

Standard Operating Procedure

Title: Calibration Policies for Laboratory Instruments Procedure

1. Introduction

- 1.1. The control of calibration for measuring and testing equipment ensures that the measurement uncertainty is known and is consistent with the required measurement capability.
- 1.2. Laboratory equipment and instrumentation is handled and stored in such a manner so as to maintain its accuracy and fitness for use. Any special handling or storage requirements are defined in the SOP or Equipment Log applicable to the piece of equipment or instrument.
- 1.3. Data relating to the calibration of Laboratory inspection, measuring and testing equipment, also including records and procedures are maintained by the Laboratory.
- 1.4. The Engineering Services Department Calibration staff also maintains records of the Laboratory instruments that they are responsible for having calibrated (eg: balances, thermometers, oven, digital vernier, thickness indicator, incubators, air samplers, autoclave etc).
These records are kept on the Plant Maintenance Module system.
- 1.5. A comprehensive list of all Laboratory equipment that requires calibration is maintained by the Laboratories (**Form-245**).
- 1.6. The Laboratory master list of instruments (**Form-245**) and the specific requirements is kept in the Lab Equipment Log folders.

2. Control Procedures

- 2.1. All pieces of equipment used for testing that require calibration, are identified by a specific number or name.
- 2.2. The unique identifying specific number or name appears on the calibration documentation matrix relevant to the equipment or instrumentation.
- 2.3. In the laboratory the unique number or name is listed in the Master list of equipment and is stored in the Equipment Log.

3. Purchasing

The equipment or instrumentation is purchased using the following criteria:

- 3.1. Capability, (Precision, Accuracy) of the equipment.
- 3.2. Environmental conditions required for the equipment.
- 3.3. Handling and maintenance of equipment.
- 3.4. Calibration methods and frequency noted in SOP's relevant to the equipment or instrumentation.
- 3.5. Equipment and instrumentation to be calibrated and its location.

4. Labelling

- 4.1. Equipment or instruments on the calibration programme are labelled when out of calibration.
- 4.2. In the Laboratory each piece of equipment or instrument is labelled to indicate the frequency of its calibration. The due date of calibration is noted in the logbook attached to each instrument or piece of equipment, together with the status of calibration. Equipment or instruments not requiring calibration are labelled accordingly. The calibration programme for each piece of equipment is also outlined in the Equipment Log.
- 4.3. When out of calibration, the QA Manager and the Laboratory Manager are notified and a label stating its status will be attached to the equipment or instrumentation.
- 4.4. Equipment that is out of calibration may not be used for testing. Refer to Section 6.