

National Measurement Regulations (Amendment) 1991 No. 146

EXPLANATORY STATEMENT

STATUTORY RULES 1991 No. 146

Issued by Authority of the Minister for Science and Technology

National Measurement Act 1960

National Measurement Regulations (Amendment)

One of the objects of the National Measurement Act 1960 (the Act) is to provide for the uniform use of uniform units and standards of measurement throughout Australia.

The National Measurement Regulations (Amendment) (the amending Regulations) amends the National Measurement Regulations (the Principal Regulations) to include a hierarchy of standards. A hierarchy of standards provides information on the permissible uncertainties of measurement, and permissible variations from nominal value, of State primary standards, State secondary and State tertiary standards; and inspectors' standards. (Primary standards are more accurate than secondary standards and so on.) Each State and Territory previously prescribed its own hierarchies, and they were not uniform throughout Australia.

The amending Regulations further amend the Principal Regulations to correct an anomaly whereby a person authorised to issue a certificate in respect of Australian primary standards or State primary standards of measurement could not issue certificates in respect of reference standards of measurement.

These amendments were prepared by the National Standards Commission (the Commission) following consultation with each of the State and Territory trade measurement authorities.

The amending Regulations amend the Principal Regulations as follows:

Regulation 1 provides that the Principal Regulations are amended as set out in the amending Regulations.

Regulation 2 amends Regulation 79 of the Principal Regulations by removing the word "expressed" from subregulation (3). The effect of this amendment is to remove the provision for the Commonwealth Scientific and Industrial Research Organisation (the Organisation) to authorise the manner of expressing the accuracy of a State primary standard. In the past both the Commission and the Organisation expressed a State primary standard in the same way. This amendment will rationalise this situation by providing for only one body, the Commission, to express the standard. The Organisation will continue to be consulted on the matter.

Regulation 2 also adds subregulations 79(4) and (5) to prescribe uncertainties of measurement applicable to State primary standards of length and-mass; and to prescribe standard reference conditions of temperature and pressure for the purpose of expressing the value of a standard of measurement on a certificate issued under Regulation 79.

Regulation 3 amends Regulation 80 of the Principal Regulations by removing the provision for the Commission to authorise the manner of expressing the accuracy of the standard. It also prescribes uncertainties of measurement applicable to State secondary standards of length, mass and volume; State tertiary standards of mass and volume; Inspectors' Class 1 standards of length, area, mass and volume; Inspectors' Class 2 standards of length and mass; and Inspectors' Class 3 standards of mass. In addition, it provides for the Commission to determine

standard reference conditions for particular reference standards, and requires the Commission to notify verifying authorities, appointed in relation to the particular reference standard, of the standard reference conditions. The definition of "verifying authority" is extended to persons authorised to sign and issue certificates under Regulation 78A(1)(b) or Regulation 79(1)(b).

Regulation 4 corrects a grammatical error in Regulation 81 of the Principal Regulations.

Regulation 5 repeals Regulation 82 of the Principal Regulations, which prescribes permissible variations of standards by reference to Schedule 31. It then substitutes a new Regulation 82 which prescribes permissible variations for Inspectors' Class 1 length, area, mass, and volume standards; Inspectors' Class 2 length and mass standards; and Inspectors' Class 3 mass standards. It also provides that standards satisfying Regulations 80 and 82 may be taken as equal to their denomination, for the purpose of a certificate issued under Regulation 80. This means that if a standard satisfies the specified variation and uncertainties then the certificate can state the nominal rather than the actual value, for example, if a 1 kilogram weight weighed 1.01 kilograms, which is within the permissible variation, the certificate would deem the weight to be 1 kilogram.

Regulation 6 repeals Regulation 83 of the Principal Regulations, which prescribes permissible variations of standards by reference to Schedule 32. It then substitutes a new Regulation 83 which defines "uncertainty" as used in the Regulations.

Regulation 7 repeals Regulation 85 of the Principal Regulations, which prescribes additional legal units of measurement for use in futures contracts by reference to Schedule 35. The reason for this amendment is that, by virtue of subsections 7(2) and 12(1) of the Act, the expression of measurement in certain classes of contract must be in Australian Legal Units of Measurement. The Act was amended in 1986 to exempt futures contracts from this requirement, as a result of which the prescription of additional legal units of measurement for futures contracts is no longer necessary.

Regulation 8 omits Schedule 31 of the Principal Regulations, the table of variations of certain standards of measurement, and substitutes tables of permissible uncertainties for length standards (Schedule 31), mass standards (Schedule 31A) and volume standards (Schedule 31B).

Regulation 9 omits Schedule 32 of the Principal Regulations, the table of permissible variations of certain standards that are made of iron, and substitutes a table of permissible variations for length standards (Schedule 32), area standards (Schedule 32A), mass standards (Schedule 32B) and volume standards (Schedule 32C).

Regulation 10 repeals Schedule 35, a table of additional legal units of measurement for use in futures contracts. The reasons for the repeal of the Schedule are the same as those for the repeal of Regulation 85.