

Mechanical Volumetric Liquid-Dispensing Devices Calibration Policy
(NC WW/GW LCB 7/6/2021)

The administrative code requirement relating to mechanical volumetric liquid-dispensing devices for non-Field laboratories is as follows:

Mechanical volumetric liquid-dispensing devices (e.g., fixed and adjustable auto-pipettors and bottle-top dispensers) used for critical volume measurements shall be calibrated once every six months.. Ref: 15A NCAC 02H .0805 (a) (7) (O).

The administrative code requirement relating to mechanical volumetric liquid-dispensing devices for Field laboratories is as follows:

Mechanical volumetric liquid-dispensing devices (e.g., fixed and adjustable auto-pipettors and bottle-top dispensers) used for critical volume measurements shall be calibrated once every twelve months. Ref: 15A NCAC 02H .0805 (g) (10).

To demonstrate compliance with these requirements, each liquid-dispensing device must meet the manufacturer's statement of accuracy. For variable volume devices used at more than one setting, check the accuracy at the maximum, middle and minimum values. Testing at more than three volumes is optional. When a device capable of variable settings is dedicated to dispensing a single specific volume, calibration is required at that setting only.

Required documentation shall include:

- Date performed
- Analyst performing the test
- Unique identifier (e.g., serial number, etc.)
- Manufacturer's specification of accuracy
- Balance test-weight reading
- Volumes tested
- Volume weights observed
- Reagent water used is at ambient temperature
- All calculations used to assess accuracy