Appendix B Checklist and Quick Reference Guide for PRL and MSL Response during a Water Emergency

Purpose: *This sheet should be used as a checklist and quick reference guide for laboratories supporting an incident. References to appropriate sections of the Water Laboratory Alliance Response Plan (WLA-RP) are provided in each section of this sheet.*

INITIAL SUPPORT REQUEST

When the initial call comes in from the Analytical Services Requester (ASR) or Primary Responding Laboratory (PRL) use the Help Sheet for Requesting Analytical Support during Water Emergency Response (Appendix C) to collect the following:

- ☐ ASR contact information
- ☐ Site Characterization Information
- ☐ Field Screening Results (Basic Field/Safety Screening: Section 3.3.1 and Field Testing Results Form: Appendix F)
- ☐ Information on types and number of samples
- ☐ Analyses required
- ☐ Data turnaround times and reporting requirements
- ☐ Sample disposal information

AGREEING TO PROVIDE SUPPORT

Prior to agreeing to provide support, the laboratory should consider the following (Sample Brokerage, Tracking, and Transport: Section 3.2):

- ☐ Capability
- ☐ Capacity
- ☐ Data turnaround requirements
- ☐ Nature of the threat
- ☐ Required proficiencies and certifications
- ☐ Internal chain-of-custody requirements
- ☐ Management approval
- ☐ Funding
- ☐ Other special conditions

COMMAND CENTER AND ONGOING COMMUNICATIONS

Responding laboratories should take steps to ensure efficient communication during an incident (Communications Logistics: Section 2.7.1)

- ☐ Set up a command center with multiple phone lines and computer and fax access
- ☐ Set up procedures for handling incident phone calls
- ☐ Designate points-of-contact and procedures for transferring information during shift changes
- ☐ Log all communications with the ASR and/or PRL
- ☐ Follow-up verbal conversations with emails to confirm information and document decisions
- ☐ Provide a daily status report and/or set up daily briefings with all participants
- ☐ Post Public Information Officer (PIO) contact information for any external inquiries

COMMAND CENTER STAFF

Responding Laboratories should have the appropriate staff available to respond to an incident (Communications Logistics: Section 2.7.1)

- ☐ Set up a command center with multiple phone lines and computer and fax access
- ☐ Set up procedures for handling incident phone calls
- ☐ Designate points-of-contact and procedures for transferring information during shift changes
- ☐ Log all communications with the ASR and/or PRL
- ☐ Follow-up verbal conversations with emails to confirm information and document decisions
- ☐ Provide a daily status report and/or set up daily briefings with all participants
- ☐ Post Public Information Officer (PIO) contact information for any external inquiries

IDENTIFY AND RECRUIT ADDITIONAL SUPPORT LABORATORIES (PRL ONLY)

If the PRL does not have the capability and/or capacity to fully address the analytical needs of the incident, then it may be necessary to bring in additional laboratory support (Direction, Control, and Coordination: Section 2.5).

- ☐ Determine that additional support is required
- ☐ Identify appropriate support laboratories (Roles: Section 2.5.1)
- ☐ Contact the laboratories to provide support
- ☐ Provide background information on the incident and available analytical results

SAMPLE BROKERAGE AND SAMPLE TRACKING

Section 3.2.1: Sample Brokerage, Section 3.2.2: Sample Tracking, and Appendix G: Example Chain-of-Custody Form:

- ☐ Obtain sample tracking numbers
- ☐ Confirm that samples arrived in acceptable condition
- ☐ Confirm that appropriate chain-of-custody was received with samples
- ☐ Determine requirements for internal sample tracking

SAMPLE ANALYSIS

The ASR and PRL should consider the following when determining an analytical strategy (Analysis: Section 3.3):

- ☐ Objectives of the monitoring (identification of contaminant vs. remediation and recovery)
- ☐ Data turnaround times
- ☐ Type of method: Rapid or Confirmatory (Rapid Laboratory Analysis: Section 3.3.2, and Confirmatory Analysis: Section 3.3.3)
- ☐ Information regarding the type of contaminant
- ☐ Laboratory capabilities
- ☐ Level of Quality Control (QC) required (Quality Assurance/Quality Control: Section 3.3.5)

DATA REVIEW AND VALIDATION

Internal Data Review: Section 3.4 and Data Reporting: Section 3.5

- ☐ Mark data that has not undergone a complete review as “Preliminary Data Pending Confirmation”
- ☐ Complete internal data review prior to releasing confirmatory data
- ☐ Determine if additional data validation is needed by PRL or ASR

DATA REPORTING

Document requirements for Data Reporting (Section 3.5) in the Help Sheet (Appendix C)

- ☐ Use the data reporting template (Appendix E)
- ☐ Confirm receipt of data submitted electronically

SAMPLE AND RECORDS RETENTION

Laboratories should follow their existing procedures regarding the following in the absence of alternative guidance or specific instructions. Document requirements in the Help Sheet (Appendix C)

- ☐ Sample retention and disposal (Sample Disposal: Section 3.3.4)
- ☐ Data/records retention (Record Keeping: Section 3.9)

COMMUNICATIONS WITH THE MEDIA AND OTHER OUTSIDE PARTIES

Generally, communication with parties not directly involved in the response should be handled through the ASR/PRL/MSL chain-of-command. Procedures for routing requests and providing information should be established at the beginning of a response (Communications and Notification: Section 2.7).

- ☐ Establish procedures for handling requests for information
- ☐ Be aware of potential exceptions to communication structure (e.g., FOIA)
- ☐ Log all communication requests received and report to appropriate contact

Appendix C Help Sheet for Requesting Analytical Support during an Emergency Response

Purpose: *This sheet is designed to help discussions between the Analytical Services Requester (ASR) and the laboratory. The ASR may be either the Incident Commander/representative or the Primary Responding Laboratory (PRL). The Laboratory may be either the PRL or a Mutual Support Laboratory. The Laboratory should use this help sheet to ensure that all critical information is exchanged. The information should be recorded in a logbook or notebook dedicated to the incident, the laboratory's standard forms, or the forms that follow.*

For each analytical request, to the extent practical, the ASR should record any information provided in writing and send to the laboratory, e.g., via fax, e-mail, etc.

COMMUNICATION INFORMATION

During the initial call with a requestor, record the following information:

- ☐ Date and time of the call
- ☐ Incident primary point-of-contact (POC)
- ☐ POC phone number, cell number, fax number, and email address
- ☐ Other relevant contact information

SITE CHARACTERIZATION INFORMATION

Ensure that the following information is documented with the sample paperwork shipped to the laboratory:

- ☐ General background of the incident
- ☐ Available field data – environmental and clinical
- ☐ Specific hazards associated with the site
- ☐ Samples collected from the site

GENERAL INFORMATION FOR LAB SERVICE REQUESTERS

Record the following information regarding the analytical request:

- ☐ Analytes of interest
- ☐ Matrix
- ☐ Analytical method(s) preferred
- ☐ Number of samples
- ☐ Reporting limit(s)
- ☐ Background levels (if data is available)
- ☐ Quantitative (standard QC or reduced QC) or semi-quantitative/screening (estimated; presence/absence)
- ☐ Data validation (preliminary or full validation)
- ☐ Turn around time

Review/Confirm sample volume, container and preservation requirements with requester.

CHAIN OF CUSTODY REQUIREMENTS

Determine requirements for chain of custody:

- ☐ Routine chain of custody or law enforcement sensitive?
- ☐ Internal chain of custody required (if law enforcement sensitive)?
- ☐ Other special conditions or instructions

SAMPLE SHIPMENTS

Inform the requestor of the laboratory's shipping address and record the following:

- ☐ Transport method
- ☐ Tracking numbers (if applicable)
- ☐ Arrival date/time at laboratory
- ☐ Other special conditions/instructions

DATA REPORTING AND RECORDS RETENTION

Laboratories will follow their existing procedures regarding the following in the absence of alternative guidance or specific instructions and record the following:

- ☐ Who receives a copy of the report
- ☐ Data format needed (e.g., Excel Spreadsheet, Specific EDD, etc.)
- ☐ Method of transmission (e.g., electronic or hard copy)

The laboratory should verify that their standard sample and record retention is adequate.

Appendix C Form Part 1: Requesting Analytical Support during Water Emergency Response (ASR⇔ PRL)

Purpose: *This sheet is designed to help discussions between the Analytical Services Requester (ASR) and the Primary Responding Laboratory (PRL). Potential PRLs should use this help sheet to ensure that all critical information is exchanged. The PRL can recruit Mutual Support Laboratories to perform the work which they cannot do, so the PRL needs to record all of the required analytical work regardless of whether the PRL can perform the work in house.*

COMMUNICATION INFORMATION

Date of initial call:

Time of initial call:

Who is in charge of the incident (Analytical Services Requester (ASR) or Incident Commander(IC))?

ASR/IC name:

ASR/IC phone number:

ASR/IC cell number:

ASR/IC fax number:

ASR/IC email address:

Other contacts (utilities, labs, public health, law enforcement, etc.):

EPA/Public Information Officer (PIO) contact:

SITE CHARACTERIZATION INFORMATION

Ensure that this information is documented with the sample paperwork shipped to the laboratory:

Nature of threat:

How was the threat determined (who, what, when):

Threat investigation status, circle one: a) possible b) credible c) confirmed d) other - list here:

Incident information:

Has distribution system been shut down? a) yes b) no c) don't know

Is this incident law enforcement sensitive? a) yes b) no c) don't know

Who has been contacted?

Any known exposure risks: a) contact b) inhalation c) ingestion d) other - specify:

Results of field safety screening (if applicable, see Field Screening Results Table):

Any known illnesses or injuries related to the incident:

Clinical data/results:

Additional information required for sample acceptance:

GENERAL INFORMATION FOR LAB SERVICE REQUESTERS

The table below should be filled out to document the sample analyses requested. If samples have not already been collected, the completed table can be provided to the samplers to provide guidance on sample volumes, preservation, sample containers, etc.

Requested Analyses

Method	# Samples	Sample Volume	Container	Preservation	Storage and Shipping Conditions	Standard or Rapid Analysis	QC Level

Sample disposal instructions:

Other special conditions or instructions:

Relevant background levels from matrix:

Drinking water treatment chemicals:

Prioritization of specific samples:

CHAIN OF CUSTODY REQUIREMENTS

Will routine chain of custody be sufficient or is the event law enforcement sensitive?

If law enforcement sensitive, will internal laboratory chain of custody be required?

Other special conditions or instructions:

SAMPLE SHIPMENTS

Transport method (courier, overnight shipping):

Tracking number(s):

When will the samples arrive at the lab?

Other special conditions or instructions:

DATA REPORTING AND RECORDS RETENTION

Laboratories will follow their existing procedures regarding the following in the absence of alternative guidance or specific instructions:

Data turnaround for preliminary results (if needed):

Data turnaround time for final results:

Data format:

Method of data transmission:

Contact to report results to:

How will the laboratory be reimbursed?

Will routine sample and record retention be adequate?

How to respond to Freedom of Information Act (FOIA), state information access laws, or law enforcement requests?

Other special considerations:

ADDITIONAL INFORMATION OR COMMENTS

Appendix C Form Part 2: Requesting Analytical Support during Water Emergency Response (PRL⇔ MSL)

Purpose: *This sheet is designed to help discussions between the PRL and the Mutual Support Laboratory (MSL). Potential MSLs should use this help sheet to ensure that all critical information is exchanged. The methods, matrices, and number of samples are discussed first to determine whether the MSL will be able to assist the PRL. If the MSL is not in a position to help the PRL then the discussion does not need to continue, and the PRL should call another potential MSL.*

GENERAL INFORMATION FOR LAB SERVICE REQUESTERS

The table below should be filled out to document the sample analyses requested. If samples have not already been collected, the completed table can be provided to the samplers to provide guidance on sample volumes, preservation, sample containers, etc.

Requested Analyses

Method/Analyte	# Samples	Matrix	Sample Volume	Container	Preservation	Storage and Shipping Conditions	Standard or Rapid Analysis	QC Level

Relevant background levels of matrix:

Known water treatment chemicals:

Sample disposal instructions:

Prioritization of specific samples:

Other special instructions:

COMMUNICATION INFORMATION

Date of initial call:

Time of initial call:

Who is in charge of the incident (Analytical Services Requester (ASR) or Incident Commander(IC)?

ASR/IC name:

ASR/IC phone number:

ASR/IC cell number:

ASR/IC fax number:

ASR/IC email address:

PRL point-of-contact name:

PRL phone number:

PRL cell number:

PRL fax number:

PRL email address:

Other contacts (utilities, labs, public health, law enforcement, etc.):

EPA/Public Information Officer (PIO) contact:

SITE CHARACTERIZATION INFORMATION

Ensure that this information is documented with the sample paperwork shipped to the laboratory:

Nature of threat:

How was the threat determined (who, what, when):

Threat investigation status, circle one: a) possible b) credible c) confirmed d) other - list here:

Incident information:

Has distribution system been shut down? a) yes b) no c) don't know

Is this incident law enforcement sensitive? a) yes b) no c) don't know

Any known exposure risks: a) contact b) inhalation c) ingestion d) other - specify:

Any known illnesses or injuries related to the incident:

Clinical data/results:

Results of field safety screening (if applicable, see Field Screening Results Table):

Results from other laboratories (if applicable, types of analytes tested, positive/negative results):

Additional information required for sample acceptance:

CHAIN OF CUSTODY REQUIREMENTS

Will routine chain of custody be sufficient or is the event law enforcement sensitive?

If law enforcement sensitive, will internal laboratory chain of custody be required?

Other special conditions or instructions:

SAMPLE SHIPMENTS

Laboratory shipping address:

Transport method (courier, overnight shipping):

Tracking number(s):

When will the samples arrive at the lab?

Other special conditions or instructions:

DATA REPORTING AND RECORDS RETENTION

Laboratories will follow their existing procedures regarding the following in the absence of alternative guidance or specific instructions:

Data turnaround for electronic and/or hardcopy results:

Data turnaround time for verbal results, if applicable:

Data format:

Method of data transmission:

Contact to report results to:

How will the laboratory be reimbursed?

Will routine sample and record retention be adequate?

How to respond to Freedom of Information Act (FOIA), state information access laws, or law enforcement requests?

Other special considerations:

ADDITIONAL INFORMATION OR COMMENTS

Appendix D Incident Communications Tracking Form for Laboratories

INSTRUCTIONS

This form is intended to be used by a responding laboratory to capture drinking water incident field information relevant to the laboratory response activity. A form should be completed for each investigation and expanded as necessary to fully document all information received from the field for each batch of samples received. If field data has been collected and reported on other forms, those form can be attached and referred to on this incident tracking form.

Incident Report to Laboratory

Site Name: _____
Date: _____
Time: _____
Reported By: _____
Contact Cell Number: _____

Type of facility:

☐ Source water ☐ Treatment plant ☐ Pump station
☐ Ground storage tank ☐ Elevated storage tank ☐ Finished water reservoir
☐ Distribution main ☐ Hydrant ☐ Service connection
☐ Other _____

Address: _____

Additional Site Incident Information: _____

INITIAL HAZARD ASSESSMENT

Initial hazard categorization

☐ Low hazard ☐ Chemical hazard
☐ Radiological hazard ☐ Biological hazard
☐ Unknown

If the initial hazard assessment indicates a chemical, radiological, or biological hazard (as described in RPTB Module 3, Section 4.1.3), then only teams trained to deal with such hazards should be sent to the site.

SITE CHARACTERIZATION TEAM

Name & Affiliation of Site Characterization/Sampling Team Leader:

_____

Contact Information: _____

Other Site Contacts

Organization _____ Name: _____
Organization _____ Name: _____
Organization _____ Name: _____
Organization _____ Name: _____

Representatives from other agencies:

☐ Local law enforcement ☐ Fire department ☐ HazMat
☐ US EPA ☐ FBI ☐ Other

COMMUNICATION PROCEDURES

Mode of communication:

☐ Phone ☐ 2-way radio ☐ Digital
☐ Facsimile ☐ Other _____

Reporting events:

☐ Upon arrival at site ☐ During approach ☐ Site entry
☐ After site evaluation ☐ After field testing ☐ Site exit
☐ Other _____

VERBAL FIELD SAFETY SCREENING INFORMATION (Written report to be included with COC and samples)

Y	Parameter[1]	Screen[2]	Instrument	Result	Comments
	Radiation	Both			
	Chlorine residual	Water			
	pH / conductivity	Water			
	Cyanide	Water			
	Volatile chemicals	Safety			
	Chemical weapons	Both			
	Biotoxins	Water			
	Pathogens	Water			

1. List the parameters that will be evaluated as part of field screening (examples are listed).
2. Screening may be conducted for safety, rapid water testing, or both.

Name of Field Screen Tech _____
Cell Phone Number _____

SAMPLES Taken and Lab Destination

Y	Analyte	No. Samples	Preservation	Destination Laboratory(s)
	Standard VOCs			
	Semi-volatiles			
	Quartenary nitrogen compounds			
	Cyanide			
	Carbamate pesticides			
	Metals/elements			
	Organometallic compounds			
	Cyanide			
	Radionuclides			
	Non-target VOCs			
	Non-target organic compounds			
	Non-target inorganic compounds			
	Immunoassays			
	Pathogens – culture			
	Pathogens – PCR			
	Water quality – bacteria			
	Water quality – chemistry			

Appendix F Field Testing Results Form

Date of Field Testing:		Site/Incident Name:		Field Tester:		Phone No.	
Parameter	**Units**	**Screen[1]**	**Meter/Kit ID[2]**	**Testing Location[3]**	**Testing Time[4]**	**Results[5]**	**Ref. Value[6]**

[1] Screening may be conducted for safety, rapid water testing, or both
[2] Report the unique identifier for the meter or kit used during screening
[3] Report the specific location where the field testing was conducted
[4] Report the specific time at which the test was performed
[5] Results of field testing should include replicate analysis where appropriate
[6] Results should be compared with a reference value, if available, to determine whether or not the levels detected pose a hazard

Appendix G Example of a Chain-of-Custody Form

Chain of Custody Form							
Site Name:			Sample Owner/Collector:				
Contact Information:			Signature				
Sample ID	Collection Date/Time (24 h)	Sample Location	Sample Type (Matrix)	Grab/ Composite	Preservative(s)	No./Type of Bottles	Comments
Matrix: DW = Drinking Water, RW = Reservoir Water, UW=Untreated Water, SD = Sediment, SL = Sludge, SO = Soil, SM = Misc. Solid Material							
Relinquished By:		Received by:		Date/Time:			
Relinquished By:		Received by:		Date/Time:			
Relinquished By:		Received by:		Date/Time:			
Relinquished By:		Received by:		Date/Time:			
Relinquished By:		Received by:		Date/Time:			
Dispatched by:	Date/Time:	Received by:	Date/Time:				
Method of Sample Transport							
Shipper:	Phone No.:	Shipper's Tracking No.:					

Attach additional pages as required.

Appendix J Close-out Action Checklist

Plan Elements and Procedures	Problem Issue?	Description of Issue	After-Action Plan Solutions
Laws and Authorities			
Minimum Qualifications for Participation			
Resource Management			
Form of Commitment to this Plan			
Planning			
Direction, Control, and Coordination			
Roles			
Quality Assurance Project Plans (QAPPs)			
Communications and Notification			
Health and Safety			
Sampling			
Sample Brokerage, Tracking, and Transport			
Sample Brokerage			
Sample Tracking			
Sample Transport			
Analysis			

Plan Elements and Procedures	Problem Issue?	Description of Issue	After-Action Plan Solutions
Basic Field/Safety Screening			
Rapid Laboratory Analysis			
Confirmatory Analysis			
Sample Disposal			
QA/QC			
Data Verification			
Data Reporting and Validation			
Secure Data Transfer and Storage			
Record Keeping			
Training			
Exercises, Evaluations, and Corrective Actions			
Finance and Administration			
Other			

Appendix N Short Form Quality Assurance Project Plan (QAPP) Template for Emergency Response Laboratory Services for Drinking Water Incidents

A Project Title and Participants

Project Name:	
Date:	
Lead Agency:	
Other Agencies:	

B Distribution List, Roles, and Approvals

Include names, organizations, roles, and telephone numbers of those individuals receiving copies of this QAPP. The Incident Commander/Analytical Services Requester, QA Officer, and Laboratory Manager(s) must sign on the lines below their names, signifying their approval of the document. Other recipients of the plan do not sign the document, but receive copies. (Add more rows to the table, or attach additional pages, as needed.)

Name	Organization	Role	Telephone Number/ e-mail
		Incident Commander/ Analytical Services Requester	
		QA Officer	
		Laboratory Manager	
		Laboratory Manager	

C Problem Definition

In the sections below, provide a brief description of the problem or the nature of the emergency response situation and describe how the data will be used (i.e., assess immediate threat to the water supply). Use tasking material provided by the Project Manager/OSC/Incident Commander, as appropriate.

C1 Problem Statement

C2 Intended Use of Data

D Response Timetable

In emergency response situations, it is critical that everyone involved understand the timeframes for response actions so that they can provide the needed data in time to make meaningful decisions. (Getting "perfect" data two days after the decision needs to be made is not helpful). Use the table below to describe the major activities that must take place and the dates and times by which they must occur. Use local time, or specify a time zone for each entry. (Add more rows to the table, as needed.)

Activity	Date and Time for Completion

E Parameters of Interest and Measurement Quality Objectives

E1 Matrices, parameters, and measurement type

Use the table below to identity the matrices, parameters (contaminants) of interest, and identify the nature of the measurements to be made. Parameters may be listed as broad classes of analytes (e.g., semivolatile organics) or specific suspected threats (e.g., kerosene), based on available information. If specific methods are to be employed, list them in the column that represents their capabilities (screening, semiquantitative, or quantitative), or simply mark the cell that corresponds to the type of measurement requested. (Add more rows to the table, as needed.)

Matrix	Parameter	Type of Measurement or Specific Method Required		
		Screening?	Semiquantitative?	Quantitative?*

**Mark the cell only; fill out the following table*

Matrix	Parameter	Quantitative Analysis				
		Project's Quantitation Limit**	Precision Require-ment**	Accuracy Require-ment**	Selected Method	Lab's Method Detection Limit

***Consult project/client provided documentation*

E2 Representativeness

Use this section to briefly describe how subsamples taken from sample containers are representative of the entire sample.

E3 Comparability

Use this section to identify any requirements for comparability of the results to data from other sources, including action limits, regulatory limits, health-based limits, or other measures used to judge the success of the project. For example, what units of measure are to be used (µg/L?, CFU/mL?, etc.) What value (if any) will "non-detects" be given for subsequent statistical analysis (e.g., zero, the MDL, treated as outliers)? What rounding rules and levels of significant figures are needed for calculations and reporting? If specific methods must be employed, list them here, as well as in Section E1 above.

E4 Completeness

Completeness is a measure of the number of valid measurements made as a percentage of samples collected. Use the table below to estimate the numbers of samples to be collected and analyzed for each parameter and to define the level of completeness required. The level of completeness may vary for each project, in that even one positive result may provide enough information to take action in some instances. (Add more rows to the table, as needed.)

Parameter	# Samples Anticipated	# Valid Results Required	Completeness (%)

F Sample Collection, Handling, and Transport Procedures

Use the section below to describe how samples will be collected, by whom, and how they will be handled and transported by the laboratory(ies). Identify any required sampling equipment and procedures consistent with the discussion in Section E2.

G Training and Certification Requirements

Use the section below to identify any training or certification requirements required for participants in the project (both organizations and individuals). Such requirements should be specific to the project and do not include routine training provided to all employees (e.g., ethics training or timekeeping training).

H Documentation and Records

Use the section below to briefly describe the documentation and other records that must be produced during the sample collection and analysis processes. If chain of custody is required, state that here. When describing analytical raw data, cite the analytical technique where practical (e.g., GC/MS raw data, including mass spectra and quantitation reports) as a means of describing the information. Indicate if there are requirements for electronic data versus hard copy. Specify the locations in which documentation and records will be retained, for what period, and by whom.

I Quality Control Requirements

The nature of emergency response situations changes the focus of many quality control operations, primarily because there may not be time to take corrective actions when QC acceptance criteria are not met (e.g., samples with poor surrogate recoveries may not be able to be rerun in time). Therefore, the focus of these QC operations may shift to identifying those critical aspects of the sampling, analysis, and data evaluation processes that must be considered, and establishing minimum requirements for each critical operation.

Use the three subsections below to identify all critical QC operations and checks for the sampling, analysis, and data evaluation processes. Where possible, establish minimum acceptance criteria, rather than acceptance windows (e.g., state that surrogate recovery must be at least 10%, rather than giving a range like 70–130%), based on your assessment of the importance of each QC check and its impact on the decision to be made (e.g., what risk of a decision error can you accept?).

I1 Laboratory QC Checks

I2 Data Evaluation Checks

J Instrument/Equipment Testing, Inspection, and Maintenance Requirements

Use the table below to identify the testing, inspection, and maintenance requirements associated with any of the laboratory equipment and instrumentation. List the equipment type (or name), the type of testing, inspection, and maintenance, and the required frequency. (Add more rows to the table, as needed). These requirements may be met through a laboratory's current quality systems as required by drinking water certification and method implementation in its state.

Equipment Type (or name)	Type of Testing, Inspection, and Maintenance	Required Frequency

K Calibration Requirements

Use the table below to identify the requirements for calibration any analytical instruments used in the laboratory. Describe the type of calibration (e.g., single-point) and the required frequency, whether during the project (e.g., daily, before each use) or overall (e.g., annually). These requirements may be met through a laboratory's current quality systems as required by drinking water certification and method implementation in its state.

Instrument	Type of Calibration	Frequency

L Inspection and Acceptance Requirements

Use this section to identify any inspection and acceptance requirements for supplies, reagents, or equipment that are critical to the successful completion of the emergency response, whether purchased or created in house. For example, identify those laboratory testing reagents that must be freshly prepared each day. If sampling equipment must be prepared in advance using specific procedures, describe the process for ensuring that such equipment is available and readily identifiable to field personnel. These requirements may be met through a laboratory's current quality systems as required by drinking water certification and method implementation in its state.

M Assessment and Response Actions

Use the section below to briefly describe how the results will be used to assess the situation and determine appropriate responses. The details should be consistent with the statement of the problem in Section C, the description of the parameters of interest and any associated limits in Section E, and QC requirements in Section I. Where practical, identify the person or persons making each assessment and those responsible for the responses, by name, organization, and role.

N Data Review, Validation, and Verification

In the context of this plan, data review refers to the process by which the person or organization generating primary data ensures that the results are correct and accurately represent what took place. "Self-inspection" is another term that has been used for this process. Data validation refers to those procedures used by an independent party to assess the validity of the results. The independent party may be another participant in the project (i.e., not part of the laboratory that generated the results), or an outside party whose sole responsibility is to validate the data. Data verification refers to the steps taken to ensure that the quality (or limitations) of any secondary data used in the project (secondary data being data which were not generated as part of the project, but taken from other sources, including literature, other projects, etc.).

The extent to which these review, validation, and verifications processes can be accomplished in an emergency response situation will vary. Some steps may be taken as the primary data are generated (e.g.,

some level of self-inspection by the laboratory staff), while others may be carried out retrospectively (after the project decisions have been made) as support for the overall project.

Use the section below to describe any procedures used to review data, validate results, and verify results, identifying the person or persons responsible for each process by name, organization, and role. Clearly indicate those procedures that will be carried out during the project and those that will be carried out later.

O Reports

Use this section to describe any anticipated reports or summaries of project activities. For reports of results that are needed to make decisions, identify the recipient (e.g., the project manager or on-scene coordinator), how the information will be transmitted (e.g., by telephone, facsimile, or email), and the timeframe. For summaries of project activities, or final reports, identify the persons or organizations responsible for generating each report, the intended audience, and any project personnel responsible for reviewing and approving the reports.