- (a) of this section shall include, as appropriate:
- (1) A measurement system for the determination of the quantities of nuclear material received, produced, shipped, lost or otherwise removed from inventory, and the quantities on inventory;
- (2) The evaluation of precision and accuracy of measurements and the estimation of measurement uncertainty;
- (3) Procedures for identifying, reviewing and evaluating differences in shipper/receiver measurements;
- (4) Procedures, including frequency, for taking a physical inventory;
- (5) Procedures for the evaluation of accumulations of unmeasured inventory and unmeasured losses; and
- (6) A system of accounting and operating records.
- (c)(1) The procedures must, unless otherwise specified in license or certificate conditions, conform to the facility information submitted by the licensee under  $\S75.10$ .
- (2) Until facility information has been submitted by the applicant, licensee, or certificate holder, the procedures must be sufficient to document changes in the quantity of nuclear material in or at its facility. Observance of the procedures described in §§ 40.61 or 74.15 of this chapter (or the corresponding provisions of the regulations of an Agreement State) by any applicant, licensee, or certificate holder subject thereto constitutes compliance with this paragraph.
- (d) The requirements of this section are in addition to any other requirements of this chapter, relating to material accounting and control, that may apply to the licensee.

[45 FR 50711, July 31, 1980, as amended at 53 FR 19263, May 27, 1988; 67 FR 78149, Dec. 23, 2002; 73 FR 78613, Dec. 23, 2008]

## § 75.22 Accounting records.

- (a) The accounting records required by §75.21 shall include, for each IAEA material balance area:
- (1) All inventory changes, so as to permit a determination of the book inventory at any time;
- (2) All measurement results that are used for determination of nuclear material quantities; and

- (3) All adjustments and corrections that have been made with respect to inventory changes, book inventories and physical inventories.
- (b) The records shall show, for each batch of nuclear material: material identification, batch data and source data. The batch data means a separate listing of the total weight of each element of nuclear material (including, as specified in the license conditions, isotopic composition for special nuclear material) with plutonium and enriched uranium measured in grams and natural or depleted uranium and thorium measured in kilograms. The source data are the data, recorded during measurement or calibration or used to derive empirical relationships, which identify nuclear material and provide batch data.
- (c) For each inventory change, the records shall show the date of the inventory change and, when appropriate, (1) the originating IAEA material balance area or the shipper, and (2) the receiving IAEA material balance area or the recipient.

## § 75.23 Operating records.

The operating records required by §75.21 shall include, as appropriate, for each IAEA material balance area:

- (a) Those operating data which are used to establish changes in the quantities and composition of nuclear material:
- (b) The data obtained from the calibration of tanks and instruments and from sampling and analyses, the procedures employed to control the quality of measurements, and the derived estimates of random and systematic error;
- (c) A description of the sequence of the actions taken in preparing for, and in taking, a physical inventory, to ensure that it is correct and complete; and
- (d) A description of the actions taken to ascertain the magnitude and cause of any accidental or unmeasured loss that might occur.

## §75.24 Retention of records.

The records referred to in §§75.22 and 75.23 shall be retained by the licensee for at least five years.