

## **Purpose**

To outline the program for the use of reference standards, reference materials and reagents.

To outline safe handling, transport, storage, and use of reference standards and reference materials in order to prevent contamination or deterioration and in order to protect their integrity.

# Scope / Field of Application

*Reference standard* - Measurement standard designated for the calibration of other measurement standards (reference standards or equipment.)

Reference material - Material sufficiently homogeneous and stable, with reference to specified properties, which has been established to be fit for its intended use in measurement or in examination of nominal properties

Prepared reagent - A dilution or mixture of commercial reagents

## Responsibilities

**Laboratory Personnel** – responsible for handling and use of reference standards and materials.

# **Materials Required**

Certificates of Analysis Equipment and/or Maintenance Logs Chemical Standards Inventory

#### **Procedure**

#### General

Upon receipt, all reference standards and materials are inventoried as outlined in SOP# *OSP 4-6-1*.

Reference standards and accompanying certificates are stored and used in a manner consistent with preserving the calibration status. Particular consideration is given to any storage advice given in the documentation supplied with the standard.

Records are kept for the date of receipt, opening, and expiration.

Instructions for the use of the reference standards, reagents and reference materials are cited in the appropriate Technical Procedure.

## **Documentation**

Inventory of reference materials includes the following information:

- > name
- > manufacturer
- ➤ lot number
- ➤ lab unique identifier
- > date received
- > date opened
- > expiration date
- location
- > manufacturer's certificate of analysis

## **Reference Procedures**

Equipment manuals

Appropriate test methods and / or specific equipment calibration and maintenance standard operating procedures

**OSP 4-6-1** - Purchasing

### References

Eurachem Guidance Document No. 1. 1993. Accreditation for Chemical Laboratories.

Garfield, F.M., Kleska, E., Hirsch, J. 2000. Quality Assurance Principles for Analytical Laboratories. 3<sup>rd</sup> Edition. AOAC. Gaithersburg, MD.

REVISION HISTORY		
CURRENT VERSION	EFFECTIVE DATE	SUMMARY OF CHANGES
1	2016/07/01	Original Version
2	2018/04/01	Change revision history table, issue date to effective date, ref# to ver#
3	2018/10/22	Entire document – Updated to include reference materials and clarified prepared reagents.  Scope/Field of Application – Archived original definitions and added new ones to reflect new scope.  Materials Required and Documentation - Updated names to reflect new documents  General – Updated to reflect reference to section technical procedures.