CHAPTER 7601
DEPARTMENT OF COMMERCE
WEIGHTS AND MEASURES

7601.0100 DEFINITIONS.

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

Subp. 2. **Animal scale and livestock scale.** "Animal scale" and "livestock scale" mean platform scales designed and used to weigh livestock. An animal scale is used to weigh a single animal. A livestock scale is used to weigh several animals. Both have an enclosure and gates built on the scale platform.

Subp. 3. **Commercial; commercial use; commercial purpose.** "Commercial," "commercial use," and "commercial purpose" refer to weights and measures used or located on premises where they could be used to:

A. determine the weight, measure, or count of commodities or things sold, offered, or exposed for sale, on the basis of weight, measure, or count; or

B. compute the basic charge or payment for services rendered on the basis of weight, measure, or count.

Subp. 4. **Commissioner.** "Commissioner" means the commissioner of the Department of Commerce.

Subp. 5. **Department.** "Department" means the Department of Commerce.

Subp. 6. **Director.** "Director" means the director of the Weights and Measures Division of the Department of Commerce.

Subp. 7. **Division.** "Division" means the Weights and Measures Division of the Department of Commerce, and employees of the Weights and Measures Division having statutory authority delegated by the director.

Subp. 8. **Hopper scale.** "Hopper scale" means a scale designed and used to weigh bulk commodities in a container, hopper, box, or tank mounted on the scale.

Subp. 9. **Minimum division.** "Minimum division" means the value of the smallest subdivision or unit that a scale, meter, or other weighing or measuring device is designed to indicate or display.

Subp. 10. **Minnesota seal.** "Minnesota seal" means a security seal placed on commercial weighing and measuring equipment by the division to prevent unauthorized adjustment of the equipment.

Subp. 11. **National Institute of Standards and Technology (NIST).** "National Institute of Standards and Technology" and "NIST" mean the United States Department of Commerce, National Institute of Standards and Technology.

Subp. 12. **National Type Evaluation Program (NTEP).** "National Type Evaluation Program" and "NTEP" mean a program of weighing and measuring device evaluation and certification operated by the National Conference on Weights and Measures (NCWM).

Subp. 13. **Place in service.** "Place in service" means to authorize commercial use of newly installed or repaired weighing and measuring equipment pending an inspection by the division. This type of authorization may only be performed by a registered person.

Subp. 14. **Railway track scale.** "Railway track scale" means a scale of appropriate capacity and design that is used to weigh a rail car.

Subp. 15. **Registered person, registrant.** "Registered person" and "registrant" mean a person who has voluntarily registered with the division and who installs, services, repairs, or reconditions weighing and measuring equipment.

Subp. 16. **Registration certificate.** "Registration certificate" means an annual certificate issued by the division to a person who voluntarily registers with the division and who installs, adjusts, services, repairs, or reconditions commercial weighing and measuring equipment.

Subp. 17. **Scale division.** "Scale division" means the value, in units of mass, of the smallest subdivision or unit that can be indicated by a scale.

Subp. 18. **Sensitivity requirement.** "Sensitivity requirement" means a performance requirement for a scale equipped with a nonautomatic indicator. It is a prescribed change in the rest position of the indicator, caused by a prescribed change in load on the scale. The requirement is stated in terms of scale divisions. For example, a load equivalent to two divisions must cause the prescribed change in the rest position of the indicator.

Subp. 19. **Soil bearing.** "Soil bearing" refers to the load, in units of mass per area, that can be placed upon soil without causing deformation, settling, or soil failure.

Subp. 20. **Vehicle scale.** "Vehicle scale" means a platform scale designed and used to weigh trucks, farm equipment, or other large industrial or highway vehicles in one draft or weighing operation.

Subp. 21. **Weighing and measuring equipment.** "Weighing and measuring equipment" means all weights and measures of every kind, all instruments and devices for weighing and measuring, and any appliances and accessories associated with those instruments and devices, which are used, or located on premises where they could be used, to:

A. determine the weight, measure, or count of commodities or things sold, offered, or exposed for sale on the basis of weight, measure, or count; or

B. compute the basic service charge or payment for services rendered on the basis of weight, measure, or count.

Statutory Authority: *MS s 239.06*

History: *20 SR 1928; L 2001 1Sp4 art 6 s 1; 30 SR 346*

7601.0200 VARIANCES.

Subpart 1. **Director to grant.** *If a variance is requested in a manner prescribed by subpart 2 and if the approval criteria in subpart 3 are met, the director shall grant a variance to any part of this chapter, except a rule that specifies a tolerance or the value of a minimum division.*

Subp. 2. **Request.** An owner or operator of commercial weighing and measuring equipment may apply to the director for a variance to any part of this chapter. The request must be in writing and must:

A. explain why a variance is needed;

B. explain the proposed alternative to the rule; and

C. include drawings if the request is for a railroad track, vehicle, or livestock scale. The drawings must illustrate the design, construction, and location of the scale.

Subp. 3. **Approval criteria.** The director shall grant a variance when appropriate to maintain good commercial practices or when enforcement of the rules would cause undue hardship. The director shall consider the following criteria in evaluating a request for a variance:

A. good commercial practices are maintained when the director is able to determine that under normal operating conditions the weighing and measuring equipment will remain accurate and reliable and the variance will not harm the owner or operator or their customers; and

B. undue hardship exists when the applicant demonstrates that:

(1) it is impossible or economically unfeasible for the applicant to comply with the rule; and

(2) the burden of compliance to the applicant outweighs any adverse effect on the applicant's customers or others affected by the rule.

Subp. 4. **Refusal to grant.** The director shall refuse to grant a variance if the request does not meet the requirements of subpart 2, or if the director determines that the criteria for approval in subpart 3 have not been met.

Subp. 5. **Response by division to request.** All requests will be answered by the division in writing, setting forth the reasons for granting or refusing to grant the requested variance.

Statutory Authority: *MS s 239.06*

History: *20 SR 1928*

UNIFORM NATIONAL CODES

7601.1000 NIST HANDBOOK 44 INCORPORATED BY REFERENCE.

Subpart 1. **NIST Handbook 44 (2005).** Weighing and measuring equipment manufactured, offered, or exposed for sale or sold or given away for use in trade or commerce in Minnesota must conform to the requirements and specifications of NIST Handbook 44. NIST Handbook 44 (2005), "Specifications, Tolerances, and Other Technical Requirements for Weighing and Measuring Devices," as adopted by the 89th National Conference on Weights and Measures and published by the United States Department of Commerce, National Institute of Standards and Technology, (Washington, D.C., December 2004), is incorporated by reference subject to the following exceptions:

A. If NIST Handbook 44 (2005) contains any provisions contrary to the laws of Minnesota, or contrary to any rule, except part 7601.1000, of the Minnesota Department of Commerce, Minnesota law and department rules govern and supersede contrary provisions of NIST Handbook 44.

B. The sentence of NIST Handbook 44 (2005), section 2 (scale code), specification S.1.8.3., stating that "Unit price displays visible to the customer shall be in terms of single whole units of weight and not in common or decimal fractions of the unit" is deleted.

C. The director shall not enforce specifications and user requirements in NIST Handbook 44 (2005) that would require owners of motor fuel dispensers to install equipment capable of allowing the customer to select the unit price. These requirements are contained in section 3.30 (liquid measuring devices), specification S.1.6.4.1., specification S.1.6.5., specification S.1.6.5.4., and user requirement UR.3.3.

D. The user requirement UR.2.2, in section 3.31 of NIST Handbook 44 (2005) does not apply so as to require a ticket printer on vehicle tank meters.

E. The last paragraph of NIST Handbook 44 (2005), section 3.30, specification S.3.1, and section 3.37, specification S.4.1, is replaced with:

"An outlet that may be opened for purging or draining the measuring system or for recirculating product if recirculation is required in order to maintain the product in a deliverable state is permitted. Effective means must be provided to prevent passage of the liquid through any such outlet during normal operation of the measuring system and to inhibit meter indications, or advancement of indications, and recorded representations while the outlet is in operation."

Subp. 2. **Handbook availability, location.** NIST Handbook 44, as adopted by reference in subpart 1, is available to the public at the Minnesota State Law Library, Minnesota Judicial Center, 25 Rev. Dr. Martin Luther King Jr. Blvd., Saint Paul, Minnesota, 55155, and is not subject to frequent change.

Statutory Authority: *MS s 239.06*

History: *20 SR 1928; L 2001 1Sp4 art 6 s 1; 30 SR 346*

7601.1010 NIST HANDBOOK 44; COMPLIANCE REQUIRED.

Subpart 1. **Compliance.** A person who owns or operates weighing or measuring equipment for commercial purposes in Minnesota must use weighing and measuring equipment that meets all applicable requirements in NIST Handbook 44 as adopted under part 7601.1000. Only the director, or a department employee delegated by the director, shall determine the applicability of, and compliance with, the requirements of NIST Handbook 44.

Subp. 2. **Certification of weighing or measuring equipment.** A person who sells, installs, owns, or operates commercial weighing or measuring equipment manufactured after January 1, 1996, must sell, install, or use only weighing or measuring equipment of a make, model, and type for which a "Certificate of Conformance" has been issued by the National Conference on Weights and Measures (NCWM).

Statutory Authority: *MS s 239.06*

History: *20 SR 1928; 30 SR 346*

7601.1020 NIST HANDBOOK 133 INCORPORATED BY REFERENCE.

Subpart 1. **NIST Handbook 133.** NIST Handbook 133 (Fourth Edition, January 2005), "Checking the Net Contents of Packaged Goods," as adopted by the 89th National Conference on Weights and Measures and published by the United States Department of Commerce, National Institute of Standards and Technology, (Washington, D.C., December 2004), is incorporated by reference. If NIST Handbook 133 contains any provision contrary to the laws of Minnesota, the rules of the Minnesota Department of Commerce, or the packaging or labeling rules of the Minnesota Department of Agriculture, Minnesota laws and rules govern and supersede contrary provisions of NIST Handbook 133.

Subp. 2. **Handbook availability, location.** NIST Handbook 133, as adopted by reference in subpart 1, is available to the public at the Minnesota State Law Library, Minnesota Judicial Center, 25 Rev. Dr. Martin Luther King Jr. Blvd., Saint Paul, Minnesota, 55155, and is not subject to frequent change.

Statutory Authority: *MS s 239.06*

History: *20 SR 1928; L 2001 1Sp4 art 6 s 1; 30 SR 346*

REQUIREMENTS FOR SCALES, GENERALLY

7601.2000 PROTECTION FROM ENVIRONMENT.

Subpart 1. **Outdoor scales.** The director shall require special protection from the environment for an outdoor scale if the division finds that the scale is adversely affected by weather or other environmental factors. Environmental protection includes:

A. belting or other suitable material to cover the clearance around a scale platform;

B. wind skirts, wind walls, or effective foundation heating for aboveground scales;

C. an improved drainage system or sump pump for pit–type scales;

D. special shielding or weatherproofing of a scale indicator;

E. a complete building to protect a scale from the weather; and

F. modifications, shielding, and other special measures to protect an electronic scale from radio frequency interference and electromagnetic interference.

Subp. 2. **Fertilizer scales.** A hopper, tank, or mixer scale used for weighing dry or liquid bulk fertilizer must be completely enclosed in a building.

Subp. 3. **Grain hopper scales.** A hopper, tank, or mixer scale used for weighing grain or grain by–products must be completely enclosed in a building.

Statutory Authority: *MS s 239.06*

History: *20 SR 1928; 30 SR 346*

7601.2010 SENSITIVITY REQUIREMENT.

For a scale not equipped with a balance indicator, but with a minimum graduated interval less than ten pounds, the sensitivity requirement is three times the value of the minimum graduated interval or 15 pounds, whichever is less.

Statutory Authority: *MS s 239.06*

History: *20 SR 1928*

RAILWAY TRACK SCALES

7601.3000 RAILWAY TRACK SCALES; PLANS.

Subpart 1. **Manufacturer's plans.** Before installing a railway track scale, the scale manufacturer shall furnish complete design, assembly, and construction plans to the purchaser.

Subp. 2. **Installer's plans.** The scale purchaser shall furnish installation plans to the director. The plans must show the scale location, the foundation drawings, and all commodity–handling equipment that could affect the operation of the scale. The plans must also include the information on soil bearing required by part 7601.3020, subpart 1.

Statutory Authority: *MS s 239.06*

History: *20 SR 1928; 30 SR 346*

7601.3010 RAILWAY TRACK SCALE PERMITS.

The director shall issue a permit to install a railway track scale if plans for installing the scale are submitted according to part 7601.3000, and if the planned scale installation meets the requirements of parts 7601.3020 and 7601.3030. The director shall review and approve the plans before issuing a permit. A railway track scale must not be installed without a permit.

Statutory Authority: *MS s 239.06*

History: *20 SR 1928; 30 SR 346*

7601.3015 APPLICATION.

The requirements in parts 7601.3020 and 7601.3030 apply only to railway track scales that will be used to weigh individual, stationary rail cars, and do not apply to railway track scales that will be used to weigh rail cars in motion.

Statutory Authority: *MS s 239.06*

History: *20 SR 1928; 30 SR 346*

7601.3020 RAILWAY TRACK SCALE FOUNDATION.

Subpart 1. **Soil bearing.** The owner, operator, or installer of a railway track scale shall complete a soil bearing test, performed by a registered engineer, before constructing the scale foundation. The soil bearing test must determine the load–bearing capacity of the soil that will lie under the completed scale foundation. The engineer's report, including a statement that the soil bearing is suitable for the scale to be installed, must be submitted to the director before constructing the scale foundation. The director shall review and approve the report before issuing a permit for a scale installation.

Subp. 2. **Materials and construction.** Foundation walls, floors, footings, and weighing element support piers must be constructed of reinforced, poured concrete that conforms to the scale manufacturer's design requirements and drawings. The concrete must be uniform and continuous. Reinforcing material in the piers and walls must be securely tied to the reinforcing material in the adjacent walls and floor.

Subp. 3. **Dimensions.** The foundation must be deep enough to provide a finished pit seven feet deep, measured from the top of the finished foundation wall to the top surface of the finished pit floor.

Subp. 4. **Length.** For a railway track scale installed after January 1, 1995, the length or combination of lengths of the weighing element or elements must be sufficient to allow single draft weighing.

Subp. 5. **Aboveground scale; concrete pier foundation.** An aboveground railway track scale foundation must meet the requirements in items A to H.

A. The weighing elements must be supported on reinforced concrete foundation piers.

B. Concrete surface slabs must be poured independently between the main foundation piers.

C. The end piers of the foundation must have end walls to prevent fill material from interfering with scale operation.

D. Where foundation construction techniques allow, the surfaces of the concrete slabs between the foundation piers must be sloped down from the longitudinal centerline to each side to prevent dirt accumulation under the platform.

E. The clearance between the bottom of the weighbridge or other main structural member and the slab surface must be at least six inches.

F. The scale platform, structural member, foundation surfaces, and surrounding area must be designed to allow access for cleaning under the scale platform and around all weighing elements.

G. For outdoor scales, the tops of the piers and the surfaces of the slab or slabs between the piers must be above the existing grade level so that water will drain away from the scale.

H. The piers must extend below the local frost line.

Statutory Authority: *MS s 239.06*

History: *20 SR 1928; 30 SR 346*

7601.3030 APPROACH RAILS AND PIERS.

Subpart 1. **Approach rails.** A railway track scale must be installed with approach rails at the end of the scale. The approach rails must be at least 50 feet long and must be parallel to the scale rails in both the horizontal and vertical planes.

Subp. 2. **Approach panels.** A reinforced concrete approach panel must be installed at each end of the scale. The panels must:

A. be level;

B. extend 25 feet from the scale foundation end walls; and

C. be designed to maintain a permanent and level approach to the scale.

Statutory Authority: *MS s 239.06*

History: *20 SR 1928; 30 SR 346*

VEHICLE AND LIVESTOCK SCALES

7601.4000 VEHICLE AND LIVESTOCK SCALES; PLANS.

Subpart 1. **Scales installed by buyer.** For a vehicle or livestock scale needing assembly or foundation construction by the scale buyer, the manufacturer shall provide to the buyer complete plans, drawings, and instructions for assembling and installing the scale and for

building the foundation. The director may require a scale buyer to submit plans to the division before construction.

Subp. 2. **Aboveground vehicle and livestock scales.** The owner, operator, or installer of an aboveground vehicle or livestock scale shall submit complete plans and drawings of the scale and foundation to the director before installing the scale. The drawings must show the finished grade level of the area that will surround the scale site. The director shall review and approve the drawings, and must respond in writing to the scale owner or operator.

Subp. 3. **Floating concrete slab foundation.** The owner, operator, or installer of an aboveground vehicle or livestock scale to be installed on a floating concrete slab foundation shall comply with subpart 2 and shall complete a soil bearing test, performed by a registered engineer, before constructing the scale foundation. The soil bearing test must determine the load–bearing capacity of the soil that will lie under the completed scale foundation. The engineer's report, including a statement that the soil bearing is suitable for the scale to be installed, must be submitted to the director before constructing the scale foundation. The director shall review and approve the report and respond in writing to the owner or operator.

Statutory Authority: *MS s 239.06*

History: *20 SR 1928*

7601.4010 VEHICLE AND LIVESTOCK SCALE FOUNDATIONS.

Subpart 1. **Generally.** Vehicle and livestock scales installed after December 31, 1985, must be installed on a reinforced, poured, concrete foundation. Scales may be installed in a concrete pit, according to subpart 2, or above grade level according to subpart 3 or 4. The foundation must be designed to support the weight of the scale and the anticipated maximum load on the scale without significant settling or cracking. Weighing element stands or bases must be securely bolted to the foundation. Space between a stand or base and the foundation must be filled with nonshrinking grout.

Subp. 2. **Pit–type scale foundation.** A pit–type vehicle or livestock scale foundation must meet the following requirements:

A. the walls, floors, footings, and weighing element support piers must be reinforced, poured concrete;

B. the clearance between the bottom of the weighbridge or other main structural member and the surface of the pit floor must be at least 48 inches;

C. for outdoor scales, the pit floor must have an effective drain system so that the pit floor remains reasonably dry and clean;

D. for outdoor scales, the tops of the pit walls must be above the existing grade level so that water will drain away from the scale; and

E. for outdoor scales, the foundation must extend below the local frost line.

Subp. 3. **Aboveground scale; concrete pier foundation.** An aboveground vehicle or livestock scale foundation must meet the requirements in items A to H.

A. The weighing elements must be supported on reinforced concrete foundation piers.

B. Concrete surface slabs must be poured independently between the main foundation piers.

C. The end piers of the foundation must have end walls to prevent fill material from interfering with scale operation.

D. Where foundation construction techniques allow, the surfaces of the concrete slabs between the foundation piers must be sloped down from the longitudinal centerline to each side to prevent dirt accumulation under the platform.

E. The clearance between the bottom of the weighbridge or other main structural member and the slab surface must be at least six inches for vehicle scales and at least 12 inches for livestock scales.

F. The scale platform, structural members, foundation surfaces, and surrounding area must be designed to allow access for cleaning under the scale platform and around all weighing elements.

G. For outdoor scales, the tops of the piers and the surfaces of the slab or slabs between the piers must be above the existing grade level so that water will drain away from the scale.

H. The piers must extend below the local frost line.

Subp. 4. **Aboveground scale; floating concrete slab foundation.** An aboveground vehicle or livestock scale may be installed on a floating concrete slab foundation. The foundation must meet the following requirements:

A. The scale weighing element or elements must be supported on a monolithic, reinforced concrete slab. The entire slab must be at least 12 inches thick, and must conform to the scale manufacturer's installation and reinforcing requirements.

B. The foundation must be constructed on soil that has a uniform natural or engineered soil bearing of at least 1,500 pounds per square foot. See part 7601.4000, subpart 3.

C. A base of uniform, compacted, permeable aggregate, at least 24 inches deep, must be installed. The concrete slab foundation must be poured on top of this base.

D. The top surface of the foundation slab must be installed above the surrounding grade level so that water will flow away from the foundation and away from the permeable aggregate base that supports the foundation.

Statutory Authority: *MS s 239.06*

History: *20 SR 1928; 30 SR 346*

7601.4020 VEHICLE AND LIVESTOCK SCALE APPROACHES.

Subpart 1. **Before January 1, 1986.** A vehicle scale installed before January 1, 1986, must have at least 12 feet or a distance equal to one–third of the deck length, whichever is greater, of straight hard surface driveway on either end of the scale not over one–third inch per foot out of level of the platform. The first six feet on both ends must be constructed of reinforced concrete.

Subp. 2. **After December 31, 1985.** For a vehicle or livestock scale installed after December 31, 1985, each end of the scale must have a straight, paved approach that meets the following requirements:

A. Approaches must be at least as wide as the scale platform and at least ten feet long or one–third of the scale platform length, whichever is greater.

B. The first ten feet of each approach must be a reinforced concrete approach panel, one end of which rests on an extension of the scale foundation end wall. The remaining length of each approach must be paved with concrete or asphalt.

C. Approaches must be sloped down from the scale platform. Maximum slope allowed is one–third inch per foot. Approaches must not be sloped up from the scale platform.

D. For aboveground scales, the foundation end walls must have wing wall extensions, or the sides of the approach slopes must be paved, so that fill material cannot fall under the scale platform.

Statutory Authority: *MS s 239.06*

History: *20 SR 1928*

7601.4030 ANIMAL AND LIVESTOCK SCALES; PRINTER REQUIRED.

An animal or livestock scale must be equipped with a printing device. The printer must be maintained in good working condition so that a clear printed record of each transaction is available to both buyer and seller.

Statutory Authority: *MS s 239.06*

History: *20 SR 1928*

7601.4040 ANIMAL AND LIVESTOCK SCALES; TOLERANCES.

Subpart 1. **Tolerance.** For animal and livestock scales, the basic maintenance tolerance is one pound per 1000 pounds of test load (0.1 percent). The acceptance tolerance is one–half of the basic maintenance tolerance.

Subp. 2. **Shift test tolerance.** A shift test must be conducted on animal and livestock scales. The maximum test load is one–fourth of the scale capacity. A scale may be approved if the sum of the indicated errors for two load–bearing readings in the same section is within tolerance.

"Section" means a part of a vehicle, livestock, or railroad track scale that consists of a pair of main load–bearing supports arranged so that the vertical plane passing through both supports is usually transverse to the direction that the load is applied to the scale platform.

Statutory Authority: *MS s 239.06*

History: *20 SR 1928*

HOPPER SCALES

7601.5000 HOPPER SCALES.

Subpart 1. **Capacity.** For a hopper scale, the load capacity of the hopper must be at least 80 percent of the capacity of the weight indicator. Load capacity must be determined by using the highest density material that will normally be weighed in the hopper.

Subp. 2. **Dust–control systems.** Weighing accuracy of a hopper scale system must not be affected by air flow or by a fluctuation or differential in air pressure caused by a dust–control system. If scale accuracy can be affected by adjusting dampers or flow–control devices in the dust–control system, the dampers and devices must be sealed with a Minnesota seal to prevent adjustment.

Statutory Authority: *MS s 239.06*

History: *20 SR 1928*

MEASURING LIQUEFIED PETROLEUM GAS

7601.6000 TEMPERATURE CORRECTION FOR MEASURING LP GAS.

Subpart 1. **Requirements.** When liquefied petroleum gas is sold or delivered to a consumer as a liquid and by liquid measurement, the volume of liquid sold and delivered must be corrected to a temperature of 60 degrees Fahrenheit through the use of the volume correction table, shown in part 7601.9900, and calculated under subpart 2, or through use of an approved meter with a sealed automatic compensating mechanism. A sale ticket must show the delivered gallons, the temperature at the time of delivery, and the corrected gallonage, or must state that temperature correction was automatically made.

This part does not apply to unit sales or deliveries made directly to mobile fuel tanks with a capacity of less than 100 gallons.

Subp. 2. **Calculation.** To convert from measured volume at another temperature to net volume at 60 degrees Fahrenheit: measure the volume and temperature, determine the specific gravity at 60 degrees Fahrenheit, refer to the column in the volume conversion table, set forth in part 7601.9900, corresponding to the specific gravity, and read the volume conversion factor opposite the observed temperature. Multiply the observed volume by this factor to obtain the volume at 60 degrees Fahrenheit.

Statutory Authority: *MS s 239.06*

History: *20 SR 1928*

VOLUNTARY PLACING IN SERVICE PROGRAM

7601.7000 PLACING IN SERVICE PROGRAM; PURPOSE AND POLICY.

Subpart 1. **Registered persons.** The director shall offer a voluntary registration program for persons who install, adjust, repair, service, or test commercial weighing and measuring equipment. The purposes of the program are to:

A. allow privately employed individuals to place newly installed or repaired weighing and measuring equipment into commercial service, pending an inspection by the division; and

B. minimize the compliance burden on owners and operators of weighing and measuring equipment by simplifying installation and repair and by reducing the amount of time the equipment is out of service.

Subp. 2. **Nonregistered persons.** A nonregistered person is not prohibited from repairing commercial weighing and measuring equipment. However, Minnesota Statutes, chapter 239, prohibits commercial use of equipment that has been repaired by a nonregistered person until the equipment has been approved by the division.

Statutory Authority: *MS s 239.06*

History: *20 SR 1928*

7601.7010 VOLUNTARY REGISTRATION.

Subpart 1. **Placing in service registration.** The director will accept applications for voluntary registration in the placing in service program, and will issue annual registration certificates to qualified persons.

Subp. 2. **Application for voluntary registration.** An applicant shall provide the following information on an application form provided by the division:

A. the applicant's name, business name, business address, and business telephone number;

B. the applicant's Social Security number and Minnesota tax identification number;

C. evidence that the applicant has the required test equipment available for use, and has met the equipment calibration requirements in part 7601.7080; and

D. the category of weighing and measuring equipment that the applicant will service.

Statutory Authority: *MS s 239.06*

History: *20 SR 1928*

7601.7020 CERTIFICATE OF REGISTRATION.

The director shall issue a registration certificate to an applicant who meets the requirements of this part. The certificate authorizes the applicant to exercise the privileges in part 7601.7050 and to fulfill the responsibilities in part 7601.7060 for a category of commercial weighing and measuring equipment specified by the director. The certificate remains in effect for 12 months following the date of issue, or until it is returned by the registrant or revoked by the director. The director shall issue a certificate to an applicant who has:

A. fulfilled the application requirements in part 7601.7010 or the reciprocity requirements in part 7601.7040;

B. met the standards and test equipment requirements in part 7601.7080;

C. attended a placing in service training seminar offered by the division to all new applicants, except that a registrant who renews a registration certificate is not required to attend annually; and

D. completed and passed a written examination to demonstrate the applicant's understanding of the appropriate requirements in department rules, including NIST Handbook 44.

Statutory Authority: *MS s 239.06*

History: *20 SR 1928*

7601.7030 REGISTRATION FEE.

The division shall charge an annual fee for each registration certificate issued, as set by part 7602.0100. It must include the costs of administering the placing in service program and calibrating the registrant's standards and test equipment.

Statutory Authority: *MS s 239.06*

History: *20 SR 1928*

7601.7040 RECIPROCITY.

The director may issue a registration certificate to a person who is registered in a placing in service program in another state. The person is required to:

A. meet the application requirements in part 7601.7010;

B. provide evidence of registration in another state;

C. provide evidence that the standards and test equipment requirements in part 7601.7080 have been met;

D. attend a placing in service training seminar offered by the division to all new applicants, except that a registrant who renews a registration certificate is not required to attend annually; and

E. complete and pass a written examination to demonstrate the applicant's understanding of the appropriate requirements in department rules, including NIST Handbook 44.

Statutory Authority: *MS s 239.06*

History: *20 SR 1928*

7601.7050 PRIVILEGES OF VOLUNTARY REGISTRANT.

A registrant may:

A. remove an official rejection tag placed on weighing and measuring equipment by the division;

B. remove a Minnesota security seal installed on weighing and measuring equipment by the division;

C. repair and place in service weighing and measuring equipment rejected by the division; and

D. place in service new or newly installed weighing and measuring equipment.

Statutory Authority: *MS s 239.06*

History: *20 SR 1928*

7601.7060 RESPONSIBILITIES OF VOLUNTARY REGISTRANT.

Subpart 1. **Performance.** A registrant shall:

A. ensure that all equipment placed in service complies with this chapter, including NIST Handbook 44;

B. personally perform or observe all installation, service, adjustment, repair, and testing of weighing and measuring equipment placed in service; and

C. use only standards and test equipment that meet the requirements of part 7601.7080.

Subp. 2. **Placing in service required.** A registrant shall place in service all commercial weighing and measuring equipment when the registrant, or a person under the direct supervision and observation of the registrant, has:

A. installed the equipment;

B. repaired the equipment, following official rejection by the division; or

C. removed a Minnesota security seal from the equipment.

Subp. 3. **Reporting.** When work authorized in part 7601.7050 is performed, a registrant shall:

A. fill out a placed in service report form;

B. carefully follow the instructions on the form and provide all of the required information in legible handwriting or typewriting;

C. submit the original form to the division within five days after completing the work;

D. submit a copy of the form to the owner or operator of the equipment when the work is completed; and

E. retain a copy of the form.

Subp. 4. **Security seals.** When a registrant removes a security seal from the adjusting or calibrating mechanism of a weighing or measuring device, the registrant shall:

A. install a new security seal in a manner that will ensure that the device cannot be adjusted without removing or defacing the security seal; and

B. imprint the seal with the registrant's placing in service registration number.

Statutory Authority: *MS s 239.06*

History: *20 SR 1928*

7601.7070 PLACED IN SERVICE REPORT.

Upon request from a registrant, the director shall provide a supply of placed in service report forms to the registrant.

Statutory Authority: *MS s 239.06*

History: *20 SR 1928*

7601.7080 STANDARDS AND TESTING EQUIPMENT.

Subpart 1. **Required equipment list.** The director shall publish a list of the standards and test equipment required for registration in each category of weighing and measuring equipment service.

Subp. 2. **Annual calibration required.** A registrant shall annually submit the required standards and test equipment for inspection, testing, and calibration by the division's metrology laboratory, by the federal government, or by a NIST–certified metrology laboratory operated by an agency of another state government.

Statutory Authority: *MS s 239.06*

History: *20 SR 1928*

7601.7090 PROBLEM RESOLUTION; CERTIFICATE OF REGISTRATION.

Subpart 1. **Director may inspect.** The director may, at any time, inspect the work performed by a registrant. The director shall use these inspections to determine whether the registrant is performing repairs in compliance with Minnesota Statutes and department rules.

Subp. 2. **Problem resolution system, list of violations.** Each of the following acts are considered a violation of department rules. When the director finds that a registrant has committed one or more of the following violations, the director shall impose an appropriate remedial action described in subparts 3 to 7. The conditions for determining the appropriate remedial action are included with each remedial action in subparts 3 to 7. Violations include:

A. failing to submit a placing in service report for commercial weighing or measuring equipment that the registrant has installed, adjusted, or repaired;

B. submitting a placing in service report that is incomplete or that contains inaccurate information;

C. placing in service any weighing or measuring equipment without performing a test utilizing the test equipment required by the director under part 7601.7080;

D. placing in service any weighing or measuring equipment that does not meet the specifications, tolerances, and other requirements of department rules, including the requirements of NIST Handbook 44;

E. placing in service any weighing and measuring equipment after a registrant's certificate of registration has expired;

F. removing a rejection tag after a registrant's certificate of registration has expired;

G. failing to install a security seal as required by part 7601.7060, subpart 4;

H. incorrectly installing a security seal so that it is possible to adjust the accuracy or change the calibration of weighing or measuring equipment without removing, damaging, or defacing the security seal;

I. continuing to install, adjust, or repair commercial weighing or measuring equipment after the director has suspended the registration certificate for up to 30 days;

J. continuing to install, adjust, or repair commercial weighing or measuring equipment after the director has suspended the registration certificate for up to 90 days; or

K. failing to pay a registration fee or equipment calibration fee more than 90 days after the division has issued an invoice for payment to the registered person.

Subp. 3. **Additional training.** The director shall require a registrant to attend additional training or tutoring offered by the division if the director finds that a registrant has committed any of the violations listed in subpart 2, items A to H.

Subp. 4. **Warning letter.** The director shall issue a warning letter to a registrant if the director finds that the registrant has committed any of the violations listed in subpart 2, items A to H. The warning letter must state that the registrant has violated department rules, must specify the violations, and must state that the director may suspend or revoke the registration certificate for continued violations.

Subp. 5. **30–day suspension.** The director shall suspend a registration certificate for up to 30 days if the director finds that a registrant has committed, on three or more occasions within a 90–day period, any of the violations in subpart 2, items A to H. The director shall inform the registrant in writing of the suspension, the reasons for the suspension, and the privileges that must not be exercised while the certificate is under suspension.

Subp. 6. **90–day suspension.** The director shall suspend a registration certificate for up to 90 days if the director finds that a registrant has committed, on six or more occasions within a 90–day period, any of the violations in subpart 2, items A to H, or if the director finds that a registrant has committed the violation in subpart 2, item I, at any time. The director shall inform the registrant in writing of the suspension, the reasons for the suspension, and the privileges that must not be exercised while the certificate is under suspension.

Subp. 7. **Revocation.** The director shall revoke a registration certificate if the director finds that a registrant has committed either of the violations in subpart 2, items J and K. The director shall inform the registrant in writing of the revocation, the reasons for the revocation, and the activities that are prohibited by the revocation.

Subp. 8. **Reinstatement.** The director shall reinstate a registration certificate that has been revoked if the director receives an application for reinstatement from a person whose registration certificate has been revoked, if the applicant has paid all registration fees and calibration fees required in part 7602.0100, and the applicant has met all of the requirements of parts 7601.7010 to 7601.7040. The director must not reinstate a registration certificate that has been under revocation for less than 120 days.

Statutory Authority: *MS s 239.06*

History: *20 SR 1928*

7601.7100 LISTS OF REGISTERED PERSONS.

The director shall publish, and supply upon request from any interested person, lists of registered service persons.

Statutory Authority: *MS s 239.06*

History: *20 SR 1928*

7601.8000 BIODIESEL BLEND QUANTIFICATION METHOD "MN BIODIESEL 2005" INCORPORATED BY REFERENCE.

Subpart 1. **"MN Biodiesel 2005" test method.** The director, in consultation with the National Biodiesel Board and the Governor's Task Force on Biodiesel, shall publish a test method, known as "MN Biodiesel 2005," for the quantification of biodiesel blends for the purpose of enforcing the biodiesel requirement in diesel fuel. The director shall use this method for enforcement purposes until a suitable, nationally accepted method exists, such as a method adopted by the American Society for Testing and Materials.

Subp. 2. **Location.** The director shall make available a copy of the method, which is incorporated by reference, and any updates or changes, including a nationally accepted method at the time it is available. The current version must be kept at the Minnesota State Law Library, Minnesota Judicial Center, 25 Rev. Dr. Martin Luther King, Jr. Boulevard,

Saint Paul, Minnesota, 55155; provided to petroleum terminals in Minnesota; posted on the department's Web site; and available upon request. The method is not subject to frequent change.

Statutory Authority: *MS s 239.06*

History: *30 SR 346*

7601.9000 REGISTRATION PROGRAM FOR LPG METER INSPECTORS; PURPOSE.

The purpose of the registration program is to allow privately employed individuals to inspect and test liquefied petroleum gas (LPG) meters.

Statutory Authority: *MS s 239.06*

History: *30 SR 346*

7601.9010 REGISTRATION.

Subpart 1. **Permit holders.** The director shall accept applications for the registration program from registered permit holders as defined in part 7601.7000.

Subp. 2. **Application.** An applicant shall provide the following information on an application form provided by the division:

A. the registrant's name, company, and permit number;

B. a list of calibration equipment to be used during inspections; and

C. a copy of the current calibration certificate for all equipment.

Subp. 3. **Testing.** If an applicant passes a written test and a field test, then the director shall authorize the applicant to inspect and test liquefied petroleum gas meters. The director shall develop and offer these tests to qualified applicants.

Subp. 4. **Permit required.** An applicant must continue to maintain the status of registered placing in service permit holder.

Statutory Authority: *MS s 239.06*

History: *30 SR 346*

7601.9020 INSPECTION SEALS.

The director shall provide each registered inspector with inspection stickers that, when applied, will indicate that a meter was tested and met specifications and tolerances at the time of the test. A new sticker must be applied annually.

Statutory Authority: *MS s 239.06*

History: *30 SR 346*

7601.9030 INSPECTION REPORTS.

A registered inspector shall complete a required test report for each meter tested and submit the original report to the director within five days. The director shall issue a warning to the owner for each meter that fails to pass an inspection performed by a registered inspector. The director shall place an "out–of–service" tag on the meter, unless the meter is condemned or removed from use.

When a meter is repaired between annual inspections, a registered inspector shall comply with part 7601.7060.

Statutory Authority: *MS s 239.06*

History: *30 SR 346*

7601.9040 DIRECTOR MAY INSPECT.

The director may inspect the work performed by a registered inspector at any time. The director shall use these inspections to determine whether the registrant is performing repairs in compliance with this chapter and Minnesota Statutes, chapter 239.

The director shall maintain a list of all liquefied petroleum gas meters in service in the state, and shall provide this list to any registered inspector that requests it.

The director shall keep current records of inspections for enforcement purposes.

Statutory Authority: *MS s 239.06*

History: *30 SR 346*

7601.9050 VIOLATIONS AND SANCTIONS.

Subpart 1. **Violations.** In addition to part 7601.7090, subpart 2, each of the following acts and failures to act is considered a violation of this chapter:

A. failure to submit a test report after completing an inspection;

B. misuse or misapplication of inspection stickers;

C. failure to renew placing in service registration; and

D. use of test equipment that is past its calibration due date.

Subp. 2. **Warning.** The director shall issue a warning letter to a registered inspector if the director finds that the registrant has committed any of the violations listed in part 7601.7090, subpart 2, or any of the violations listed in this part.

Subp. 3. **Suspension.** The director shall suspend for 30 days a registrant's permit if the director finds that the registrant has committed:

A. more than one of the violations listed in part 7601.7090, subpart 2;

B. more than one of the violations listed in this part; or

C. any violation listed in this part or part 7601.7090 at any time after the director has issued a warning letter to the registrant.

Subp. 4. **Revocation.** The director shall revoke a registered inspector's permit if the director finds that the registrant has committed any violation after the director has suspended the registrant's permit.

Statutory Authority: *MS s 239.06*

History: *30 SR 346*

7601.9900 VOLUME CORRECTION FACTOR TABLE.

VOLUME CORRECTION FACTOR TABLE
Specific Gravities at 60°/60°F

Product Temp degrees F	0.5000	Propane 0.5079	0.5100	0.5200	0.5300	0.5400	0.5500	0.5600	Iso– Butane 0.5631	0.5700	0.5800	N– Butane 0.5944
	Volume Correction Factors											
–35	1.140	1.135	1.134	1.128	1.122	1.116	1.112	1.106	1.105	1.101	1.096	1.094
–30	1.134	1.129	1.128	1.122	1.116	1.111	1.106	1.101	1.100	1.096	1.092	1.090
–25	1.127	1.122	1.121	1.115	1.110	1.105	1.100	1.095	1.094	1.901	1.087	1.085
–20	1.120	1.115	1.114	1.109	1.104	1.099	1.095	1.090	1.089	1.086	1.082	1.080
–15	1.112	1.109	1.107	1.102	1.097	1.093	1.089	1.084	1.083	1.080	1.077	1.075
–10	1.106	1.102	1.100	1.095	1.091	1.087	1.083	1.079	1.079	1.075	1.072	1.071
–5	1.098	1.094	1.094	1.089	1.085	1.081	1.077	1.074	1.073	1.070	1.067	1.066
0	1.092	1.088	1.088	1.084	1.080	1.076	1.073	1.069	1.068	1.066	1.063	1.062
2	1.089	1.086	1.085	1.081	1.077	1.074	1.070	1.067	1.066	1.064	1.061	1.060
4	1.086	1.083	1.082	1.079	1.075	1.071	1.068	1.065	1.064	1.062	1.059	1.058
6	1.084	1.080	1.080	1.076	1.072	1.069	1.065	1.062	1.061	1.059	1.057	1.055
8	1.081	1.078	1.077	1.074	1.070	1.066	1.063	1.060	1.059	1.057	1.055	1.053
10	1.078	1.075	1.074	1.071	1.067	1.064	1.061	1.058	1.057	1.055	1.053	1.051
12	1.075	1.072	1.071	1.068	1.064	1.061	1.059	1.056	1.055	1.053	1.051	1.049
14	1.072	1.070	1.069	1.066	1.062	1.059	1.056	1.053	1.053	1.051	1.049	1.047
16	1.070	1.067	1.068	1.063	1.060	1.056	1.054	1.051	1.050	1.048	1.046	1.045
18	1.067	1.065	1.064	1.061	1.057	1.054	1.051	1.049	1.048	1.046	1.044	1.043
20	1.064	1.063	1.061	1.058	1.054	1.051	1.049	1.046	1.046	1.044	1.042	1.041
22	1.061	1.059	1.058	1.055	1.052	1.049	1.046	1.044	1.044	1.042	1.040	1.039
24	1.058	1.056	1.055	1.052	1.049	1.046	1.044	1.042	1.042	1.044	1.038	1.037
26	1.055	1.053	1.052	1.049	1.047	1.044	1.042	1.039	1.039	1.037	1.036	1.035
28	1.052	1.050	1.049	1.047	1.044	1.041	1.039	1.037	1.037	1.035	1.034	1.034
30	1.049	1.047	1.046	1.044	1.041	1.039	1.037	1.035	1.035	1.033	1.032	1.032
32	1.046	1.044	1.043	1.041	1.038	1.036	1.035	1.033	1.032	1.031	1.030	1.030
34	1.043	1.041	1.040	1.038	1.036	1.034	1.032	1.031	1.030	1.029	1.028	1.028
36	1.039	1.038	1.037	1.035	1.033	1.031	1.030	1.028	1.028	1.027	1.025	1.025
38	1.036	1.036	1.034	1.032	1.031	1.029	1.027	1.026	1.025	1.025	1.023	1.023
40	1.033	1.032	1.031	1.029	1.028	1.026	1.025	1.024	1.023	1.023	1.021	1.021
42	1.030	1.029	1.028	1.027	1.025	1.024	1.023	1.022	1.021	1.021	1.019	1.019
44	1.027	1.026	1.025	1.023	1.022	1.021	1.020	1.019	1.019	1.018	1.017	1.017
46	1.023	1.022	1.022	1.021	1.020	1.018	1.018	1.017	1.016	1.016	1.015	1.015
48	1.020	1.019	1.019	1.018	1.017	1.016	1.015	1.014	1.014	1.013	1.013	1.013
50	1.017	1.016	1.016	1.015	1.014	1.013	1.013	1.012	1.012	1.011	1.011	1.011
52	1.014	1.013	1.012	1.012	1.011	1.010	1.010	1.009	1.009	1.009	1.009	1.009
54	1.010	1.010	1.009	1.009	1.008	1.008	1.007	1.007	1.007	1.007	1.006	1.006
56	1.007	1.007	1.006	1.006	1.005	1.005	1.005	1.005	1.005	1.005	1.004	1.004
58	1.003	1.003	1.003	1.003	1.003	1.003	1.002	1.002	1.002	1.002	1.002	1.002
60	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
62	0.997	0.997	0.997	0.997	0.997	0.997	0.997	0.998	0.998	0.998	0.998	0.998
64	0.993	0.993	0.994	0.994	0.994	0.994	0.995	0.995	0.995	0.995	0.996	0.996
66	0.990	0.990	0.990	0.990	0.991	0.992	0.992	0.993	0.993	0.993	0.993	0.993
68	0.986	0.986	0.987	0.987	0.988	0.989	0.990	0.990	0.990	0.990	0.991	0.991
70	0.983	0.983	0.984	0.984	0.985	0.986	0.987	0.988	0.988	0.988	0.989	0.989
72	0.979	0.980	0.981	0.981	0.982	0.983	0.984	0.985	0.986	0.986	0.987	0.987
74	0.976	0.976	0.977	0.978	0.980	0.980	0.982	0.983	0.983	0.984	0.985	0.985
76	0.972	0.973	0.974	0.975	0.977	0.978	0.979	0.980	0.981	0.981	0.982	0.983
78	0.969	0.970	0.970	0.972	0.974	0.975	0.977	0.978	0.978	0.979	0.980	0.980
80	0.965	0.967	0.967	0.969	0.971	0.972	0.974	0.975	0.976	0.977	0.978	0.978
82	0.961	0.963	0.963	0.966	0.968	0.969	0.971	0.973	0.973	0.974	0.976	0.976
84	0.957	0.959	0.960	0.962	0.965	0.966	0.968	0.970	0.971	0.972	0.974	0.974
86	0.954	0.954	0.956	0.959	0.951	0.964	0.966	0.967	0.968	0.969	0.971	0.971
88	0.950	0.952	0.953	0.955	0.958	0.961	0.963	0.965	0.966	0.967	0.969	0.969
90	0.946	0.949	0.949	0.952	0.955	0.958	0.960	0.962	0.963	0.964	0.967	0.967
92	0.942	0.945	0.946	0.949	0.952	0.955	0.957	0.959	0.960	0.962	0.964	0.965
94	0.938	0.941	0.942	0.946	0.949	0.952	0.954	0.957	0.958	0.962	0.964	0.965
96	0.935	0.938	0.939	0.942	0.946	0.949	0.952	0.954	0.955	0.957	0.960	0.960
98	0.931	0.934	0.935	0.939	0.943	0.940	0.949	0.952	0.953	0.954	0.957	0.957
100	0.927	0.930	0.932	0.936	0.940	0.943	0.946	0.949	0.950	0.952	0.954	0.955
105	0.917	0.920	0.923	0.927	0.931	0.935	0.939	0.943	0.943	0.946	0.949	0.949
110	0.907	0.911	0.913	0.918	0.923	0.927	0.932	0.936	0.937	0.939	0.943	0.944
115	0.897	0.902	0.904	0.909	0.915	0.920	0.925	0.930	0.930	0.933	0.937	0.938

Statutory Authority: *MS s 239.06*

History: *20 SR 1928*