



*Bureau of State Laboratory Services  
Office of Laboratory Licensure, Certification & Training*

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JANE DEE HULL, GOVERNOR  
CATHERINE R. EDEN, DIRECTOR

1-800-952-0374

**FAX TRANSMITTAL SHEET**

**DATE:** February 15, 2002

**TO:** Laboratory Director and QA Manager

**FROM:** Wesley B. Press, Bureau Chief

**subject:** Information Update #70

**PAGES:** 3 (including cover)

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<http://www.hs.state.az.us/lab/license/tech/infoup.htm>

JANE DEE HULL, GOVERNOR

CATHERINE R. EDEN, DIRECTOR

## Information Update

February 15, 2002

Update #70

1. Standard Method 9223B, Colilert Quanti-Tray MPN, manufactured by IDEXX Laboratories Inc., was approved by the Director of Arizona Department of Health Services on February 11, 2002, for compliance testing of *E. coli* in wastewater samples. This approval is only applicable for Arizona licensed laboratories when a National Pollutant Discharge Elimination System (NPDES) permit specifies *E. Coli* as a required testing parameter.
2. A reminder: The permitted maximum holding times for coliform analysis are:
  - six hours for wastewater samples
  - eight hours for source water samples
  - thirty hours for drinking water samples.
3. Method 8000B, Revision 2, December 1996, Section 8.2.6.5.1 specifies that the results of a method blank should be "less than the laboratory's Method Detection Limits (MDL) for the analyte or less than the level of acceptable blank contamination specified in the approved quality assurance project plan". ADHS sought input from the EPA's Methods Information Communication Exchange (MICE) service to see if it is acceptable to require the method blank to be less than the minimum reporting limits. The main concern of the MICE service is how the laboratories set the minimum reporting limits. Many times these limits are arbitrarily set without any standardized factor above the calculated MDL. Since our Office requires a calibration standard to be analyzed at or below the minimum reporting limit, MICE recommends that the method blank criteria should be set to less than this calibration standard. With MICE services' recommendation in mind, for 8000 series methods, our Office will accept method blank concentrations reported as less than the low standard of the calibration curve. The low standard should be equal to or below the reporting limit.
4. The residue non-filterable (TSS) methods, EPA 160.2, SM 2540D, and Hach 8158 require a well-mixed representative water sample prior to filtration. The use of a blender is not an acceptable means of producing a well-mixed sample, because the blender modifies the size of the particles. A "well-mixed sample" means to shake the sample for re-suspending the particles. This information was obtained from EPA's Engineering and Analysis Division, Office of Science of Technology,

Office of Water. SM 2540D specifies a magnetic mixer to be used to produce a well-mixed sample.

5. There has been an ongoing discussion between this Office and the licensed laboratories regarding acceptable recoveries for the calibration verification standards on the non-Calibration Check Compounds (CCC) for EPA methods 8260 and 8270. The acceptance criteria are not given for the non-CCC compounds in these methods. When we corresponded with MICE last year on the same subject, their response was that EPA was getting away from CCC and System Performance Check Compounds (SPCC) and they were in the process of revising the methods. The revised methods would have compounds grouped based on their difficulties and would have individual acceptance criteria. They thought the concept of setting in-house limits was good, but the disadvantage was that a laboratory doing poor analytical work would have wider acceptance limits. They also thought setting a straight acceptance limit of 15 or 20% was unreasonable and hard to achieve on the difficult compounds.

The staff at MICE has changed recently. Their response to our recent e-mail was, since 8260B and 8270C have no criteria given for non-CCC and non-SPCC compounds, the 8000B criteria of  $\pm 15\%$  would apply. The revisions to these methods were still in the works and they didn't know the completion date.

Our Office will continue to enforce in-house limits until we gather more information. The environmental laboratory licensure rules specify that the laboratories should develop in-house limits if the methods do not have set acceptance requirements. We welcome comments from the licensed laboratories on the impact of enforcing the 8000B criteria. We understand the difficulty in achieving the  $\pm 15\%$  recoveries on some of the difficult compounds. Please fax your laboratory's in-house limits for non-CCC compounds for 8260B and 8270C for both water and soil samples. Please fax your response to (602) 364-0758, to the attention of Prabha Acharya. Thank you in advance for taking the time to respond.

6. If you have any questions regarding the Information Updates, or if you have any technical questions that need clarification, please call or send e-mail to Prabha Acharya, Program Manager, Technical Resources and Training, at the Laboratory Licensure numbers/address. Copies of the Information Updates can now be found at our Internet address:  
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**FAX TRANSMITTAL SHEET**

**DATE:** December 17, 2002

**TO:** Laboratory Director and QA Manager

**FROM:** Wesley B. Press, Bureau Chief

**Subject:** Information Update #78

**PAGES:** 5 (including cover)

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**Information Update**  
**December 17, 2002**  
**Update #78**

1. The Technical Resources and Training Program is tentatively planning to have two workshops during the first week of March 2003, "Detecting and Correcting Inappropriate Laboratory Practices" and "Manual Integration Training Course". There is a limit on the number of participants for both the classes, 40 for the first workshop and 30 for the second one. We are planning to have multiple sessions of each workshop to accommodate more participants. Mr. Jack Farrell of Analytical Excellence, Inc. will present the workshops. Several technical associates versed in laboratory practices and analytical software will accompany Mr. Farrell.

Detecting and Correcting Inappropriate Laboratory Practices

(Registration fees between \$125.00-\$150.00)

This one-day training program has been presented all over the U.S. at industry meetings, government agency conferences, for government laboratories and private companies. It was heavily attended by laboratory analysts, QA officers, managers, regulators and federal enforcement officers. The program is both practical and timely as well as interactive and entertaining.

Discussion topics include potential causes of scientific misconduct, examples of improper practices, and specific practices designed for early detection, resolving ethical dilemma, differentiating between proper and wrongful practices and the role of an effective quality system in preventing laboratory wrongdoing. Auditors, lab managers, senior chemists, owners and QA managers will benefit from this sharing of examples and successful detection systems. Ample time will be provided for questions and discussion of real life examples. The format contains lecture, large group exercises and small group interactive exercises and demonstrations.

A rough agenda for the training program includes:

- I. Introduction.....5 min.

II. Review of Agenda and Logistics.....	5 min.
III. Purpose and Objectives .....	10 min.
IV. The Rationale and Initiatives for Implementing Ethical Practices and the Ramifications of Ethical Lapses in Environmental Labs .....	30 min.
V. The Role of a Functioning Quality System in Preventing Inappropriate Practices Within the Laboratories.....	45 min.
Short Break.....	15 min.
VI. Establishing Values for Your Organization and Examples Statements of Value .....	30 min.
VII. Small Group Exercise on Developing Shared Values for Your Organization + Lunch .....	60 min.
VIII. Causes of Improper Practices - Root Cause Analysis.....	60 min.
IX. Examples of Improper Practices Found.....	60 min.
X. Small Group Exercise - Manual Integrations; Progress to Disaster (Short Break Included) .....	45 min.
XI. Establishing Ethical Practices and Management's Role in Prevention .....	60 min.
XII. Small Group Exercise - The Method Blank Dilemma.....	30 min.
XIII. Review, Summary & Discussion.....	30 min.

**Manual Integration Training Course - One day course**

(Registration fees between \$225.00-\$250.00)

The complexity of environmental chromatographic, organic and inorganic, has raised a number of issues. One that has caused significant difficulty centers on the proper set up of instrument integration parameters and the use of manual integration techniques. In an open letter to environmental laboratories dated September 5, 2002, the EPA-OIG expressed a strong concern regarding the misuse of manual integration techniques to bypass quality control requirements. It has, therefore, become increasingly important for analysts and data reviewer to be well versed in the techniques of quantification and integration of complex chromatographic analyses. Clearly, there is complexity due to a variety of matrix effects, interferences, changing instrument conditions, a multitude of closely eluting target analytes and imperfections in chromatographic methods and data system algorithms. These complexities require specific training and experience in both setting instrument integration and quantification

parameters, and in performing scientifically sound manual integrations.

This training course discusses the basics of calibration, peak detection, instrument integration and peak detection algorithm set up and usage. This proposed training course will address the issues of refining software parameters to try and minimize the need for manual integrations, as well as defining proper methods for performing manual integrations when they are necessary. The majority of the course will be presented using graphical tools including actual chromatograms and methods used for demonstrations. Students are encouraged to provide examples of difficult integration problems for discussion and resolution. The format of the program contains limited lecture, large group and small group exercises along with opportunities for live demonstrations using applicable and available data system software.

A rough course agenda is below:

- I. Introduction
  - a. Why is this an important issue?
  - b. What is peak detection and integration?
  - c. What are the tools available and the differences in software systems?
  
- II. Automated Peak Detection - How Does It Work?
  - a. Identification requirements and criteria;
  - b. Threshold and area reject;
  - c. Slope and sensitivity;
  - d. Peak width;
  - e. Proper documentation.
  
- III. Enhancing Automated Peak Detection Parameters - Examples
  - a. Autointegration using HP Chemstation integrator (GC only);
  - b. Refining HP Chemstation integrator events;
  - c. Refining HP RTE integrator events.
  
- IV. Manual Integration Basics
  - a. What is a manual integration?
  - b. How manual integrations are performed?
    1. 2-D Data (GC and LC);
    2. 3-D Data (GC/MS).
  
  - c. Why manual integrations are necessary?
    1. Co-elutions;
    2. Complex sample matrices;
    3. Baseline fluctuations.
  
- V. Proper Manual Integration
  - a. Single peak;
  - b. Co-elutions;
  - c. Hydrocarbon envelopes;
  - d. Single components in complex matrices;
  - e. Proper Documentation.
  
- VI. Proper vs. Improper Manual Integration
  - a. Defining an improper manual integration;
  - b. Peak trimming;
  - c. Peak enhancement;

- d. Improper peak identification.

## VII. Conclusion and Questions

Please respond to us by fax [(602) 364-0758] before January 02, 2003 if you are interested in attending these workshops, so that we can make appropriate plans.

2. If you have any questions regarding the Information Updates, or if you have any technical questions that need clarification, please call or send e-mail to Prabha Acharya, Program Manager, Technical Resources and Training, at the Laboratory Licensure numbers/address. Copies of the Information Updates can now be found at our internet address:  
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**FAX TRANSMITTAL SHEET**

DATE: October 10, 2002

TO: Laboratory Director and QA Manager

FROM: Wesley B. Press, Bureau Chief

Subject: Information Update #77

PAGES: 4 (including cover)

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## Information Update

October 10, 2002

Update #77

1. If a laboratory would like to perform the Selected Ion Monitoring (SIM) for specific compounds of EPA method 8260B (or 8270C) for the purposes of lowering the reporting limits, the following protocol must be met for the compliance analysis:
  - The GC/MS must be tuned with a full scan of 4-bromofluorobenzene (BFB) analysis that meet the 8260B requirements every twelve hours [or decafluorotriphenylphosphine (DFTPP) for 8270C].
  - Three or more characteristic ions must be monitored in each calibration standard, quality control samples and project samples using SIM scan for each compound of interest. Surrogate and internal standard must also be monitored using a minimum of three ions. This can be accomplished by setting up a method with a SIM programmable scan.
  - A five point initial calibration for each SIM compound and surrogate must be performed that meets the requirements of Method 8260B/8000B, as applicable [note that the Calibration Check Compounds (CCCs) and System Performance Check Compounds (SPCCs) are not required to be monitored unless they are SIM compounds].
  - A mid-concentration standard must meet acceptance criteria of Method 8260B/8000B, as applicable, for all internal standards, surrogates and SIM compounds (note that the CCCs and SPCCs are not required to be monitored unless they are SIM compounds).
  - Analytical batch quality control samples must consist of a method blank, a laboratory control sample, a matrix spike and a matrix spike duplicate (spiked with each compound of interest), which must meet the method specific acceptance criteria.
2. EPA method 525.2: Kay Dunlap and Dave Clift, chemists from the Bureau of State Laboratory Services, would like to share some valuable information that has been shown to increase the sensitivities of the EPA 525.2 method analytes. Their recommended changes are to:
  - Use a 0.25 um instead of a 0.5 um film thickness column.

- Use an alternate criteria of the DFTPP tune, making mass 442 the base peak instead of 198, emphasizing large masses of the target compounds. The quantitation of certain compounds, for e.g., heptachlor on mass 272 and heptachlor epoxide on mass 353, are made using masses, which are less likely to be found in the background.
- Use an alternate source, which contains among other things a draw out plate with a larger aperture. A larger aperture is supposed to reduce the pressure inside the ionization chamber, consequently improving the linearity of calibration curves and also increasing signal/noise ratios.

If you need additional information, Kay and Dave can be contacted at (602) 542-6116 or (602) 542-6108.

3. Non-linear calibration models may be necessary for compounds and detectors that definitely do not show a linear response; unstable compounds or difficult detectors such as particle beam mass spectrometer. For the common analytes that have been previously shown to be linear, it is not the intent of the method to use a non-linear model. This has been confirmed by communications with the EPA programs.

To validate the use of non-linear calibration models, our office will review all the chemistry methods using non-linear models by the following protocol:

- Analyze at a minimum six calibration levels for organic methods.
  - Document the equation used for the calibration model, including all the coefficients, intercepts, coefficient of determination and the calculation used to quantify the concentrations.
  - Demonstrate that the detector has not been saturated by processing/analyzing a narrower calibration range.
  - Verify that the compound has not been previously demonstrated as being linear during the initial instrument set up.
4. Standard Methods 9221F, in conjunction with SM 9221B and SM 9221C, has been approved for Arizona licensed laboratories for testing wastewater compliance samples for National Pollution Discharge Elimination System (NPDES) permits that specify *E.coli* as a required testing parameter.
  5. We are sponsoring a FREE workshop on "GC and Chromatography" in Phoenix on November 6, 2002, from 8:00 AM - 3:00 PM. The presenter is Mr. Daren Decker, chromatography technical specialist, of Agilent Technologies. The topics covered are:
    - Introduction to GC
    - Choosing the "correct" GC column
    - GC care and maintenance
    - Trouble shooting common GC problems

- Optimization of GC temperature program

The workshop is being held at the State Hospital, 2500 East Van Buren, Phoenix, AZ 85008, in room 405 at the Education Building.

Registration:

Please complete the registration form and fax it to the attention of David Winters or Prabha Acharya at (602) 364 - 0758. For questions, contact Prabha Acharya at (602) 364-0734 or David Winters at (602) 364-0732.

**GC and Chromatography Workshop, November 6, 2002.**

<b>(Dr., Mr., Ms.,)</b>	<b>First</b>	<b>(M.I.)</b>	<b>Last</b>
<b>Name:</b> _____			
<b>Address:</b> _____		<b>City:</b> _____	<b>State:</b> _____ <b>Zip:</b> _____
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<b>Employer Address:</b> _____		<b>City:</b> _____	<b>State:</b> _____ <b>Zip:</b> _____
<b>Employer Phone Number:</b> ( _____ ) _____		<b>Fax Number:</b> ( _____ ) _____	

**Registration must be received by: October 28, 2002.**

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## Information Update

July 19, 2002

Update #76

1. The National Institute of Standards and Technology (NIST) and National Voluntary Laboratory Accreditation Program (NVLAP) have recently accredited four whole effluent toxicity (WET) testing providers. The accredited providers are: AccuStandard, Environmental Resource Associates (ERA), Resource Technology Corporation, and SPEX Certiprep Inc. The Discharge Monitoring Report-Quality Assurance (DMR-QA) WET sample can be purchased from the above vendors and the sample must be ordered by September 09, 2002. The permittee is required to report DMR-QA WET results to the provider by November 11, 2002.
2. In the previous updates #74 & 75, we announced a tentative plan to present basic and advanced Quality Assurance and Quality Control workshops. We received enough responses to finalize both of the workshops. The workshop will be held at South Mountain Environmental Education Center, 10409 South Central Avenue in Phoenix. It is located south of Baseline on Central Avenue within the South Mountain Park/Preserve. Please see the Information Updates #74 & 75 for details on the agenda and presenter. Complete the attached registration form for each attendee and Fax it to the attention of Prabha Acharya at (602) 364-0758 before August 9, 2002. Make the check payable to ADHS and enclose a copy of the registration forms.

Mail to: Maria Valenzuela  
Laboratory Licensure Certification & Training  
1740 West Adams Room 203N  
Phoenix, AZ 85007

Fees: Basic QA/QC Workshop \$ 100.00 August 27, 2002  
Advanced QA/QC Workshop \$ 125.00 August 28, 2002

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**BASIC QA/QC WORKSHOP REGISTRATION FORM**

**AUGUST 27, 2002**

**BASIC LABORATORY QUALITY ASSURANCE AND QUALITY CONTROL WORKSHOP**  
(Please Type or Print)

(Dr., Mr., Mrs., \_\_\_\_\_  
Ms., Miss) (First) (M.I.) (Last)

Employer's Name: \_\_\_\_\_ Position Title: \_\_\_\_\_

Employer's Address: \_\_\_\_\_ City: \_\_\_\_\_ State: \_\_\_\_\_ Zip: \_\_\_\_\_

Employer's Phone Number: (\_\_\_\_\_) \_\_\_\_\_ Employer's Fax Number: (\_\_\_\_\_) \_\_\_\_\_

Check enclosed \_\_\_\_\_ Check to be mailed \_\_\_\_\_

Fax Number: (602) 364-0758

**ADVANCED QA/QC WORKSHOP REGISTRATION FORM**

**AUGUST 28, 2002**

**ADVANCED LABORATORY QUALITY ASSURANCE AND QUALITY CONTROL WORKSHOP**  
(Please Type or Print)

(Dr., Mr., Mrs., \_\_\_\_\_  
Ms., Miss) (First) (M.I.) (Last)

Employer's Name: \_\_\_\_\_ Position Title: \_\_\_\_\_

Employer's Address: \_\_\_\_\_ City: \_\_\_\_\_ State: \_\_\_\_\_ Zip: \_\_\_\_\_

Employer's Phone Number: (\_\_\_\_\_) \_\_\_\_\_ Employer's Fax Number: (\_\_\_\_\_) \_\_\_\_\_

Check enclosed \_\_\_\_\_ Check to be mailed \_\_\_\_\_

Fax Number: (602) 364-0758



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**DATE:** July 01, 2002

**TO:** Laboratory Director and QA Manager

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## Information Update

July 01, 2002

Update #75

1. During recent inspections of laboratories performing chemistry compliance testing using chromatographic instrumentation (inorganic and organic), it has been observed that several laboratories are using instrument software that does not save the integrations on peaks that were used to calculate the data. Pursuant to A.A.C. R9-14-601.37, the definition of "Records" means all written, recorded and electronic documentation necessary to reconstruct all laboratory activities that produce data and includes all information relating to the laboratory's equipment, analytical test methods and related activities. Pursuant to A.A.C. R9-14-617.B, "A licensee shall maintain records and reports of compliance testing and the ability to reproduce all electronic data for at least 5 years from the date of compliance testing." Pursuant to A.A.C. R9-14-617.E7, these records must include "The actual results of compliance testing, including all raw data, work sheets, and calculations performed." Since a peak's integration is a critical element in the calculation of the data, a laboratory cannot use instrumentation software that does not allow an inspector to evaluate the appropriateness of the computer or manual integration.
2. In our last Information Update we announced a tentative plan to present a one-day workshop on Basic Quality Assurance and Quality Control on August 27, 2002. So far we have only received six responses for this workshop. We need approximately 50 people in order for us to cover our expenses. If there is not enough interest we will be canceling the class. If you are interested in attending this workshop please send a fax by July 12, 2002, to either Prabha Acharya or David Winters at (602) 364-0758. The course agenda is:

Quality Assurance ..... (2 hours)

- ▶ What is quality assurance?
- ▶ The application of quality assurance
- ▶ Documentation of test methods
- ▶ Examples of quality assurance principles

General Quality Control Protocol ..... (3 hours)  
▶ Why perform spiking?  
▶ Methods of standards addition  
▶ Benefits of on-going statistical analysis  
▶ Control charts, limits calculations  
▶ Maintenance, standards and reagents logbooks

General Chemistry principles ..... (3 hours)  
▶ Gravimetric techniques  
▶ Titration standardizations  
▶ Colorimetric automated and manual operations  
▶ Instrumental calibration and verification  
▶ Extractions documentation  
▶ Digestions documentation

3. Due to several requests we are considering presenting an Advanced QA/QC Workshop on August 28, 2002. Ms. Marlene Moore from Advanced Systems Inc. will be the presenter for this workshop as well. The cost for this workshop is \$125.00. If you are interested in attending the workshop please send a fax by July 12, 2002, to either Prabha Acharya or David Winters at (602) 364-0758. We will proceed with the preparation for the workshop if we have enough commitments to cover our costs.

The course is directed to quality assurance officers, laboratory managers, and testing supervisors, analysts, and data reviewers. The objective of the course is to present various methods for determining when QA/QC problems occur during data collection activities. These problems are often presumed to be limited to the test method while other factors also contribute to the data generation. A sound quality assurance program helps to ferret out these QA/QC problems and prevent their reoccurrence. The course provides guidance on the review of QA/QC requirements to acquire technically and legally defensible environmental data from laboratory operations.

The course will discuss the following:

- ▶ Fundamentals of quality assurance and quality control practices
- ▶ Examples of applied quality assurance principles
- ▶ Data review of matrix spike, control samples and calibration standards
- ▶ Demonstration of the use of statistical analysis for identifying problem areas
- ▶ Review of sensitivity issues related to detection limits and quantitation limits
- ▶ Review of chemistry principles related to the corrective actions for chromatography, spectrometry and other techniques
- ▶ Review of chemistry principles: instrumental calibration and verification, spectrometry data review, chromatography data review (retention time,

background, integration parameters and practices)

- ▶ Review of support system: manual and electronic data transfer, training

4. If you have any questions regarding the Information Updates, or if you have any technical questions that need clarification, please call or send e-mail to Prabha Acharya, Program Manager, Technical Resources and Training, at the Laboratory Licensure numbers/address. Copies of the Information Updates can now be found at our internet address:

<http://www.hs.state.az.us/lab/license/tech/infoup.htm>



*Bureau of State Laboratory Services  
Office of Laboratory Licensure, Certification & Training*

1740 W. Adams, Room 203  
Phoenix, Arizona 85007  
(602) 364-0720  
(602) 364-0758 FAX  
1-800-952-0374

JANE DEE HULL, GOVERNOR  
CATHERINE R. EDEN, DIRECTOR

**FAX TRANSMITTAL SHEET**

**DATE:** June 17, 2002

**TO:** Laboratory Director and QA Manager

**FROM:** Wesley B. Press, Bureau Chief

**Subject:** Information Update #74

**PAGES:** 3 (including cover)

**NOTE:** If any of the pages are missing, please call 1-800-952-0374, (602) 364-0734 or (602) 364-0732.

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JANE DEE HULL, GOVERNOR

CATHERINE R. EDEN, DIRECTOR

## Information Update

June 17, 2002

Update #74

1. It is time for the Discharge Monitoring Report-Quality Assurance (DMR-QA) study 22. As per John Helm with the Environmental Protection Agency's DMR-QA program the requirements for the successful completion of the DMR-QA study are:
  - A. The chemistry completion date is September 20. This is the date all testing must be completed. No chemical testing may occur after that date.
  - B. The deadline to purchase the sample is June 5, 2002. However, a chemistry sample may be purchased after June 5, 2002, but must be completed prior to the Sept 20 deadline.
  - C. The WP sample can be used for the DMR-QA as long as the required chemicals "overlap" and the laboratory doing the WP sample is the laboratory that regularly analyses the permittee's DMR sample.
2. The Technical Resources and Training Program of the Bureau of State Laboratory Services is tentatively planning to present a one-day workshop on basic quality assurance and quality control. This workshop is for entry level analytical/sample preparation chemists. It would also be suitable for data users, marketing personnel and or anyone wanting to gain knowledge of basic quality assurance principles. This workshop would not be suitable for experienced analytical chemists.

The presenter for the workshop will be Ms. Marlene Moore from Advanced Systems Inc. Ms. Moore co-founded Advanced Systems, Inc. in February 1992 as an environmental consulting company specializing in quality systems for laboratory and sampling operations. She worked in and managed environmental sampling and testing laboratories for over twenty years prior to starting her consulting business.

This workshop is tentatively scheduled for Tuesday August 27, 2002. The registration fee for the workshop is \$100.00. If you would be interested in attending the workshop, please send a fax to either Prabha Acharya or David Winters before July 8, 2002 at (602) 364-0758. We will proceed with the preparation for the workshop if we have enough commitments to cover our costs.

3. If you have any questions regarding the Information Updates, or if you have any technical questions that need clarification, please call or send e-mail to Prabha Acharya, Program Manager, Technical Resources and Training, at the Laboratory Licensure numbers/address. Copies of the Information Updates can now be found at our internet address:

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**FAX TRANSMITTAL SHEET**

**DATE:** May 23, 2002

**TO:** Laboratory Director and QA Manager

**FROM:** Wesley B. Press, Bureau Chief

**subject:** Information Update #73

**PAGES:** 2 (including cover)

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JANE DEE HULL, GOVERNOR  
CATHERINE R. EDEN, DIRECTOR

## Information Update

May 23, 2002

Update #73

1. The Arizona Data Qualifiers, developed by the sub-committee of the Arizona Environmental Laboratory Advisory Committee, dated 12/11/2000, have now been revised and are now available for use. Additional qualifiers have been added to the original list. The new expanded list "AZ Data Qualifiers, Rev 1.0, 05/13/2002", can be found on the ADHS's web site: <http://www.hs.state.az.us/lab/license/tech/infoup.htm>

The new items are in bold.

2. A reminder:

The permitted maximum holding time from sample collection to initiation of analysis for heterotropic bacteria in drinking water is eight hours.

3. If a batch spike recovery is outside of the acceptable range, it is permissible to only flag the sample that was spiked and not the other samples in the batch. As required in the Arizona Adopted Rules A.A.C. R9-14-617.F, clients must always be informed if the batch QC result is unacceptable whether one of their samples was spiked or not. The laboratory can choose how the unacceptable QC is reported to the client (e.g., cover letter or footnote).
4. If you have any questions regarding the Information Updates, or if you have any technical questions that need clarification, please call or send e-mail to Prabha Acharya, Program Manager, Technical Resources and Training, at the Laboratory Licensure numbers/address. Copies of the Information Updates can now be found at our internet address: <http://www.hs.state.az.us/lab/license/tech/infoup.htm>



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**FAX TRANSMITTAL SHEET**

**DATE:** March 18, 2002

**TO:** Laboratory Director and QA Manager

**FROM:** Wesley B. Press, Bureau Chief

**subject:** Information Update #72

**PAGES:** 3 (including cover)

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JANE DEE HULL, GOVERNOR

CATHERINE R. EDEN, DIRECTOR

## Information Update

March 18, 2002

Update #72

1. The Arizona Department of Health Services and the Arizona Water and Pollution Control Association are cosponsoring an 8 hour Laboratory Safety Workshop in Phoenix on April 16, 2002. The topics to be covered will include:

- OSHA Laboratory Standard
- OSHA Inspections
- Components of the OSHA Laboratory Standard
- Physical and Health Hazards
- General Laboratory Safety
- Control Measures
- Chemical Safety by Hazard Class
- Chemical Releases
- Waste Disposal and Lab Packing
- Safety Responsibilities / Lab Standard Implementation

This workshop will be presented by the Environmental Training Center (E.T.C.). The E.T.C. is a provider of environmental, health and safety training. They offer compliance training courses on the rules and regulations required by OSHA, EPA, RCRA, MSHA and DOT. They are affiliated with:

- Pima Community College
- OSHA Region IX Training Institute at the University of California, San Diego.

The workshop will be held at the City of Phoenix's wastewater treatment facility located near 23<sup>rd</sup> Ave. and Durango. The registration fee for this workshop is \$50.00. Fax the registration form to (602) 364 - 0758. Please make checks payable to AWPCA and mail to: David Winters, Office of Laboratory Licensure, Certification and Training, 1740 W. Adams, Room 203N, Phoenix, Arizona 85007.

Please share this announcement with anyone you feel would benefit from attending this workshop (bench chemists, managers, plant operators etc.).

If you need any additional information, please call Prabha Acharya at (602) 364-0734 or David Winters at (602) 364-0732.

**LABORATORY SAFETY WORKSHOP**  
(Please Type or Print)

(Dr., Mr., Mrs., \_\_\_\_\_  
Ms., Miss) (First) (M.I.) (Last)

Employer's Name: \_\_\_\_\_ Position Title: \_\_\_\_\_

Employer's Address: \_\_\_\_\_ City: \_\_\_\_\_ State: \_\_\_\_\_ Zip: \_\_\_\_\_  
\_\_\_\_\_

Employer's Phone Number: (\_\_\_\_) \_\_\_\_\_ Employer's Fax Number: (\_\_\_\_) \_\_\_\_\_

Check enclosed   N/A   Check to be mailed \_\_\_\_\_

Fax Number: (602) 364-0758

2. If you have any questions regarding the Information Updates, or if you have any technical questions that need clarification, please call or send an e-mail to Prabha Acharya, Program Manager, Technical Resources and Training, at the Office of Laboratory Licensure, Certification and Training at the numbers/address included on the fax transmittal sheet. Copies of the Information Updates can now be found at our internet address: <http://www.hs.state.az.us/lab/license/tech/infoup.htm>



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JANE DEE HULL, GOVERNOR  
CATHERINE R. EDEN, DIRECTOR

**FAX TRANSMITTAL SHEET**

**DATE:** March 08, 2002

**TO:** Laboratory Director and QA Manager

**FROM:** Wesley B. Press, Bureau Chief

**subject:** Information Update #71

**PAGES:** 3 (including cover)

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## Information Update

March 08, 2002

Update #71

1. The Technical Resources and Training Program is planning a three day workshop entitled *Surface Water/Ground Water Sampling and Analysis* in Phoenix, on March 26, 27, 28, 2002. This workshop is a basic course that introduces the participants to various sampling protocols, associated regulatory methods and laboratory testing for surface water and ground water. Ms. Melinda Longworth, the principle presenter, is a hydrologist and the owner of Water Quality Consulting of Tucson, Arizona. Ms. Longworth consults with various public and private entities regarding drinking water, ground water and surface water issues. She also teaches courses at Pima County Community College covering both sampling techniques and the applicable rules and regulations.

The registration fee of \$200.00 covers the three days of training. Fax the registration form to (602) 364 - 0758. Please make the check payable to ADHS and mail to: Cristy Finan, Office of Laboratory Licensure, Certification and Training, 1740 W. Adams, Room 203N, Phoenix, Arizona 85007.

Arizona certified operators for drinking water and wastewater who complete this course are eligible to receive 20 Professional Development Hours (PDHs) from Arizona Department of Environmental Quality (ADEQ). ADEQ will consider these PDHs to be job related.

If you need any additional information, please call Prabha Acharya at (602) 364-0734 or David Winters at (602) 364-0732.

**SURFACE WATER/GROUND WATER SAMPLING AND ANALYSIS WORKSHOP REGISTRATION FORM**

(Please type or Print)

(Dr., Mr., Mrs., \_\_\_\_\_  
Ms., Miss) (First) (M.I.) (Last)

Employer's Name: \_\_\_\_\_ Position Title: \_\_\_\_\_

Employer's Address: \_\_\_\_\_ City: \_\_\_\_\_ State: \_\_\_\_\_ Zip: \_\_\_\_\_

Employer's Phone Number: (\_\_\_\_\_) \_\_\_\_\_ Employer's Fax Number: (\_\_\_\_\_) \_\_\_\_\_

Check enclosed   N/A   Check to be mailed \_\_\_\_\_

Fax Number: (602) 364-0758

2. If you have any questions regarding the Information Updates, or if you have any technical questions that need clarification, please call or send e-mail to Prabha Acharya, Program Manager, Technical Resources and Training, at the Laboratory Licensure numbers/address included on the fax transmittal sheet. Copies of the Information Updates can now be found at our internet address:  
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