Lab Name (Lab ID# 5 Digit #:)

**Standard Operating Procedure for Continuous pH Monitoring**

**EPA Method 150.2**

**Revision #** Enter #

1. **Summary**
   1. pH effluent from Enter Facility Name will be continuously monitored using a pH meter/transmitter.
   2. The effluent is discharged to Enter Sewerage Treatment Plant (e.g., Passaic Valley Sewerage Commission). The pH of the effluent discharge must be maintained between Enter required pH range (e.g., 5.0 to 10.5) pH standard units, in accordance with the permit.
2. **Equipment**
   1. pH transmitter/meter: Enter Manufacturer Name and Model
   2. pH probe: Enter Manufacturer Name and Model
      1. The probe Specify can or cannot be removed from the waste stream for direct calibration.
   3. pH recorder: Enter Manufacturer Name and Model and identify whether it is a strip chart, circle chart, or other type of recorder.
3. **Reagents**
   1. The pH buffers used at the laboratory are pH buffers Specify the buffers used (e.g., 4 and 10).
   2. pH buffers are marked with the “date received” and the “date opened” by the laboratory.
   3. pH buffers are discarded after each use.
   4. pH buffers are not used past the manufacturer’s expiration date and are immediately discarded upon expiration.
   5. The “Certificate of Analysis” for each buffer is retained by the laboratory.
4. **Maintenance**
   1. Prior to calibration, the pH probe is removed from the waste stream and thoroughly cleaned with reagent water. It is ensured that all debris is removed prior to calibrating.
   2. ENTER ANY OTHER PROBE CLEANING OR MAINTENANCE HERE.
5. **Calibration** 
   1. Calibration is performed weekly by trained personnel only.
   2. Calibration is performed with fresh aliquots of List the pH values of the buffers used standard buffers, which bracket the values to be measured.
   3. EDIT THIS SECTION TO DESCRIBE THE STEP-BY-STEP LABORATROY PROCEDURE FOR CALIBRATION.
   4. The calibration values observed are recorded to two decimal places and must be within ±0.1 pH units of the true buffer values, otherwise the meter is recalibrated. If the calibration values continue to fail criteria, then corrective action, such as replacing the pH probe, is performed.
   5. All calibration data, including the signature/initials of the analyst, the time and date of calibration, and the results of the calibration, shall be recorded on the pH analysis chart or in a separate log.
6. **Records**
   1. PEN is to be used, NOT PENCIL. NO WHITEOUT is to be used. Any errors recorded shall be single-lined (ex: ~~error~~), dated, and initialed.
   2. All original records are retained for at least five years. The records are initially maintained on-site for a minimum of 1 year, so that they are readily accessible for review.
   3. This SOP is readily available to all personnel and will be updated to reflect any procedural changes.

**APPROVED BY: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**Printed Name Position**

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**Signature Date**