

**Amendment #1  
to the  
Northeast Texas Municipal Water District  
Clean Rivers Program FY 2010 - 2011 QAPP**

**Prepared by the Northeast Texas Municipal Water District  
In Cooperation with the  
Texas Commission on Environmental Quality (TCEQ)**

Questions concerning this QAPP should be directed to:

**Linard Arocha  
Water Monitoring Solutions, Inc.  
PO Box 1132  
Sulphur Springs, TX 75483  
Phone: 903-439-4741  
FAX: 903-439-0021  
linard@water-monitor.com**

Effective: **Date to be inserted by TCEQ Lead QA Specialist**

**Justification:**

This document details the changes made to the basin-wide Quality Assurance Project Plan to update Table A7.1 and Appendix D for FY 2010-2011.

This amendment changes the method used for the analysis of Total Hardness from SM 2340 C to SM 2340 B.

**Summary of Changes:**

Table A7.1 is updated to change the analysis method for Total Hardness from SM 2340 C to SM 2340 B.

Appendix D is amended to include of a Project Chain of Custody form. Sample information from more than one station can be listed on a single form. The Project Chain of Custody form includes the correct method for Total Hardness analysis.

## **Detail of Changes:**

Table A7.1 is updated to change the analysis method for Total Hardness from SM 2340 C to SM 2340 B. Total Hardness is calculated from the results of Calcium and Magnesium when using SM 2340 B. In SM 2340 C, a titration is performed. Since the analysis of Calcium and Magnesium are already being performed by EPA Method 200.7, Revision 4.4, the titration of these parameters is unnecessary and does not yield more accurate results than the calculation. Ana-Lab is NELAC-certified for EPA 200.7, Revision 4.4 and SM 2340 B.

## **Appendix D: Chain of Custody Form:**

The Project Chain of Custody form for conventional analysis (Attachment #2) is added to Appendix D. Sample collection information from more than one station can be listed on a single form. The Project Chain of Custody includes the correct method for Total Hardness analysis.

## **Distribution:**

QAPP Amendments/Revisions to Appendices will be distributed to all personnel on the distribution list maintained by the Cypress Creek Basin Planning Agency.

These changes will be incorporated into the QAPP document and TCEQ and the Northeast Texas Municipal Water District will acknowledge and accept these changes by signing this amendment.



**CYPRESS CREEK BASIN PLANNING AGENCY  
Northeast Texas Municipal Water District**

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Walt Sears, Jr., General Manager      Date

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Lee Thomas, Project Manager      Date

**Water Monitoring Solutions, Inc.**

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Randy Rushin, Project Manager      Date

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Augustine De La Cruz      Date  
Quality Assurance Officer

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Linard Arocha      Date  
Technical Coordinator

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Scott Mgebhoff, Data Manager      Date



## Attachment # 1

**Table A7.1 Measurement Performance Specifications**

Parameter	Units	Matrix	Method	Parameter Code	AWRL	Limit of Quantitation (LOQ)	LOQ Check Standard % Rec.	Precision (RPD of LCS/LCSD)	Bias (%Rec. of LCS)	Matrix Spike % Rec.	Lab
Hardness, Total (as CaCO <sub>3</sub> )	mg/L	water	SM 2340 B	00900	5	5	NA	20	80-120	80-120	Ana-Lab

## **Attachment # 2**

### **Appendix D: Chain of Custody form**

- Add Project Chain of Custody form to list more than one station on a single form
- Changed method number for Total Hardness analysis



Ana-Lab Corp. P.O. Box 9000 Kilgore, TX 75663

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LELAP-accredited #02008

# Chain of Custody

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**Report To**

Randy Rushin  
Water Monitoring Solutions  
PO Box 1132  
Sulfur Springs, TX 75483-

**WMS2**

**Lab Number** \_\_\_\_\_

**A**

Phone: 903/439-4741

Fax: 903/439-0021

**Conventional Site** \_\_\_\_\_

Accredited Test Name Method

*Matrix: Liquid Aqueous*

Sampler Printed Name	Sampler Affiliation	Sampler Signature
	<b>*Polyethylene 1.5 gal (White)</b>	
AN	ICL Chloride	EPA 800.0, Rev. 2.1
AN	+ INCL Nitrate-Nitrogen Total	EPA 800.0, Rev. 2.1
AN	+ INCL Nitrite-Nitrogen, Total	EPA 800.0, Rev. 2.1
AN	ISL Sulfate	EPA 800.0, Rev. 2.1
AN	ALY Alkalinity as CaCO3	SM 2509, 2005 Ed.
AN	TDS Total Dissolved Solids	SM 2540 C 2005 Ed.
AN	TSS Total Suspended Solids	SM 2540 D, 2005 Ed.
	<b>**Na2S2O3 (0.009%) Polyethylene 100 mL, Sterilized</b>	
	MPNR E. Coli Holding Time	
N	+ MPNE MPN, Escol, Coliform-18	SM 9223 B.a, 2005 Ed.
	<b>*BIR04 in pH &lt;2 Amber Glass 120 mL w/Teflon lined lid</b>	
AN	TOCL Total Organic Carbon	SM 5310 C 2005 Ed.
	<b>*Glass Qc (Amber) w/Teflon lined lid</b>	
AN	+ #PHE Phytoplankton	EPA 445.0
AN	+ #Cpa Chlorophylla	EPA 445.0
	<b>*BNC0 in pH &lt;2 Polyethylene 500 mL for Metals</b>	
AN	MLL Liquid Metals Digestion	EPA 800.2, Rev. 2.0
AN	*Ca Calcium	EPA 800.7, Rev. 4.4
AN	*Mg Magnesium	EPA 800.7, Rev. 4.4
AN	TBC Total Hardness Ca/Mg Eq. CaCO3	SM 2540 B, 2005 Ed.
	<b>*Polyethylene 1000 mL, unprov.</b>	
AN	DAMP Dissolved Ammonia Filtering	
	<b>*BIR04 in pH &lt;2 120 mL Polyethylene</b>	
AN	NRd Dissolved Ammonia Nitrogen	EPA 350.1, Rev. 2.0
AN	TKN Total Kjeldahl Nitrogen	EPA 351.2, Rev. 2.0
AN	TPWB Phosphate	EPA 365.3

Ana-Lab #	Sample ID	Barcode	Date	Time	Notes

Corporate Shipping: 2690 Dudley Rd. Kilgore, TX 75642



ISO-17025 # 0637-01

LELAP-accredited #02008



NELAP-accredited #T104704201-08-TX

www.ana-lab.com



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# Chain of Custody

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Water Monitoring Solutions  
PO Box 1132  
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**WMS2**

**Lab Number** \_\_\_\_\_

**A**

Phone 903/439-4741

Fax 903/439-0021

**Conventional Site** \_\_\_\_\_

Accredited Test Name Method

Sample Received on Ice?  Yes  No Method of Shipment:  UPS  Bus  FedEx  Low Star  Hand Delivered  Other  
Cooler/Sample Secure?  Yes  No Tracking/Shipping #

The accredited column designates accreditation by A - ASLA, N - NELAP, or X - not covered under ASLA or NELAP scope of accreditation.

Comments:

Corporate Shipping: 2600 Dudley Rd. Kilgore, TX 75642



ISO-17025 # 0637-01

1.08Class 1.0.1.063



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Form 09/09/09 Created 6/22/06 v1.7