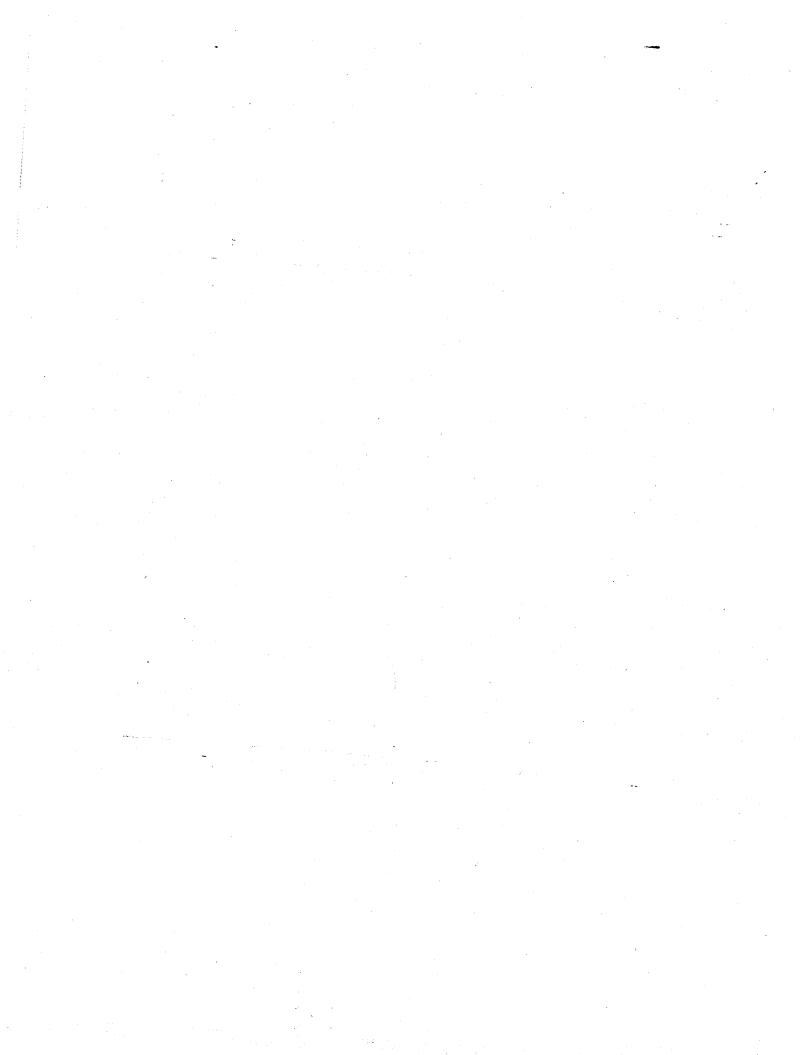
# New England States' Drinking Water Programs Quality Assurance Project Plan

Revision 2.3 August 12, 2002

Previous Versions: Rev. 1.0, Dec. 15, 2000 Rev. 2.0, Sept. 7, 2001 Rev. 2.1, Feb. 21, 2002 Rev. 2.2, March 28, 2002

This QAPP was prepared jointly by representatives of the Drinking Water Programs of the Six New England States with assistance from EPA New England.



#### **CONCURRENCE PAGE**

New England States' Drinking Water Programs
Quality Assurance Project Plan
Rev. 2.3, August 12, 2002

#### **PROGRAM DIRECTORS**

| Connecticut Department of Public Hea     | alth               | Gerald R. Iwan, F                     | Ph.D.   |
|------------------------------------------|--------------------|---------------------------------------|---------|
| en e |                    |                                       | •       |
|                                          | Signature          |                                       | Date    |
| lassachusetts Department of Enviror      | nmental Protection | David Terry                           |         |
|                                          | Signature          |                                       | Date    |
| laine Department of Human Services       |                    | Nancy Beardsley                       | ,       |
|                                          | Signature          |                                       | Date    |
| ew Hampshire Department of Enviro        | nmental Services   | Anthony Giunta                        |         |
|                                          | Signature          |                                       | Date    |
| Rhode Island Department of Health        |                    | June A. Swallow,                      | P.E.    |
|                                          | Signature          |                                       | Date    |
| ermont Department of Health              |                    | Jay L. Rutherford                     | l, P.E. |
|                                          | Signature          | · · · · · · · · · · · · · · · · · · · | Date    |
|                                          |                    |                                       |         |
| U.S. ENVIRONMI                           | ENTAL PROTECTION   | AGENCY                                |         |
| PA New England Associate Director        | for Drinking Water | Jane Downing                          |         |
|                                          | Signature          |                                       | Date    |
| PA New England Quality Assurance         | Manager            | Gerald Sotolongo                      | )<br>)  |
|                                          | Signature          |                                       | Date    |

# New England States' Drinking Water Programs Quality Assurance Project Plan Workgroup

| Members                        | Agency                                               |
|--------------------------------|------------------------------------------------------|
| Sandy Downie                   | Connecticut Department of Public Health              |
| Nancy Beardsley<br>Mike Corbin | Maine Department of Human Services                   |
| Chuck Larson<br>Isabel Collins | Massachusetts Department of Environmental Protection |
| Richard Thayer                 | New Hampshire Department of Environmental Services   |
| June Swallow                   | Rhode Island Department of Health                    |
| Jean Nicolai                   | Vermont Department of Environmental Conservation     |
| Art Clark<br>Ellie Kwong       | EPA New England                                      |

| Table of Contents          |               |         |  |  |
|----------------------------|---------------|---------|--|--|
| Subject                    | Worksheet No. | Page    |  |  |
| Cover page                 |               | 1       |  |  |
| Concurrence Page           |               | 1a      |  |  |
| Table of Contents          |               | 1b & 1c |  |  |
| Workgroup                  |               | 2       |  |  |
| Worksheets Title Pages     | 1             | 3 .     |  |  |
| Implementation             | 2             | 9       |  |  |
| Distribution Lists         | 3             | 13      |  |  |
| Sign-off Sheets            | 4             | 19      |  |  |
| Organizational Structure   | 5a ·          | 25      |  |  |
| Communication Pathways     | 5b            | 43      |  |  |
| Personnel Responsibilities | 6             | 49      |  |  |
| Special Training           | 7             | 57      |  |  |
| Planning Attendance        | 8a            | 66      |  |  |
| Description                | 8b-9a         | 67      |  |  |
| Contaminants of Concern    | 9b            | 100     |  |  |
| Field Quality Control      | 9c            | 130     |  |  |
| Analytical Services        | 9d            | 131     |  |  |
| Schedule                   | 10            | 133     |  |  |
| Performance Criteria       | 11            | 134     |  |  |
| Sampling Design            | 12a           | 135     |  |  |
| Sampling                   | 12b & 13      | 143     |  |  |
| Field Equipment            | 14 & 15       | 144     |  |  |
| Sample Handling            | 16            | 145     |  |  |
| Field Analysis             | 17, 18 & 19   | 146     |  |  |
| Lab Analysis               | 20            | 147     |  |  |
| Lab Instrumentation        | 21            | 148     |  |  |

|     | Table of Contents, con         | ntinued        |       |
|-----|--------------------------------|----------------|-------|
|     | Subject                        | Worksheet No.  | Page  |
|     | Field Sampling Quality Control | 22a & 22b      | 149   |
|     | Field Analysis Quality Control | 23a & 23b      | 150   |
|     | Lab QC                         | 24a & 24b      | 151   |
|     | Non-direct Measurements        | 25             | 152   |
| No. | Documents and Records          | 26             | 153   |
|     | Assessments                    | 27a, 27b & 27c | 154   |
| ٤   | Quality Assurance Reports      | 28             | . 155 |
|     | Data Evaluation                | 29a & 29b      | 156   |
|     | Data Usability                 | 30             | 157   |

Site Name/Project Name: CT Department of Public Health

Site Location: 410 Capitol Ave

Hartford, CT 06134

Title: CT-DW-QAPP Revision Number: 1

Revision Date: January 1, 2001

Page: 1 of 1

| Document Title: State of Connecticut Drinking Water Quality Assurance                   | Project Plan                              |
|-----------------------------------------------------------------------------------------|-------------------------------------------|
| Lead Organization (Agency, State, Tribe, Federal Facility, PRP, or Grantee):            | CT Department of Public Health (CT/DPH)   |
| Preparer's Name and Organizational Affiliation: Sandra Downie, Program I                | Developer, Water Supplies Section, CT/DPH |
| Preparer's Address and Telephone Number: 410 Capitol Ave., P.O. Box 3403 (860) 509-7333 | 08, MS #51WAT, Hartford, CT 06134         |
| Preparation Date (Day/Month/Year): January 1, 2001                                      |                                           |
| Investigative Organization's Project Manager:                                           |                                           |
|                                                                                         | Signature/Date                            |
|                                                                                         | Printed Name/Organization                 |
| Investigative Organization's Project QA Officer:                                        |                                           |
|                                                                                         | Signature/Date                            |
|                                                                                         | Printed Name/Organization                 |
| Lead Organization's Project Manager: Gerald R. Iwan, Ph.D                               |                                           |
| CT/DPH, Bureau of Regulatory Services, Div. of Environmental Health, W                  | Signature/Date Vater Supplies Section     |
|                                                                                         | Printed Name/Organization                 |
|                                                                                         |                                           |
| Approval Signature:                                                                     | ·                                         |
|                                                                                         | Signature/Date                            |
|                                                                                         | Printed Name/Title                        |
| Other Approval Signatures:                                                              | Approval Authority                        |
| outer Approvat digitatures.                                                             | Signature/Date                            |
|                                                                                         | Printed Name/Title                        |
| Document Control Number:                                                                |                                           |

## [4]

## EPA-NE QAPP Worksheet #1 - Rev. 10/99

Site Name/Project Name: MA DEP-DWP

Site Location: Massachusetts

Title: NE States DW QAPP Revision Number: 1.0

Revision Date: January 1, 2001

Page: of

| Document Title: Massachusetts Drink                                                | ing water Quality Ass   | urance Project Plan              | <b>1</b>                              |                             |
|------------------------------------------------------------------------------------|-------------------------|----------------------------------|---------------------------------------|-----------------------------|
| Lead Organization (Agency, State, Tri                                              | be, Federal Facility, P | RP, or Grantee): N               | AA Department o                       | of Environmental Protection |
| Preparer's Name and Organizational A                                               | ffiliation: Isabel Ram  | nirez, DEP-DWP                   |                                       |                             |
| Preparer's Address and Telephone Nur                                               | mber: One Winter St.    | , 6 <sup>th</sup> Floor, Boston, | MA 02108 T                            | el: (617) 574-6854          |
| Preparation Date (Day/Month/Year):                                                 | January 1, 2001         |                                  |                                       |                             |
| Investigative Organization's Project M                                             | anager:                 | •                                |                                       | Signature/Date              |
|                                                                                    |                         |                                  |                                       | Printed Name/Organization   |
| Investigative Organization's Project Quantum DEP, Office of Research and Standards |                         | Anastas                          | · · · · · · · · · · · · · · · · · · · | Signature/Date              |
| Lead Organization's Project Manager:                                               |                         |                                  |                                       | Printed Name/Organization   |
| DEP-DWP Program Director                                                           |                         |                                  |                                       | Signature/Date              |
|                                                                                    |                         |                                  |                                       | Printed Name/Organization   |
| Approval Signature:                                                                | .*                      |                                  |                                       |                             |
|                                                                                    |                         |                                  |                                       | Signature/Date              |
| -                                                                                  |                         |                                  |                                       | Printed Name/Title          |
| Other Approval Signatures:                                                         |                         |                                  |                                       | Approval Authority          |
|                                                                                    |                         |                                  |                                       | Signature/Date              |
| Document Control Number:                                                           |                         |                                  |                                       | Printed Name/Title          |

| Site Name/Project Name: Maine Drinking Water Program                     | Title: NE States DW QAPP                     |
|--------------------------------------------------------------------------|----------------------------------------------|
| Site Location: Maine                                                     | Revision Number: 1.0                         |
|                                                                          | Revision Date: 1/1/01                        |
|                                                                          | Page: of                                     |
|                                                                          |                                              |
| Document Title: State of Maine Drinking Water Quality Assurance Proj     | inst Plan                                    |
| Document Title. State of Mame Dinking Water Quanty Assurance Proj        | icu ridii                                    |
|                                                                          |                                              |
| Lead Organization (Agency, State, Tribe, Federal Facility, PRP, or Grant | tee): Maine Drinking Water Program           |
|                                                                          |                                              |
| Preparer's Name and Organizational Affiliation: Michael Corbin, Compl    | liance Manager, Maine Drinking Water Program |
|                                                                          | 3,                                           |
| Preparer's Address and Telephone Number: 11 State House Station, 157     | Capital St. Augusta Maina M223               |
|                                                                          | Capitol St., Augusta, Maine 04333            |
| (207) 287-2070                                                           |                                              |
| Preparation Date (Day/Month/Year): 01/01/01                              |                                              |
|                                                                          |                                              |
| Investigative Organization's Project Manager: Nancy Beardsley, Director  | r, Maine Drinking Water Program              |
|                                                                          | Signature/Date                               |
| <del></del>                                                              |                                              |
|                                                                          | Printed Name/Organization                    |
|                                                                          | Finited Name/Organization                    |
| Investigative Organization's Project QA Officer: Michael Corbin, Compl   | liance Manager, Maine Drinking Water Program |
|                                                                          | Signature/Date                               |
| <del></del>                                                              |                                              |
|                                                                          | D: 131 /0                                    |
|                                                                          | Printed Name/Organization                    |
| Lead Organization's Project Manager: Michael Corbin, , Compliance Ma     | anager Maine Drinking Water Program          |
| Lead Organization's Project Manager. Michael Corbin, , Compilance Ma     | Signature/Date                               |
| · · · · · · · · · · · · · · · · · · ·                                    | Signature/Date                               |
|                                                                          | <u> </u>                                     |
|                                                                          | Printed Name/Organization                    |
|                                                                          |                                              |
|                                                                          |                                              |
| Approval Signature:                                                      |                                              |
|                                                                          | Signature/Date                               |
|                                                                          |                                              |
|                                                                          | D : 4-1N/Ed-                                 |
|                                                                          | Printed Name/Title                           |
|                                                                          | ·                                            |
|                                                                          | Approval Authority                           |
| Other Approval Signatures:                                               | · · · · · · · · · · · · · · · · · · ·        |
|                                                                          | Signature/Date                               |
|                                                                          | -5. Marie 1997                               |
|                                                                          |                                              |
|                                                                          | Printed Name/Title                           |
| Document Control Number                                                  |                                              |

Site Name/Project Name: NH DES WD WSEB

Site Location: Concord, NH

Title: QAPP Title Page Revision Number: 2nd Draft Revision Date: 2/12/01

Page: 1 of 1

| Document Title: New Hampshire Water Supply Engineering Bureau's Quality Assurance Project Plan                                                                        |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Lead Organization (Agency, State, Tribe, Federal Facility, PRP, or Grantee): NH Department of Environmental Services, Water Division, Water Supply Engineering Bureau |
| Preparer's Name and Organizational Affiliation: Richard Thayer, NH DES WD WSEB, Sanitary Engineer II                                                                  |
| Preparer's Address and Telephone Number: PO Box 95, Concord, NH 03301 Tel.#: 603-271-2950                                                                             |
| Preparation Date (Day/Month/Year): 12 June 2000                                                                                                                       |
| Investigative Organization's Project Manager: Tony Giunta                                                                                                             |
| Signature/Dat                                                                                                                                                         |
| Tony Giunta, NH DES WD WSEB, Administrator                                                                                                                            |
| Printed Name/Organizatio                                                                                                                                              |
| Investigative Organization's Project QA Officer: Richard Thayer                                                                                                       |
| Signature/Dat                                                                                                                                                         |
| Richard Thayer, NH DES WD WSEB, Sanitary Engineer II                                                                                                                  |
| Printed Name/Organizatio                                                                                                                                              |
| Lead Organization's Project Manager: Tony Giunta                                                                                                                      |
| Signature/Dat                                                                                                                                                         |
| Tony Giunta, NH DES WD WSEB, Administrator                                                                                                                            |
| Printed Name/Organization                                                                                                                                             |
| Approval Signature:                                                                                                                                                   |
| Signature/Dat                                                                                                                                                         |
| Printed Name/Titl                                                                                                                                                     |
| Approval Authorit Other Approval Signatures:                                                                                                                          |
| Signature/Dat                                                                                                                                                         |
| Printed Name/Titl                                                                                                                                                     |
| Document Control Number:                                                                                                                                              |

Site Name/Project Name: Rhode Island Department of Health, Office of

Drinking Water Quality
Site Location: Rhode Island

Title: NE States DW QAPP Revision Number: List 1.0 Revision Date: 1/1/01

Page: of

| Document Title: Rhode Island Drinking Water Quality A     | ssurance Plan                          |                |                 |                  |
|-----------------------------------------------------------|----------------------------------------|----------------|-----------------|------------------|
| Lead Organization (Agency, State, Tribe, Federal Facility | y, PRP, or Grantee): Rhode             | e Island Depar | tment of Heal   | th               |
| Preparer's Name and Organizational Affiliation: June A.   | Swallow, P.E., Chief, Offi             | ce of Drinkin  | g Water Quali   | ty, RI HEALTH    |
| Preparer's Address and Telephone Number: 3 Capitol Hi     | II, Room 209, Providence,              | RI 02908 (4    | 01) 222-6867    |                  |
| Preparation Date (Day/Month/Year): January 1, 2001        |                                        |                |                 |                  |
| Investigative Organization's Project Manager:             |                                        |                |                 |                  |
|                                                           |                                        | •              |                 | Signature/Date   |
|                                                           |                                        |                | Printed Na      | ne/Organization  |
| Investigative Organization's Project QA Officer:          |                                        |                |                 |                  |
|                                                           |                                        |                |                 | Signature/Date   |
| Lead Organization's Project Manager: June A. Swallow,     | P.E., Chief, Office of Drin            | king Water Q   | puality, RI HE. | ALTH             |
|                                                           |                                        |                |                 | Signature/Date   |
|                                                           | ······································ |                | Printed Na      | ne/Organization  |
| Approval Signature:                                       |                                        |                |                 |                  |
|                                                           |                                        |                |                 | Signature/Date   |
|                                                           |                                        | ,              | <u>-</u>        |                  |
| Other Approval Signatures:                                |                                        |                | App             | proval Authority |
|                                                           |                                        |                |                 | Signature/Date   |
|                                                           | <u></u>                                |                | Pri             | nted Name/Title  |
| Document Control Number:                                  |                                        |                |                 |                  |

Site Name/Project Name:

Department of Environmental Conservation

Water Supply Division

Site Location: 103 South Main Street, Waterbury Vermont

Title: NE States DW QAPP

Revision Number: 1.0 Revision Date: 1/1/01

Page: of

| Document Title: Vermont Drinking Water Quality Assurance Project Plan                                                                                                 |                           |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------|
| Lead Organization (Agency, State, Tribe, Federal Facility, PRP, or Grantee): State of Vermont, Agency of Natural Resources, Department of Environmental Conservation. | , Water supply Division   |
| Preparer's Name and Organizational Affiliation: Jean M. Nicolai, DEC Water Supply Divisi                                                                              |                           |
| Preparer's Address and Telephone Number: 103 South Main Street Waterbury, VT 05671                                                                                    | (802)-241-3405            |
| Preparation Date (Day/Month/Year): January 1, 2001                                                                                                                    |                           |
| Investigative Organization's Project Manager:                                                                                                                         |                           |
|                                                                                                                                                                       | Signature/Date            |
|                                                                                                                                                                       | Printed Name/Organization |
| Investigative Organization's Project QA Officer:                                                                                                                      | Signature/Date            |
|                                                                                                                                                                       | Printed Name/Organization |
| Lead Organization's Project Manager: Jean M. Nicolai, Compliance and Certification Chie                                                                               |                           |
| DEC Water Supply Division                                                                                                                                             | Signature/Date            |
|                                                                                                                                                                       | Printed Name/Organization |
| Approval Signature:                                                                                                                                                   |                           |
|                                                                                                                                                                       | Signature/Date            |
|                                                                                                                                                                       | Printed Name/Title        |
|                                                                                                                                                                       | Approval Authority        |
| Other Approval Signatures:                                                                                                                                            | Signature/Date            |
|                                                                                                                                                                       | Printed Name/Title        |
| Document Control Number                                                                                                                                               |                           |

## 9

#### EPA-NE OAPP Worksheet #2 - Rev. 10/99

Site Name/Project Name: NE States' Drinking Water Programs Title: NE States DW QAPP Site Location: CT, MA, ME, NH, RI & VT **Revision Number: 1.0** Site Number/Code: Revision Date: January 1, 2001 **Operable Unit:** Page: of Contractor Name: **Contractor Number:** Contract Title: Work Assignment Number: Anticipated date of QAPP Implementation: January 1, 2001 1. Identify Guidance used to prepare QAPP: EPA New England Compendium of Quality Assurance, Oct. 1999 2. Identify EPA Program: Drinking Water 3. Identify approval entity: EPA-NE or State: EPA New England Quality Assurance Unit or other entity: 4. Indicate whether the QAPP is a generic program QAPP or a project specific QAPP. (underline one) Generic 5. List dates of scoping meetings that were held: 5/25/00, 6/22/00, 7/25/00, 9/7/00, 9/28/00, 10/19/00, 11/9/00 6. List title of QAPP documents and approval dates written for previous site work, if applicable: Title Approval Date 7. List organizational partners (stakeholders) and connection with EPA and/or State: The drinking water programs of the following state agencies worked with the EPA New England Regional Office to prepare this document: Connecticut Department of Public Health, Maine Department of Human Services, Massachusetts Department of Environmental Protection, New Hampshire Department of Environmental Services, Rhode Island Department of Health, Vermont Department of Health 8. List data users: EPA, the above state agencies, and the public. 9. If any required OAPP Elements (1-20), Worksheets and/or Required Information are not applicable the project, then circle the omitted QAPP Elements, Worksheets and Required Information on the attached Table. Provide an explanation for their exclusion below: Worksheets 14 & 15: No field equipment is used. All samples are collected as grab samples directly into sample containers. Worksheets 17, 18, 19, 23a & 23b: No field analyses are performed.

Worksheet 25: Non-direct measurements are not performed.

#### Table 1. Region I, EPA-NE QAPP Requirement Summarization

| (10 |
|-----|
| 110 |
|     |

| EPA QA/R-5<br>QAPP<br>ELEMENTS    | REQUIRED EPA-NE QAPP ELEMENTS<br>and CORRESPONDING EPA-NE QAPP<br>SECTIONS                                                                                                                                                   | EPA-NE<br>QAPP<br>Worksheet<br># | REQUIRED INFORMATION                                                                                                                                                                                                                                                         |  |  |  |
|-----------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|--|--|
| Project Management and Objectives |                                                                                                                                                                                                                              |                                  |                                                                                                                                                                                                                                                                              |  |  |  |
| Al                                | 1.0 Title and Approval Page                                                                                                                                                                                                  | 1                                | - Title and Approval Page                                                                                                                                                                                                                                                    |  |  |  |
| A2                                | <ul> <li>2.0 Table of Contents and Document Format</li> <li>2.1 Table of Contents</li> <li>2.2 Document Control Format</li> <li>2.3 Document Control Numbering System</li> <li>2.4 EPA-NE QAPP Worksheet #2</li> </ul>       | 2                                | - Table of Contents - EPA-NE QAPP Worksheet                                                                                                                                                                                                                                  |  |  |  |
| А3                                | 3.0 Distribution List and Project Personnel Sign-off Sheet                                                                                                                                                                   | 3<br>. 4                         | - Distribution List<br>- Project Personnel Sign-off Sheet                                                                                                                                                                                                                    |  |  |  |
| A4, A8                            | 4.0 Project Organization 4.1 Project Organizational Chart 4.2 Communication Pathways 4.2.1 Modifications to Approved QAPP 4.3 Personnel Responsibilities and Qualifications 4.4 Special Training Requirements/ Certification | 5a<br>5b<br>6                    | <ul> <li>Organizational Chart</li> <li>Communication Pathways</li> <li>Personnel Responsibilities and<br/>Qualifications Table</li> <li>Special Personnel Training Requirements<br/>Table</li> </ul>                                                                         |  |  |  |
| A5                                | <ul> <li>5.0 Project Planning/Project Definition</li> <li>5.1 Project Planning Meetings</li> <li>5.2 Problem Definition/Site History and<br/>Background</li> </ul>                                                           | 8a<br>8b                         | <ul> <li>Project Scoping Meeting Attendance Sheet with Agenda and other Project Planning Meeting Documentation</li> <li>Problem Definition/Site History and Background</li> <li>EPA-NE DQO Summary Form</li> <li>Site Maps (historical and present)</li> </ul>               |  |  |  |
| A6                                | 6.0 Project Description and Schedule 6.1 Project Overview 6.2 Project Schedule                                                                                                                                               | 9a<br>9b<br>9c<br>9d<br>10       | <ul> <li>Project Description</li> <li>Contaminants of Concern and Other Target<br/>Analytes Table</li> <li>Field and Quality Control Sample Summary<br/>Table</li> <li>Analytical Services Table</li> <li>System Designs</li> <li>Project Schedule Timeline Table</li> </ul> |  |  |  |
| A7                                | 7.0 Project Quality Objectives and Measurement Performance Criteria 7.1 Project Quality Objectives 7.2 Measurement Performance Criteria                                                                                      | 11a<br>11b                       | <ul> <li>Project Quality Objectives/Decision<br/>Statements</li> <li>Measurement Performance Criteria Table</li> </ul>                                                                                                                                                       |  |  |  |
| Measurement/Data Acquisition      |                                                                                                                                                                                                                              |                                  |                                                                                                                                                                                                                                                                              |  |  |  |
| B1                                | 8.0 Sampling Process Design 8.1 Sampling Design Rationale                                                                                                                                                                    | 12a<br>12b                       | <ul> <li>Sampling Design and Rationale</li> <li>Sampling Locations, Sampling and<br/>Analysis Method/SOP Requirements Table</li> <li>Sample Location Map</li> </ul>                                                                                                          |  |  |  |

|                                | T                                                                                                                                                                                                                                                                                                                                                                                                                         | T                                      |                                                                                                                                                                                                                                                                                                                                                              |
|--------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| EPA QA/R-5<br>QAPP<br>ELEMENTS | REQUIRED EPA-NE QAPP ELEMENTS<br>and CORRESPONDING EPA-NE QAPP<br>SECTIONS                                                                                                                                                                                                                                                                                                                                                | EPA-NE<br>QAPP<br>Worksheet<br>#       | REQUIRED INFORMATION                                                                                                                                                                                                                                                                                                                                         |
| B2, B6,<br>B7, B8              | <ul> <li>9.0 Sampling Procedures and Requirements</li> <li>9.1 Sampling Procedures</li> <li>9.2 Sampling SOP Modifications</li> <li>9.3 Cleaning and Decontamination of Equipment/Sample Containers</li> <li>9.4 Field Equipment Calibration</li> <li>9.5 Field Equipment Maintenance, Testing and Inspection Requirements</li> <li>9.6 Inspection and Acceptance Requirements for Supplies/ Sample Containers</li> </ul> | 13<br>12b<br>14                        | <ul> <li>Sampling SOPs</li> <li>Project Sampling SOP Reference Table</li> <li>Sampling Container, Volumes and Preservation Table</li> <li>Field Sampling Equipment Calibration Table</li> <li>Cleaning and Decontamination SOPs</li> <li>Field Equipment Maintenance, Testing and Inspection Table</li> </ul>                                                |
| В3                             | 10.0 Sample Handling, Tracking and Custody Requirements 10.1 Sample Collection Documentation 10.1.1 Field Notes 10.1.2 Field Documentation Management System 10.2 Sample Handling and Tracking System 10.3 Sample Custody                                                                                                                                                                                                 | 16                                     | Sample Handling, Tracking and Custody SOPs     Sample Handling Flow Diagram     Sample Container Label (Sample Tag)     Chain-of-Custody Form and Seal                                                                                                                                                                                                       |
| B4, B6,<br>B7, B8              | <ul> <li>11.0 Field Analytical Method Requirements</li> <li>11.1 Field Analytical Methods and SOPs</li> <li>11.2 Field Analytical Method/SOP</li></ul>                                                                                                                                                                                                                                                                    | 17 18 19                               | <ul> <li>Field Analytical Methods/SOPs</li> <li>Field Analytical Method/SOP Reference<br/>Table</li> <li>Field Analytical Instrument Calibration<br/>Table</li> <li>Field Analytical Instrument/Equipment<br/>Maintenance, Testing and Inspection Table</li> </ul>                                                                                           |
| B4, B6,<br>B7, B8              | 12.0 Fixed Laboratory Analytical Method Requirements 12.1 Fixed Laboratory Analytical Methods and SOPs 12.2 Fixed Laboratory Analytical Method/SOP Modifications 12.3 Fixed Laboratory Instrument Calibration 12.4 Fixed Laboratory Instrument/ Equipment Maintenance, Testing and Inspection Requirements 12.5 Fixed Laboratory Inspection and Acceptance Requirements for Supplies                                      | 20<br>21                               | <ul> <li>Fixed Laboratory Analytical Methods/SOPs</li> <li>Fixed Laboratory Analytical Method/SOP<br/>Reference Table</li> <li>Fixed Laboratory Instrument Maintenance<br/>and Calibration Table</li> </ul>                                                                                                                                                  |
| B5                             | 13.0 Quality Control Requirements 13.1 Sampling Quality Control 13.2 Analytical Quality Control 13.2.1 Field Analytical QC 13.2.2 Fixed Laboratory QC                                                                                                                                                                                                                                                                     | 22a<br>22b<br>23a<br>23b<br>24a<br>24b | Sampling - Field Sampling QC Table - Field Sampling QC Table cont. Analytical - Field Analytical QC Sample Table - Field Analytical QC Sample Table cont Field Screening/Confirmatory Analysis Decision Tree - Fixed Laboratory Analytical QC Sample Table - Fixed Laboratory Analytical QC Sample Table - Fixed Laboratory Analytical QC Sample Table cont. |

| EPA QA/R-5<br>QAPP<br>ELEMENTS | REQUIRED EPA-NE QAPP ELEMENTS<br>and CORRESPONDING EPA-NE QAPP<br>SECTIONS                                                                                                                                                                                                                                                                                  | EPA-NE<br>QAPP<br>Worksheet | REQUIRED INFORMATION                                                                                                                             |
|--------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|
| В9                             | 14.0 Data Acquisition Requirements                                                                                                                                                                                                                                                                                                                          | 25                          | - Non-Direct Measurements Criteria and Limitations Table                                                                                         |
| A9, B10                        | <ul> <li>15.0 Documentation, Records and Data Management</li> <li>15.1 Project Documentation and Records</li> <li>15.2 Field Analysis Data Package Deliverables</li> <li>15.3 Fixed Laboratory Data Package Deliverables</li> <li>15.4 Data Reporting Formats</li> <li>15.5 Data Handling and Management</li> <li>15.6 Data Tracking and Control</li> </ul> | 26                          | <ul> <li>Project Documentation and Records Table</li> <li>Data Management SOPs</li> </ul>                                                        |
|                                | Assessment                                                                                                                                                                                                                                                                                                                                                  | Oversight                   |                                                                                                                                                  |
| Cl                             | <ul> <li>16.0 Assessments and Response Actions</li> <li>16.1 Planned Assessments</li> <li>16.2 Assessment Findings and Corrective<br/>Action Responses</li> <li>16.3 Additional QAPP Non-Conformances</li> </ul>                                                                                                                                            | 27a<br>27b<br>27c           | <ul> <li>Assessment and Response Actions</li> <li>Project Assessment Table</li> <li>Project Assessment Plan</li> <li>Audit Checklists</li> </ul> |
| C2                             | 17.0 QA Management Reports                                                                                                                                                                                                                                                                                                                                  | 28                          | - QA Management Reports Table                                                                                                                    |
|                                | Data Validation                                                                                                                                                                                                                                                                                                                                             | and Usability               | 7                                                                                                                                                |
| D1                             | 18.0 Verification and Validation Requirements                                                                                                                                                                                                                                                                                                               |                             | - Validation Criteria Documents *                                                                                                                |
| D2                             | 19.0 Verification and Validation Procedures                                                                                                                                                                                                                                                                                                                 | 29a<br>29b<br>29c           | <ul><li>Data Evaluation Process</li><li>Data Validation Summary Table</li><li>Data Validation Modifications</li></ul>                            |
| D3                             | 20.0 Data Usability/Reconciliation with<br>Project Quality Objectives                                                                                                                                                                                                                                                                                       | 30                          | - Data Usability Assessment                                                                                                                      |

<sup>\*</sup> Include Data Validation Criteria Document as an attachment to the QAPP if Region I, EPA-NE Data Validation Functional Guidelines for Evaluating Environmental Analyses will not be used for validating project data.

Note: Required project-specific information should be provided in tabular format, as much as practicable. However, sufficient written discussion in text format should accompany these tables. Certain sections, by their nature, will require more written discussion than others. In particular, Section 8.0 should provide an in-depth explanation of the sampling design rationale and Sections 18-20 should describe the procedures and criteria that will be used to verify, validate and assess data usability.

List peo 'ho will receive approved QAPP, QAPP revisions, addenda and/or amendments. (Refer to QAPP Manual Section 3.0 for guidance.)

CT

Ime: CI-DW-QAPP Revision Number: 1

Revision Date: January 1, 2001

Page: 1 of 1

| QAPP Recipients         | Title                                        | Organization                                                           | Telephone Number | Document<br>Control Number |  |
|-------------------------|----------------------------------------------|------------------------------------------------------------------------|------------------|----------------------------|--|
| Cynthia Denne           | Bureau Chief                                 | Department of Public Health, Bureau of Regulatory Services             | 860-509-7406     |                            |  |
| Thomas Furgalack        | Division Director                            | Department of Public Health, Division of<br>Environmental Health (DEH) | 860-509-7293     |                            |  |
| Gerald Iwan, Ph.D.      | Section Chief                                | Department of Public Health, DEH, Water<br>Supplies Section            | 860-509-7333     |                            |  |
| Sandra Downie           | Planning Analyst                             | Department of Public Health, DEH, Water Supplies Section               | 860-509-7333     |                            |  |
| Katherine Kelley, Ph.D. | Director                                     | CT Dept. of Public Health Laboratory                                   | 860-509-8500     |                            |  |
| Danuta Medynski         | Quality Assurance/Quality Control<br>Chemist | CT Dept. of Public Health Laboratory                                   | 860-509-8546     |                            |  |
| Mark Sceery             | CT PWSS Coordinator                          | Environmental Protection Agency, Region 1                              | . 617-918-1559   |                            |  |
|                         |                                              |                                                                        |                  |                            |  |
|                         |                                              |                                                                        |                  |                            |  |
|                         |                                              |                                                                        |                  |                            |  |
|                         | · ·                                          |                                                                        |                  |                            |  |
|                         |                                              |                                                                        |                  |                            |  |
|                         |                                              |                                                                        |                  |                            |  |



MA

Title: MA-DWP-QAPP
Revision Number: 3.0

Revision Date: October 11, 2001

Page:

| QAPP Recipients  | Title                                        | Organization                              | Telephone Number     | Document<br>Control Number |  |
|------------------|----------------------------------------------|-------------------------------------------|----------------------|----------------------------|--|
| Dave Terry       | DWP Program Director                         | MA Department of Environmental Protection | (617) 292-5529       |                            |  |
| Yvette dePeiza   | WQA Manager                                  | MA Department of Environmental Protection | (617) 292-5857       |                            |  |
| Douglas Paine    | DWP Point of Contact-Western Regional Office | MA Department of Environmental Protection | (413) 755-2281       |                            |  |
| Paula Caron      | DWP Point of Contact-Central Regional Office | MA Department of Environmental Protection | (508) 792-7650 x3719 |                            |  |
| Chester Masel    | DWP Section Chief-Northeast Regional Office  | MA Department of Environmental Protection | (978) 661-7760       |                            |  |
| Laurence Dayian  | DWP Section Chief-Southeast Regional Office  | MA Department of Environmental Protection | (508) 946-2769       |                            |  |
| Nicholas Anastas | QA Officer                                   | MA Department of Environmental Protection | (617) 556-1157       |                            |  |
| Arthur Clark     | EPA Project Manager                          | US EPA-NE                                 | (617) 918-8374       |                            |  |
| Ellie Kwong      | EPA Project Manager                          | US EPA-NE                                 | (617) 918-1592       |                            |  |
|                  |                                              |                                           |                      |                            |  |
|                  |                                              |                                           |                      |                            |  |
|                  |                                              |                                           |                      |                            |  |
|                  |                                              |                                           |                      |                            |  |
|                  |                                              |                                           |                      |                            |  |
|                  |                                              |                                           |                      |                            |  |



ME

Title:

Revision Number: Revision Date:

Page: of

| QAPP Recipients  | Title                                                                          | Organization                                             | Telephone Number<br>(207) | Document<br>Control Number |
|------------------|--------------------------------------------------------------------------------|----------------------------------------------------------|---------------------------|----------------------------|
| Nancy Beardsley  | cy Beardsley DWP Manager Division of Health Engineering Drinking Water Program |                                                          | 287-5674                  |                            |
| Michael Corbin   | Compliance Manager                                                             | Division of Health Engineering Drinking Water Program    | 287-8403                  |                            |
| Jack Krueger     | Chief of Lab Operations                                                        | Health & Environmental Testing Lab                       | 287-2727                  |                            |
| Dick French      | QA/QC Officer                                                                  | Health & Environmental Testing Lab                       | 287-2727                  |                            |
| Roger Crouse     | Field Services Manager                                                         | Division of Health Engineering Drinking Water Program    | 287-5684                  |                            |
| Geraldine Poulin | Data Management                                                                | Division of Health Engineering Drinking Water Program    | 287-8412                  |                            |
| Lindy Moceus     | Rule Coordinator                                                               | Division of Health Engineering Drinking Water Program    | 287-8402                  |                            |
| Jeff Folger      | Rule Coordinator                                                               | Division of Health Engineering Drinking Water Program    | 287-5682                  |                            |
| Dana Ivers       | Rule Coordinator                                                               | Division of Health Engineering Drinking Water Program    | 287-6472                  |                            |
| Scott Whitney    | Rule Coordinator                                                               | Division of Health Engineering<br>Drinking Water Program | 287-8487                  |                            |
|                  |                                                                                |                                                          |                           |                            |
|                  |                                                                                |                                                          |                           |                            |
|                  |                                                                                |                                                          |                           |                            |
|                  |                                                                                |                                                          |                           |                            |
|                  |                                                                                |                                                          |                           |                            |
|                  |                                                                                |                                                          |                           |                            |
|                  | ·                                                                              |                                                          |                           |                            |



NH

Title:

Revision Number: Revision Date:

Page: of

| QAPP Recipients Title |                          | Organization     | Telephone Number | Document<br>Control Number |  |
|-----------------------|--------------------------|------------------|------------------|----------------------------|--|
| Tony Giunta           | Administrator            | NHDES-WSEB       | 603-271-0655     |                            |  |
| Pat Bickford          | Director                 | NHDES-Laboratory | 603-271-3233     |                            |  |
| Ricahrd Thayer        | Sanitary Engineer        | NHDES-WSEB       | 603-271-2950     |                            |  |
| Judy Maloney          | Hydrogeologist           | NHDES-WSEB       | 603-271-3303     |                            |  |
| James Gill            | Civil Engineer           | NHDES-WSEB       | 603-271-2449     |                            |  |
| Laurie Cullerot       | Information Tech Manager | NHDES-IRMU       | 603-271-2954     |                            |  |
|                       |                          |                  | ·                |                            |  |
|                       |                          |                  |                  |                            |  |
|                       |                          |                  |                  |                            |  |
|                       |                          |                  |                  |                            |  |
|                       |                          |                  |                  |                            |  |
|                       |                          |                  |                  | _                          |  |
|                       |                          |                  |                  |                            |  |
|                       |                          |                  |                  |                            |  |
|                       |                          |                  |                  |                            |  |
|                       |                          |                  |                  | · ·                        |  |
|                       |                          |                  |                  | ``                         |  |



RI

Title:

Revision Number: Revision Date:

Page: of

| QAPP Recipients                                        | Title                                                              | Organization                                                                                     | Telephone Number | Document<br>Control Number |
|--------------------------------------------------------|--------------------------------------------------------------------|--------------------------------------------------------------------------------------------------|------------------|----------------------------|
| June Swallow, P.E.                                     | Chief, Office of Drinking Water<br>Quality                         | Rhode Island Department of Health, 3 Capitol<br>Hill Rm 209, Providence, RI 02908                | 401-222-6867     |                            |
| Engineering Services, Office of Drinking Water Quality | Supervising Sanitary Engineer                                      | See above                                                                                        | See above        |                            |
| Sampling Services, Office of Drinking Water Quality    | Chief Sanitarian                                                   | See above                                                                                        | See above        |                            |
| Gregory Hayes                                          | Associate Director, Division of Laboratories                       | Rhode Island Department of Health, Chapin<br>Laboratory, 50 Orms Street, Providence, RI<br>02908 | 401-222-5600     |                            |
| Ewa King                                               | Quality Assurance Officer                                          | See above                                                                                        | See above        |                            |
| Ellie Kwong                                            | EPA-NE Rhode Island State Office<br>Drinking Water Program Officer | EPA-NE                                                                                           | 617-918-1592     |                            |
|                                                        |                                                                    |                                                                                                  |                  |                            |
|                                                        |                                                                    |                                                                                                  |                  |                            |
|                                                        |                                                                    |                                                                                                  |                  |                            |
|                                                        |                                                                    |                                                                                                  | ·                |                            |
|                                                        | ·                                                                  |                                                                                                  |                  |                            |
|                                                        |                                                                    |                                                                                                  | ·                |                            |
|                                                        |                                                                    | ,                                                                                                |                  |                            |
|                                                        |                                                                    |                                                                                                  |                  | ·                          |
|                                                        |                                                                    |                                                                                                  |                  |                            |
|                                                        |                                                                    |                                                                                                  |                  | =                          |

VT

Title: Vermont Revision Number: Revision Date: Page: of

| QAPP Recipients | Title                              | Organization                        | Telephone Number | Document<br>Control Number |
|-----------------|------------------------------------|-------------------------------------|------------------|----------------------------|
| Jean Nicolai    | Compliance and Certification Chief | Dept. of Environmental Conservation | 802-241-3405     |                            |
| George Mills    | Certification Officer              | Dept. of Health Laboratory          | 802-863-7612     |                            |
| Burt Wilcke     | Laboratory Director                | Dept. of Health Laboratory          | 802-863-7335/    |                            |
| Mary Celotti    | Laboratory Administrator           | Dept. of Health Laboratory          | 802-863-7335     |                            |
|                 |                                    |                                     |                  |                            |
|                 |                                    |                                     |                  |                            |
|                 |                                    |                                     |                  |                            |
|                 |                                    |                                     |                  |                            |
|                 |                                    |                                     |                  |                            |
|                 |                                    |                                     |                  |                            |
|                 |                                    |                                     |                  |                            |
|                 |                                    |                                     |                  |                            |
|                 |                                    |                                     |                  |                            |
|                 |                                    |                                     |                  |                            |
|                 |                                    |                                     |                  |                            |
|                 |                                    |                                     |                  |                            |
|                 |                                    |                                     |                  |                            |
|                 |                                    |                                     |                  |                            |
|                 |                                    |                                     |                  | · ·                        |

Copies of form must be signed by project personnel from each organization to indict that they have read the QAPP and will implement the QAPP as prescribed. Each organization must keep the original signed "Sheets" in their organization's project file and forward copies of the signed "Sheets" to the Lead Organization. (Refer to QAPP Manual Section 3.0 for guidance.)

Title: CT-DW-QAPP Revision Number: 1

Revision Date: January 1, 2001

Page: 1 of 1

## **Project Personnel Sign-Off Sheet**

| Project Personnel       | Title                                             | Telephone<br>Number | Signature                | Date QAPP Read  | QAPP Acceptable as Written |
|-------------------------|---------------------------------------------------|---------------------|--------------------------|-----------------|----------------------------|
| Gerald Iwan, Ph.D.      | Section Chief, Water Supplies Section             | 860-509-7333        |                          |                 |                            |
| Raymond Jarema          | Section Supv., Water Supplies Section             | 860-509-7333        |                          |                 |                            |
| Katherine Kelley, Ph.D. | Director, CT Dept. of Public Health<br>Laboratory | 860-509-8500        |                          |                 |                            |
| Danuta Medynski         | Quality Assurance/Quality Control<br>Chemist      | 860-509-8546        |                          |                 |                            |
|                         |                                                   |                     |                          |                 |                            |
|                         | State personnel will sign this                    | sheet upon compl    | etion of appropriate sam | pling training. |                            |
|                         |                                                   |                     |                          |                 |                            |
|                         |                                                   |                     |                          |                 |                            |
|                         |                                                   |                     |                          |                 |                            |
|                         |                                                   |                     |                          |                 |                            |
|                         |                                                   |                     |                          |                 |                            |
|                         | <del></del>                                       |                     |                          |                 |                            |
|                         |                                                   | .*                  |                          |                 |                            |



Copies of this form must be signed by project personnel from each organization to indicate that they have read the QAPP and will implement the QAPP as prescribed. Each organization must keep the original signed "Sheets" in their organization's project file and forward copies of the signed "Sheets" to the Lead Organization. (Refer to *QAPP Manual Section 3.0* for guidance.)

MA

Title: NE States DW QAPP Revision Number: 1.0

Revision Date: January 1, 2001

Page: of

## **Project Personnel Sign-Off Sheet**

| Project Personnel | Title                                            | Telephone Number          | Signature           | Date QAPP Read | QAPP Acceptable as Written |
|-------------------|--------------------------------------------------|---------------------------|---------------------|----------------|----------------------------|
| Oscar Pancorbo    | DEP Lab Director                                 | (978) 682-5237x314        |                     |                |                            |
| Robert Serabian   | DEP Lab Quality assurance Officer                | (978) 682-5237x322        |                     |                |                            |
| Damon Guterman    | DEP Lab Liaison/Monitoring Compliance<br>Officer | (617) 574-6811            |                     |                | ·                          |
|                   |                                                  |                           |                     |                |                            |
|                   |                                                  |                           |                     |                |                            |
|                   | State personnel will sign this sh                | neet upon completion of a | ppropriate sampling | training       |                            |
|                   |                                                  |                           |                     |                |                            |
|                   |                                                  |                           |                     |                |                            |
|                   |                                                  |                           |                     | -              |                            |
| ,                 |                                                  |                           |                     |                | ·                          |
|                   |                                                  |                           |                     |                |                            |
|                   |                                                  |                           |                     |                |                            |
|                   |                                                  |                           |                     |                | ·                          |

Copies of this form must be signed by project personnel from each organization to indicate that they have read the QAPP and will implement the QAPP as prescribed. Each organization must keep the original signed "Sheets" in their organization's project file and forward copies of the signed "Sheets" to the Lead Organization. (Refer to *QAPP Manual* Section 3.0 for guidance.)

ME

Title: NE States DW QAPP Revision Number: 1.0 Revision Date: 01/01/01

Page: of

## **Project Personnel Sign-Off Sheet**

| Organization:                           |                               |                     |           |                |                            |
|-----------------------------------------|-------------------------------|---------------------|-----------|----------------|----------------------------|
| Project Personnel                       | Title                         | Telephone<br>Number | Signature | Date QAPP Read | QAPP Acceptable as Written |
| Jack Krueger                            | Lab Director                  | 287-2727            |           |                |                            |
| Richard French                          | Lab Quality Assurance Officer | 287-2727            |           |                |                            |
| Michael Corbin                          | ME DWP, Compliance Manager    | 287-8403            |           |                |                            |
|                                         |                               |                     |           |                |                            |
|                                         |                               |                     |           |                |                            |
|                                         |                               |                     |           |                |                            |
|                                         |                               |                     |           |                |                            |
|                                         |                               |                     |           |                |                            |
|                                         |                               |                     |           |                |                            |
|                                         |                               |                     |           |                |                            |
|                                         |                               |                     |           |                |                            |
|                                         |                               |                     |           |                |                            |
|                                         |                               |                     |           |                |                            |
| - · · · · · · · · · · · · · · · · · · · |                               |                     |           |                |                            |
|                                         |                               |                     |           |                |                            |

Copies of this form must be signed by project personnel from each organization to indicate that they have read the QAPP and will implement the QAPP as prescribed. Each organization must keep the original signed "Sheets" in their organization's project file and forward copies of the signed "Sheets" to the Lead Organization. (Refer to QAPP Manual Section 3.0 for guidance.)

NH

Title: NE States, DW QAPP, NH

Revision Number:1 Revision Date:10/10/01

Page:1 of 1

## **Project Personnel Sign-Off Sheet**

| Project Personnel | Title                          | Telephone<br>Number | Signature | Date QAPP Read | QAPP Acceptable as Written |
|-------------------|--------------------------------|---------------------|-----------|----------------|----------------------------|
| Tony Giunta       | DES, WSEB Administrator        | 606-271-0655        |           |                |                            |
| Patricia Bickford | DES, Laboratory Administrator  | 603-271-3233        |           |                |                            |
| Vincent Perelli   | DES, Quality Assurance Manager | 603-271-8989        |           |                |                            |
|                   |                                |                     |           |                |                            |
|                   |                                |                     |           |                |                            |
|                   |                                |                     |           |                |                            |
|                   |                                |                     |           |                |                            |
|                   |                                |                     |           |                |                            |
|                   |                                |                     |           |                |                            |
|                   |                                |                     |           |                |                            |
|                   |                                |                     |           |                |                            |
|                   |                                |                     |           |                |                            |
|                   |                                |                     |           |                |                            |
|                   |                                |                     |           | 7:             |                            |
|                   |                                |                     |           |                |                            |

Copies of this form must be signed by project personnel from each organization to indicate that they have read the QAPP and will implement the QAPP as prescribed. Each organization must keep the original signed "Sheets" in their organization's project file and forward copies of the signed "Sheets" to the Lead Organization. (Refer to *QAPP Manual* Section 3.0 for guidance.)

RI

Title:

Revision Number: Revision Date:

Page: of

## **Project Personnel Sign-Off Sheet**

| Project Personnel                    | Title                                       | Telephone Number | Signature | Date QAPP Read | QAPP Acceptable as<br>Written |
|--------------------------------------|---------------------------------------------|------------------|-----------|----------------|-------------------------------|
| Gregory Hayes, PhD                   | Associate Director of Health (Laboratories) | 401-222-5554     |           | Ä              |                               |
| Ewa King, PhD                        | Quality Assurance Officer                   | 401-222-1999     |           |                |                               |
| Donna Pytel                          | Chief Sanitarian                            | 401-222-7783     |           |                |                               |
| State personnel will sign this sheet | upon completion of appropriate sampling     | training.        |           |                |                               |
|                                      |                                             |                  |           |                |                               |
|                                      |                                             |                  |           |                |                               |
|                                      |                                             |                  |           |                |                               |
|                                      |                                             |                  |           |                |                               |
|                                      |                                             |                  |           |                |                               |
|                                      |                                             |                  |           |                |                               |
|                                      |                                             |                  |           |                |                               |
|                                      |                                             |                  |           |                |                               |
|                                      |                                             |                  |           |                |                               |
|                                      |                                             |                  |           |                |                               |
|                                      |                                             |                  |           |                |                               |

Copies of this form must be signed by project personnel from each organization to indicate that they have read the QAPP and will implement the QAPP as prescribed. Each organization must keep the original signed "Sheets" in their organization's project file and forward copies of the signed "Sheets" to the Lead Organization. (Refer to *QAPP Manual* Section 3.0 for guidance.)

VT

Title:
Revision Number:
Revision Date:
Page: of

## **Project Personnel Sign-Off Sheet**

| Project Personnel    | Title                                  | Telephone<br>Number | Signature | Date QAPP Read | QAPP Acceptable as Written |
|----------------------|----------------------------------------|---------------------|-----------|----------------|----------------------------|
| Jay Rutherford, P.E. | Director, Water Supply Division        | 802-241-3434        |           |                |                            |
| Jean M. Nicolai      | Compliance and Certification Chief     | 802-241-3405        |           |                |                            |
| Burton Wilcke, Ph.D. | Director, Health Surveillance Division | 802-863-7246        |           |                |                            |
| Mary Celotti         | Laboratory Administrator               | 802-863-7570        |           |                | . ,                        |
| Karen Cutler         | Quality Assurance Officer              | 802-863-7551        |           |                |                            |
|                      |                                        |                     |           |                |                            |
|                      |                                        |                     |           | ·              | ·                          |
|                      |                                        |                     |           |                |                            |
|                      |                                        |                     | × 1       |                |                            |
|                      |                                        |                     |           |                |                            |
|                      |                                        |                     |           |                |                            |
|                      |                                        |                     |           |                |                            |
| <u> </u>             |                                        |                     |           |                |                            |
|                      |                                        |                     |           |                |                            |
|                      |                                        |                     |           |                |                            |

