ENVIRONMENTAL LABORATORY APPROVAL PROGRAM CERTIFICATION MANUAL

| <u>SUBJECT</u> | <u>DATE</u> | <u>PAGE</u> | ITEM NO. |
|---|-------------|-------------|----------|
| Field Analyses/Analyze Immediate Parameters | 03/28/12 | 1 of 2 | 249 |

Although ELAP ceased certification for the "Analyze Immediate Onsite" (AIOS) parameters (temperature, pH and chlorine residual) effective close of business March 31, 2012, it does not negate the requirement for laboratories to continue to perform these methods as required by either Standard Methods or EPA or NYS criteria, or by the laboratory's own standard operating procedures.

For those laboratories holding only AIOS certifications, they will no longer receive ELAP notifications and certificates. However, ELAP has provided guidance below in regards to AIOS analyses performed in the field and the quality assurance and quality control that should be maintained at such labs.

For those laboratories holding certifications for more than AIOS parameters, the accurate performance of the AIOS parameters will be evaluated by ELAP during other accreditation reviews. For example, the laboratory's accurate performance of pH will be evaluated during the assessment of biological oxygen demand.

In addition, ELAP has provided guidance in regards to fiber analyses performed outside of the inspected fixed-based or mobile laboratory premises.

"Analyze Immediate On-site" Parameters

Laboratories performing analysis of AIOS parameters in the field should adhere to the following conditions:

• Proficiency testing should be performed using the portable meter routinely used in the field.

If the laboratory has more than one portable meter, the proficiency testing should be rotated through the meters.
The laboratory can obtain proficiency tests for these AIOS parameters from one of the other providers listed on NELAC/TNI website:

http://www.nelac-institute.org/ptproviders.php

- Each portable meter is to be individually identifiable by one of the following: (1) property tag number, (2) labeling system, or (3) make, model and serial number.
- Each portable meter and its associated kit (including buffers and standards) should have a service and maintenance record kept at the laboratory. The record should include, but not be limited to:
 - Dates of battery replacement, when applicable.
 - Dates and nature of electrode replacement, when applicable.
 - Dates and nature of standard/calibrant preparation
 - Dates and nature of any repair or adjustment

ENVIRONMENTAL LABORATORY APPROVAL PROGRAM CERTIFICATION MANUAL

| <u>SUBJECT</u> | DATE | PAGE | ITEM NO. |
|---|----------|--------|----------|
| Field Analyses/Analyze Immediate Parameters | 03/28/12 | 2 of 2 | 249 |

• Dates of **monthly** inspection of the field kit by a competent and identifiable member of the laboratory-based staff.

Each non-laboratory staff member responsible for the field determination of AIOS parameters should be **annually** trained in the use and calibration of the portable meter(s). Documentation of annual training should include the name(s) of staff members trained, name(s) of instructor(s), topics covered (e.g., calibration procedures, importance of protecting the pH kit from temperature extremes, and maintenance of electrodes) and date(s) of training.

Field testing data should be documented with the following:

- Sample location (e.g., name of plant)
- Sample type (e.g., effluent at head of outfall)
- Meter battery check (and any other manufacturer's suggested pre-use test)
- Calibration of meter immediately prior to use (See Certification Manual Item 231.)
- Meter calibration check, including reading and acceptance range
- Time of sample collection
- Time of sample analysis
- Result with correct units
- Signature of analyst

Records of field test data/results is submitted to the laboratory for incorporation into the final record, with other sample aliquots (if any) destined for further laboratory analysis.

Fibers in Air by PCM

All analyses performed for compliance monitoring must be performed at the approved laboratory. However, if duplicate samples are collected, one cassette may be analyzed on-site for informational purposes only.