

1 Department of Public Service
2 Weights and Measures Division

3

4 Adopted Rules Governing Scale Standards and Inspection Fees

5

6 Rules as Adopted

7 7600.6800 NBS HANDBOOK 44 INCORPORATED BY REFERENCE.

8 NBS Handbook 44 1985, Specifications, Tolerances, and other
9 Technical Requirements for Weighing and Measuring Devices, as
10 adopted by the 69th National Conference on Weights and Measures
11 and published by the United States Department of Commerce,
12 National Bureau of Standards, (Washington, D.C., Nov. 1984) is
13 incorporated by reference subject to the following exceptions:

14 A. If NBS Handbook 44 1985 contains any provisions
15 contrary to the laws of Minnesota or the rules of the Minnesota
16 Department of Public Service, Minnesota law and department rule
17 govern.

18 B. The final sentence of NBS Handbook 44 1985,
19 section 2 (scale code), specification S.1.8.3., is deleted.

20 NBS Handbook 44 is located at the Minnesota State Law
21 Library, 117 University Avenue, Saint Paul, Minnesota and is not
22 subject to frequent change.

23 7600.7200 ANIMAL AND LIVESTOCK SCALE.

24 Subpart 1. Tolerances. The basic maintenance tolerance is
25 one pound per 1,000 pounds of test load (0.1 percent). The
26 acceptance tolerance is one-half of the basic maintenance
27 tolerance.

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

33 Subp. 3. Section, defined. "Section" means a pair of main
34 load-bearing points arranged so that the vertical plane passing
35 through the centers of both points is perpendicular to the

1 longitudinal axis of the scale platform.

2 7600.7210 SCALES, SENSITIVITY REQUIREMENT.

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

7 7600.7500 VEHICLE AND LIVESTOCK SCALE APPROACHES.

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

14 Subp. 2. After December 31, 1985. For vehicle and
15 livestock scales installed after December 31, 1985, each end of
16 the scale must have a straight, paved approach which meets the
17 following requirements:

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

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

25 C. Approaches should be sloped down from the scale
26 platform. Maximum slope allowed is one-third inch per foot.
27 Approaches must not be sloped up from the scale platform.

28 D. For above-ground scales, the foundation end walls
29 must have wing wall extensions or the sides of the approaches
30 must be paved so that fill material cannot fall under the scale
31 platform.

32 7600.7700 SUBMISSION OF PLANS.

33 Subpart 1. Scales installed by buyer. For scales needing
34 assembly or foundation construction by the buyer, the
35 manufacturer must provide to the buyer complete plans, drawings,

1 and instructions for assembling and installing the scale and for
2 building the foundation. If potential rule violations are
3 anticipated, the Weights and Measures Division may require the
4 buyer to submit plans to the division before construction.

5 Subp. 2. Above-ground vehicle and livestock scales. The
6 buyer of an above-ground vehicle or livestock scale must submit
7 complete plans and drawings of the scale and foundation to the
8 Weights and Measures Division before installation of the scale.
9 The drawings must show the existing grade level at the scale
10 site. The division shall approve scales for commercial use only
11 if the plans comply with the requirements of this chapter or if
12 a variance is issued under the requirements of part 7600.9800.

13 7600.7750 PROTECTION FROM ENVIRONMENT.

14 Subpart 1. Outdoor scales. The Weights and Measures
15 Division shall require special environmental protection for an
16 outdoor scale if the division finds that the scale is adversely
17 affected by weather or other environmental factors.

18 Environmental protection includes:

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

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

23 C. an improved drainage system or sump pump for
24 pit-type scales;

25 D. special shielding or weatherproofing of the scale
26 indicator;

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

29 F. modifications, shielding, and other special
30 measures to protect electronic scales from radio frequency
31 interference and electromagnetic interference.

32 Subp. 2. Fertilizer scales. Hopper, tank, and mixer
33 scales used for weighing dry or liquid bulk fertilizer must be
34 completely enclosed in a building.

35 7600.7900 SCALE PITS.

1 Subpart 1. Generally. Vehicle and livestock scales
2 installed after December 31, 1985, must be installed on a
3 reinforced, poured concrete foundation. Scales may be installed
4 in a pit or on a slab above grade level. In either case, the
5 foundation footings must extend below the local frost line. The
6 foundation must be designed to support the weight of the scale
7 and the anticipated maximum load on the scale without
8 significant settling or cracking. Weighing element stands or
9 bases must be securely bolted to the foundation. Space between
10 a stand or base and the foundation must be filled with
11 nonshrinking grout.

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

14 A. The walls, floors, footings, and weighing element
15 support piers must be reinforced, poured concrete.

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

19 C. For outdoor scales, the pit floor must have an
20 effective drain system so that the pit floor remains reasonably
21 dry and clean.

22 D. For outdoor scales, the tops of the pit walls must
23 be above the existing grade level so that water will drain away
24 from the scale.

25 Subp. 3. Above-ground scale foundation. An above-ground
26 vehicle or livestock scale foundation must meet the following
27 requirements:

28 A. The slab foundation must be poured integrally or
29 interlocked with piers located directly below the scale
30 load-bearing points.

31 B. The foundation must have end walls to prevent fill
32 material from interfering with scale operation.

33 C. Where platform construction techniques allow, the
34 surface of the foundation slab must be sloped down from the
35 longitudinal centerline to each side to prevent dirt
36 accumulation under the platform.

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

5 E. The scale platform, structural members, and
6 foundation surfaces must be designed to allow access for
7 cleaning under the scale platform and around all weighing
8 elements.

9 F. For outdoor scales, the entire slab surface must
10 be above the existing grade level so that water will drain away
11 from the scale.

12 G. An effective heating system must be installed in
13 the slab to prevent ice and snow accumulation under the platform
14 and on the end walls.

15 H. An above-ground scale must be installed on a
16 foundation slab above the existing grade level or in a pit which
17 conforms to the requirements of subpart 2. Other methods of
18 installation will not be approved.

19 7650.0100 INSPECTION FEES.

20 Subpart 1. Generally. The Weights and Measures Division
21 of the Department of Public Service shall charge the following
22 fees for all regular and special inspections as required by
23 Minnesota Statutes, sections 239.10 and 239.52:

24 A. For scales classified by capacity;

25 (1) \$11 for scales up to and including six pounds
26 capacity;

27 (2) \$12 for scales of seven pounds capacity up to
28 and including 250 pounds capacity;

29 (3) \$20 for scales of 251 pounds capacity up to
30 and including 1,100 pounds capacity;

31 (4) \$45 for scales of 1,101 pounds capacity up to
32 and including 2,000 pounds capacity;

33 (5) \$50 for scales of 2,001 pounds capacity up to
34 and including 4,000 pounds capacity;

35 (6) \$100 for scales of 4,001 pounds capacity up
36 to and including 6,000 pounds capacity; and

1 (7) \$115 for scales of 6,001 pounds capacity up
2 to and including 10,000 pounds capacity.

3 B. For specific classes of scales;

4 (1) \$130 for a two-section vehicle scale;

5 (2) \$160 for a three-section vehicle scale;

6 (3) \$175 for a four-section vehicle scale;

7 (4) \$185 for a five-section vehicle scale;

8 (5) \$275 for a railroad track scale;

9 (6) \$200 for a heavy capacity hopper scale
10 located at a terminal grain elevator;

11 (7) \$115 for a fertilizer hopper scale;

12 (8) \$125 for a livestock scale;

13 (9) \$70 for a wheel load weigher used for law
14 enforcement purposes; and

15 (10) \$55 for a jeweler's, pharmaceutical, or
16 analytical balance.

17 C. For liquid measuring devices;

18 (1) \$45 for agricultural chemical meters and
19 petroleum bulk meters used to measure petroleum products for
20 which the petroleum inspection fee required by Minnesota
21 Statutes, section 296.13 has not been paid; and

22 (2) \$55 for a liquified petroleum gas meter or
23 stationary dispenser of liquified petroleum gas.

24 D. For a linear measuring machine, \$15.

25 E. For issuance or renewal of a placing-in-service
26 permit, \$50. This fee includes administrative costs, supplies
27 to registered agents, and 20 minutes of equipment calibration
28 time. When calibration costs exceed this limit, the regular
29 laboratory calibration rate will be charged.

30 Subp. 2. Other rates. The fees in subpart 1 are based on
31 the average amount of time required for an individual inspection
32 and test. This average includes travel, equipment, and
33 administrative costs. For a nonroutine inspection and test, or
34 when a device is not specified in subpart 1, the inspector shall
35 calculate the total charge based on the following hourly rates:

36 A. \$50 for one inspector and appropriate test

1 equipment designated for light capacity scale and volumetric
2 equipment testing;

3 B. \$65 for one inspector and appropriate test
4 equipment designated for heavy capacity scale testing; and

5 C. \$75 for laboratory calibration time.

6

7 REPEALER. Minnesota Rules, part 7600.8000, is repealed.

8

9 EFFECTIVE DATE. Minnesota Rules, part 7600.6800, as amended by
10 these rules, is effective January 1, 1986.