



The NELAC Institute

Small Lab Panel Assessment Forum



THE NELAC INSTITUTE



Jan Wilson
Clean Water Services, Inc.

Training Records



- **Approach to training records**
- **Record keeping and tools**
- **Manage the process**



Robin Cook
Harbor Branch Environmental Laboratories, Inc.

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Basic Approach

- Easy to use for analyst and Technical Director
- Can see right away who is prepared and available for each analyte
- Specific to the analyst
- Specific to method



A Useful Tool

Analysis	IDC PA	IDC RC	IDC JH	IDC BP	SOP	Comp Cert
Alkalinity						
Conductivity						
COLOR						
ODOR						
PH						
Turbidity						
TDS						
MBAS						
TSS						
TS						
TVS						
CBOD						
BOD						
IC NO2/NO3						
RES CL2						
SOUR						
MICRO						
Total mmo-mug						
Total MF						
Fecal MF						
Fecal MPN						
HPC						



Method Comprehension

CERTIFICATION of METHOD COMPREHENSION

Date:

Laboratory Name: HARBOR BRANCH Environmental Laboratory at Deltona

Laboratory Address:

Analyst(s) Name(s):

NELAC standards June 5, 2003
Comprehensive Quality Assurance Plan Quality Manual Version _____
Or Laboratory Method Manual and SOP:
Effective Date: _____ of Document

We, the undersigned, CERTIFY that:

1. The analyst(s) identified above has read, understood, and shall use the latest version of the Comprehensive Quality Assurance Plan Quality Manual and or Laboratory Method Manual for the analysis of samples under the National Environmental Laboratory Accreditation Program.
2. A copy of the Comprehensive Quality Assurance Plan Quality Manual and the laboratory-specific Method Manual are available for all personnel on-site for the above testing

Analyst(s) Name(s)	Signature	Date
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Technical Director's Name and Title	Signature	Date
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Quality Assurance Officer's Name	Signature	Date
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IDC Calculation

EPA 425.1 and SM 5540 C

IDC Study 2005

Instrument: Perkin Elmer UV-VIS Lamda 2S HB 04606

Analyst: Robin L Cook

MBAS Surfactants

Matrix: WATER

Harbor Branch Environmental Laboratory Deltona

Sample Datafile	Replicate Number	Date Tested	Conc. mg/L	Result µg/L	Result ug/L	Percent Recovery
LCS	1	1/21/2005	1.00	1.01	1.01	100.80
LSC	<u>2</u>	1/21/2005	<u>1.00</u>	<u>1.04</u>	1.04	<u>104.30</u>
LCS	3	1/21/2005	1.00	0.95	0.95	94.50
LCS	<u>4</u>	1/21/2005	<u>1.00</u>	<u>0.99</u>	0.99	<u>98.50</u>

Method Recovery Limit: 80-120%

Standard Deviation (S): 0.04

Mean Recovery (X, ug/L): 1.00

Relative Standard Deviation (%): 4.13

Mean Accuracy (%): 99.53

Spiking Std DE000220

Ricca Chemical Cat # 4350-4

Certified at 1ml=1mg as LAS

Lot # 1402438 exp 2/28/2005

IMS made by adding 10ml of DE00220
to 100 ml DI to yield 100 mg/L std
1 ml of IMS to 100 ml DI to yield 1mg/L std

Annual curve attached



Managing the Process

- Each Analyst is responsible for reading SOP's
- Trainer is responsible to oversee all initial work
- Annual training such as Ethics is lab wide and done under direct supervision of QA manager.
- Use the checklist
- All additional training certificates are simply placed in training files.



Kristen Russell
ACZ Laboratories, Inc.

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Approach to training records

- Quality Manual describes general training & has a separate section for technical training
 - Define responsibilities
 - Documentation requirements
- Records are accessible
 - Each employee has a training file
 - IDOC maintained same as client batches
 - Other training records filed by method & year
- Evolving Process



Record Keeping & Tools

- Training forms for Safety, Ethics, QA/QC maintained in employee's training file
- IDOC goes thru database like client sample
 - Associated with a batch number
 - Trainee and trainer perform initial review
 - QA/QC performs secondary review
 - Training form maintained with batch
- Training status spreadsheet for analysts



example spreadsheet:

8/10/2007

Jennifer Garola

Method	Analyte	Inst ID	prep/Inst	Matrix	IDOC	CDOC	LCR	Training Form	QA Clearance
EPA335.4 (TWAD/LL)	CN		prep	aq	1/31/06	1/19/07		1/31/06	2/8/2008
EPA9012A (soil)	CN		prep	so	9/21/06			6/6/06	10/28/2008
8M4500-CN (macro)	CN		prep	aq	8/2/06			8/06	8/16/2008
EPA350.1	NH3-T		prep	aq	1/8/07			1/8/07	1/26/2007
EPA351.2	TKN		prep	aq	2/21/06	11/17/07		2/22/06	3/13/2008
EPA365.1	Phos		prep	aq	1/27/06	1/15/07		1/27/06	2/7/2008
EPA420.4	Phenol		prep	aq	5/11/07			3/21/06	3/27/2008
EPA300.0	IC	Dionex	Inst	aq	8/3/06		08/03/06	8/4/06	8/16/2008
EPA325.2	Chloride	Lachat	Inst	aq	2/2/06	1/10/07		2/2/06	2/7/2008
EPA325.2	Chloride	Konelab	Inst	aq	2/22/07			2/26/07	2/28/2007
EPA335.4/9012/8M4500-CN	CN	Lachat	Inst	aq or so	1/30/06	1/23/07		1/30/06	2/8/2008
EPA335.4/9012/8M4500-CN	CN	Konelab	Inst	aq or so	4/23/07			4/23/07	4/24/2007
EPA350.1	N-NH3	Lachat	Inst	aq	2/1/06	1/9/07		2/1/06	2/7/2008
EPA351.2	TKN	Lachat	Inst	aq or so	2/22/06			2/22/06	3/13/2008
EPA353.2	NO3/NO2	Lachat	Inst	aq or so	11/14/06			11/14/06	11/21/2008
EPA365.1	Phos	Lachat	Inst	aq or so	3/29/06	1/16/07		3/29/06	4/11/2008
EPA415.1	TOC		Inst	aq or so	5/30/07			5/30/07	8/1/2007
EPA420.4	Phenol	Lachat	Inst	aq	3/22/06			3/21/06	3/27/2008
EPA420.4	Phenol	Konelab	Inst	aq	5/14/07			5/14/07	5/18/2007



Manage the Process

- Initial training first day for Safety, Ethics, QA/QC & Sexual Harassment
- Follow-up training within 30-60 days of hire date for Ethics & QA/QC
- Company-wide annual training for Ethics
- Company-wide training for Quality Manual



Technical training

- Read published method & test SOP
- Training performed by supervisor or other qualified analyst within the department
- Trainee shadows the trainer
- Initial Method Training form (checklist)
- Trainee practices the procedure
- Perform IDOC
- Demonstrate continued proficiency annually



Audience Participation

- What are some of the approaches to training records that you have either assessed or been involved with? (Low Tech and High Tech)
- What would be the best venue to share this information in the TNI community?



Jan Wilson
Clean Water Services, Inc.

Control of Documents



- **Approach to Controlling Documents**
- **Tools**
- **Manage the process**



Robin Cook
Harbor Branch Environmental Laboratories, Inc.

Control of Documents



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Basic Approach

- Here is my personal motto: Work smarter not harder.
- As always, easy to use. If it is easy to do, it will be done
- Small focal point, someone must oversee



Tools

- Archive lists for all types of document
- Revision numbers on SOPs
- Access logs
- Other logbooks or spreadsheets



Managing the Process

- Currently, one person to oversee
- Access logs placed with archived records and logbooks
- Each client has an individual file for reports, contracts, correspondence etc
- Do what works for you!!



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ACZ Laboratories, Inc.

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Approach to document control

- Quality Manual describes the control & storage of all records & documents
- System for hard copy & electronic copy
- Documentation for all sample batches are scanned – can be accessed from any PC
- Client reports can be accessed from any PC



Tools for document control

- LabWeb intranet available on each PC
 - Go to 'document control' home page
 - Organize SOP or form by department, ID, title, etc.
- SOP status: approval date & effective date
- SOPs cannot be printed (read-only pdf)
- Dept binders for master hard copy of SOPs
- 1 controlled SOP hard copy in each lab



Manage the process

- QA/QC manages LabWeb ‘document control’
 - Only current version available in LabWeb
 - Previous version electronically archived
- QA/QC manages SOP distribution/collection
- IT manages sample batch documentation
- IT manages client / report documentation



Audience Participation

- What are some of the approaches to Controlling Documents that you have either assessed or been involved with? (Low Tech and High Tech)
- What would be the best venue to share this information in the TNI community?



- Summary
- What other issues would you like to see addressed



Thank You