

Internal Calibration Check Standard: Once/day or additional as needed.

SOP: INFLUENT/EFFLUENT pH ANALYSIS (Lab bench pH meter)

Scope: This procedure can be used to measure pH of wastewater, industrial, sludge Biosolids, storm water, surface, and groundwater samples.
REF: Standard Methods, 22nd Edition

Equipment/supplies:

Lab pH meter with pH probe with automatic temperature probe;
pH standard buffer solutions 4.0, 7.0, and 10.0
Lab

Procedure:

pH Meter Calibration

*Note: pH meter calibrated once/day using three buffers and recorded on pH calibration record (day shift)

- Pour up three buffers solutions, (pH 4; pH 7; and pH 10)
- Press CAL;
- Rinse pH probe with DI water and place in 1st buffer (4.0), press next, then start; wait for stable reading; accept buffer
- Take probe out of 1st buffer, rinse probe DI water and place in 2nd buffer (7.0); press next, then start; wait for stable reading; accept buffer
- Take probe out of 2nd buffer; rinse probe DI water and place in 3rd buffer (10.0); press next, then start; wait for stable reading; accept buffer
- Take probe out of 3rd buffer; rinse probe DI water and place pH probe in one of the buffers for buffer check; press measure; allow for stable reading; record measurement in calibration record (buffer check).

pH Measurement

- Take pH probe out of pH buffer, rinse with DI water; place probe in sample and allow for stable reading, record reading in log sheet for sample.
- Repeat above for next sample(s);
- After final measurement, rinse pH probe and place in buffer storage solution.

QA/QC

- Buffer check after daily calibration and recorded
- Duplicate checked on every 10th analysis.