

1 Department of Public Service

2

3 Adopted Permanent Rules Governing Weights and Measures

4

5 Rules as Adopted

6 7601.0100 DEFINITIONS.

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

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

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

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

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

23 Subp. 4. Commissioner. "Commissioner" means the
24 commissioner of the Department of Public Service.

25 Subp. 5. Department. "Department" means the Department of
26 Public Service.

27 Subp. 6. Director. "Director" means the director of the
28 Weights and Measures Division of the Department of Public
29 Service.

30 Subp. 7. Division. "Division" means the Weights and
31 Measures Division of the Department of Public Service, and
32 employees of the Weights and Measures Division having statutory
33 authority delegated by the director.

34 Subp. 8. Hopper scale. "Hopper scale" means a scale
35 designed and used to weigh bulk commodities in a container,

1 hopper, box, or tank mounted on the scale.

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

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

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

14 Subp. 12. **National Type Evaluation Program (NTEP).**
15 "National Type Evaluation Program" and "NTEP" mean a program of
16 weighing and measuring device evaluation and certification
17 operated by the United States Department of Commerce, National
18 Institute of Standards and Technology.

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

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

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

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

36 Subp. 17. **Scale division.** "Scale division" means the

1 value, in units of mass, of the smallest subdivision or unit
2 that can be indicated by a scale.

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

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

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

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

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

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

29 7601.0200 VARIANCES.

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

35 Subp. 2. **Request.** An owner or operator of commercial

1 weighing and measuring equipment may apply to the director for a
2 variance to any part of this chapter. The request must be in
3 writing and must:

- 4 A. explain why a variance is needed;
5 B. explain the proposed alternative to the rule; and
6 C. include drawings if the request is for a railroad
7 track, vehicle, or livestock scale. The drawings must
8 illustrate the design, construction, and location of the scale.

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

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

19 B. undue hardship exists when the applicant
20 demonstrates that:

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

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

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

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

33 UNIFORM NATIONAL CODES

34 7601.1000 NIST HANDBOOK 44 INCORPORATED BY REFERENCE.

35 Subpart 1. **NIST Handbook 44** ~~(1994)~~ (1995). Weighing and

1 measuring equipment manufactured, offered, or exposed for sale
2 or sold or given away for use in trade or commerce in Minnesota
3 must conform to the requirements and specifications of NIST
4 Handbook 44. NIST Handbook 44 (~~1994~~) (1995), "Specifications,
5 Tolerances, and Other Technical Requirements for Weighing and
6 Measuring Devices," as adopted by the ~~77th~~ 79th National
7 Conference on Weights and Measures and published by the United
8 States Department of Commerce, National Institute of Standards
9 and Technology, (Washington, D.C., October ~~1993~~ 1994), is
10 incorporated by reference subject to the following exceptions:

11 A. If NIST Handbook 44 (~~1994~~) (1995) contains any
12 provisions contrary to the laws of Minnesota, or contrary to any
13 rule, except part 7601.1000, of the Minnesota Department of
14 Public Service, Minnesota law and department rules govern and
15 supersede contrary provisions of NIST Handbook 44.

16 B. The final sentence of NIST Handbook 44
17 (~~1994~~) (1995), section 2 (scale code), specification S.1.8.3.,
18 is deleted.

19 C. The director shall not enforce specifications and
20 user requirements in NIST Handbook 44 (~~1994~~) (1995) that would
21 require owners of motor fuel dispensers to install equipment
22 capable of allowing the customer to select the unit price.
23 These requirements are contained in section 3.30 (liquid
24 measuring devices), specification S.1.6.4.1., specification
25 S.1.6.5., specification S.1.6.5.4., and user requirement UR.3.3.

26 D. The user requirement UR.2.2, in section 3.31 of
27 NIST Handbook 44 (1995) shall not apply so as to require a
28 ticket printer on vehicle tank meters.

29 Subp. 2. Location. NIST Handbook 44 is available to the
30 public at the Minnesota State Law Library, Minnesota Judicial
31 Center, 25 Constitution Avenue, Saint Paul, Minnesota, 55155,
32 and is not subject to frequent change.

33 7601.1010 NIST HANDBOOK 44; COMPLIANCE REQUIRED.

34 Subpart 1. Compliance. A person who owns or operates
35 weighing or measuring equipment for commercial purposes in

1 Minnesota must use weighing and measuring equipment that meets
2 all applicable requirements in NIST Handbook 44 as adopted under
3 part 7601.1000. Only the director, or a department employee
4 delegated by the director, shall determine the applicability of,
5 and compliance with, the requirements of NIST Handbook 44.

6 Subp. 2. NTEP Certification. A person who sells,
7 installs, owns, or operates commercial weighing or measuring
8 equipment manufactured after January 1, 1996, must sell,
9 install, or use only weighing or measuring equipment of a make,
10 model, and type for which a "Certificate of Conformance" has
11 been issued by the United States Department of Commerce,
12 National Institute of Standards and Technology, Office of
13 Weights and Measures.

14 7601.1020 NIST HANDBOOK 133 INCORPORATED BY REFERENCE.

15 Subpart 1. NIST Handbook 133. NIST Handbook 133
16 (September, 1988), "Checking the Net Contents of Packaged
17 Goods," with additions and amendments to it published in
18 supplements issued through October, 1992, as adopted by the 77th
19 National Conference on Weights and Measures and published by the
20 United States Department of Commerce, National Institute of
21 Standards and Technology, (Washington, D.C., October 1992), is
22 incorporated by reference. If NIST Handbook 133 and its
23 supplements contain any provision contrary to the laws of
24 Minnesota, the rules of the Minnesota Department of Public
25 Service, or the packaging or labeling rules of the Minnesota
26 Department of Agriculture, Minnesota laws and rules govern and
27 supersede contrary provisions of NIST Handbook 133 and its
28 supplements.

29 Subp. 2. Location. NIST Handbook 133 and supplements are
30 available to the public at the Minnesota State Law Library,
31 Minnesota Judicial Center, 25 Constitution Avenue, Saint Paul,
32 Minnesota, 55155, and are not subject to frequent change.

33 REQUIREMENTS FOR SCALES, GENERALLY

34 7601.2000 PROTECTION FROM ENVIRONMENT.

35 Subpart 1. Outdoor scales. The director shall require

1 special protection from the environment for an outdoor scale if
2 the division finds that the scale is adversely affected by
3 weather or other environmental factors. Environmental
4 protection includes:

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

7 B. wind skirts, wind walls, or effective foundation
8 heating for above-ground scales;

9 C. an improved drainage system or sump pump for
10 pit-type scales;

11 D. special shielding or weatherproofing of a scale
12 indicator;

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

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

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

21 **7601.2010 SENSITIVITY REQUIREMENT.**

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

26 **RAILROAD TRACK SCALES**

27 **7601.3000 RAILROAD TRACK SCALES; PLANS.**

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

32 Subp. 2. **Installer's plans.** The scale purchaser shall
33 furnish installation plans to the director. The plans must show
34 the scale location, the foundation drawings, and all
35 commodity-handling equipment that could affect the operation of

1 the scale. The plans must also include the information on soil
2 bearing required by part 7601.3020, subpart 1.

3 7601.3010 RAILROAD TRACK SCALE PERMITS.

4 The director shall issue a permit to install a railroad
5 track scale if plans for installing the scale are submitted
6 according to part 7601.3000, and if the planned scale
7 installation meets the requirements of parts 7601.3020 and
8 7601.3030. The director shall review and approve the plans
9 before issuing a permit. A railroad track scale must not be
10 installed without a permit.

11 7601.3015 APPLICATION.

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

16 7601.3020 RAILROAD TRACK SCALE FOUNDATION.

17 Subpart 1. Soil bearing. The owner, operator, or
18 installer of a railroad track scale shall complete a soil
19 bearing test, performed by a registered engineer, before
20 constructing the scale foundation. The soil bearing test must
21 determine the load-bearing capacity of the soil that will lie
22 under the completed scale foundation. The engineer's report,
23 including a statement that the soil bearing is suitable for the
24 scale to be installed, must be submitted to the director before
25 constructing the scale foundation. The director shall review
26 and approve the report before issuing a permit for a scale
27 installation.

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

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

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

9 7601.3030 APPROACH RAILS AND PIERS.

10 Subpart 1. Approach rails. A railroad track scale must be
11 installed with approach rails at the end of the scale. The
12 approach rails must be at least 50 feet long and must be
13 parallel to the scale rails in both the horizontal and vertical
14 planes.

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

18 A. be level;

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

21 ~~C. be formed independently of the end walls, and rest~~
22 ~~on extensions of the end walls or on the scale foundation~~
23 ~~footings, and~~

24 ~~D.~~ be designed to maintain a permanent and level
25 approach to the scale.

26 VEHICLE AND LIVESTOCK SCALES

27 7601.4000 VEHICLE AND LIVESTOCK SCALES; PLANS.

28 Subpart 1. Scales installed by buyer. For a vehicle or
29 livestock scale needing assembly or foundation construction by
30 the scale buyer, the manufacturer shall provide to the buyer
31 complete plans, drawings, and instructions for assembling and
32 installing the scale and for building the foundation. The
33 director may require a scale buyer to submit plans to the
34 division before construction.

35 Subp. 2. Above-ground vehicle and livestock scales. The

1 owner, operator, or installer of an above-ground vehicle or
2 livestock scale shall submit complete plans and drawings of the
3 scale and foundation to the director before installing the
4 scale. The drawings must show the finished grade level of the
5 area that will surround the scale site. The director shall
6 review and approve the drawings, and must respond in writing to
7 the scale owner or operator.

8 Subp. 3. Floating concrete slab foundation. The owner,
9 operator, or installer of an above-ground vehicle or livestock
10 scale to be installed on a floating concrete slab foundation
11 shall comply with subpart 2 and shall complete a soil bearing
12 test, performed by a registered engineer, before constructing
13 the scale foundation. The soil bearing test must determine the
14 load-bearing capacity of the soil that will lie under the
15 completed scale foundation. The engineer's report, including a
16 statement that the soil bearing is suitable for the scale to be
17 installed, must be submitted to the director before constructing
18 the scale foundation. The director shall review and approve the
19 report and respond in writing to the owner or operator.

20 7601.4010 VEHICLE AND LIVESTOCK SCALE FOUNDATIONS.

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

31 Subp. 2. Pit-type scale foundation. A pit-type vehicle or
32 livestock scale foundation must meet the following requirements:

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

35 B. the clearance between the bottom of the

1 weighbridge or other main structural member and the surface of
2 the pit floor must be at least 48 inches;

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

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

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

11 Subp. 3. **Above-ground scale; concrete pier foundation.** An
12 above-ground vehicle or livestock scale foundation must meet the
13 following requirements:

14 A. the weighing elements must be supported on
15 reinforced concrete foundation piers;

16 B. concrete surface slabs must be poured
17 independently between the main foundation piers;

18 C. the end piers of the foundation must have end
19 walls to prevent fill material from interfering with scale
20 operation;

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

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

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

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

1 H. the vertical surfaces of the end walls and the
2 horizontal surfaces of the end piers must have hooks or other
3 devices to allow installation of surface-mounted heating cables;
4 and

5 I. the piers must extend below the local frost line.

6 Subp. 4. **Above-ground scale; floating concrete slab**
7 **foundation.** An above-ground vehicle or livestock scale may be
8 installed on a floating concrete slab foundation. The
9 foundation must meet the following requirements:

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

14 B. The foundation must be constructed on soil that
15 has a uniform natural or engineered soil bearing of at least
16 1,500 pounds per square foot. See part 7601.4000, subpart 3.

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

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

24 7601.4020 VEHICLE AND LIVESTOCK SCALE APPROACHES.

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

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

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

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

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

11 D. For above-ground scales, the foundation end walls
12 must have wing wall extensions, or the sides of the approach
13 slopes must be paved, so that fill material cannot fall under
14 the scale platform.

15 7601.4030 ANIMAL AND LIVESTOCK SCALES; PRINTER REQUIRED.

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

20 7601.4040 ANIMAL AND LIVESTOCK SCALES; TOLERANCES.

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

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

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

35 HOPPER SCALES

1 7601.5000 HOPPER SCALES.

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

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

14 MEASURING LIQUEFIED PETROLEUM GAS

15 7601.6000 TEMPERATURE CORRECTION FOR MEASURING LIQUEFIED
16 PETROLEUM GAS.

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

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

30 Subp. 2. Calculation. To convert from measured volume at
31 another temperature to net volume at 60 degrees Fahrenheit:
32 measure the volume and temperature, determine the specific
33 gravity at 60 degrees Fahrenheit, refer to the column in the
34 volume conversion table, set forth in part 7601.9900,
35 corresponding to the specific gravity, and read the volume

1 conversion factor opposite the observed temperature. Multiply
2 the observed volume by this factor to obtain the volume at 60
3 degrees Fahrenheit.

4 VOLUNTARY PLACING IN SERVICE PROGRAM

5 7601.7000 PLACING IN SERVICE PROGRAM; PURPOSE AND POLICY.

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

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

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

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

24 7601.7010 VOLUNTARY REGISTRATION.

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

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

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

34 B. the applicant's social security number and
35 Minnesota tax identification number;

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

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

6 7601.7020 CERTIFICATE OF REGISTRATION.

7 The director shall issue a registration certificate to an
8 applicant who meets the requirements of this part. The
9 certificate authorizes the applicant to exercise the privileges
10 in part 7601.7050 and to fulfill the responsibilities in part
11 7601.7060 for a category of commercial weighing and measuring
12 equipment specified by the director. The certificate remains in
13 effect for 12 months following the date of issue, or until it is
14 returned by the registrant or revoked by the director. The
15 director shall issue a certificate to an applicant who has:

16 A. fulfilled the application requirements in part
17 7601.7010 or the reciprocity requirements in part 7601.7040;

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

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

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

27 7601.7030 REGISTRATION FEE.

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

33 7601.7040 RECIPROCITY.

34 The director may issue a registration certificate to a

1 person who is registered in a placing in service program in
2 another state. The person is required to:

3 A. meet the application requirements in part
4 7601.7010;

5 B. provide evidence of registration in another state;

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

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

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

15 7601.7050 PRIVILEGES OF VOLUNTARY REGISTRANT.

16 A registrant may:

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

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

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

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

25 7601.7060 RESPONSIBILITIES OF VOLUNTARY REGISTRANT.

26 Subpart 1. Performance. A registrant shall:

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

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

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

34 Subp. 2. Placing in service required. A registrant shall
35 place in service all commercial weighing and measuring equipment

1 when the registrant, or a person under the direct supervision
2 and observation of the registrant, has:

- 3 A. installed the equipment;
- 4 B. repaired the equipment, following official
5 rejection by the division; or
- 6 C. removed a Minnesota security seal from the
7 equipment.

8 Subp. 3. Reporting. When work authorized in part
9 7601.7050 is performed, a registrant shall:

- 10 A. fill out a placed in service report form;
- 11 B. carefully follow the instructions on the form and
12 provide all of the required information in legible handwriting
13 or typewriting;
- 14 C. submit the original form to the division within
15 five days after completing the work;
- 16 D. submit a copy of the form to the owner or operator
17 of the equipment when the work is completed; and
- 18 E. retain a copy of the form.

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

- 22 A. install a new security seal in a manner that will
23 ensure that the device cannot be adjusted without removing or
24 defacing the security seal; and
- 25 B. imprint the seal with the registrant's placing in
26 service registration number.

27 7601.7070 PLACED IN SERVICE REPORT.

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

30 7601.7080 STANDARDS AND TESTING EQUIPMENT.

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

35 Subp. 2. Annual calibration required. A registrant shall

1 annually submit the required standards and test equipment for
2 inspection, testing, and calibration by the division's metrology
3 laboratory, by the federal government, or by a NIST-certified
4 metrology laboratory operated by an agency of another state
5 government.

6 7601.7090 PROBLEM RESOLUTION SYSTEM; CERTIFICATE OF REGISTRATION.

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

12 Subp. 2. Problem resolution system, list of violations.

13 Each of the following acts are considered a violation of
14 department rules. When the director finds that a registrant has
15 committed one or more of the following violations, the director
16 shall impose an appropriate remedial action described in
17 subparts 3 to 7. The conditions for determining the appropriate
18 remedial action are included with each remedial action in
19 subparts 3 to 7. Violations include:

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

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

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

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

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

35 F. removing a rejection tag after a registrant's

1 certificate of registration has expired;

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

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

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

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

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

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

22 Subp. 4. Warning letter. The director shall issue a
23 warning letter to a registrant if the director finds that the
24 registrant has committed any of the violations listed in subpart
25 2, items A to H. The warning letter must state that the
26 registrant has violated department rules, must specify the
27 violations, and must state that the director may suspend or
28 revoke the registration certificate for continued violations.

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

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

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

16 Subp. 8. Reinstatement. The director shall reinstate a
17 registration certificate that has been revoked if the director
18 receives an application for reinstatement from a person whose
19 registration certificate has been revoked, if the applicant has
20 paid all registration fees and calibration fees required in part
21 7602.0100, and the applicant has met all of the requirements of
22 parts 7601.7010 to 7601.7040. The director must not reinstate a
23 registration certificate that has been under revocation for less
24 than 120 days.

25 7601.7100 LISTS OF REGISTERED PERSONS.

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

1 7601.9900 VOLUME CORRECTION FACTOR TABLE.

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

Product Temp degrees F	Volume Correction Factors										N- Butane 0.5944	
	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
-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	1.091	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

1 REPEALER. Minnesota Rules, parts 7600.0100, 7600.0200,
2 7600.0300, 7600.0400, 7600.0500, 7600.0600, 7600.0700,
3 7600.0800, 7600.0900, 7600.1000, 7600.1100, 7600.1200,
4 7600.1300, 7600.1400, 7600.1500, 7600.1600, 7600.1700,
5 7600.1800, 7600.1900, 7600.2000, 7600.2100, 7600.2200,
6 7600.2300, 7600.2400, 7600.2500, 7600.2600, 7600.2700,
7 7600.2800, 7600.2900, 7600.3000, 7600.3100, 7600.3200,
8 7600.3300, 7600.3400, 7600.3500, 7600.3600, 7600.3700,
9 7600.3800, 7600.3900, 7600.4000, 7600.4100, 7600.4200,
10 7600.4300, 7600.4400, 7600.4500, 7600.4600, 7600.4700,
11 7600.4800, 7600.4900, 7600.5000, 7600.5100, 7600.5200,
12 7600.5300, 7600.5400, 7600.5500, 7600.5600, 7600.5700,
13 7600.5800, 7600.5900, 7600.6000, 7600.6100, 7600.6200,
14 7600.6300, 7600.6400, 7600.6500, 7600.6600, 7600.6700,
15 7600.6800, 7600.6900, 7600.7000, 7600.7100, 7600.7200,
16 7600.7210, 7600.7300, 7600.7400, 7600.7500, 7600.7600,
17 7600.7700, 7600.7750, 7600.7800, 7600.7900, 7600.8100,
18 7600.8200, 7600.8300, 7600.8400, 7600.8500, 7600,8600,
19 7600.8700, 7600.8800, 7600.8900, 7600.9000, 7600.9100,
20 7600.9200, 7600.9300, 7600.9400, 7600.9500, 7600.9600,
21 7600.9700, 7600.9800, and 7600.9900, are repealed.