### IR 6969 Revisions Since September 2014 Publication

### **Revision January 2015**

#### SOP 4

- 1. Added 2.5.2.6. to repeat the measurement process with a check standard.
- 2. Equations 3.1.1. and 3.1.2., 3.2.2.1., 3.2.2.2. were all updated to start calculations with the check standards and then substitute  $S_c$  with X in all equations. 3.2.2.1., 3.2.2.2. previously had a mix of  $S_c$  and X subscripts as well.
- 3. 3.2.5 numbering was empty/off. Renumbered subsequent sections.

#### **Revision June 2015**

#### SOP 8

- 1. Section 1.2.5.1, Updated Table 2 Inside Limits as signs were reversed:
  - a. Inside upper or lower limits > 18 °C and < 27 °C

# **Revision January 2016**

#### GLP 9

1. Added two additional options for rounding practices to include use of Excel and rounding up. The current even/odd rounding remains Option A. There are no changes to identifying significant digits. (This GLP was modified so that laboratories who have written deviations in conflict with the original GLP will have an official NIST document that does not require supplemental documentation for how the laboratory will round measurement results. Laboratories using the previously documented methods in GLP 9 do not need to make changes in their methods.)

# *GMP 11*

- 1. Modified the baseline recalibration interval for liquid in glass thermometers in Table 9, due to a complaint and additional reference materials that were provided. The 10 year calibration interval that was modified during review of the 2013 version was not appropriate.
- 2. Added 100 g starting restraints and check standards to Table 2 for maintaining suitable intervals for mass calibrations for laboratories working at the Echelon I levels of calibration to ensure consistency with what is presented in training materials and discussed in NISTIR 5672.
- 3. Minor editorial changes.

#### SOP 2

1. Added equations for effective density that were in SOP 28 so that they are more readily available and noted that some standards, check standards, or tare weights when used in summation will need to use the effective density of the summation.

### **SOP 33**

- 1. Added that the mean value of replicate measurements are to be reported and that adjustments must be taken into consideration when determining the mean value to report.
- 2. Minor editorial changes.

#### **SOP 34**

1. Updated Tables 1 and 2 to clarify the intent based on conflicts that resulted when the 2012 version was updated in 2013.