

**Quality System Assessment of  
New England Interstate Water Pollution Control Commission**  
Final Report - February 10, 2009

## **Introduction**

EPA Order 5360.1 A2, *Policy and Program Requirements for the Mandatory Agency-wide Quality System*, mandates that all organizations conducting environmental data and technology programs performed for EPA through EPA-funded extramural agreements shall have a quality system in operation to support these programs. Each quality system must be described in an approved Quality Management Plan (QMP) that details the policies and procedures, roles and responsibilities, and quality activities used to plan, implement and assess the effectiveness of the organization's quality system. EPA New England is responsible for providing periodic oversight and assessment of the implementation of those quality systems within New England.

## **Purpose, Background and Scope**

At a quality assurance roundtable meeting with EPA New England's state partners in 2005, EPA New England Quality Assurance Manager (QAM) Gerry Sotolongo announced that the Quality Assurance Unit would begin reviewing the performance of the quality systems of the states' environmental protection programs to determine conformance with their quality management plans (QMPs). Several non-profit organizations which receive EPA funds to perform environmental projects were also reviewed. The initial quality system assessment (QSA) of the New England Interstate Water Pollution Control Commission (NEIWPCC) quality system was performed in January 2006 as part of the Quality Assurance Unit's first round of QSAs. Another QSA was performed on January 21, 2009, as part of the second round.

The primary purpose of this recent QSA was to evaluate the implementation and effectiveness of the NEIWPCC's quality system. Criteria included:

- Quality requirements specified in EPA financial assistance regulations.
- The components of the NEIWPCC quality system, which were documented in the current QMP, which was approved on December 12, 2006.

The NEIWPCC and EPA New England agreed, prior to this QSA, upon the schedule, agenda and content of each interview. For this assessment, selected documents of the quality system were reviewed.

The specific issues addressed during the assessment included:

- Compliance with quality assurance requirements of EPA financial assistance regulations.
- Conformance with the approved NEIWPCC Quality Management Plan.
- Implementation of the quality system at the program level. (The Wastewater and On-Site Programs Division was reviewed this time. The Drinking Water<sup>1</sup> and Water Quality Programs were reviewed in 2006.)
- Review of quality assurance practices and QAPP review practices.
- Review of documentation practices, e.g., records handling and document control.

## **Executive Summary**

The NEIWPCC has fully integrated its quality management system into the operation of its programs. This was demonstrated in 2006 during our assessment of programs within the Drinking Water<sup>1</sup> and Water Quality Divisions, and was demonstrated again during this year's assessment of the Wastewater and On-Site Programs Division. The key quality components continue to be the Quality Assurance Program Manager (QAPM) and the Quality Management Steering Committee (QMSC), which is made up of the QAPM, the Executive Director, the Deputy Director, the three Division Directors and the Office Manager. The QAPM and QMSC work together to conduct an effective, agency-wide quality system which is supported by the entire staff.

The assessment determined that the reviewed programs are in compliance with the quality assurance requirements of EPA financial assistance regulations and the NEIWPCC QMP. The NEIWPCC has implemented its QMP in all programs. Numerous conformances are noted in the report. The assessment team also identified a nonconformance: two instances in which grant recipients submitted QAPPs for review without informing NEIWPCC that data collection had already been completed.

## **Types of Assessment Results**

*Conformance:* a finding which demonstrates agreement with standards, specifications and documented practices.

*Nonconformance:* a finding which identifies a deviation from standards, specifications and documented practices. It may be either a deficiency or a weakness. Whenever a nonconformance is identified, corrective action is warranted.

*Observation:* a finding which identifies a condition which, while not a nonconformance, suggests action which may improve an aspect of the quality system. Corrective actions are not required for observations.

## **Assessment Process**

Assessment procedures were developed by the EPA New England QA Unit. Candidate programs and personnel to be interviewed were jointly agreed upon by EPA and the NEIWPCC. The specific procedures used to conduct this QSA are described below.

1. *Assessors.* The assessment team included the following members of the EPA New England QA Unit: Arthur Clark (team leader) and Vicki Maynard.
2. *Documents reviewed.* In preparation for the QSA the assessment team reviewed the following documents both before and during the on-site assessment:
  - a. *Annual Status Report and Quality Management Plan Review*, October 2008.
  - b. *Annual Status Report and Quality Management Plan Review*, September 2007.
  - c. *Annual Status Report and Quality Management Plan Review*, September 2006.

- d. *Guide for Development and Approval of Quality Assurance Project Plans*, by the NEIWPC, Rev. 1.0, March 2006
  - e. *Investigation of Nutrient Removal Mechanisms of a Constructed Gravel Wetland Used for Stormwater Control in a Northern Climate*, Sept. 7, 2007; and the field assessment report for this project dated October 28, 2008.
  - f. *New England Interstate Water Pollution Control Commission Quality Management Plan*, Rev. No. 3, December 2006.
  - g. *Recording of Suspended Sediment Transport in the Upper Hudson/Mohawk Rivers*, by G. Wall, USGS New York Water Science Center (undated; reviewed December 2006).
  - h. *West Warwick Odor Control Project*, by Bowker & Associates, Inc., March 29, 2007.
3. *Personnel interviewed.* The following NEIWPC staff persons were interviewed during the assessment. In preparation for these interviews, separate checklists were developed to facilitate them.
- Quality Assurance Program Manager (Mike Jennings)
  - Quality Management Steering Committee. (See Attachment A, Item 1, for a list of QMSC members. All were present.)
  - Non supervisory personnel: Susy King (Water Quality Program ) & John Murphy (Wastewater & On-Site Programs)
4. *Criteria.* The criteria for this assessment were based on the following policies:
- *EPA Guidance on Assessing Quality Systems*, EPA QA/G-3, March 2003.<sup>2</sup>
  - *EPA Requirements for Quality Management Plans*, EPA QA/R-2, March 2001.
  - *EPA Requirements for Quality Assurance Project Plans*, EPA QA/R-5, March 2001.
  - *Implementation of Quality Assurance Requirements for Organizations Receiving EPA Financial Assistance.*
  - *NEIWPC Quality Management Plan*, Rev. 3, December 2006.
  - *Policy and Program Requirements for the Mandatory Agency-wide Quality System*, EPA CIO 2105.0 (formerly EPA Order 5360.1 A2) May 2000.

## Assessment Results

### Conformances:

1. The Quality Management Steering Committee, the Quality Assurance Program Manager and the entire staff work very well together in implementing and sustaining the quality system described in the QMP. Communication among the staff is facilitated by monthly meetings which alternate between QMSC meetings and full staff meetings. Our interviews confirmed that the personnel interviewed are aware of the QMP requirements.
2. Each year all employees complete self-assessment questionnaires which determine their awareness of the QMP and their levels of involvement in environmental monitoring projects.

3. Field assessments of environmental monitoring activities are now conducted at a frequency of 10%, and an assessment form has been developed to formalize the documentation procedure.
4. All NEIWPCCC personnel are required to attend an annual staff meeting. Quality assurance training is given at almost every meeting.
5. The Human Resource Manager discusses the QMP at every job interview and includes a copy of the QMP with every formal offer of employment.
6. The QAPM is an active and valued participant in the quarterly EPA New England Quality Assurance Roundtables.

Nonconformance:

1. The assessment team found two instances where QAPPs were submitted to the NEIWPCCC for review and approval after data collection activities had been performed. In one situation this was discovered before the QAPP review was performed, and the NEIWPCCC documented why the review would not be done in this situation.<sup>3</sup> In the second situation, the QAPP had been reviewed and approved by EPA and NEIWPCCC before anyone became aware that sampling had been completed.<sup>4</sup>

Observation:

1. The team noted that the QAPM has limited experience in performing assessments of environmental monitoring activities and has offered him the opportunity to accompany Charlie Porfert, a field assessor for the EPA New England Quality Assurance Unit, when Charlie performs a future field assessment.

**Attachment A**  
**DEP Personnel in Attendance**

1. Opening and closing briefings and QMSC interview.
  - Beth Card, Division Director, Water Quality Program
  - Tom Groves, Division Director, Wastewater and On-Site Programs
  - Mike Jennings, Quality Assurance Program Manager
  - Pam Jordan, Office Manager
  - Ron Poltak, Executive Director
  - Susan Sullivan, Deputy Director
  - Becky Weidman, Division Director, Water Resource Protection Program
  
2. Quality Assurance Program interview
  - Mike Jennings, QA Program Manager
  
3. Water Quality Program interview regarding the Hudson River QAPP
  - Beth Card, Division Director
  - Susy King
  
4. Wastewater and On-Site Programs interview
  - Tom Groves, Director
  
5. Wastewater and On-Site Programs regarding the Odor Control QAPP
  - John Murphy

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<sup>1</sup> The scope of the Drinking Water Division's responsibilities was expanded to include issues such as underground storage tanks and climate change; it was renamed the Water Resource Protection Division.

<sup>2</sup> Each status report was accompanied by a list of QAPPs reviewed during the year.

<sup>3</sup> *Recording of Suspended Sediment Transport in the Upper Hudson/Mohawk Rivers*, by G. Wall, USGS New York Water Science Center (undated; reviewed December 2006).

<sup>4</sup> *West Warwick Odor Control Project*, by Bowker & Associates, Inc., March 29, 2007.