5	88.5	88.5	85.5	87.5	87.5	85.5
10.0	87.5	88.5	90.2	89.5	87.5	87.5	87.5	87.5
15.0	89.5	90.2	89.5	89.5	87.5	88.5	89.5	88.5
20.0	90.2	91.0	90.2	90.2	88.5	90.2	89.5	89.5
25.0	91.0	91.7	91.0	90.2	89.5	91.0	90.2	89.5
30.0	91.0	91.7	91.7	91.0	89.5	91.0	91.0	90.2
40.0	91.7	92.4	91.7	90.2	90.2	91.7	91.7	90.2
50.0	91.7	92.4	91.7	91.7	90.2	92.4	91.7	91.0
60.0	93.0	93.0	92.4	92.4	91.7	93.0	91.7	91.7
75.0	93.0	93.6	93.0	93.6	92.4	93.0	93.0	93.0

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Proposed Rules

	-----OPEN-----				-----ENCLOSED-----			
	3600 RPM	1800 RPM	1200 RPM	900 RPM	3600 RPM	1800 RPM	1200 RPM	900 RPM
HORSE	3600	1800	1200	900	3600	1800	1200	900
POWER	RPM	RPM	RPM	RPM	RPM	RPM	RPM	RPM
<u>100.0</u>	<u>93.0</u>	<u>93.6</u>	<u>93.6</u>	<u>93.6</u>	<u>93.0</u>	<u>93.6</u>	<u>93.0</u>	<u>93.0</u>
<u>125.0</u>	<u>93.0</u>	<u>93.6</u>	<u>93.6</u>	<u>93.6</u>	<u>93.0</u>	<u>93.6</u>	<u>93.0</u>	<u>93.6</u>
<u>150.0</u>	<u>93.6</u>	<u>94.1</u>	<u>93.6</u>	<u>93.6</u>	<u>93.0</u>	<u>94.1</u>	<u>94.1</u>	<u>96.6</u>
<u>200.0</u>	<u>93.6</u>	<u>94.1</u>	<u>94.1</u>	<u>93.6</u>	<u>94.1</u>	<u>94.5</u>	<u>94.1</u>	<u>94.1</u>

7670.1115 EFFECTIVE DATES.

The effective date of amendments to this chapter is ~~September 7, 1992~~ January 1, 1994.

EXCEPTION: ~~The Effective date of part 7670.0550, subpart 3, is January 1, 1993~~ 1998, residential buildings (one- and two-family and other residential buildings three stories or less in height) must meet the requirements of the R-2000 Home Program Technical Requirements, Canadian Home Builders' Association, September 1992.

REPEALER. Minnesota Rules, parts 7605.0100; 7605.0110; 7605.0120; 7605.0130; 7605.0140; 7605.0150; 7605.0160; 7670.0125; 7670.0480; 7670.0500; 7670.0510; 7670.0530; 7670.0550; 7670.0850; and 7670.1000, are repealed.

Secretary of State

Proposed Permanent Rules Relating to Uniform Commercial Code Filings

Notice of Intent to Adopt Rules Without a Public Hearing

The Office of the Secretary of State intends to adopt permanent rules without a public hearing following the procedures set forth in the Administrative Procedure Act, *Minnesota Statutes*, sections 14.22 to 14.28. You have 30 days to submit written comment on the proposed rules and may also request that a hearing be held on the rules.

Agency Contact Person. Comments or questions on the rules and written requests for a public hearing on the rules must be submitted to:

Katherine A. Engler
Staff Attorney
Office of the Secretary of State
180 State Office Building
100 Constitution Avenue
St. Paul, MN 55155-1299
Phone: 612/297-5163
Fax: 612/296-9073

Subject of Rule and Statutory Authority. The proposed rules cover the Uniform Commercial Code computerized filing system. The statutory authority to adopt these rules is *Minnesota Statutes*, sections 336.9-411(3), 336.9-403(5) and 14.06. A copy of the proposed rules are published in the *State Register* and specify the manner in which the statewide computerized filing system will be operated by the 87 county recorders and the Office of the Secretary of State. A free copy of the rules are available on request from the agency contact person listed above.

Comments. You have until 4:30 p.m., Thursday, September 30, 1993, to submit written comment in support of or in opposition to the proposed rules and any part or subpart of the rules. Your comments must be in writing and received by the agency contact person by the due date. Comment is encouraged. Your comments should identify the portion of the proposed rules addressed, the reason for the comment, and any change proposed.

Request for a Hearing. In addition to submitting comments, you may also request that a hearing be held on the rules. Your request for a public hearing must be in writing and must be received by the agency contact person by 4:30 p.m. on Thursday, September 30, 1993. Your written request for a public hearing must include your name and address. You are encouraged to identify the portion of the proposed rules which caused your request, the reason for the request, and any changes you want made to the proposed rules. If 25 or more persons submit a written request for a hearing, a public hearing will be held unless sufficient number withdraw their requests in writing. If a public hearing is required, the agency will follow the procedures in *Minnesota Statutes*, sections 14.131 to 14.20.

Modifications. The proposed rules may be modified as a result of public comment. The modifications must be supported by data and views submitted to the agency and may not result in a substantial change in the proposed rules as printed in the *State Register*. If the proposed rules affect you in any way, you are encouraged to participate in the rulemaking process.

Statement of Need and Reasonableness. A statement of need and reasonableness is now available from the agency contact person. This statement describes the need for and reasonableness of each provision of the proposed rules and identifies the data and information relied upon to support the proposed rules.

Small Business Considerations. Small businesses who use the Uniform Commercial computerized filing system may be impacted by these rules. Small businesses, as all members of the public, are encouraged to participate in this rulemaking proceeding.

The Uniform Commercial Code provides a method for establishing priority among competing interests in the same collateral. Altering the rules to reduce filing requirements for small businesses cannot be done without affecting all who use the Uniform Commercial Code system and thus affecting the priority rights in the collateral. The Office of the Secretary of State has considered all of the issues stated in *Minnesota Statutes* section 14.115, subdivision 2 and can find no way to change the rules to address these issues that does not adversely affect the rights of all those competing for the same collateral.

Expenditure of Public Money by Local Public Bodies. The adoption of these rules will not require the expenditure of public monies by local bodies. Therefore, *Minnesota Statutes* section 14.11, subdivision 1 is not applicable.

Impact on Agricultural Lands. The adoption of these rules will not have any impact on agricultural land and so *Minnesota Statutes* section 14.11, subdivision 2 is not applicable.

Adoption and Review of Rule. If no hearing is required, after the end of the comment period the agency may adopt the rules. The rules and supporting documents will then be submitted to the attorney general for review as to legality and form to the extent form relates to legality. You may request to be notified of the date the rules are submitted to the attorney general or be notified of the attorney general's decision on the rules. If you wish to be so notified, or wish to receive a copy of the adopted rules, submit your written request to agency contact person listed above.

Dated: 16 August 1993

Joan Anderson Grove
Secretary of State

Rules as Proposed (all new material)

8270.0010 APPLICABILITY.

This chapter applies to Uniform Commercial Code documents filed with a filing officer for purposes of creating a public record concerning the obligation of a debtor to a secured party or a taxpayer to a taxing authority.

8270.0050 DEFINITIONS.

Subpart 1. **Scope.** As used in this chapter, the following words have the meanings given them.

Subp. 2. **Amendment.** "Amendment" means the document used to show a change in the information given on an original financing statement.

Subp. 3. **Assignment.** "Assignment" means the document used to show the transfer of all of a secured party's interest to another party.

Subp. 4. **Business records.** "Business records" means the information maintained by the Secretary of State concerning trademarks, service marks, assumed business names, corporations, limited partnerships, limited liability companies, and other business organizations.

Subp. 5. **Certification date.** "Certification date" is the date through which a response to an information request presents data concerning a debtor or taxpayer that has not lapsed or been terminated.

Subp. 6. **Continuation.** "Continuation" means the document used to extend the five-year life of a financing statement.

Subp. 7. **County recorder.** "County recorder" means the filing officer designated in each county to accept Uniform Commercial Code filings.

Subp. 8. **Filing.** A "filing" means a UCC document.

Subp. 9. **Filing office.** "Filing office" means either the Office of the County Recorder or the Office of the Secretary of State.

Subp. 10. **Filing officer.** "Filing officer" means the persons in the office of the County Recorder or the Secretary of State who are responsible for filing financing statements, statutory liens, and other UCC documents.

KEY: PROPOSED RULES SECTION — Underlining indicates additions to existing rule language. ~~Strike outs~~ indicate deletions from existing rule language. If a proposed rule is totally new, it is designated "all new material." **ADOPTED RULES SECTION** — Underlining indicates additions to proposed rule language. ~~Strike outs~~ indicate deletions from proposed rule language.

Proposed Rules

Subp. 11. **Financing statement.** "Financing statement" means the UCC document filed with a filing officer to perfect a security interest in collateral. It includes any subsequent filings.

Subp. 12. **Information request.** "Information request" means a written request made to a filing officer for information about a named debtor. An information request may seek either UCC document or tax lien information and will result in a printout of information and/or copies of UCC documents which have been filed.

Subp. 13. **Lapsed filing.** "Lapsed filing" means a financing statement that has expired because a continuation has not been timely filed.

Subp. 14. **Original financing statement.** "Original financing statement" means the first document filed that perfects a security interest in collateral. It does not include any subsequent filing.

Subp. 15. **Partial assignment.** "Partial assignment" means an assignment of collateral that is specifically labeled as a partial assignment, sets forth the collateral to be assigned to the additional secured party, and results in more than one secured party of record.

Subp. 16. **Partial release.** "Partial release" means the document used to show that the secured party has relinquished its security interest in some of the previously specified collateral. The collateral to be released must be specified in the filing.

Subp. 17. **Record.** "Record" means all of the UCC documents concerning a specific obligation of the debtor to the secured party or the taxpayer to the taxing authority.

Subp. 18. **Search.** "Search" means an information request.

Subp. 19. **Secretary of State.** "Secretary of State" means the Minnesota Secretary of State.

Subp. 20. **Social security number.** "Social security number" means the identification number assigned to an individual by the Social Security Administration.

Subp. 21. **Tax lien.** "Tax lien" means a document evidencing an obligation owed by a taxpayer to a taxing authority.

Subp. 22. **Taxing authority.** "Taxing authority" means either the Internal Revenue Service or the Minnesota Department of Revenue.

Subp. 23. **Taxpayer identification number.** "Taxpayer identification number" means the number assigned to a business entity by the Internal Revenue Service.

Subp. 24. **Termination.** "Termination" means the document used to end the record created by the financing statement and all subsequent filings.

Subp. 25. **UCC.** "UCC" means the Uniform Commercial Code as adopted in *Minnesota Statutes*, chapter 336.

Subp. 26. **UCC-1.** "UCC-1" is a designation used by the Secretary of State to identify the form approved pursuant to chapter 8260 for use as a financing statement.

Subp. 27. **UCC-3.** "UCC-3" is a designation used by the Secretary of State to identify the form approved pursuant to chapter 8260 for use as an amendment or assignment, partially release collateral, or continue or terminate an original financing statement.

Subp. 28. **UCC-11.** "UCC-11" is a designation used by the Secretary of State to identify the form approved pursuant to chapter 8260 for use as an information request concerning a particular debtor.

Subp. 29. **UCC-12.** "UCC-12" is a designation used by the Secretary of State to identify the form approved pursuant to chapter 8260 for use as an information request concerning a particular taxpayer.

Subp. 30. **UCC document.** "UCC document" means a financing statement, statutory lien, or any subsequent filing such as an amendment, assignment, continuation, partial release, or termination.

Subp. 31. **Work day.** "Work day" means a weekday that is not a federal holiday, a state holiday as defined in *Minnesota Statutes*, section 645.44, subdivision 5, or a county holiday declared by a county's board of commissioners. Work day does not include a weekday when government offices have been closed due to a weather or other emergency.

8270.0100 PLACE OF FILING.

Nothing in this chapter changes the filing requirements of *Minnesota Statutes*, section 336.9-401.

8270.0105 DETERMINATION OF PLACE OF FILING.

Financing statements may be filed at the Office of the County Recorder or with the Secretary of State as directed in *Minnesota Statutes*, section 336.9-401.

8270.0110 FILINGS AFFECTING REAL ESTATE.

Nothing in this chapter changes the filing requirements for financing statements to be recorded in the mortgage records of the Office of the County Recorder.

8270.0115 RECORDING IN MULTIPLE FILING OFFICES.

To record a financing statement in more than one filing office, multiple financing statements and fees are required. If a secured party wishes to record a financing statement in more than one filing office, the secured party may either file a new financing statement or a copy of the previously filed financing statement in each filing office. If a copy is used, it is a nonstandard filing in the new filing office and the appropriate fee is due. The date of filing in each filing office is the date the filing is made in that office, not the date of the original filing. The date of perfection for each financing statement will be determined according to *Minnesota Statutes*, section 336.9-303.

8270.0200 DATABASE.

Subpart 1. **Creation of database.** A centralized database containing information on all UCC documents filed in Minnesota is created in Saint Paul. The database is housed on a computer operated by the Secretary of State.

Subp. 2. **Changes in database.** The Secretary of State shall make appropriate programming changes in or additions to the database and screens for the central database to reflect any changes to the Minnesota statutes. In addition, the Secretary of State shall program the system to automatically remove lapsed financing statements from the active record that are five years old and that have not been continued.

Subp. 3. **Maintenance of database.** The Secretary of State shall maintain the central database and communications network between the filing offices. The Secretary of State is responsible for the cost of maintaining the computer and the equipment used in its filing office. Each county, through its recorder, is responsible for the cost of maintaining the equipment in the county recorder's filing office.

8270.0205 UNAUTHORIZED ENTRY.

Subpart 1. **Generally.** The Secretary of State shall develop a security system with varying levels of access to the central database which protects the system against unauthorized entry. This will be accomplished by the development of a computer industry standard security system and implemented in cooperation with all filing officers.

Subp. 2. **Security measures.** Security measures adopted by the Secretary of State are confidential and may be disclosed only to the extent required to provide filing officers and their employees access to the central database and to ensure their cooperation with the security system.

Subp. 3. **Cooperative security.** All filing officers and their staff shall cooperate with any request made by the Secretary of State to further the security and integrity of the central database.

Subp. 4. **Periodic review.** The staff of the Secretary of State shall regularly review and analyze access levels of the users of the central database and take every prudent precaution to ensure that unauthorized entry or use does not occur.

Subp. 5. **Notice of entry.** If unauthorized entry or use has occurred, the Secretary of State shall notify all filing officers of the occurrence and take the appropriate steps to prevent a recurrence of the breach of security.

8270.0210 DATA ENTRY.

Subpart 1. **Generally.** Each filing officer must enter data received on UCC documents filed in the filing office into the central database through the terminal located in the filing office. The filing officer is responsible for entry of the UCC documents received and accepted at the filing office.

Subp. 2. **Manner of entry.** Entry of information will be made by the filing officer into the terminal via alphabetical and numerical representations made on the appropriate data entry screens and transmitted via the communications network to the central database.

Subp. 3. **Ability to modify.** A filing officer may add or modify information in the database only when supported by a UCC document filed in the filing officer's office. No modification of the records of another filing office is permitted.

Subp. 4. **Writing required.** Entry or modification of a central database record may only be made after receipt by the filing officer of a UCC document from the secured party or its authorized representative that shows the information to be entered into the central database.

8270.0215 ENTRY DEADLINE.

For the purpose of uniformity and the ability to accurately state that availability of filed information, it is the goal of all filing officers to have data entered into the central database by noon on the first work day following the filing date. The computer generated search certificate must identify filing offices that have not met this goal. The Secretary of State will determine when it is not technically possible to meet this data entry goal and will take appropriate action.

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Proposed Rules

8270.0220 CERTIFICATION DATE.

Each filing office must change the certification date after each day's filings are entered.

8270.0225 FILING A FINANCING STATEMENT.

Subpart 1. **Generally.** Upon receipt of an original financing statement, a filing officer shall determine if the debtor name is legible and can be indexed. If the debtor name is legible, an identification number is listed for each debtor name, and the correct filing fee has been submitted with the original financing statement, the filing officer shall accept the UCC document for filing.

Subp. 2. **Individual debtor name.** The name of an individual debtor shall be presented on the original financing statement with the last name first. The filing officer shall index the original financing statement according to the name presented in the last name area.

Subp. 3. **Business debtor name.** If the debtor name is a business name, it shall be shown on the original financing statement as it appears on the registration papers filed with the Office of the Secretary of State. If the business debtor is the only debtor name on an original financing statement, only the business name area on the UCC-1 form should be used.

8270.0230 MODIFYING A FINANCING STATEMENT.

Subpart 1. **Generally.** Upon the filing of an amendment, assignment, partial assignment, partial release, continuation, or termination, the filing officer shall modify the data in the central database so that it matches the information presented on the filing. Only one function shall be presented on a single UCC-3 form. The code that represents the type of filing made must be entered by the filing officer into the central database.

Subp. 2. **Continuation.** To file a continuation statement, the UCC-3 form must be completed to show:

A. the continuation box checked;

B. the original financing statement file number;

C. the original date of filing; and

D. all the debtor and secured party information of record which includes the social security or taxpayer identification number for the debtor and an address for the debtor and the secured party. The correct filing fee must accompany the continuation.

One continuation statement will be accepted for filing on an original financing statement in the six months prior to the time of expiration. Multiple continuation statements from separate secured parties on the same financing statement will not be accepted.

Subp. 3. **Assignment.** To file an assignment, the UCC-3 form must be completed to show:

A. the assignment box checked;

B. the original financing statement file number;

C. the original date of filing;

D. all the debtor and secured party information of record and an address for the debtor and the secured party; and

E. the new secured party's name and address in the appropriate area. The correct filing fee must accompany the assignment.

Subp. 4. **Partial assignment.** To file a partial assignment, the UCC-3 form must be completed to show:

A. the partial assignment box checked;

B. the original financing statement file number;

C. the original date of filing;

D. all the debtor and secured party information of record and an address for the debtor and the secured party;

E. the additional secured party information in the appropriate area; and

F. a description of the collateral assigned in the appropriate area. The correct filing fee must accompany the partial assignment.

After a partial assignment has been filed, any of the secured parties can amend, assign, continue, or file a partial release to the original financing statement.

Subp. 5. **Amendment.** To file an amendment, the UCC-3 form must be completed to show:

A. the appropriate amendment box checked;

B. the original financing statement file number;

C. the original date of filing;

D. all the debtor and secured party information of record and an address for the debtor and the secured party; and

E. the amended information clearly identified in the appropriate area. If debtor names are added, an identification number of

each debtor must be listed as part of the amendment. The correct filing fee must accompany the amendment.

Subp. 6. **Partial release.** To file a partial release, the UCC-3 form must be completed to show:

- A. the partial release box checked;
- B. the original financing statement file number;
- C. the original date of filing;
- D. all the debtor and secured party information of record and an address for the debtor and the secured party; and
- E. a description of the collateral to be released in the appropriate area. The correct filing fee must accompany the partial release.

Subp. 7. **Termination.** To file a termination, the UCC-3 form must be completed to show:

- A. the termination box checked;
- B. the original financing statement file number;
- C. the original date of filing;
- D. all the debtor and secured party information of record and an address for the debtor and the secured party; and
- E. the signature of every secured party of record. If the termination is presented in a nonstandard form or format, the correct filing fee must accompany the filing.

8270.0235 PROCEDURES MANUAL.

Data entry standards and procedures and search procedures are prescribed in the UCC Procedures Manual authored and published by the Secretary of State's office. The manual, dated 1988, and all subsequent amendments to it are incorporated by reference and are not subject to frequent change. It is available from the Computer Services Section, Office of the Secretary of State, 180 State Office Building, 100 Constitution Avenue, Saint Paul, MN 55155-1299. It is also available at the State Law Library.

8270.0240 INFORMATION RETRIEVAL.

Subpart 1. **Generally.** Each filing officer shall have the computer capability to retrieve information stored in the central database. The database is accessed through a telecommunications network and by using the menu presented. Information retrieved from the central database is printed in the form of a search certificate which contains all information in the central database for the debtor name which is selected by the filing officer to be certified.

Subp. 2. **Retrieval of information.** All filing officers must retrieve information on a requested debtor from the central database upon receipt of an information request. When a filing officer's tax liens are entered in the central database, it must be used to prepare a search certificate in response to a tax lien information request.

8270.0245 INDEX.

Subpart 1. **Security interests.** The central database shall serve as the index of all security interests as required by *Minnesota Statutes*, section 336.9-403, subsection (4).

Subp. 2. **Statutory liens.** The central database is the index of all statutory liens that have been entered into it.

Subp. 3. **Tax liens.** The central database is the index of all federal and state tax liens filed with the Secretary of State and with any county recorder whose tax liens have been entered into the central database.

8270.0255 REMOVAL AND DESTRUCTION OF UCC DOCUMENTS.

Subpart 1. **Removal.** A filing officer may remove lapsed or terminated UCC documents from the officer's records one year after the date of lapse or termination.

Subp. 2. **Destruction.** UCC documents that have been removed from the files of the filing officer may be destroyed.

Subp. 3. **Retention schedules.** Each filing officer has the ability, unless otherwise directed by statute, to adopt procedures for the retention of UCC documents according to *Minnesota Statutes*, section 138.17. The procedures may include the storage of UCC documents on microfilm, microfiche, or other media as permitted by law and may establish a schedule for the retention of paper copies of UCC documents.

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Proposed Rules

8270.0260 BUSINESS RECORDS.

Subpart 1. **Generally.** The Secretary of State maintains information about business and corporate filings for the state of Minnesota. The information found in these records is stored in a computer that is operated and maintained by the Secretary of State and that is accessible to all filing officers via the communications network.

Subp. 2. **View-only access.** View-only access of these records is available to the filing officers and their customers.

Subp. 3. **No interpretation.** No interpretation by a filing officer of information contained in the business records is binding on the Secretary of State.

Subp. 4. **Business filing requirements.** The filing requirements for business records are determined by the appropriate statute and not by this chapter.

8270.0265 IDENTIFICATION OF PARTIES.

The identification number for each debtor, whether the social security number of an individual debtor or the federal taxpayer identification number of a business debtor, may be used by a requesting party to specify a particular debtor when making an information request.

If it becomes possible to search the central database for secured party information, the secretary may adopt an identification procedure for secured parties.

8270.0270 CONVERSION OF RECORDS.

Conversion of UCC documents or tax liens will occur in a manner agreed to by the county recorder, the Secretary of State, and any other appropriate parties. Data entry will be done in the manner described in parts 8270.0210 and 8270.0235, if data entry is required by the conversion.

Adopted Rules

The adoption of a rule becomes effective after the requirements of Minn. Stat. §14.14-14.28 have been met and five working days after the rule is published in *State Register*, unless a later date is required by statutes or specified in the rule.

If an adopted rule is identical to its proposed form as previously published, a notice of adoption and a citation to its previous *State Register* publication will be printed.

If an adopted rule differs from its proposed form, language which has been deleted will be printed with strikeouts and new language will be underlined. The rule's previous *State Register* publication will be cited.

An emergency rule becomes effective five working days after the approval of the Attorney General as specified in Minn. Stat. §14.33 and upon the approval of the Revisor of Statutes as specified in §14.36. Notice of approval by the Attorney General will be published as soon as practicable, and the adopted emergency rule will be published in the manner provided for adopted rules under §14.18.

Housing Finance Agency

Adopted Permanent Rules Relating to Housing Loans and Grants

The rules proposed and published at *State Register*, Volume 17, Number 49, pages 3006-3007, June 7, 1993 (17 SR 3006), are adopted as proposed.

Housing Finance Agency

Adopted Permanent Rules Relating to Accessibility Deferred Loan Program

The rules proposed and published at *State Register*, Volume 17, Number 49, pages 3007-3008, June 7, 1993 (17 SR 3007), are adopted as proposed.

Withdrawn Rules

Department of Commerce

Notice of Withdrawal of Proposed Rule in the Matter of the Proposed Adoption of the Rules Relating to Credit Unions

NOTICE IS HEREBY GIVEN that the above-referenced proposed rules which were published in the *State Register* on July 12, 1993, (Volume 18, Number 2, pages 80-82) are hereby withdrawn. Replacement rules are being published in this volume of the *State Register*.

Dated: 13 August 1993

Patrick L. Nelson
Commissioner of Commerce (Acting)

Executive Orders

Executive Department

Executive Order 93-17: Providing for the Establishment of a Governor's Council on Geographic Information; Rescinding Executive Order 91-19

I, ARNE H. CARLSON, GOVERNOR OF THE STATE OF MINNESOTA, by virtue of the authority vested in me by the Constitution and the applicable statutes, do hereby issue this Executive Order:

WHEREAS, the management of geographic information about the character and location of the state's natural and cultural resources, and the human and economic activities that affect and are affected by those resources, is essential to all levels of government, state, local, and federal, in the State of Minnesota; and

WHEREAS, there is a need to coordinate the various activities in geographic information systems (GIS) and land information systems (LIS) in order to better exchange and share information and to enhance the stewardship of geographic information in the management of public resources; and

WHEREAS, the current Minnesota GIS/LIS Consortium, a volunteer organization, has been engaged in a variety of educational, communications, and information sharing activities but lacks the explicit authority to recommend standards, policies, and guidelines; and

WHEREAS, there is a need to recommend standards, policies, and guidelines to the Information Policy Office and other units of government for developing and sharing geographic information; and

WHEREAS, there is a need to avoid duplication of efforts so as to reduce the costs that would otherwise be involved if each organization developed its own GIS capabilities independently; and

WHEREAS, there is a need to establish a formal forum in order to discuss, debate, and decide issues related to geographic information; and

WHEREAS, there is a need to prioritize and schedule the development of public-funded data programs, define the roles and responsibilities for data stewardship, and formulate the policies for the access, distribution, and pricing of data; and

WHEREAS, there is a need to initiate a geographic information clearinghouse in order to consolidate data into libraries, integrate data into common formats, and distribute data to users; and

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Executive Orders

WHEREAS, there is a need to provide organizational structure, financial support, and personnel direction to a statewide approach for developing and managing geographic information; and

WHEREAS, there is a need to provide education, training, and support for users of geographic information toward their better management of public resources; and

WHEREAS, there is a need to modify Executive Order 91-19 to reflect the transfer by the 1993 Legislature of certain GIS and LIS responsibilities from the Commissioner of Administration to the Director of the Office of Strategic and Long-Range Planning;

NOW, THEREFORE, I hereby order that:

1. The Governor's Council on Geographic Information (hereinafter referred to as Council) shall be formally established.

2. The Council shall be appointed by the Director of the Office of Strategic and Long-Range Planning who shall solicit nominations from the Minnesota GIS/LIS Consortium and other interested groups. The Council shall be composed of not more than 18 members with knowledge and interest in the GIS field representing state government, higher education, local government, federal government, and GIS user(s) in the private sector. The Director of the Office of Strategic and Long-Range Planning shall appoint a chair for the Council.

3. The Council shall formulate and adopt a charter for its own operation and the formation of topical advisory committees. No more than 15 members may be reimbursed for expenses as provided in *Minnesota Statutes* 1992, Section 15.0593.

4. The Council shall receive administrative staff support from the Office of Strategic and Long-Range Planning, technical staff support from the Land Management Information Center, and advice from the Minnesota GIS/LIS Consortium.

5. The Council shall prepare an annual report by June 30th of each year to the Governor, to be submitted through the Director of the Office of Strategic and Long-Range Planning, describing accomplishments from the previous year and plans and recommendations for the future.

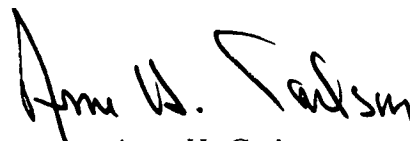
6. The Council's annual report on June 30, 1994 shall include recommendations to the Governor on the future organizational structure for the Council and recommendations for addressing the needs described in this executive order.

7. Standards developed by the Council must go through the Information Policy Office standards approval process.

Executive Order 91-19 is rescinded.

Pursuant to *Minnesota Statutes* 1992, Section 4.035, subd. 2, this Order shall be effective fifteen (15) days after publication in the *State Register* and filing with the Secretary of State and shall remain in effect until rescinded by proper authority or it expires in accordance with *Minnesota Statutes* 1992, Section 4.035, subd. 3.

IN TESTIMONY WHEREOF, I have set my hand this eighteenth day of August, 1993.


Arne H. Carlson
Governor

Filed According to Law:

Joan Anderson Growe
Secretary of State

Executive Department

Emergency Executive Order 93-18: Declaring a State of Emergency in the State of Minnesota

I, ARNE H. CARLSON, GOVERNOR OF THE STATE OF MINNESOTA, by virtue of the authority vested in me by the Constitution and the applicable statutes, do hereby issue this Executive Order:

WHEREAS, heavy, continuous rainfall during the months of July and August, 1993, has saturated the soils, and on August 15, 1993, a torrential downpour of four to ten inches caused the Cedar River and Turtle Creek to flood out of their banks; and

WHEREAS, the heavy rainfall has resulted in widespread road and bridge closings and damage, crop destruction, building damage, potential dam and levee failures, and other threats to public safety; and

WHEREAS, the resources of local government and private relief agencies are being fully utilized to respond to the crisis; and

WHEREAS, local government and private relief agency resources are being exhausted; and

WHEREAS, in addition to the counties already declared in Emergency Executive Orders 93-7, 93-12, 93-15 and 93-16, there is a threat to public safety in Freeborn and Mower counties; and

WHEREAS, severe storms continue to cause damage, and additional counties may be requesting assistance as flood waters recede;

NOW, THEREFORE, I hereby order that:

A State of Emergency exists in the State of Minnesota and do direct the Division of Emergency Management, in conjunction with the Federal Emergency Management Agency and other state and federal agencies, to determine the need for supplementary disaster aid and to coordinate the provision of any such assistance as necessary under existing state and federal authority.

Pursuant to *Minnesota Statutes* 1992, Section 4.035, subd. 2, this Order is effective immediately and shall remain in effect until rescinded by proper authority or it expires in accordance with *Minnesota Statutes*, 1992, Section 4.035, subd. 3.

IN TESTIMONY WHEREOF, I have set my hand this nineteenth day of August, 1993.



Arne H. Carlson
Governor

Filed According to Law:

Joan Anderson Growe
Secretary of State

Official Notices

Pursuant to the provisions of Minnesota Statutes § 14.10, an agency, in preparing proposed rules, may seek information or opinion from sources outside the agency. Notices of intent to solicit outside opinion must be published in the *State Register* and all interested persons afforded the opportunity to submit data or views on the subject, either orally or in writing.

The *State Register* also publishes other official notices of state agencies, notices of meetings, and matters of public interest.

Commerce Department

Minnesota Petroleum Tank Releases Compensation Board

Notice of Intent to Solicit Outside Information or Opinions Regarding Proposed Rules Governing Documentation and Investigation of Claims, Competitive Bidding, Invoicing, Applications for Reimbursement, Eligibility of Costs, Fee Schedules and Criteria for Evaluating the Reasonableness of Costs

NOTICE IS HEREBY GIVEN that the Minnesota Petroleum Tank Release Compensation Board (the "Board") is seeking information or opinions from outside sources in preparing to propose the amendment of rules governing the Documentation and Investigation of Claims, Competitive Bidding, Invoicing, Applications for Reimbursement, Eligibility of Costs, Fee Schedules and Criteria for Evaluating the Reasonableness of Costs. The amendment of the rules is authorized by *Minnesota Statute* § 115C.07, subd. 3 (1992), which requires the Board to adopt the rules regarding the Board's practices and procedures, and the form and procedure for applications for compensation from the fund and procedures for investigation of claims; rules on competitive bidding that specify a bid format and an invoice format that are consistent with each other and with an application for reimbursement; rules under sections 14.29 and 14.385 to establish costs that are not eligible for reimbursement; and rules establishing a fee schedule of costs or criteria for evaluating the reasonableness of costs submitted for reimbursement.

The Board requests information and opinions concerning the subject matter of the rules. Interested persons or groups may submit data or views in writing or orally. Written or oral statements or comments should be directed to:

Patricia L. Peterson
Minnesota Department of Commerce St. Paul, Minnesota 55101
133 East Seventh Street Telephone: (612) 297-1119

Oral statements will be received during regular business hours, 9:00 a.m. to 4:30 p.m., Monday through Friday.

The proposed amendments to the rules of the Board will have an impact on small business. Many small businesses seek reimbursement of clean-up costs relating to releases of petroleum. The proposed amendments to the Board's rules may affect the amount of costs reimbursed and the requirements for receiving reimbursement.

All statements of information and opinion will be accepted until September 15, 1993. Any written materials received by the Board shall become part of the rulemaking record in the event that the rule is adopted, amended, or repealed.

Phil Troutwine, Chair
Minnesota Petroleum Tank Release Compensation Board

Department of Health

Health Care Delivery Systems Division

The Following is the Schedule of Meetings for the Integrated Service Network (ISN) Work Groups and ISN Advisory Committee Which Were Announced in the *State Register* on July 26, 1993. For Further Information, call (612) 623-5555

ISN Work Group #1—Finance & Administration

September 2, 1993	1:30 p.m.-4:30 p.m.	Chesley Room, Dept. of Health
September 7, 1993	1:30 p.m.-4:30 p.m.	Capitol View Conference Center
September 21, 1993	1:00 p.m.-4:00 p.m.	Chesley Room, Dept. of Health
September 27, 1993	1:30 p.m.-4:30 p.m.	Chesley Room, Dept. of Health
October 7, 1993	2:00 p.m.-5:00 p.m.	Chesley Room, Dept. of Health
October 11, 1993	1:30 p.m.-4:30 p.m.	Chesley Room, Dept. of Health

ISN Work Group # 2—Service Delivery & Provider Relations

September 1, 1993	8:30 a.m.-11:30 a.m.	Chesley Room, Dept. of Health
September 7, 1993	8:30 a.m.-11:30 a.m.	Capitol View Conference Center
September 20, 1993	8:30 a.m.-11:30 a.m.	Chesley Room, Dept. of Health
September 28, 1993	8:30 a.m.-11:30 a.m.	Capitol View Conference Center
October 8, 1993	8:30 a.m.-11:30 a.m.	Chesley Room, Dept. of Health
October 12, 1993	1:00 p.m.-4:00 p.m.	Chesley Room, Dept. of Health

ISN Work Group #3—Quality Assurance & Enrollee Rights

September 3, 1993	8:30 a.m.-11:30 a.m.	Chesley Room, Dept. of Health
September 8, 1993	8:30 a.m.-11:30 a.m.	Capitol View Conference Center
September 22, 1993	8:30 a.m.-11:30 a.m.	Chesley Room, Dept. of Health
September 28, 1993	1:30 p.m.-4:30 p.m.	Capitol View Conference Center
October 8, 1993	1:30 p.m.-4:30 p.m.	Chesley Room, Dept. of Health
October 15, 1993	2:00 p.m.-5:00 p.m.	Chesley Room, Dept. of Health

ISN Advisory Committee

October 4, 1993	8:30 a.m.-4:30 p.m.	Capitol View Conference Center
November 22, 1993	8:30 a.m.-4:30 p.m.	Capitol View Conference Center

Health Department

Advisory Review Panel for Nursing Home Moratorium Exceptions

Interagency Long Term Care Planning Committee (INTERCOM)
 393 North Dunlap Street, P.O. Box 64900, St. Paul, MN 55164-0900.
Minnesota Statutes 144A.073., MCAR. [EMERGENCY] 4655.1074.

APPOINTING AUTHORITY: INTERCOM. COMPENSATION: None.

VACANCY: Five positions. Please refer to the description of this committee.

The Advisory Review Panel reviews and ranks proposals for exceptions to the moratorium on nursing homes, and reports their recommendations to INTERCOM.

The panel consists of five members; two representatives from organizations that represent consumers of nursing home services, two representatives from organizations representing providers of nursing home services, and one who has a background in long term care and accounting, engineering, or building construction.

Meetings are scheduled during the moratorium exception application and review process, which has traditionally been initiated within 30 days of the beginning of the biennium.

Departments of Human Services, Health and Public Safety

Notice of Intent to Solicit Outside Information or Opinions Regarding Proposed Merit System Rules Governing Definitions, Prohibition Against Discrimination, the Probationary Period, the Compensation Plan and Salary Adjustments and Increases

NOTICE IS HEREBY GIVEN that the State Departments of Human Services, Health, and Public Safety are seeking information or opinions from sources outside the agencies in preparing to propose amendments to the Merit System rules governing definitions, prohibitions against discrimination, the probationary period, the compensation plan and salary adjustments and increases. The amendments to the rules are authorized by *Minnesota Statutes*, sections 256.012, 144.071 and 12.22, subd. 3, which permit the Merit System to establish rules to provide local and county appointing authorities with an effective system of personnel administration based on merit principles.

The proposed amendments alter the definitions for "discrimination" and "equal employment opportunity" and the language in the rule on prohibition against discrimination to comply with recent changes in the Minnesota Human Rights Act.

Official Notices

Amendments to the rule on the probationary period simplify the computation of the probationary period for intermittent employees. Amendments also are proposed to rules on the compensation plan and salary adjustments and increases.

The State Departments of Human Services, Health and Public Safety request information and opinions concerning the subject matter of the rules. Interested persons or groups may submit data or views on the subject matter of concern in writing or orally.

Written statements of information and comment should be addressed to:

Betty Carlson
Minnesota Merit System
Human Services Building
444 Lafayette Road
St. Paul, Minnesota 55155-3822

Oral statements will be received during regular business hours over the telephone by Betty Carlson at (612) 296-3996 and in person at the above address.

All statements of information and opinions shall be accepted until further notice is published in the *State Register* or the Notice of Hearing or Notice of Intent to Adopt Rules Without a Hearing is published in the *State Register*. Any written material received by the Minnesota Merit System shall become part of the rulemaking record to be submitted to the attorney general or administrative law judge in the event that the rule is adopted.

Dated: 19 August 1993

Betty Carlson
Merit System Supervisor

Department of Human Services

Community Mental Health and State-Operated Services Administration—Residential Program Management Division

Notice of Solicitation of Outside Information or Opinions Regarding Proposed Rules Governing Operation, Maintenance, and Licensure of Program to be Established at the Minnesota Psychopathic Personality Treatment Center

NOTICE IS HERBY GIVEN that the State Department of Human Services is seeking information or opinions from sources outside the agency in preparing to develop and propose adoption of rules governing the program to be established at the Minnesota Psychopathic Personality Treatment Center. *Minnesota Statutes*, section 246B.02 directs the commissioner of human services to establish and maintain a secure facility located in Moose Lake to be known as the Minnesota Psychopathic Personality Treatment Center.

Adoption of the rules is authorized by *Minnesota Statutes*, section 246B.04. The rules under development will govern the operation, maintenance, and licensure of the treatment center program for persons committed to the center as psychopathic personalities. The facility will also be licensed by the Minnesota Department of Health as a supervised living facility.

The rules under development will address such areas as program services; program evaluation; policies on admission, discharge, and transfer; rules and discipline; staffing requirements, and client rights.

The State Department of Human Services requests information and opinions concerning the subject matter of the rule. Interested persons or groups may submit data or views on the subject matter of concern in writing or orally. Written statements should be addressed to: Alice Weck, Rules Division, Minnesota Department of Human Services, 444 Lafayette Road, St. Paul, MN 55155-3816.

Oral statements will be received during regular business hours over the telephone by Alice Weck at 612/297-4302 and in person at the above address.

All statements of information and opinions shall be accepted until further notice is published in the *State Register* or the Notice of Hearing or Notice of Intent to Adopt Rules Without a Hearing is published in the *State Register*. Any written material received by the State Department of Human Services will become part of the rulemaking record to be submitted to the attorney general or administrative law judge in the event that the rule is adopted.

Dated: 23 August 1993

Alice S. Weck
Rules Division

Judicial Department

Joint Notice of County Law Library Filing Fees

Pursuant to *Minnesota Statute* 134A.10, the following law library fees are currently in effect unless otherwise noted. Civil fees include probate matters except as noted. Criminal conviction includes felonies, gross misdemeanors, and misdemeanors except as noted.

COUNTY	CIVIL	CONCILIATION	CRIMINAL CONVICTION	PETTY MISD.	NOTES:
Anoka	7	5	10	5	\$5 on Probate matters.
Clay	10	5	10	5	\$5 on Misdemeanors.
New fees effective January 1, 1994.					
Clearwater	8	8	8	8	
Freeborn	10	10	10	2	
Houston	5	2	10	5	\$5 on Misdemeanors.
Nothing on family matters.					
Mille Lacs	7	1	—	—	
Nicollet	3	3	3	3	
Roseau	7.50	7.50	7.50	7.50	
Sherburne	5	3	3	3	

Labor & Industry Department

Labor Standards Division

Notice of Prevailing Wage Certifications for Commercial Construction Projects

Effective August 30, 1993 prevailing wage rates are certified for commercial construction projects in: Becker county: Detroit Lakes Headquarters Building Sanitary Sewer-Detroit Lakes. Carlton county: Moose Lake R.T.C. 100 Bed Facility-Moose Lake. Carver county: Chaska Middle School Renovation-Chaska. Crow Wing county: High School Agricultural Building-Brainerd. Dakota county: Burnsville Siphon Interceptor Improvements-Burnsville, Metropolitan Mosquito Control District-Rosemount. Hennepin county: Bloomington Siphon Interceptor Improvements-Bloomington, Minneapolis Community College-Minneapolis, Richfield Schools: High School Gym, Bus Garage Lincoln Hills Elementary Reroofing-Richfield. Mower county: Austin Community College Exterior Lighting-Austin. Ramsey county: Highland Park Middle, J.J. Hill Montessori Magnet & Longfellow Magnet Schools Telecommunications System-St. Paul. Roseau county: Warroad Fire Alarm Early Detection-Warroad. St. Louis county: U/M China Hall Domestic Water Piping Replacement-Duluth, Buhl City Hall Reroofing-Buhl. Wadena county: Staples Airport Tee Hangar-Staples. Washington county: New Jr. High School Sitework-Cottage Grove and Woodbury. Winona county: Lourdes Hall Asbestos Removal-Winona State University.

Copies of the certified wage rates for these projects may be obtained by writing the Minnesota Department of Labor and Industry, Prevailing Wage Section, 443 Lafayette Road, St. Paul, Minnesota 55155-4306. The charge for the cost of copying and mailing are \$1.36 per project. Make check or money order payable to the State of Minnesota.

John B. Lennes, Jr
Commissioner

Minnesota Comprehensive Health Association

Notice of Meeting of the Executive Committee

NOTICE IS HEREBY GIVEN that a meeting of the Minnesota Comprehensive Health Association (MCHA), Executive Committee will be held at 3:00 p.m., on Wednesday, September 1, 1993 at Blue Cross and Blue Shield of Minnesota, 3500 Yankee Drive, Suite 400, Eagan, Minnesota. The meeting will be in Room "A."

For additional information please call Lynn Gruber at (612) 593-9609.

Minnesota Property Insurance Placement Facility

Notice of Meeting of the Board of Directors

NOTICE IS HEREBY GIVEN that a meeting of the Board of Directors of the Minnesota Property Insurance Placement Facility will be held at 9:00 a.m. on Wednesday, September 8, 1993 at its office located at 1201 Marquette Avenue, Suite 310, Minneapolis, MN. For additional information please call 338-7584.

Regional Transit Board

Public Hearing on Proposed Bus Fare Increases

The Regional Transit Board (RTB) will hold two public hearings on Monday, September 20, 1993 on proposed regular route bus fare increases. One hearing will be at noon at the Hennepin County Government Center, in the Auditorium located on Level A, 300 South Sixth Street, downtown Minneapolis. The second hearing will be at 5:00 p.m. in the Chambers on the first floor of Mears Park Centre, 230 East Fifth Street, downtown St. Paul. Interested persons are encouraged to attend this hearing and offer public comment. Sign language interpreters will be provided if requested two weeks in advance. The information to be presented will also be available in Braille or on cassette tape if requested two weeks in advance. Please call Mary Fitzgerald, RTB secretary, if you wish to speak at the public hearing. You may also sign up at the hearing. For further information, contact the Regional Transit Board offices, 7th floor, Mears Park Centre, 230 E. 5th Street, St. Paul, MN 55101, telephone: 292-8789, (299-TTY). Written comments will also be accepted at the above address until October 18, 1993.

John Riley
Chair, Regional Transit Board

Professional, Technical & Consulting Contracts

Department of Administration procedures require that notice of any consultant services contract or professional and technical services contract which has an estimated cost of over \$10,000 be printed in the *State Register*. These procedures also require that the following information be included in the notice: name of contact person, agency name and address, description of project and tasks, cost estimate, and final submission date of completed contract proposal. Certain quasi-state agencies are exempted from some of the provisions of this statute.

In accordance with *Minnesota Rules Part 1230.1910*, certified Targeted Group Businesses and individuals submitting proposals as prime contractors shall receive the equivalent of a 6% preference in the evaluation of their proposal. For information regarding certification, call the Materials Management Helpline (612) 296-2600 or [TDD (612) 297-5353 and ask for 296-2600].

Department of Administration

Notice of Request for Proposals to Lease Eight Four Bedroom Homes

The Department of Administration on behalf of the Department of Health Services desires proposals for leasing eight (8) four-bedroom homes within a 40 to 60 mile radius of Moose Lake, Minnesota and preferably in the communities of Duluth, Cloquet and Carlton for the purpose of providing residences for developmentally disabled persons.

Contact: Department of Administration
Real Estate Management Division
309 Administration Building
50 Sherburne Avenue
St. Paul, Minnesota 55155
Telephone: (612) 296-6674

Proposals must be submitted by 4:30 p.m. (CST) on Wednesday, September 22, 1993.

Office of the Attorney General

The Minnesota Attorney General's Consumer Division is Distributing a Request for Proposals (RFP) to Write Two Publications to Assist First-Time Home Buyers and First-Time Home Sellers

"The Home Buying Handbook" will serve as a road map to the home buying process—discussing the important players, terms, fees and legal concepts involved. "How To Sell Your Home" will be a smaller guide for home owners interested in selling. Proposals are due by 4:00 p.m. on Friday, October 1, 1993. There will be a briefing session on Tuesday, September 21. Work must be completed by December 31, 1993. If you are interested in the outlines for these two publications and a copy of this RFP, please contact Ann Ettel, Consumer Division, Office of the Attorney General, 1400 NCL Tower, 445 Minnesota Street, St. Paul, MN 55101, (612) 297-8280.

Department of Corrections

Request for Proposal for Vocational Programs for Criminal Offenders

The Carl Perkins Vocational and Applied Technology Act designates that 1% of the total state allocation will be set aside for vocational programs for criminal offenders. Included in the definition of criminal offender are individuals charged with or convicted of any criminal offense, including a youth or juvenile offender. State and local correctional facilities are eligible to receive funds.

The 1% monies, approximately \$150,000, are being administered by the Department of Corrections and the State Board of Technical colleges, as defined by law. Money will be available on a competitive basis for proposals rated by a panel of readers. Proposal emphases should focus on one or more of the following: Functional Literacy; Assessment Procedures; Vocational Exploration; Transition. Proposals may be requested for two years. Proposals are due no later than Wednesday, September 29, 1993.

Programs educating criminal offenders may apply for Carl Perkins money through a request for proposal procedure. Complete details on the RFP and forms for submitting a proposal are available by phoning Roger Knudson at (612) 642-0244.

Environmental Quality Board

Public Notice of Request for Qualifications (RFQ) for Professional Services for a Thermal Energy System Feasibility Analysis

The Environmental Quality Board is anticipating hiring professional services to assist with the analysis of the technical and economic feasibility of various boiler, electricity cogeneration, and district energy systems. This analysis is to be completed as part of an Environmental Impact Statement (EIS) planned for the University of Minnesota's proposed renovation of its Twin City campus steam facilities. The work is anticipated to include the preparation of technical reports and summary documents, assisting in public meetings, and coordination with other aspects of the planned EIS.

The Request for Qualifications are available by calling or writing John N. Wachtler, Project Manager, Minnesota Environmental Quality Board, 300 Centennial Building, 658 Cedar Street, St. Paul, MN 55155. Telephone (612) 296-4095 Fax (612) 296-3698.

Details concerning submission requirements are included in the Request for Qualifications.

Environmental Quality Board

Public Notice of Request for Qualifications (RFQ) for Professional Services Assisting With a Land Use and Economic Impact Analysis

The Environmental Quality Board is anticipating hiring professional services to assist in the evaluation of land use and economic impacts due to the University of Minnesota's proposed renovation of its Twin City campus steam facilities. The analysis is part of an Environmental Impact Statement (EIS) for the proposed project. The work is anticipated to include the preparation of technical reports and summary documents, assistance at public meetings, and coordination with other aspects of the planned EIS.

The Request for Qualifications are available by calling or writing John N. Wachtler, Project Manager, Minnesota Environmental Quality Board, 300 Centennial Building, 658 Cedar Street, St. Paul, MN 55155. Telephone (612) 296-4095 Fax (612) 296-3698. SOQ's are due no later than September 10, 1993. Details concerning submission requirements are included in the Request for Qualifications.

Professional, Technical & Consulting Contracts

Department of Human Services

Evaluation of the New Vistas/Economic Self-Sufficiency Program (ESP)

August 16, 1993

A Project of the Minnesota Department of Human Services, Honeywell and the Minneapolis Public Schools

This request for proposals does not obligate the State to complete the project, and the State reserves the right to cancel the solicitation if it is considered to be in its best interests.

RFP Issued: August 30, 1993
Letter of Intent Due: September 13, 1993
Proposals Due: October 11, 1993
Contract Begins: October 29, 1993
Evaluation Plan Due: December 29, 1993

Minnesota Department of Human Services Contact

Prospective respondents who have questions regarding this request for proposals may call or write:

Stephen Gies
JOBS Revenue Enhancement
Department of Human Services
State of Minnesota
444 Lafayette Road
St. Paul MN 55155-3837
Telephone: (612) 297-1427
Facsimile: (612) 297-5840

All contact regarding this RFP is to be made with the individual listed above. There will be no other point of contact. In the interest of fairness, copies of (a) any addenda to the RFP; and (b) responses to any questions relating to the RFP will be sent to all prospective bidders who submit a letter of intent indicating their interest in submitting a proposal (see "Letter of Intent").

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Description of the Project

New Vistas/ESP is a program designed to reduce welfare dependency and to enhance the vocational and economic independence of adolescent parents. Research has linked significant long-term economic difficulties and associated stresses to families where the first child was born to an unmarried adolescent. Many jobs which are available to adolescents do not provide sufficient income to support a family. Adolescent parents frequently lack an adequate support system to facilitate completion of secondary education and preparation for a job which will provide a wage adequate to meet basic family needs.

Because few adolescent fathers provide support, the complete responsibility for meeting family needs often rests upon the adolescent mothers. Although the role of the father needs to be addressed, the loss of public assistance when income is earned has been demonstrated to be a deterrent to the transition from welfare dependence to the role of a contributing member of society.

The human services system has become encumbered by overlapping programs and inconsistent policies, and welfare benefits have not kept up with inflation. In Minnesota, the purchasing power of AFDC benefits declined 40% between 1972 and 1990. There has been no Cost of Living Adjustment in welfare since July 1, 1986. In addition, legislative and administrative changes to the welfare system have created, for AFDC recipients, significant disincentives to work; only 14% of the Minnesota case load is employed. Although the majority of families use welfare only temporarily, some use welfare for a longer term. These long term cases are a major part of the cost.

It is the intent of New Vistas/ESP to provide incentives for adolescent mothers to participate in educational and vocational development activities leading to long-term independence from the welfare system. The current welfare system puts recipients on an economic roller coaster because of the loss of AFDC benefits, particularly when employment is sporadic, since a rise in earned income is followed by a drop in benefits (which is frequently concomitant with a loss in earned income as well). New Vistas/ESP hopes to raise the perceived value of career planning and education by creating a vision of economic independence as an achievable goal.

New Vistas/ESP Goals and Objectives

The evaluation shall address the four goals of the New Vistas/ESP Project:

- Reduce fluctuations in family income caused by reactions of the welfare system to earned income for adolescent mothers who are trying to complete their education.
- Support adolescent mothers' movement toward self-sufficiency through increased earned income.
- Prevent long-term dependence on public assistance as the primary source of family income.
- Help families increase their income-earning potential.

New Vistas/ESP is designed to achieve these goals through three mechanisms: The New Vistas/ESP waiver will provide financial incentives to encourage employment; an Employability Skills Portfolio will provide focus by maintaining records of skills, interests, accomplishments and career plans; and vocational training will develop skills in a career which promises to provide a living-wage.

Scope of the Project

The Steering Committee of the New Vistas/ESP Evaluation Team is soliciting proposals from qualified consultants (individuals or firms) to conduct an evaluation of the New Vistas/ESP project and each of its major components. The evaluation will consider the context, inputs, process and products of the New Vistas/ESP project, and is envisioned to include a detailed analysis of the impact of the waiver of earned income under section 1115 of the Social Security Act which has been received from the Department of Health and Human Services, Administration for Children and Families.

New Vistas is a model program of the Minneapolis Public Schools housed in the first floor of Honeywell's corporate headquarters in Minneapolis. The school was opened in September 1990 and currently accommodates approximately 70 infants, toddlers and preschoolers along with 60 students in grades 10 through 12 who are their mothers or are expecting a child. All of the participants in the waiver program which will be the subject of this evaluation are receiving AFDC benefits, and are voluntarily participating in the program.

The school offers individualized instruction for teen mothers, and daycare and early childhood education for their children. A wide

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range of health and social services are also available, including parenting classes. Graduates of the program earn a regular Minneapolis Public Schools high school diploma.

In 1992, the Minnesota Department of Human Services requested and received the following waivers for the New Vistas/ESP participants:

To allow the State to conduct the demonstration only among AFDC recipients in the Minneapolis Public Schools while excluding AFDC cases not within the demonstration from receiving the waivers.

To allow the State to disregard all income earned from participation in the demonstration when determining AFDC eligibility and payments.

To allow the State to exclude income earned from participation in the demonstration from the 185% of need standard test for AFDC.

To allow the State to apply the AFDC \$30 and one third earned income disregards without regard to the fact that the AFDC recipient earned income from participation in the demonstration and did not have a twelve consecutive month period of ineligibility after earning such income.

As part of the agreement to qualify for these waivers, the State of Minnesota agreed to acquire the services of an independent evaluator, funded by Honeywell, to assess the impact of the waivers on the students involved. The contractor must be qualified and have experience in evaluating social experiments of the design, scale, and duration of that proposed in the WAIVERS REQUESTED (see Appendix A).

Evaluation Plan

The selected evaluation contractor will be required to develop, not later than 3 weeks after contract award, an evaluation plan that will be submitted by the State to the United States Department of Health and Human Services for approval. The evaluation plan must include the research questions to be studied, the major variables to be measured, the sources of data for these variables, the data collection procedures, and the major data analyses to be performed.

The evaluation will include a process study that will describe how the parts of the program were implemented and operated. The following aspects of the demonstration will be addressed:

- The organizational aspects, such as: the planning process; staffing structure; funding committed; procedures for inclusion in the experimental group; procedures for referral to any support services used by the participants; and interagency coordination among Honeywell, Minneapolis Public Schools, and the Minnesota Department of Human Services.

- The service aspects, such as: the characteristics, roles and training of personnel running the program; type and duration of student training and services actually provided, including monitoring services and case management services; and timeliness and scheduling in the provision of services to students. The costs of running such a program on a per-participant basis should also be measured and reported.

- The contextual factors, such as the social, economic and political forces that may have a bearing on the replicability of the intervention or that influence the implementation of the demonstration.

- Measures of demonstration participants at the baseline, throughout the demonstration, and at the end of the demonstration on factors such as AFDC status and history, use of services, school enrollment and attendance, graduation, post secondary school attendance, subsequent births, employment performance and history subsequent to the end of the demonstration. There should be some analysis of the self-selection factor that brings participants into the demonstration.

In addition to the above, the evaluation contractor will be required to do a follow-up survey after the waiver expires on May 31, 1996. The purpose of this survey will be to determine the extent to which the New Vistas Goals and Objectives (see box in Goals and Objectives section) have been met.

With the approval of the United States Department of Health and Human Services, additional research questions and outcome measures may also be included.

Reporting Requirements

Quarterly reports will be submitted by the State of Minnesota to the federal project officer at the United States Department of Health and Human Services 30 to 60 days following each quarter. These reports will include the number of participants enrolled in the demonstration for that quarter (for both the comparison group and the waiver group), those who have left the demonstration, and start dates for those entering, fields of employment, and hours worked each week by each student. The last quarterly report, covering March 1, 1996 through May 31, 1996 will be completed and sent by August 31, 1996.

A final evaluation report will be due nine months after the termination of the demonstration (i.e., by the end of February, 1997). This report shall include the results from the follow-up study as described under the box in the section entitled Evaluation Plan. The evaluation contractor will produce and make available public-use data tapes containing data collected during the demonstration. Annual

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progress reports, summarizing the progress in implementing the demonstration and carrying out the evaluation plan, will also be submitted to the Department of Health and Human Services.

Data Sources

The students and staff will implement and maintain a portfolio which will provide the primary data source for the evaluation:

- California Achievement Test Results (electronic format)
- Career Assessment Inventory (given to all New Vistas/ESP students upon entry into the program) Results (electronic format)
- Results from other tests of interests, skills and achievement
- Work experience records
- Vocational Training and Certification Records
- Enrollment and Attendance Records (electronic format)
- History of use of public assistance
- History of participation in New Vistas
- Attitude survey (toward work, health, relationships, locus of control, etc.)
- Individual Plans for:
 - Financial and Budget
 - Stress Management
 - Personal and Family Health
 - Family Life Vision
- Letters of Recommendation
- Diploma and Transcript (electronic format)

Practically all of the above data are currently available, and will not need to be collected by the contractor. Baseline data (indicated as available in electronic format) will be supplied by the Minneapolis Public School District. For the purposes of executing its responsibilities and to the extent set forth in this contract, the contractor shall be considered as part of the welfare system as defined in *Minnesota Statutes*, section 13.46, subdivision 1. The contractor's employees and agents shall have access to private or confidential data maintained by the State, Honeywell or Minneapolis Public Schools to the extent necessary to carry out its responsibilities under this contract. The contractor will be responsible for providing adequate supervision and training to its agents and employees to ensure compliance with the Data Practices Act. No private or confidential data collected, maintained or used in the course of this contract shall be disseminated except as authorized by statute, either during the period of this contract or hereafter.

For reasons of privacy, students will be identified by a non-traceable identification number only. Follow-up of participants will be made through information provided to the contractor by the participants.

Critical Stakeholders

The critical stakeholders must be represented in an Evaluation Team which will guide and review progress of the evaluation. These include:

Honeywell, Inc.
Minneapolis Public Schools
New Vistas/ESP Staff and Students
State of Minnesota, Department of Human Services
United States Department of Health and Human Services

Comparison Group

Because of the experimental nature of this project, and because there is a desire to obtain meaningful results which could be used for planning wider scale application of the waiver concept, it is necessary to have a carefully selected comparison group in addition to the New Vistas/ESP participants. Possible candidates for a comparison group would include adolescent mothers in the Pregnant Adolescent Continuing Education (PACE) and Mother and Infant Continuing Education (MICE) programs. Baseline data have been collected on potential comparison group members. It will be a responsibility of the successful bidder to assess the appropriateness of the comparison group selected by the New Vistas/ESP Evaluation Team.

Project Costs and Completion Date

The time frame for evaluation begins with the selection of the successful bidder and ends with the submission of the final report in February 28, 1997. The State estimates that approximately \$20,000 is available the first year to fund the services solicited in this RFP,

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with an additional \$8,000 per subsequent year and \$4,000 upon submission of the final report (for a total of \$40,000). The funding is provided by Honeywell, and is subject to change. It should be understood that continuation of the evaluation contract over the course of the project will depend upon satisfactory completion of the evaluation activities and reporting requirements. The duties will be carried out under a series of one-year contracts which coincide with the State fiscal year (July 1 through June 30). Depending on the exact starting date, the first and last contracts may be longer or shorter than one year. The contract may be terminated if, in the judgment of the State, there is a likely possibility that the goals of the evaluation cannot be fulfilled by the successful bidder.

Phase Down Plan

The New Vistas Demonstration Project waiver of earned income is effective from June 1, 1993 through May 31, 1996. Hennepin County Department of Economic Assistance will be informed by the State of Minnesota of the end of the demonstration by formal letter prior to March 1, 1996.

Termination notices to participants will be coordinated between the school and county AFDC program personnel. Participants will be informed in writing by school staff and by county personnel as to the ending of the waiver. The county will specifically state that March earnings will be the last earnings that will qualify for the income exclusion and that April 1996 earnings will be counted as earned income which will be reflected in AFDC checks issued in June 1996.

Individual participants will be kept continuously informed of their own standing in relation to the waiver throughout the project period. A notification letter will be given to all current participants by New Vistas staff on or before April 20, 1996, stating that the waiver will no longer be in effect. The county will send a second notification by May 20, 1996 to all participants, in order to comply with the 10-day notification requirement for any adverse action. At this time the participants will be given the option of continuing their employment and having the earned income counted against their AFDC grant or ending employment effective with the end of the waiver period.

General Information for Prospective Contractors

Issuing Office

This RFP is issued by the State of Minnesota, Department of Human Services, Self-Sufficiency Programs Division. This RFP does not obligate the State to complete the project, and the State reserves the right to cancel the solicitation if it is considered to be in its best interest. The State reserves the right to reject all proposals and to issue no contract in the event that no adequate proposals are submitted.

Letter of Intent

Prospective contractors are strongly encouraged to send a letter of intent indicating their interest in submitting a proposal. The letters must be received by the State by September 13, 1993. The letter of intent will facilitate communication related to:

- a. copies of any addenda to the RFP; and
- b. responses to questions relating to the RFP.

Prospective contractors who do not submit a letter of intent will not receive these communications. Letters of intent may be submitted by mail or facsimile to:

Stephen Gies
JOBS Revenue Enhancement
Department of Human Services
State of Minnesota
444 Lafayette Road
St. Paul MN 55155-3837
Telephone: (612) 297-1427
Facsimile: (612) 297-5840

Questions Concerning the RFP

Prospective contractors who have submitted a letter of intent may submit any questions relating to the RFP in writing to the Project Manager (see address above). Each question must cite the particular RFP page to which it refers. Copies of all questions and their answers will be provided to all prospective contractors who have submitted letters of intent. Only responses in writing by the Project Manager will be considered official. The closing date for the receipt of questions will be the close of business on Friday, October 1, 1993.

From the issue date of this RFP until the selection of a contractor, all contacts with Department personnel concerning the contents of this RFP must be made through the Project Manager or his/her designee. Communication on any matter related to the New Vistas/ESP evaluation directed to employees of the State of Minnesota other than the Project Manager, or his/her designee, may result in the disqualification of the bidder. Similarly, communication on any matter related to the New Vistas/ESP evaluation directed to employees

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of New Vistas/ESP may result in the disqualification of the bidder. This provision shall remain in effect until the contract is awarded by the State of Minnesota. Prospective contractors shall not approach Department personnel with offers of employment during the period from the release of the RFP until approval of an executed contract.

Oral Presentations

The State may, at its discretion, elect to have some or all of the bidders provide oral presentations of their proposals. The Department will provide at least 7 days of advance notice.

Minimum Qualifications of Prospective Contractors

Bidders must not have a direct interest with any of the stakeholders listed in the box in the Critical Stakeholders section. They must have experience in evaluating social experiments of the scale and duration of the project described in this RFP. A qualified prospective contractor must have knowledge and experience in the following areas in order to conduct the New Vistas/ESP evaluation:

- An understanding of the AFDC program, the low-income population, the dynamics of public assistance receipt, and work/welfare demonstrations.
- A broad understanding of issues related to adolescent parents, including child care, parenting, and education.
- An understanding of employment and training programs and their efficacy with low income populations.
- Demonstrated skill in conducting social science field research, including study design, sample design, data collection, use of administrative records and record systems, survey data, data base management, observations of program process, data analyses, and reporting.

Addenda to RFP

The State reserves the right to amend the RFP. If it becomes necessary to revise any part of the RFP, addenda will be provided to all prospective contractors who submitted a letter of intent.

Incurred Costs

The State is not liable for any cost incurred by prospective contractors, or by contractors who are submitting proposals, in preparation for or prior to the approval of an executed contract by the State. Additionally, no cost will be incurred by the State for any activity by the selected contractor prior to the contract execution.

Selection Criteria

Bidders will be evaluated on a 100-point scale in determining which are qualified to participate in the bid opening:

- Understanding of the Problem (20 points): The proposal must include a restatement of the scope and objectives of the project, including a description of the services and products to be provided. This will be used to determine the respondent's understanding of the nature of the project.
- Capability to Perform Work (50 points): An outline must be provided detailing the respondent's background and experience with social science research projects, including attention to the topics listed in the box in the Minimum Qualifications of Prospective Contractors section. Response to this item should minimally include abstracts for related past reports/ studies and/or evaluations of work performed on similar projects.
- Detailed Cost and Work Plan (30 points): The work plan must cover the entire project period beginning with award of the contract on October 29, 1993 through completion of the final report on February 28, 1997. For each task, the plan must include an estimate of the person-hours of work needed to complete the task or provide the service.

Only bids which receive at least 85 points will be considered for inclusion in the final selection process.

Submission of Proposal

The following are general requirements to which a prospective contractor must adhere in submitting a proposal in response to the RFP:

- a. The prospective contractor must submit the proposal in two parts: technical and cost.
- b. The technical proposal must include a section that contains the following materials:
 - A notarized statement, signed in ink by a responsible officer of the organization, which includes:
 - (i) a statement of the bidder's willingness to enter into a contract which contains, at minimum, the terms and conditions set forth in this RFP (the bidder may suggest revisions to such terms and conditions but the state reserves the right to reject any such proposed revisions and to incorporate such terms and conditions into the resulting contract, unchanged); and
 - (ii) a statement of assurance that the offer will remain valid and not subject to change for a minimum period of ninety (90) days after opening date.

Professional, Technical & Consulting Contracts

(iii) Bidders must not have a direct interest with any stakeholders listed in the box in the critical stakeholders section.

• A management summary of the organization, which must include:

(i) a brief description of the offering organization;

(ii) a list of the names and titles of all responsible officers, identifying those who are authorized to negotiate a contract with the state and who will have ultimate responsibility and accountability for this contract; and

(iii) names and addresses of any organizations with which the bidder will subcontract for any services under the project and mechanisms for assuring effective and efficient operations by subcontractors. Evidence of a potential subcontractor's willingness to participate or enter into sub contractual arrangements should be included. Potential subcontractors must not have a direct interest with any of the stakeholders listed in the box in the critical stakeholders section.

c. The cost proposal must include a detailed breakdown of the proposed project activities and costs for each. The State reserves the right to reject any activity not deemed to be in its best interests, or to substitute activities at a mutually agreed upon cost.

d. To facilitate the evaluation process, the prospective contractor is required to submit an original and five (5) copies of both parts of the proposal. The original must be one-sided and suitable for duplication. The copies must be two-sided.

e. The cost proposal and the technical proposal should be identified and bound separately. These proposals should then be packaged together sealed, properly identified, and mailed or hand-delivered to:

Stephen Gies
JOBS Revenue Enhancement
Department of Human Services
State of Minnesota
444 Lafayette Road
St. Paul MN 55155-3837
Telephone: (612) 296-1427
Facsimile: (612) 297-5840

f. Proposals must be received by the Department on or before:

Proposal Opening at the Minnesota Department of Human Services

Date: Tuesday, October 12, 1993

Time: 11:00 a.m.

g. Prospective contractors must allow adequate time for delivery to ensure receipt of proposals by the opening date and time.

Requests for Supplemental Information Regarding Proposals

During the selection period, prospective contractors may be requested to present supplemental information clarifying their proposal. This supplemental information must be submitted in writing and will be included as a formal part of the prospective contractor's proposal.

Disclosure of Proposal Contents

Prospective contractor's proposals will be unsealed at 11:00 on October 12, 1993. All material submitted becomes the property of the State. Submitted proposals may be reviewed and evaluated by any person, other than one associated with a competing prospective contractor, designated by the Department. The Department reserves the right to use any and all ideas presented in any response to the RFP unless noted by the bidder as trade secret or copyrighted material.

If a prospective contractor believes that any information in its proposal constitutes a trade secret and wishes such information not be disclosed if requested by a member of the public pursuant to the Minnesota Government Data Practices Act, the prospective contractor shall submit with his or her proposal a letter specifically identifying by page number, line or other appropriate designation that information which is secret. Failure by a prospective contractor to submit such a letter with his or her proposal identifying trade secrets shall constitute a waiver by the prospective contractor of any rights she or he may have under law relating to protection of trade secrets.

Notification of Award

After evaluation and selection of the contractor, the successful contractor will be notified in writing of the acceptance of her or his proposal. The name of the successful contractor will be disclosed. Press releases, advertising material, other publicity pertaining to this project shall not be released without prior written approval by the Department and then only in conjunction with the issuing office.

Contract Duration and Level of Effort

The duties assigned to the contractor in this RFP cover a period of approximately three (3) years and nine (9) months commencing on the date of contract approval by the State, projected to be October 29, 1993. The duties will be carried out under a series of one-

Professional, Technical & Consulting Contracts

year contracts which coincide with the state fiscal year (July 1 through June 30). Depending on the exact starting date, the first and last contracts may be longer or shorter than one year.

Each potential contractor must provide assurance that, should they be the successful bidder, they will be available for the duration of the entire project, and that their proposal is valid for the duration of the project. In the event the successful bidder is unable to complete the project, the contractor must be prepared to pass on any and all data and related documentation to the succeeding contractor(s).

Potential contractors should note that federal or state public assistance laws or regulations may change significantly during the course of the New Vistas/ESP project. Such changes could require significant alteration of the evaluation design. Should significant demonstration program changes be required, the State may ask the contractor to assess the validity of the evaluation design and recommend appropriate changes. Due provision will be made to provide for expenses for needed modifications or termination of the evaluation.

Basis of Payment

Payment to the contractor will be made using a standard invoice form prescribed by the Department of Human Services and upon submission and Department acceptance of required deliverables.

Projected Timeline

August 30, 1993	RFP appears in <i>State Register</i> .
September 13, 1993	Deadline for Letters of Intent to be received by State contact person.
October 11, 1993	Deadline for all proposals to be submitted to the State contact person.
October 29, 1993	Deadline for independent committee to select the successful bidder.
October 29, 1993	Deadline for negotiations with prospective contractor to be finalized and contract signed.
December 28, 1993	Deadline for contractor to submit Evaluation Plan (60 days after contract awarded).

APPENDIX A WAIVERS REQUESTED

STATEWIDENESS

Waive section 402(a)(1) of the Social Security Act and 45 CFR 233.10 (a)(1)(iv). Waiver of these sections will allow Minnesota to pilot a project for demonstration purposes with persons enrolled in the Minneapolis Public School's New Vistas program rather than throughout the State.

QUALITY CONTROL

Waive section 45 CFR 205.40(c)(1) to waive fiscal consequences of Quality Control errors in cases of persons enrolled in the New Vistas program.

DISREGARD OF EARNED INCOME

First Option: Total Income Disregard

Waive 45 CFR 233.20(a)(1)(i). Waiver of this section will allow the amount of assistance for New Vistas students to be determined in a different manner than other employed students.

Waive section 402(a)(18) of the Social Security Act and 45 CFR 233.20(a)(3)(xiii) and 233.20(a)(3)(xix). Waiver of these sections will allow income earned by students in the New Vistas apprenticeship program to be excluded from the Gross Income Test (185% of the State's need standard). Approximately half of the students live with a parent(s). If the parent(s) is also employed, the additional earnings of the student may make the entire family ineligible.

Waive section 402(a)(8)(A)(i), (ii), (iii), (iv), and (vii) and section 402(a)(8)(B)(ii) of the Social Security Act and 45 CFR 233.20(11)(i) and (ii). Waiver of these sections will allow Minnesota to totally disregard the earnings of students enrolled in the New Vistas program. After the student graduates from the program, the student will qualify for the disregard under section 402(a)(8)(B)(ii) of the Social Security Act and 45 CFR 233.20(a)(11)(ii)(B) without a twelve consecutive month period of ineligibility.

Second Option: Partial Income Disregard

Waive 45 CFR 233.20(a)(1)(i). Waiver of this section will allow the amount of assistance for New Vistas students to be determined in a different manner than other employed students.

Waive section 402(a)(18) of the Social Security Act and 45 CFR 233.20(a)(3)(xiii) and 233.20(a)(3)(xix). Waiver of these sections will allow income earned by students in the New Vistas apprenticeship program to be excluded from the Gross Income test (185% of

Professional, Technical & Consulting Contracts

the State's need standard). Approximately half of the students live with a parent(s). If the parent(s) is also employed, the additional earnings of the student may make the entire family ineligible.

Waive section 402(a)(8)(B)(ii) of the Social Security Act and 45 CFR 233.20(a)(11)(ii)(B). Waiver of these sections will not restrict application of the \$30 plus one third disregard to four consecutive months nor the \$30 portion of the disregard to the eight month period following the fourth consecutive month. Application of the \$30 plus one-third disregard will be continuous as long as the student has earnings and is enrolled in the new Vistas program. After the student graduates from the program, the student will qualify for the disregard under this section without a twelve consecutive month period of ineligibility.

Department of Trade and Economic Development

Notice of Fund Availability Request for Proposals Affirmative Enterprise Program

INTRODUCTION

The 1993 Minnesota Legislature created an Affirmative Enterprise program (*Minnesota Statute 116J.874*) which the Department of Trade and Economic Development is responsible for administering.

The Department of Trade and Economic Development announces the availability of \$100,000 in grant funds for fiscal year 1994 for businesses which promote the full-time employment of disabled persons in areas of economic need.

DTED is seeking proposals from qualifying businesses to receive grant funds to provide training and support services to employees.

ELIGIBLE APPLICANTS

A business is eligible for an Affirmative Enterprise grant if it meets the following criteria:

1. The business employs at least 25 percent of its full-time employees who are not disabled. (Unless the business has fewer than ten employees.)
2. The business employs disabled persons in at least 50 percent of its full-time positions.
3. The business maintains an integrated work force of non-disabled and disabled persons at the highest possible level.
4. Each full-time employee has an employee status with all accompanying rights and responsibilities.
5. Each full-time employee receives the following benefits.
 - a. paid vacation
 - b. paid holidays
 - c. paid sick leave
 - d. a personalized career plan
 - e. retirement with employer participation
 - f. copayment health insurance plan

Additionally, the company must have in place a process whereby:

- a. a full-time employee selected by all employees of the business entity meets with the business entity's management at least once a month;
- b. each full-time employee is informed of other, less restrictive, employment when it becomes available;
- c. all full-time employees are required to participate in at least two evaluations each year with accompanying wage adjustments;
- d. profit sharing based on the business entity's performance is provided to all full-time employees.

PROPOSAL CONTENTS

The purpose of the Affirmative Enterprise Grants is to provide training and support services to disabled persons in conjunction with economic development. Applicants must provide:

1. a training plan
2. a support services proposal
3. evidence that the business meets the criteria described in the Eligible Applicant section
4. an explicit line item budget detailing the training and support services plan
5. evidence that the company is located in an area of economic need.

SELECTION PROCESS

The following criteria will serve as the basis for grant recipient selection:

1. The degree to which applicant proposals meet eligible applicant criteria;
2. The specificity of, and the degree to which the training plan ensures that the disabled person will be a productive member of the workforce;
3. The level of support services offered by the business to ensure the continued productivity and employment of the disabled worker;
4. The degree to which the budget links specific costs to specific training and support service activities;
5. The location of the company in an area of economic need;
6. Budget.

This Request for Proposals (RFP) is subject to all applicable federal, state, and municipal laws, rules, and regulations. DTED reserves the right to modify or withdraw this RFP at any time and is not able to reimburse any applicant for costs incurred in the preparation or submittal or applications.

SUBMISSION OF PROPOSALS

All proposals must be submitted by 4:30 p.m. on October 15, 1993. Applications should be sent to:

Mr. Louis Jambois
Department of Trade and Economic Development
500 Metro Square
121 7th Place East
St. Paul, Minnesota 55101

Late proposals will not be accepted.

QUESTIONS

Questions regarding the application process should be directed to Louis Jambois at 612-297-3172.

Non-State Public Bids and Contracts

The *State Register* also serves as a central marketplace for contracts let out on bid by the public sector. The *Register* meets state and federal guidelines for statewide circulation of public notices. Any tax-supported institution or government jurisdiction may advertise contracts and requests for proposals from the private sector.

It is recommended that contracts and RFPs include the following: 1) name of contact person; 2) institution name, address, and telephone number; 3) brief description of project and tasks; 4) cost estimate; and 5) final submission date of completed contract proposal. Allow at least three weeks from publication date (four weeks from date article is submitted for publication). Surveys show that subscribers are interested in hearing about contracts for estimates as low as \$1,000. Contact the editor for further details.

City of St. Paul

Ramsey County Purchasing Office

Environmental Remedial Clean-Up

The City of Saint Paul Department of Public Works is seeking bids from qualified vendors to provide environmental remedial clean-up at 141 W. Water Street on the Mississippi River. A part of the process for acquiring property for construction of a flood control project with the U.S. Army Corps of Engineers, the former occupant was Metals Reduction Company, a recycler of used lead acid batteries. Listed on the EPA/CECLIS list and the MPCA Permanent List of Priorities (PLP), site size is approximately 1 acre with a 40 x 200 ft. building.

A prebid conference will be held September 2, 1993 at 9:00 a.m. in Room W 107 of the City Hall/Courthouse. Bid Opening is 9-15-93. Specifications are available for \$45.00 (non-refundable) in Room 800, City Hall Annex, 25 W. 4th Street, Saint Paul, MN 55102, 298-5151. Bid forms can be obtained in Purchasing, 266-8900.

Project Manager: Rafic Chehoury, 298-4593; Consultant: Peer Environmental, L. Michael Johnson, 831-3341; Buyer: Susan E. Feuerherm, 266-8908.

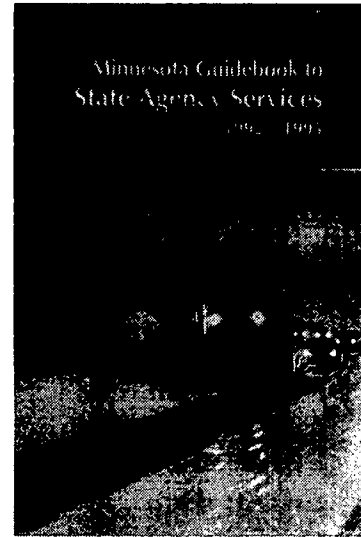
Access Your State Government:

Minnesota Guidebook to State Agency Services 1992-95

An obvious "headliner" on any list for the citizen's reference desk. The perfect "owner's manual" to Minnesota state government is a great reference tool for:

- * applying for grants, bidding on contracts
- * addresses, phone numbers and key contact people for each agency
- * license requirements and fees
- * gaining access to government services
- * participating in state policy making and service delivery
- * understanding the structure of Minnesota government with detailed descriptions of state agencies, their functions and services.

A **MUST** for Minnesota residents, business persons, professionals and educators. 710pp. **Stock No. 1-11-SR \$18.00**
(Price includes MN 6-1/2% sales tax)



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Welcome wildlife to your property

Landscaping for Wildlife. Attract wildlife to your land and gardens, farms and woodlots by spreading nature's welcome mat. Songbirds, butterflies, hummingbirds, pheasants, deer and other wildlife are drawn through these gardening tips and landscaping techniques that add natural beauty to your property and habitat for wildlife. Over 70 color photos and 144 pages give you simple, enjoyable, and inexpensive methods for adding the right touches for a "wildlife party" on your grounds, whether urban or rural. Stock #9-15-SR, \$9.95 plus tax.

Woodworking for Wildlife. Songbirds, owls, ducks, geese, loons and other wildlife will show appreciation for your skills by adding a "wild" dimension to your property. Carefully illustrated with a variety of game bird and mammal box designs, this booklet provides important tips on the placement of nest in proper habitat areas and maintenance requirements. Construction diagrams included. 47 pp. Stock #9-14-SR, \$9.95 plus tax.

Wildlife Set. Order both books above as a set and save 15%. Stock #9-20-SR, \$17.95 plus tax.

TO ORDER: Send to Minnesota's Bookstore, 117 University Avenue, St. Paul, MN 55155. Call (612) 297-3000, or toll-free nationwide: 1-800-657-3757. Minnesota residents please include 6½% sales tax. St. Paul residents include 7%. On all orders, add \$3.00 per order for postage and shipping. Prepayment is required. Please include daytime phone. VISA/MasterCard, American Express and Discover orders accepted over phone and through mail. **Prices are subject to change.** FAX: (612) 296-2265.



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Reach Minnesota's health care field decision makers

Health Care Facilities Directory 1993

A list of hospitals and related institutions licensed and/or certified to deliver various levels of care. The list is alphabetical by county, town and facility name. Stock No. 1-89-SR. \$18.95

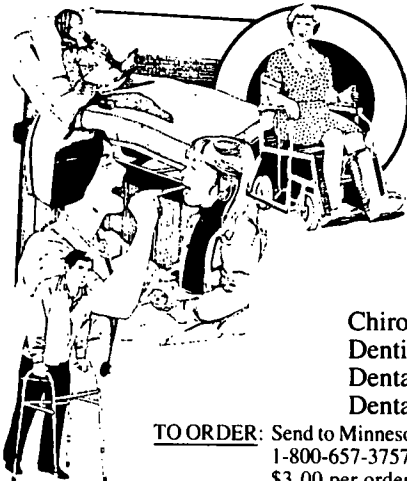
Mailing Lists of Health Care Professionals Licensed by the State of Minnesota Now Available

Call 297-2552 for more information or write to the address below for your free mailing list service packet.

Chiropractors	Medical Corporations (Clinics)	Pharmacists
Dentists	Registered Nurses	Physical Therapists
Dental Assistants	Licensed Practical Nurses	Physicians
Dental Hygienists	Pharmacies	Veterinarians

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River Stories That Warm Your Heart

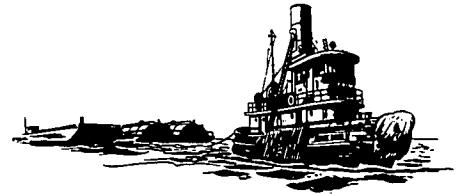
A Stretch on the River. 1950 novel about the son of a wealthy family who goes to work on a Mississippi River towboat to avoid being drafted. With power, gusto and humor, author Richard Bissel creates an energetic, rowdy, and delightful account of a typical trip up the river, accurately re-creating a colorful era of towboating on America's major waterway. Stock #17-6-SR, \$8.95 plus tax.

High Water. During the worst flood on the Mississippi River anyone can remember, the mate of a towboat has his hands full on a perilous trip, working with an unhappy crew, an angry captain, and too many barges to push against too much river. A 1954 Richard Bissel novel reveals the drama, humor and charm of working on the river. Stock #17-8-SR. \$8.95 plus tax.

Old Times on the Mississippi River. George Merrick's lively, loving, and humorous reminiscences of his steamboat life from the bottom up, as a pantry boy, apprentice engineer, second clerk, and "cub" pilot. First published in 1909, he describes steamboat operations—from machinery and personnel to the economics of the business—with vivid examples and rich detail. 323 pp. includes appendices and index. Stock #17-45-SR. \$8.95 plus tax.

Canoeing with the Cree. Minnesota's distinguished newsman, Eric Sevareid, wrote his book in 1935 about a canoe journey he and a classmate made to Hudson Bay. The classic recounts their trip on the Mississippi, Minnesota and Red River of the North Rivers into Lake Winnipeg, and then God's River to Hudson Bay. 209 pp. includes index, maps and photos. Stock #17-14-SR. \$6.95 plus tax.

TO ORDER: Send to Minnesota's Bookstore, 117 University Avenue, St. Paul, MN 55155. Call (612) 297-3000, or toll-free nationwide: 1-800-657-3757. Minnesota residents please include 6½% sales tax. St. Paul residents include 7%. On all orders, add \$3.00 per order for shipping. Prepayment is required. Please include daytime phone. VISA/MasterCard, American Express and Discover orders accepted over phone and through mail. **Prices are subject to change.** FAX: (612) 296-2265.



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Social workers', counselors' and therapists' guides and directories

Chemical Dependency Programs Directory 1993-94. Features comprehensive listings for programs ranging from prevention/intervention services to a wide range of treatment services. Each type of program includes a listing of facilities and description of programs. Stock No. 1-12-SR, \$17.00 + tax.

Process parenting—Breaking the Addictive Cycle. This training manual provides parent education and treatment techniques for professionals working with recovering chemically dependent parents or dysfunctional families. Stock No. 5-4-SR, \$15.00 + tax.

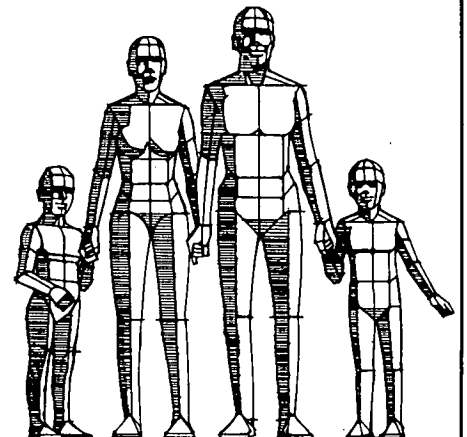
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Process Parenting

Process Parenting: Breaking the Addictive Cycle. This is a curriculum and training manual designed to help chemical dependency treatment counselors to incorporate parent education into their on-going programs. It focuses on positive parent-child interactions and parenting strengths to assist chemically dependent persons develop a more positive view of self, feelings of greater control or influence over situations, understanding of self-defeating behaviors, and increased responsibility within one's social/community situation. 163 pages plus appendices. Stock #5-4, \$15.00 + 90¢ tax.

Companion Video: Process Parenting. Instructive video introduces basics of 'Process Parenting' technique. VHS 38:46. Stock No. 4-5, \$15.00



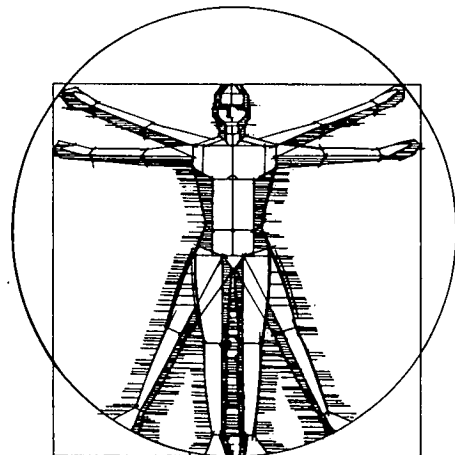
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A Helping Hand for the Chemically Dependent

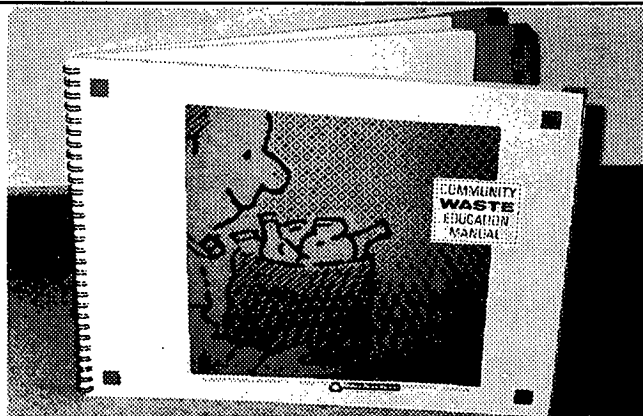
Directory of Chemical Dependency Programs in Minnesota.

This 250-page directory lists prevention and intervention programs including county social service agencies, mental health centers, other information and referral programs, self-help programs and employee assistance programs. It also lists DWI (Driving While Intoxicated) clinics and detoxification centers. Outlining Minnesota's continuum of care, the Minn. Dept. of Human Services Directory lists treatment services under three headings: **Primary Residential Programs**—freestanding facilities, hospital-based facilities and state regional treatment centers; **Intermediate/Extended Residential Programs**—halfway houses, extended care facilities, and board and lodging facilities; **Non-Residential Programs**—freestanding facilities and hospital-based facilities. Stock #1-12-SR. \$17.00 + \$1.10 tax.



TO ORDER: Send to Minnesota's Bookstore, 117 University Avenue, St. Paul, MN 55155. Call (612) 297-3000, or toll-free nationwide: 1-800-657-3757. Minnesota residents please include 6½% sales tax. St. Paul residents include 7%. On all orders, add \$3.00 per order for shipping. Prepayment is required. Please include daytime phone. VISA/MasterCard, American Express and Discover orders accepted over phone and through mail. *Prices are subject to change.* FAX: (612) 296-2265.

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Community Waste Education Manual available at Minnesota's Bookstore

NEW—Reduced Price!

Waste Education Campaigns

The **COMMUNITY WASTE EDUCATION MANUAL** offers practical guidance to help communities develop waste education campaigns. Tremendous step-by-step guide to organizing volunteers, planning a budget, working with media and more. Includes camera-ready art and copy for media and publication needs. 82 pp. Produced by the Minnesota Office of Waste Management. Stock #5-7-SR. **Now only \$9.95.**

TO ORDER: Send to Minnesota's Bookstore, 117 University Avenue, St. Paul, MN 55155. Call (612) 297-3000, or toll-free nationwide: 1-800-657-3757. Minnesota residents please include 6½% sales tax. St. Paul residents include 7%. On all orders, add \$3.00 per order for shipping. Prepayment is required. Please include daytime phone. VISA/MasterCard, American Express and Discover orders accepted over phone and through mail. *Prices are subject to change.* FAX: (612) 296-2265.

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MAILING LISTS GALORE

Successful business means successful sales

The Print Communications Division has a variety of mailing lists of licensed professionals and permit holders that will enable you to focus your marketing efforts on a targeted audience.

Types of lists available are: registered nurses, real estate agents, physicians, insurance agents, boatowners, hunters, cosmetologists, teachers, and many more! And you can get them on printouts, cheshire/pressure sensitive labels, as well as 9-track magnetic tapes.

What's more, you can choose from several selection capabilities. You will find our selections most helpful and beneficial to your business when you learn that you can acquire names and addresses of individuals in the areas you need to target most.

Find out more about our mailing lists by writing for our free mailing list catalog. In a hurry? Call (612) 296-0930 for more information. Requests can be sent to: Print Communications Division, Mailing List Service, 117 University Avenue, St. Paul, MN 55155. FAX: (612) 297-8260.

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Minnesota's Bookstore

Publications, Services, Subscriptions

Order Form on Back—For Information, Call 297-3000

1991 Minnesota Rules. Eleven volume set includes 1992 Supplement as a subscription service. Stock #18-100, \$200 + tax (Minnesota residents only). Individual volumes can be purchased at \$20.00 + tax.

1992 Minnesota Session Laws. Two volume set includes laws passed during the 1992 session. Stock #18-12, \$30.00 + tax.

101 Ways to Promote Academic Excellence. A collection of nuts-and-bolts methods educators have successfully used to foster academic achievement. These are techniques that directly help students, can be replicated easily, are cost-effective, and that work in meeting the public education's great challenge: helping every single child learn. Code #5-1, \$4.50.

1989 Pollution Control Laws. Laws dealing with water pollution, disposal facilities, solid waste management, the Minnesota Environmental Rights Act, recycling, and more. Code #2-21, \$24.95.

1992 Hazardous Waste Rules. Governs the production, storage, transportation and disposal of hazardous waste. *Minnesota Rules* Chapter 7001, 7045 and 7046. Code #3-71, \$16.95.

Real Estate Rules 1991. Chapters 2800, 2805 and 2810 from the *Minnesota Rules. Essential* for both students and established brokers and salespersons. It contains all education and licensing requirements. Code #3-99, \$6.00.

Police Report Writing Style Manual 1989. A common framework for report writing throughout the state. Discusses the general purpose of police reports, reviews field notetaking, offers instructions on completing common report forms and introduces the Data Practices Law. Code #14-13, \$15.00.

OTHER PUBLICATIONS

Secrets of the Congdon Mansion. A complex, intriguing murder case set in one of Minnesota's most spectacular mansions. Now a top Minnesota tourist attraction on Duluth's famous Lake Superior North Shore Drive. By Joe Kimball. Code #19-56, \$5.95.

A Paddler's Guide to the Boundary Waters Canoe Area. Advice on what to bring along on canoe trips, regulations, canoe tips and detailed information for self-guided tours. Includes detailed maps and descriptions of 31 wilderness canoe routes in the Superior National Forest of Northern Minnesota. Stock #19-17, \$4.95.

Minnesota Geographic Names. Names of places by the thousand plus interesting historical tidbits included in this 800+ page book. Minnesota history buffs—this is for you! Stock #17-13, \$12.95.

Room at the Inn Minnesota. The only guide to more than 60 historic Bed & Breakfast homes, hotels and country inns. Stock #19-72, \$9.95.

Minnesota Manufacturer's Directory, 1993. More than 7,000 entries listing name, address, phone, staff size, sales volume, market area, year of establishment, type of firm, CEO, sales or marketing and purchase managers, and four manufactured products. Stock #40-2, \$90.00.

1993 Lake Map Index. Listing over 4,000 lake maps. Free.

SUBSCRIPTIONS:

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