



*Division of Public Health Services*

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**FAX TRANSMITTAL SHEET**

**DATE:** April 02, 2009

**TO:** Laboratory Director and QA Manager

**FROM:** Steven D. Baker, Assistant Bureau Chief

State Laboratory Services

**Subject:** Information Update #102

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**NOTE:** If any of the pages are missing, please call 1-800-952-0374, (480) 284-6869 or (602) 364-0733.

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*Prabha Acharya at (480) 284-6869*

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*Leadership for a Healthy Arizona*



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### **Information Update**

**April 02, 2009**

**Update #102**

1. Allowed/disallowed method modifications to EPA Method 1664A: Changes to the chemistry of the method, the determinative step (e.g., the detector), the quality control, or those not expressly permitted in 1664A are not allowed. Richard Reding's memo, which is posted on the ADHS website, <http://www.azdhs.gov/lab/license/tech/infoup.htm> describes several modifications that are within the flexibility of 1664A, a solvent change that is not allowed, and a special modification approved only in one EPA region. Please see Richard Reding's memo that answers several questions about allowed modifications to Method 1664A.

Please see the clarification memo on the **solvent exchange** from Lemuel Walker of EPA to Barbara Escobar dated March 31, 2009, which was received following Mr. Reding's memo above:

*As you know, Oil and Grease is a method-defined analyte and use of any co-solvents, alternate solvents or any substance that can introduce the target analyte into the final extract is not allowed per 40 CFR Part 136.6. However, a methanol rinse may be allowed to remove water residual if:*

1. *The methanol rinse is immediately discarded to waste.*
2. *The SPE filter is sufficiently air dried with vacuum to remove any traces of methanol remaining in the SPE filter so as to ensure that no methanol will collocate or be collected with the n-hexane extractions.*
3. *And, it is the laboratory's responsibility to demonstrate and document the appropriate operating conditions (1 & 2) above to allow this use of methanol.*

*Given this, the use of methanol to condition the SPE filter or rinsing bottles with another solvent is allowed provided that solvent is sent to waste and not collected into the collection vessel with the final n-Hexane elution.*

2. EPA Region 9 Supplemental Guidance to HACH Method 10360, Luminescence Measurement of Dissolved Oxygen in Water and Wastewater, Revision 1.0, April 2008, is posted on ADHS website: <http://www.azdhs.gov/lab/license/tech/infoup.htm>. The use of the LDO was not globally allowed within EPA Region IX, the individual permittee should get approval from Region IX.

3. “Should” and “Must”: Please note the definition of “should” and “must”, which is copied below from the Drinking Water Certification Manual, 5<sup>th</sup> edition; the Arizona Laboratory Licensure does not differentiate between these two terms, they are equally enforced.

*Generally the term "must" in this manual refers to elements that are required by the National Primary Drinking Water Regulations or the approved drinking water methods. This manual uses the term "should" to describe criteria and procedures that in OW's judgement are necessary for laboratories to produce data that are scientifically valid and defensible, and are of known and acceptable precision and accuracy.*

4. EPA Method 548.1, endothall: The method requires triplicate preparation of calibration standards, but it doesn't instruct how to use those triplicates; ADHS requires the labs to prepare the calibration standards in triplicates and specify in their SOPs the laboratory's decision of how to use those replicates, for e.g., if the average of the three responses are used to build the curve or any other protocol. Please note the arbitrary selection of one replicate from each concentration, which best fits the curve, is not allowed.
5. The following methods have been Director Approved (See part E of the web application); if labs would like to add these methods to their license, please write to us with the necessary documentation (SOP, IDOC/MDL and acceptable PE study, where applicable) attached along with the additional method fees.
  - Methods IO-3.5 and IO-3.1 for the preparation and determination of metals in ambient air
  - SW846 Method 8330B, Nitroaromatics, Nitramines and Nitrate Esters by High Performance Liquid Chromatography (HPLC).
6. LFB @ MRL: Drinking Water Certification Manual, 5th Edition, requires that a LFB @ MRL concentration must be analyzed on each analysis day (Chapter IV, Sections 7.2.6 & 7.2.12). It was confirmed by communicating with Region IX that in lieu of preparing another LFB @ MRL on the day the calibration curve is processed, performing the mathematical calculation is acceptable for those methods where the calibration standards are processed using the same procedures as the samples. The low calibration standard would need to be at the MRL concentration.
7. BOD Results/Dilutions - Samples reported out for BOD must meet the requirement for achieving at least two dilutions per sample (Standard Methods 5210B, 4f) with DO depletions of 2.0 mg/L and a DO retention of at least 1mg/L. The sample reports must be properly qualified if the above criteria is not met.
8. DMRQA Study 29: EPA has offered the states the opportunity to choose from multiple options on how the DMRQA study will work. After careful review of the options and discussion between the Arizona Department of Health Services and the Arizona Department of Environmental Quality, the following changes and/or allowances will be made to DMRQA Study 29:
  - a. Laboratories licensed by the state of Arizona, that perform work for Arizona permit holders and facilities (permit holders), which are not currently licensed by the state of Arizona, and perform the 15 minute or immediate tests (pH, turbidity, total residual chlorine), will be allowed to use a WP proficiency study anytime between **January 1<sup>st</sup> and August 24<sup>th</sup>, 2009**, as long as the close date is before or on August 30<sup>th</sup>.

- b. Facilities (permit holders) will be required to contact their contract laboratories for a copy of the graded results of a WP study that meets the above timeline. Copies of the graded WP study from the contract laboratory must be obtained by **September 23, 2009**.
- c. Facilities will take the graded results from their proficiency testing and from their contract laboratories and submit the information to the state DMRQA coordinator and ADEQ. The state coordinator will accept pdf copies of the information.

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- 9. A two-day workshop titled “Wastewater Workshop, AzPDES Permit Requirements” will be held on May 20-21, 2009 at State laboratory, 250 N. 17<sup>th</sup> Avenue, Phoenix, offered by AZ Water Association, ADEQ and ADHS. The topics covered would be, AzPDES- Part II requirements;, Quality Control, QA Plan; Instrument Calibration; DMRQA; Low Level Chlorine; Whole Effluent Toxicity; E. Coli and Fecal Testing; BOD; Working With Your Commercial Lab; and Audit Findings. You can find more details and register on-line at [www.awpca.org](http://www.awpca.org)
- 10. Please contact Prabha Acharya @ (480) 284-6869 or [acharyp@azdhs.gov](mailto:acharyp@azdhs.gov) for any technical or method related questions. The earlier Information Updates can be accessed @ <http://www.azdhs.gov/lab/license/tech/infoup.htm>