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## Rationale Related to Changes

### Order Amending the Specifications Relating to Non-automatic Weighing Devices (1998)

SI/2008-81

Came into force on August 6, 2008

#### Notes:

1. The text of the changes to the *Specifications Relating to Non-automatic Weighing Devices (1998)*, enclosed, has been prepared for convenience of reference only and does not have official sanction. Some typing errors may have occurred. The official text of the Order, published on August 6, 2008, in Part II of the *Canada Gazette*, is available from page <http://canadagazette.gc.ca/index-e.html>. The latter document should be consulted for all purposes of interpreting and applying the law.
2. When used, the Canadian units of measurement are now written in full, without abbreviation. This is in accordance with Schedule II of the *Weights and Measures Act* which does not establish any abbreviation for the Canadian units of measurement, while the Act specifies abbreviations for the units determined by the International System of Units.
3. For convenience of editing, symbols of designation of classes of device are written without the oval in the << rationale for change >> sections.

Novembre 2008

Canada

1. Section 3 of the *Specifications Relating to Non-automatic Weighing Devices (1998)* is replaced by the following:

- 3.(1) Subject to subsection (2) and (3), the classes of non-automatic weighing devices are as set out in column 1 of the table to this subsection on the basis of the device's accuracy, verification scale interval and number of verification scale intervals as set out in columns 2, 3, and 4, respectively, of that page.

TABLE

Column 1 Class	Column 2 Accuracy	Column 3 Verification scale interval (e)		Column 4 Number of verification scale intervals	
		International Units	Canadian Units	Minimum	Maximum
	Special	e	e	50 000	---
I II	High	0.001 g (0.005 carat) ≤ e ≤ 0.05 g (0.2 carat) e ≥ 0.1 g (0.5 carat)	0.00005 ounce (troy ounce) ≤ e ≤ 0.002 ounce (troy ounce) e ≥ 0.005 ounce (troy ounce)	100 5 000	100 000 100 000
III	Medium	0.1 g ≤ e ≤ 2 g e ≥ 5 g	0.0002 pound (0.005 ounce) ≤ e ≤ 0.005 pound (0.1 ounce) e ≥ 0.01 pound (0.2 ounce)	100 500	10 000 10 000
IIIHD	Medium (high capacity devices)	e ≥ 2 kg	e ≥ 5 pounds	2 000	---
III	Ordinary	e ≥ 5 g	e ≥ 0.01 pound (0.2 ounce)	100	1 200

(2) On-board weighing systems are limited to Classes III, IIIHD and III.

(3) The verification scale interval of Class III on-board weighing systems shall not be less than 5 g.

**Old Section 3:**

3. The classes of non-automatic weighing devices are as set out in column I of the table to this section on the basis of the device's accuracy, verification scale interval and number of scale intervals as set out in columns II, III and IV, respectively, of that table.

**Old Table of Section 3:**

Changes are indicated in *italic* in this non amended version of the table.

**TABLE**

Column I Class	Column II Accuracy	Column III Verification scale interval (e)		Column IV Number of verification scale intervals	
		International Units	Canadian Units	Minimum	Maximum
	Special	e	e	50 000	—
I	High	$e \leq 0.05 \text{ g}$ $0.1 \text{ g} \leq e$	$e \leq 0.002 \text{ oz.}$ $0.005 \text{ oz.} \leq e$	100 5 000	100 000 100 000
II	Medium	$0.1 \text{ g} \leq e \leq 2 \text{ g}$	$0.0002 \text{ lb. (0.005 oz.)} \leq e \leq 0.005 \text{ lb. (0.1 oz.)}$ $0.01 \text{ lb. (0.2 oz.)} \leq e$	100	10 000
III		$5 \text{ g} \leq e$		500	10 000
IIIHD	Medium (high capacity devices)	$2 \text{ kg} \leq e$	$5 \text{ lb.} \leq e$	2 000	—
	Ordinary	$5 \text{ g} \leq e$	$0.01 \text{ lb. (0.2 oz.)} \leq e$	100	1 200

IIII

### **Rationale for changes:**

1. These amendments to Class II of the table:

1.1 limit the smallest possible verification scale interval ( $e$ ) for a Class II device to 0.001 g, 0.005 carats, 0.00005 ounces or 0.00005 troy ounces:

- limiting the smallest scale interval on a Class II device to 0.001 g harmonizes our Class II classification with that of OIML and the USA. The International Organization of Legal Metrology (OIML: *Organisation Internationale de la Métrologie Légale*) states that it is not normally feasible to test and verify an instrument to  $e < 1$  mg, due to the uncertainty of the test load;

- allowing  $e < 1$  mg would mean that Class F2 weights cannot be used for acceptance testing. For all practical purposes this means that we could no longer apply acceptance limits of error to Class II devices in the field;

- there are currently no scales approved in Canada with  $e < 1$  mg;

- if someone wanted an  $e < 1$  mg they would have to opt for a device approved as a Class I.

1.2 indicate the possible values of the possible verification scale interval ( $e$ ) in *carat* and in *troy ounce*, for class II devices. For convenience, the possible values in *carat* are shown with the *grams*.

2. There are also some editorial changes, in the table, to improve consistency in writing mathematical equations.

3. At new subsection 3.(2), limitation of on-board weighing systems to class III, IIIHB and IIII was previously included in the *Terms and Conditions for the Approval of On-board Weighing Systems* (revoked on August 6, 2008).

4. The requirement related to the verification scale interval not being less than 5 g, at new subsection 3(3), takes into consideration specific operating conditions related to on-board weighing systems.

**2. Paragraphs 10 (a) and (b) of the Specifications are replaced by the following:**

(a) in the case of a module that is the only part of a weighing device that is subject to measurement errors due to disturbances or influence factors, the acceptance limits of error are the limits of error set out in these Specifications for that device for a specified load; and

(b) in the case of all other modules, the acceptance limits of error are 0.7 times the limits of error set out in these Specifications for the weighing device for a specified load.

**Old Section 10:**

10. Where a module, such as an indicating element, or a weighing and load-receiving element, is tested separately for approval pursuant to section 3 of the *Weights and Measures Act*,
- (a) in the case of a module that is the only part of a weighing device that is subject to measurement errors due to disturbances or influence factors, the acceptance limits of error are the limits of error set out in section 9 for that device for a specified load; and
  - (b) in the case of all other modules, the acceptance limits of error are 0.7 times the limits of error set out in section 9 for the weighing device for a specified load.

**Rationale for change:**

The previous section considered acceptance LOEs to be one-half the in-service LOEs for the devices performance in general (section 9), but it did not mention that the acceptance LOEs for repeatability and eccentric loading do not have to be one-half the in-service LOEs.

The change simply clarifies the intent of the section, in order to avoid confusion.

**3. Sections 17 and 18 of the Specifications are replaced by the following:**

17. If a load is kept on a weighing and load-receiving element under stable environmental conditions, the difference between the weight indication obtained immediately after placing the load on the element and the weight indication observed during the following 30 minutes shall not exceed the absolute value of the applicable limits of error for that load.

**Old section 17:**

17. Where a load is kept on a weighing and load-receiving element under stable environmental conditions, the difference between the weight indication obtained immediately after placing the load on the element and the weight indication observed during the following hour shall not exceed the absolute value of the applicable limits of error for that load.

**Rationale for change:**

The requirement passed from 60 minutes to 30 minutes in order to harmonized the Canadian requirement with the International Organization of Legal Metrology (OIML) requirement.

The change relaxes the requirements without jeopardize the assurance of good measurements.

## AGREEMENT OF INDICATIONS AND RECORDINGS

- 18.** The weight values that are indicated or recorded by the indicating and recording elements of a weighing device and any equipment and accessories attached to the weighing device or used in conjunction with it shall agree
- (a) exactly, in the case of digital values produced by electronic elements, equipment and accessories that have the same verification scale intervals;
  - (b) within 0.25 times the verification scale interval, in the case of analogue values produced by elements, equipment and accessories that have the same verification scale intervals; and
  - (c) within 0.6 times the largest verification scale interval or the verification scale interval common to the elements, equipment and accessories, in all other cases.

**Old Section 18:**

- 18.** The weight values that are indicated or recorded by the indicating and recording elements of a weighing device and any equipment or accessories attached to the weighing device or used in conjunction with it shall agree
- (a) exactly, in the case of digital values produced by electronic elements, equipment or accessories that have the same verification scale intervals;
  - (b) within 0.25 times the verification scale interval, in the case of analogue values produced by elements, equipment or accessories that have the same verification scale intervals; and
  - (c) within 0.6 times the largest verification scale interval or the verification scale common to the elements, equipment or accessories, in all other cases.

**Rationale for change:**

The wording has been changes to clarified the intent. “Equipment or accessories” has been replaced by “equipment and accessories “ in order to avoid any confusion.

The change is administrative in nature and reflects current practices.

**4. Section 20 of the Specifications is replaced by the following:**

- 20.** A weighing device shall maintain its metrological characteristics and perform within the applicable limits of error for at least 100 000 weighings for a weighing device with a maximum capacity of not more than 1 000 kg (2 000 pounds), and for at least 300 weighings in all other cases.

**Old Section 20:**

- 20.** A weighing device with a maximum capacity of not more than 1 000 kg (2,000 lb.) shall maintain its metrological characteristics and perform within the applicable limits of error for at least 100,000 weighings.

**Rationale for change:**

The amendment introduces a reduced requirement for devices with a maximum capacity of 1 000 kg and over. This requirement is consistent with the requirements in effect in the United States. It is very difficult to perform 100 000 weighings on devices with a capacity greater than 1 000 kg due to physical and time constraints inherent in verifying this type of device.

The amendment relaxes the requirement for a practical matter and harmonizes it with the requirement currently in effect in the US.

**5. Section 30 of the Specifications is replaced by the following:**

- 30.** A weighing device shall be of a design, composition and construction that
- (a) under normal conditions of use, enables it to measure accurately and does not facilitate the perpetration of fraud; and
  - (b) provides it with a static operating mode for inspection purposes, even if the device is designed to be used in a dynamic operating mode.

**Old Section 30:**

- 30.** A weighing device shall be of such design, composition and construction that, under normal conditions of use, it is able to measure accurately and does not facilitate the perpetration of fraud.

**Rationale for change:**

The change to paragraph (a) is editorial in nature.

New paragraph (b) intends to ensure that on-board weighing systems or other dynamic operating weighing systems be required to have a static operating mode in order to make the inspection possible. The usage of standards, as known test load, due to their characteristics, requires to perform some tests under a static mode. The change considers the necessity of having the conditions to perform the inspection in proper condition.

This requirement does not have effects on static weighing devices, since the static mode is inherent to their nature.

**6. The Specifications are amended by adding the following after section 31:**

**31.1** Neither gross values nor tare values shall be entered manually in on-board weighing systems.

**Old Section:**

N/A: new section

**Rationale for change:**

This requirement is consistent with the operating principles of most on-board weighing systems that determine net weight by establishing the difference between the gross weight when the product is loaded by deducting the tare of the container upon its return. These measurements are usually done in the device's weighing window. All tares entered manually would represent no benefit in terms of the operation of the device and could cause measurement errors.

Only lift trucks equipped with on-board weighing systems could benefit from using a tare that represents the standardized weight of a pallet (or any other container) used to hold the product being weighed. Considering the inherent variations of such containers, the introduction of a manual tare would inevitably result in merchandise being measured inaccurately. This inaccuracy of measured merchandise would exceed the regulatory limits of error.

The same logic applies to the entry of manual gross weights.

This requirement clarifies requirements relating to on-board weighing systems.

Since the requirement prohibit to enter manually gross values or tare values, consequently, it is prohibited to use them.

**7.(1) The portion of section 45 of the Specifications before paragraph (a) is replaced by the following:**

- 45. A weighing device that is operating in a static mode and that has a digital indicating element shall permit zeroing, taring, printing or the storage of weight values only when the weight indication is stable within

**Old Section 45:**

- 45. A weighing device with a digital indicating element shall permit zeroing, taring or the printing of weight values only when the weight indication is stable within

**Rationale for change:**

The amendment allows the consideration of non-automatic weighing devices operating in dynamic mode. It limits zeroing, the entry of a tare, the printing or storage of weight values only if the indication is stable for devices carrying out static weighing.

Non-automatic weighing devices that operate in dynamic operating mode are not limited to a solid indication during weighing, since most register values by an integration of weight values detected during the operation of the weighing device. Therefore, for these devices, it is not necessary to require that the weight indicator be stable when the weight crosses the weighing window.

**(2) Paragraph 45(a) of the Specifications is replaced by the following:**

(a)  $\pm 3$  verification scale intervals, in the case of a device with a maximum capacity of more than 2 000 kg (5 000 pounds); and

**Old paragraph 45 (a):**

45. (a)  $\pm 3$  verification scale intervals, in the case of a device with a maximum capacity of more than 2 000 kg (5,000 lb.); and

**Rationale for change:**

The change is editorial in nature and improve consistency in writing numbers and abbreviations.

**8. Section 48 of the Specifications is replaced by the following:**

- 48.(1) Access to the metrological functions and the adjustable components of an electronic weighing device shall be protected by means of readily accessible and observable physical seals or electronic sealing, such as an audit trail, that make apparent any accessing of the metrological functions or adjustable components.
- (2) The information contained in an audit trail shall be available on site.
- (3) In this section, “audit trail” means an electronic feature that counts the number of changes made to the calibration or configuration parameters of a weighing device, or records the values related to these changes.

**Old Section 48:**

48. Every electronic weighing device shall be equipped with a means of attaching a seal to it to detect any alteration or degradation of the device's metrological functions or any access to its means of adjustment.

**Rationale for change:**

The purpose of this amendment is to clarify the reasons behind attaching seals. The section will allow electronic “sealing” as in the case of seals used for metrological audit trails and will not limit “sealing” to physical seals. Requirements related to the design, composition, construction, performance, installation and use of audit trails are established in the *Terms and Conditions for the Approval of Metrological Audit Trails*.

The amendment clarifies the aim of the section, relaxes the seal requirement and officially recognizes current practices.

**9. The references to “Verification scale interval, if different from actual scale interval” and “Actual scale interval” in column I of the table of subsection 49(1) of the Specifications are replaced by “Verification scale interval” and “Actual scale interval, if different from the verification scale interval”, respectively.**

**Old required information, in table of subsection 49(1) :**

Verification scale interval, if different from actual scale interval  
Actual scale interval

**Rationale for change:**

The change intends to align the requirement on the OIML requirements. The Recommendation R-76 requests a compulsory marking of the verification scale interval (e), and requires the marking of the actual scale interval (d) only when it is different than the verification scale interval (e).

The change formalize current practices and align the requirement on the OIML requirements.

**10. Section 51 of the Specifications is replaced by the following:**

**51.** All markings shall meet the following criteria:

(a) they shall be distinct, easily readable and such nature that they will not become obliterated or illegible;

(b) they shall be of a height appropriate to the size of the device; and

(c) any capital letters in the markings shall be at least 2 mm high.

**Old Section 51:**

**51.** All markings shall be distinct and easily readable and shall be of such nature that they will not become obliterated or illegible.

**Rationale for change:**

The subsection 18 (3) of the *Weights and Measures Regulations* requires that marking should be not less than 3 mm, but allows specifications to specified more other dimensions. The International Organization of Legal Metrology (OIML) requires minimum capitals letters of at least 2 mm for non-automatic weighing devices.

The change formalize current practices and align the requirement on the OIML requirements.

**11. Subparagraphs 52(b) (ii) and (iii) of the Specifications are replaced by the following:**

(ii) the verification scale interval, and

(iii) if it is different from the verification scale interval, the actual scale interval.

**Old Paragraphs 52 (b) (ii) & (iii):**

**52(b)** (ii) the actual scale interval, and

(iii) if different from the actual scale interval, the verification scale interval.

**Rationale for change:**

The change intends to align the requirement on the International Organization of Legal Metrology (OIML) requirements. The Recommendation R-76 requests a compulsory marking of the verification scale interval (e) and the marking of the actual scale interval (d) only when it is different than the verification scale interval (e).

The change formalize current practices and align the requirement to the OIML requirements.

**12. Paragraph 55(1)(a) of the English version of the Specifications is replaced by the following:**

(a) ensures accurate measurement;

**Old Paragraph 55(1)(a):**

**55.(1)** (a)  
facilitates accurate measurement;

**Rationale for change:**

Replaces the word “facilitates” by “ensures”, in order to ensure conformity between the French and English versions.

**13. The heading before section 57 of the Specifications is replaced by the following:**

PROTECTION FROM ENVIRONMENTAL FACTORS

**Old heading:**

PROTECTION FROM EXTERNAL FACTORS

**Rationale for change:**

The change intends to align the terminology with the one used in the section and the one used internationally. While the term “*external*” refers more to the device itself: external equipment, external influence, external adjustment, external standard weights; the term “*environmental*” refers broadly to the environment and to environmental conditions.

The change is editorial in nature and improve consistency.

**14. Section 57 of the French version of the Specifications is replaced by the following:**

57. L'appareil de pesage doit être adéquatement protégé contre les facteurs environnementaux, tels le vent, les températures extrêmes, les vibrations et les champs magnétiques ou électrostatiques, qui peuvent nuire à son bon fonctionnement ou à sa durabilité.

**Old French version of section 57:**

57. L'appareil de pesage doit être adéquatement protégé contre les facteurs environnementaux, tels le vent, les écarts extrêmes de température, les vibrations, les effets des champs magnétiques et électrostatiques, qui peuvent nuire à son bon fonctionnement ou à sa durabilité.

**Rationale for change:**

Replaces the French text of this section in order to ensure conformity between the French and English versions.

The change is editorial in nature.

**15. Sections 58 and 59 of the Specifications are replaced by the following:**

- 58.(1)** A weighing device shall be used in such a manner that the commodities or objects that are being weighed are fully supported by the weighing and load-receiving element when their weight is observed or recorded.
- (2) If a weighing device is operating in static mode, the commodities or objects that are being weighed shall be stationary when their weight is observed or recorded.

**Old section 58:**

- 58.** A weighing device shall be used in such a manner that the commodities or objects that are being weighed are stationary and fully supported by the weighing and load-receiving element when their weight is observed or recorded.

**Rationale for change:**

This change clarifies requirements concerning on-board weighing systems.

The change adds a subsection in order to consider non-automatic weighing devices performing dynamic weighments, where it is unrealistic to request the commodities or objects being weighed stationary. These devices are developed to weigh in motion.

Subsection (1) requires the load being fully supported by the weighing and load-receiving element when it is weighed, no matter if the operation is carried out in static mode or dynamic mode.

Subsection (2) limits, only to devices operating in static mode, the requirement that the commodities or objects being weighed shall be stationary when the weight is recorded.

## WEIGHING DEVICES USED FOR DIRECT SALES

59. A weighing device that is used for direct sales shall be positioned so that the indication relating to the measurement and the transaction can be easily read and the weighing operation observed from the normal location of the customer.

**Old section 59:**

## WEIGHING DEVICES USED FOR DIRECT SALES TO THE PUBLIC

59. A weighing device that is used for direct sales to the public shall be positioned so that all indications relating to the measurement and the transaction may be easily read and the weighing operation may be observed from the normal location of the customer.

**Rationale for change:**

The amendment deletes the references to “*direct sales to the public*” to avoid the exclusion of sales not intended for the general public. For example, indications relating to weight measurements of a device used in a quarry (where products are not sold *directly to the public*) must be able to be easily read by the trucker, even if the trucker is not deemed to be a member of the general public.

Also, there will no longer be mention of the requirement that the client be able to observe all particulars of the transaction. Such a requirement may be excessive. It is not necessary, for example, for the client to be able to see the transaction number.

The amendment intends to avoid confusion and relax requirements regarding observable indications.

**16. Subsections 62(1) and 62(2) of the Specifications are replaced by the following:**

- 62.(1)** A weighing device that is used in an application described in column 1 of the table to this section shall be from the accuracy class set out in column 2 for that device, or from a higher accuracy class, and shall be used to weigh a load that is not less than the amount obtained by multiplying the verification scale interval by the corresponding multiplying factor set out in column 3, and the device's smallest verification scale interval shall not exceed that set out in column 4.
- (2) A weighing device described in subsection 2(2) that is used or intended to be used in an application described in column 1 of the table to this section and that is not marked with an accuracy class designation shall, for the purpose of applying these Specifications, be considered to be of the corresponding accuracy class set out in column 2 of that table.

**Old subsections 62(1) & 62(2):**

- 62. (1)** A weighing device to be used in a weight application described in column I of an item of the table to this section shall be from the accuracy class set out in column II of that item for that device, or from a higher accuracy class, and shall be used to weigh a load that is not less than the amount obtained by multiplying the verification scale interval by the corresponding multiplying factor set out in column III of that item, and the device's smallest verification scale interval shall not exceed that set out in column IV of that item.
- (2) A weighing device described in subsection 2(2) that is used or intended to be used in a weight application described in column I of an item of the table to this section and that is not marked with an accuracy class designation shall, for the purpose of applying these Specifications, be considered to be of the corresponding accuracy class set out in column II of that table.

**Rationale for change:**

The change is editorial in nature in order to ensure conformity between the French and English versions.

(2) The table to section 62 of the Specifications is replaced by the following:

TABLE

Item	Column 1	Column 2	Column 3		Column 4
	Application	Accuracy class	Minimum net load expressed as a number of verification scale intervals	Verification scale interval	Multiplying factor
1.	Weighing precious metals and commodities of comparable value (a) at retail level	(II)	---	---	10 mg
	(b) at the wholesale or industrial level	(II)	$e \leq 10$ mg $e \geq 20$ mg	---	---
2.	Weighing diamonds or other gemstones	(II)	---	---	1 mg or 0.005 carat
3.	Weighing to determine postal, transportation or shipping charges, except when determined by means of a weighing device with a maximum capacity of 4 000 kg (10 000 pounds) or more	(III)	$e \leq 50$ g (2 ounces)	10	---
			$e > 50$ g (2 ounces)	20	---
4.	Weighing gravel, land fill and other raw material for road construction	(IIII)	e	50	---
5.	Weighing waste material other than scrap	(IIII)	e	10	---
6.	Weighing scrap metal (ferrous)	(IIIRD)	e	20	---
7.	Weighing scrap metal (non-ferrous)	(IIIRD)	e	100	---
8.	Weighing grain at a primary, transfer or terminal elevator, or alcohol, by means of a weighing device with a maximum capacity of 4 000 kg (10 000 pounds) or more	(IIIRD)	e	200	---
9.	Weighing bulk commodities, other than the commodities referred to in items 1 to 8, by means of a weighing device with a maximum capacity of 4 000 kg (10 000 pounds) or more	(IIIRD)	e	100	---
10.	Any other application	(III)	$0.1 \text{ g} \leq e \leq 2 \text{ g}$	20	---
			$e = 5 \text{ g}$	20	---
			$5 \text{ g} < e < 50 \text{ g}$	50	---
			$e \geq 50 \text{ g}$	100	---

(SI/2008-81)

Note: See table to section 3 for equivalent Canadian units

**Old table of Section 62:**

Changes are indicated in *italic* in the following non amended version of the table.

**Old Section 62 of NAWDS (was amended)**

Item	Column I  <i>Weight Application</i>	Column II  Accuracy class	Column III  Minimum net load expressed as a number of verification scale intervals		Column IV  Maximum verification scale interval permitted
			Verification scale interval	Multiplying factor	
1	Weighing precious metals and commodities of comparable value	Class $\textcircled{\text{II}}$	----	----	10 mg
	(a) at the retail level				
2	Weighing diamonds or other gemstones	Class $\textcircled{\text{II}}$	----	----	<i>0.5 mg or 0.002 carat</i>
3	Weighing to determine postal, transportation or shipping charges, except when determined by means of a weighing device with a maximum capacity of 4 000 kg (10 000 lb) or more	Class $\textcircled{\text{III}}$	$e \leq 50 \text{ g (2 oz)}$	10	----
			$50 \text{ g (2 oz)} < e$	20	----
4	Weighing gravel, land fill and other raw material for road construction. <i>by means of a weighing device with a maximum capacity of 4 000 kg (10 000 lb) or more</i>	Class $\textcircled{\text{III}}$	e	50	----
5	<i>Weighing waste material other than scrap metal by means of a weighing device with a maximum capacity of 4 000 kg (10 000 lb) or more</i>	Class $\textcircled{\text{IIIHD}}$	e	50	----
6	<i>Weighing waste material other than scrap metal by means of a weighing device with a maximum capacity of less than 4 000 kg (10 000 lb)</i>	Class $\textcircled{\text{III}}$	e	20	----
7	Weighing grain at a primary, transfer or terminal elevator, or alcohol, by means of a weighing device with a maximum capacity of 4 000 kg (10 000 lb) or more	Class $\textcircled{\text{IIIHD}}$	e	200	----
8	Weighing bulk commodities, other than the commodities referred to in items 1 to 7, by means of a weighing device with a maximum capacity of 4 000 kg (10 000 lb) or more	Class $\textcircled{\text{IIIHD}}$	e	100	----
9	Any other application	Class $\textcircled{\text{III}}$	$0.1 \text{ g} \leq e \leq 2 \text{ g}$	20	----
			$5 \text{ g} = e$	20	----
			$5 \text{ g} < e < 50 \text{ g}$	50	----
			$50 \text{ g} \leq e$	100	----

Changes are indicated in *italic* in this old version of the table (was amended).

**Rationale for change to table of section 62:**

Item 2. The maximum verification scale interval (e) permitted has changed from 0.5 mg (0.002 carat) to 1 mg (0.005 carat) in order to remain consistent with the amendment made in table of section 3 of the specification.

Item 4, 5, 6, and 7. All devices used to weigh land fill and gravel for road construction, waste material, and scrap metal, regardless of capacity, are now subject to the same requirements. Although it is unlikely any device smaller than 4 000 kg would be used in these manners, there is no justification for having stricter requirements for those devices. That's why references to 4 000 kg were withdrawn in each of these items.

Item 5. By modifying waste material measurement other than scrap metal to Class III and 10 e minimum weighment, we also address on-board weighing systems.

Item 6. The old item 6 item has been made obsolete by the rewording of section 5. New item 6 is now used to address scrap metal recycling. Ferrous metals are subject to a smaller minimum weighment than are non-ferrous metals. This accounts for the large difference in value of these two categories of recyclables. Also, the requirement of a minimum weighment of 20 e is similar to the OIML requirements, which require that class III devices have a minimum weighment of 20 e.

Item 7. This item deals with non-ferrous metals for recycling. The multiplying factor remains unchanged at 100 as, in the past, weighing of these materials was addressed in item 9.

Items 8, 9 and 10 replace the former items 7, 8 and 9 who were re-numbered.

The changes relax existing requirements and officially recognize current practices. The requirements for weighing diamonds and other precious metals are in line with the allowable verification scale interval set out in section 3 of the specifications.

There are also some editorial changes, in the table, to improve consistency in writing mathematical equations.

**17. Paragraph 65(b) of the Specifications is replaced by the following:**

(b) a printer that, on demand, prints a ticket bearing the information required by section 66;  
and

**Old paragraph 65 (b):**

65. (b) a printer that automatically prints, for each weighing, a ticket bearing the information required by section 66; and

**Rationale for change:**

The new wording allows unattended vehicle scales to not issue tickets unnecessarily if the user has no need for them. The device is not required to automatically issue a ticket upon each weighing, but must be configured in such a way that the user can receive a ticket if it is needed. In any case, a requested ticket should automatically indicate the information required by section 66.

In other words, the new wording allows the user to print a ticket if it is of use to him/her. If the total price of the transaction is indicated, information on the ticket must automatically show the weight and unit price without the user having to specifically request them.

The amendment relaxes and clarifies the requirement.

**18. The Specifications are amended by adding the following after section 67:**

**67.1** The following information shall be provided for each transaction by a on-board weighing system for the weighing of waste materials for recycling, whether at curbside or at the customer premises:

- (a) an identification of the customer;
- (b) the date of the transaction;
- (c) the net weight of the waste or materials to be recycled;
- (d) the price per unit of weight if the total price is indicated
- (e) the identification number of the vehicle on which the on-board weighing system is installed; and
- (f) the identification number of the on-board weighing system used if more than one system is installed on the same vehicle.

**Old section:**

N/A, new section

**Rationale for change:**

This requirement allows clients or taxpayers to be able to verify the accuracy of information on indications related to the measurement of waste or recyclables usually weighed without the presence of the customer. This requirement applies to transactions carried out for residential weighments (curbside) or on-site at the customer premises.

The requirement excludes other on-board weighing systems, such as systems mounted on lift trucks or loaders.

This requirement was previously included in the *Terms and Conditions for the Approval of On-board Weighing Systems* that were revoked at the registration of this Ministerial Order, on August 6, 2008.

The expression “identification of the customer”, at paragraph (a), gives the flexibility to provide the name, the address, the number and/or any other identification, as long as an identification of the customer is provided.

The paragraphs (e) and (f) consider the possibility for the parties to find a weighing system for any later verification.

**19. The Specifications are amended by replacing the expression "equipment or accessories" with the expression "equipment and accessories" wherever it occurs in the following provisions:**

**(a) section 36;**

**(b) the heading of column VI of the table to subsection 49(1); and**

**(c) paragraph 49 (2)(d).**

**Old expression:**

“equipment or accessories “

**Rationale for change:**

The wording has been changes to clarified the intent. “Equipment or accessories” has been replaces by “equipment and accessories “ in order to avoid any confusion.

The change is editorial/administrative in nature and improves consistency.

**COMING INFO FORCE**

**20. This Order came into force on the day on which it is registered: August 6, 2008.**

Program Development Directorate  
Measurement Canada