

**QUALITY MANAGEMENT PLAN**  
**HAZARDOUS SITE CLEANUP DIVISION**

January 2016

Karen Melvin, Acting Director  
Hazardous Site Cleanup Division

Laura Mohollen, Chief  
Technical Support Branch  
Quality Assurance Coordinator



CONCURRENCES AND APPROVALS

Laura Mohollen, Chief Technical Support Branch  
Technical Support Branch (3HS41)  
HSCD Quality Assurance Coordinator

Signature: Laura Mohollen

Date: 12/15/15

Paul Leonard, Associate Director  
Office of Federal Facility Remediation and Site Assessment (3HS10)

Signature: Paul Leonard

Date: 12/14/15

Kristine Matzko, Acting Associate Director  
Office of Superfund Site Remediation (3HS20)

Signature: Kristine Matzko

Date: 12/10/2015

Bonnie Gross, Associate Director  
Office of Preparedness and Response (3HS30)

Signature: Bonnie Gross

Date: 12/18/15

Peter Ludzia, Acting Associate Director  
Office of Technical and Administrative Support (3HS40)

Signature: Peter Ludzia

Date: 12/16/15

Stacie Driscoll, Associate Director  
Office of Brownfields and Outreach (3HS50)

Signature: Stacie Driscoll

Date: 12/21/15

Joan Armstrong, Associate Director  
Office of Enforcement (3HS60)

Signature: Joan Armstrong

Date: 12/21/15

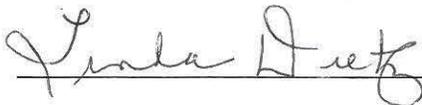
**APPROVAL FOR THE HAZARDOUS SITE CLEANUP DIVISION**

Karen Melvin, Acting Director  
Hazardous Site Cleanup Division (3HS00)

Signature: 

Date: DEC 29 2015

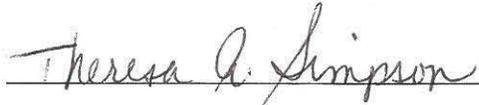
Linda Dietz, Acting Deputy Director  
Hazardous Site Cleanup Division (3HS00)

Signature: 

Date: 12/22/15

**APPROVAL FOR REGION III**

Terry Simpson, Region III Quality Assurance Manager  
Environmental Assessment and Innovation Division (3EA00)

Signature: 

Date: 1/29/16

## QUALITY MANAGEMENT PLAN

### Hazardous Site Cleanup Division

#### Introduction

The Hazardous Site Cleanup Division (HSCD) Quality Management Plan (QMP) has been prepared in accordance with Chapter 3 of the US EPA Quality Manual for Environmental Programs (CIO 2105-P-01-0, May 2000).

This QMP identifies the mission and roles and responsibilities of personnel in the HSCD with regard to quality assurance (QA), quality management (QM), communications structure and the measures of effectiveness of the HSCD. Components of the Division's Quality System are also addressed.

HAZARDOUS SITE CLEANUP DIVISION  
QUALITY MANAGEMENT PLAN

Contents

- I. Management and Organization
  - A. Mission
  - B. Quality Assurance Policy and Position
  - C. HSCD Organization
  - D. Organization Chart
  - E. QA/QM Roles and Responsibilities
  - F. Dispute Resolution
  
- II. Quality System Components
  - A. Quality Management Plan
  - B. Systematic Planning Process
  - C. Quality Assurance Project Plans
  - D. Standard Operating Procedures
  - E. Data Quality Assessments
  - F. Training Plans
  - G. Technical Systems Audits
  - H. Quality System Assessments
  
- III. Personnel Qualifications and Training
  
- IV. Procurement of Items and Services
  
- V. Documents and Records
  
- VI. Computer Hardware and Software
  
- VII. Planning
  
- VIII. Implementation of Work Processes
  
- IX. Assessment and Response
  
- X. Quality Improvement

## I. MANAGEMENT AND ORGANIZATION

### A. Mission

The HSCD conducts and oversees assessment, remedial, and removal activities at hazardous waste sites in US EPA's Region III. The Division is responsible for the development and management of the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) Program and the implementation of Section 311 of the Clean Water Act (CWA).

In support of the CERCLA Program, the Division conducts and/or coordinates the assessment and investigation of waste sites and other potential response actions. It also directs the preparation of remedial action plans for Superfund sites in Region III. The Division is responsible for the preparation and review of detailed technical remedial investigations, feasibility studies, final remedial measure design(s) and other necessary activities designed to mitigate threats to human health and the environment.

In support of Section 311 of the CWA, the Division is responsible for the implementation of the Regional and sub-Regional Contingency Plans for combating spillage of oil and hazardous materials in cooperation with the US Coast Guard and state and local agencies. The Division conducts and coordinates cooperating agency and industry responses to oil and hazardous material spills pursuant to the requirements of the CWA and CERCLA/Superfund Amendments and Reauthorization Act, including containment and cleanup actions, assistance to enforcement investigations and assessment of environmental damage. In addition, the Division is responsible for the implementation of compliance monitoring for the Oil Prevention Program, Risk Management Program, and the Emergency Planning and Community Right to Know Act (EPCRA) program by conducting inspections, monitoring compliance of the regulations, pursuing enforcement actions, and coordinating with various federal, state and local partners.

### B. Quality Assurance Policy and Position

The QA/QM goals of the Division are to ensure that all environmental data collected, evaluated or used including that generated by contractors, states, and other funding recipients, will be scientifically valid, of known and documented precision, accuracy, completeness, representativeness and comparability, and, where appropriate, legally defensible. Specifically, it is the policy of the Division that:

- a. All parts of the Division as well as extramural sources that generate environmental data as defined by Section A.1.a of the Region 3 QMP will develop and implement QA programs that comply with the EPA Order CIO 2105.0; EPA Quality Manual for Environmental Programs CIO 2105-P-01-0; and EPA QA Field Activities Procedure CIO 2105-P-02.0.
- b. Data quality information developed with environmental data will be documented and available as requested for purposes of audits;
- c. Intended data uses will be defined before data collection begins, so that appropriate QA measures may be included. The determination of this level of data quality shall also consider the prospective data needs of secondary

- users. Data Quality Objectives (DQOs) will be established to ensure the utility of environmental data for its intended use. The intended data uses, level of quality, specific QA activities, and data acceptance criteria needed to meet the data quality needs of these uses will be described in each project or activity's Quality Assurance Project Plan (QAPP);
- d. All projects that generate environmental data, including data collected from extramural sources, will have an approved QAPP and QMP in place, as defined by Section A.8.c of the Region III QMP, before field sampling or inspections begin. Additionally, all projects using existing data (i.e., data that was collected for other purposes or from other sources than the project objectives) will have an approved QAPP in place prior to data use. The QAPPs will be reviewed by the Office of Analytical Services and Quality Assurance (OASQA) and approved by the Project Manager (For the purposes of this QMP, Remedial Project Managers (RPMs), On-Scene Coordinators (OSCs), Site Assessment Managers (SAMs), and Compliance Inspectors will be referred to generally as "Project Managers.");
  - e. QA activities will be designed in the most cost-effective fashion possible without compromising DQOs.

C. Hazardous Site Cleanup Division Organization

HAZARDOUS SITE CLEANUP DIVISION

The HSCD Programs, under the supervision of the Division Director, are responsible for all managerial and programmatic functions of the Superfund Program in Region III. The Superfund Program administers CERCLA and the Superfund Amendments and Reauthorization Act of 1986 (SARA). The Division is also responsible for the Regional implementation activities of the SARA Title III Chemical Emergency Preparedness and Prevention (CEPP) programs and carries out the Regional Oil Program pursuant to the Oil Pollution Act (OPA) of 1990.

The Division consists of six Offices: Federal Facility Remediation and Site Assessment; Superfund Site Remediation; Technical and Administrative Support; Preparedness and Response; Brownfields and Outreach; and Enforcement.

Office of Federal Facility Remediation and Site Assessment

The Office consists of two Branches: the National Priorities List (NPL)/Base Realignment and Closure (BRAC) Federal Facilities Branch and the Site Assessment and Non-NPL Federal Facilities Branch. The NPL/BRAC Federal Facilities Branch is responsible for the development and implementation of CERCLA and SARA activities associated with compliance and cleanup of federal facilities listed on the NPL; the Site Assessment and Non-NPL Federal Facilities Branch is responsible for similar activities at federal facilities not listed on the NPL and at formerly used defense sites. The Site Assessment and Non-NPL Federal Facilities Branch is also responsible for screening hazardous waste sites for possible listing on the NPL.

a. NPL/BRAC Federal Facilities Branch. The Branch prepares and negotiates Section 120 Interagency Agreements (IAG) with other Federal Facilities and state agencies for Remedial Investigation/Feasibility Study (RI/FS) and Remedial Design/Remedial Action. It also oversees the investigation and cleanup of federal facilities listed on the NPL and implements the requirements of the BRAC Program for the Region. The Project Managers in this Branch manage the Regional Oversight Contract (ROC) contractors that support the federal facilities program's activities.

b. Site Assessment and Non-NPL Federal Facilities Branch. The Branch is responsible for hazardous waste site discovery, assessment, investigation, and ranking of sites for the NPL. The Branch also manages the oversight of investigation and cleanup of non-NPL Federal Facilities and formerly used defense sites. This Branch manages state cooperative agreements and performs oversight of State pre-remedial programs. The Project Managers in this Branch perform Brownfields assessments at targeted sites identified by EPA, states and local communities, including review of Brownfields sampling and QA plans to ensure compliance with appropriate requirements.

### Office of Superfund Site Remediation

The Office is responsible for the development and implementation of CERCLA and SARA remedial programs for sites throughout the Region and manages the Superfund monetary expenditures at remedial action sites. The Office maintains cooperative relationships with the states and oversees the implementation of Superfund state contracts and cooperative agreements with the states. The Office consists of three Branches, organized geographically: Eastern Pennsylvania (PA) Remedial Branch; Western PA and Maryland (MD) Remedial Branch; and Delaware (DE), Virginia (VA), West Virginia (WV) Remedial Branch.

a. Eastern PA Remedial Branch: The Branch is responsible for the Superfund remedial response actions at NPL sites located generally in the part of Pennsylvania served by Regions 1 and 2 of the Pennsylvania Department of Environmental Protection (PADEP) and for coordinating with those regional offices. Specific responsibilities include: directing the preparation of remedial action plans for Superfund sites, preparing and reviewing technical site investigation and feasibility studies, evaluating final remedial measures, directing cleanup construction, and other necessary activities to address threats to human health and the environment. Project Managers in this Branch also oversee contractors that support the remedial program's activities, such as the Remedial Action Contracts (RACs), and oversee State activities at NPL sites that are undertaken through EPA state cooperative agreements and contracts. Enforcement activities include conducting negotiations with Potentially Responsible Parties (PRPs) for taking the lead at NPL sites. Five-year-reviews of sites where waste was left in place are also performed in this Branch.

b. Western PA and MD Remedial Branch: The Branch is responsible for Superfund remedial response actions at NPL sites generally located in the part of PA served by Regions 3, 4, 5, and 6 of PADEP and at sites in MD. The Branch also has the lead for coordinating with those PADEP Offices and the State of MD. The Branch has the same specific responsibilities as the Eastern PA Remedial Branch.

c. DE, VA, WV Remedial Branch. The Branch is responsible for Superfund remedial response actions at NPL sites in DE, VA and WV and for coordinating with these states on remedial actions. The Branch has the same specific responsibilities as the Eastern PA Branch.

#### Office of Preparedness and Response

The Office is responsible for the development and implementation of the Regional Emergency Response and Removal Programs under CERCLA and OPA, as well as response and preparedness activities for Homeland Security and natural disasters. The Office also has lead responsibility for operating and maintaining the Regional Response Center, providing a 24-hour emergency spill notification network to facilitate Regional response activities relating to oil and hazardous material spills, hazardous air pollutant incidents, citizens' reports, pesticides accidents, and radionuclide incidents. The Office consists of three branches: two response branches which are organized geographically and the Preparedness and Support Branch.

a. Eastern Response Branch The Branch is responsible for emergency response and time critical removal actions under CERCLA/SARA and emergency response actions under Section 311 of the CWA in Eastern PA (generally characterized as PADEP Regions 1, 2, and 3), MD, DE, and the District of Columbia. Specific responsibilities include: performing removal assessments and initiating emergency response operations at sites; coordinating and directing efforts on-scene; initiating time critical removal operations at NPL and non-NPL sites; conducting and coordinating responses to oil and hazardous materials spills; and, monitoring cleanups for compliance with enforcement-related conditions where PRPs have taken the lead at removal sites.

b. Western Response Branch: The Branch is responsible for emergency response and time critical removal actions under CERCLA/SARA and emergency response actions under Section 311 of the CWA in Western PA (generally characterized by PADEP regions 4, 5, and 6), VA and WV. The Branch has the same specific responsibilities as the Eastern Response Branch.

c. Preparedness and Support Branch: The Branch is responsible for developing, coordinating and implementing responses for both traditional oil and chemical spills, and for natural disasters and counterterrorism. The Branch also is responsible for the SARA Title III preparedness program. The Branch provides contract management support to the Office. Specific responsibilities include: maintaining the Regional Response Center, ensuring a timely spill notification process, maintaining the readiness of the alternate Regional Response Center at the Boothwyn Field Office, developing and updating the Regional Contingency Plan, and, in cooperation with the US Coast Guard, state and Federal agencies, conducting regular meetings of the Region III Regional Response Team. The Branch manages the Office's contracts, including the Emergency and Remedial Response Services (ERRS) contract, the Superfund Technical Assistance and Response Team (START) contract, and the Equipment Management contracts.

#### Office of Technical and Administrative Support

The Office provides scientific, technical and information management support for the Division. The Office provides a wide range of services, including administering Superfund contracts, grants and interagency agreement (IAGs), managing the Records Room, and providing

support for risk assessment and hydrogeology for site assessment, remedial, enforcement, Brownfields, outreach and federal facilities site activities. The Office consists of two Branches: the Technical Support Branch and the Administrative Support Branch.

a. Technical Support Branch: The Branch provides technical and scientific support to the program branches in the Office of Superfund Site Remediation, the Office of Preparedness and Response, and Office of Federal Facility Remediation and Site Assessment. Specific responsibilities include: performing toxicological reviews for issues relating to human health risk, conducting hydrogeological investigations for ground water contamination, evaluating ecological risks, performing technical reviews of remedial investigations, feasibility studies, records of decisions and remedial designs.

b. Administrative Support Branch: The Branch is responsible for providing oversight of contracts, grants and cooperative agreements used for Superfund enforcement, federal facilities, state program support and community relations. It also provides information management and Local Area Network (LAN) system support to the Division and manages the Records Room. Specific responsibilities include: administering Superfund contracts for technical support, including RACs, ROC and the Enforcement Support Services Contract (ESSC), managing the Superfund Enterprise Management System (SEMS) and the Region III waste data system on the LAN (WASTELAN), developing cooperative agreements with Region III states, and developing interagency agreements with other Federal agencies.

#### Office of Brownfields and Outreach

The Office manages the Region's Brownfields and Land Revitalization programs. The Office also provides community involvement support to the remedial, removal, and federal facility programs, manages Freedom of Information Act (FOIA) requests and includes the Regional Public Liaison (formerly known as the Ombudsman). The Office also serves as the point of contact for the Division's work with the Region's State environmental agencies. The Office consists of two branches: the Brownfields and Land Revitalization Branch, and the Community Involvement and Outreach Branch.

a. Brownfields and Land Revitalization Branch: The Branch manages the Division's Brownfields activities, including awarding and oversight of grants, outreach, and the coordination of site-specific Brownfields assessments. The Branch manages the Division's land revitalization program, including implementation of the Revitalization Action Plan and the Agency's Revitalization Agenda.

b. Community Involvement and Outreach Branch: The Branch is responsible for ensuring that Region III meets the public involvement requirements of the Superfund Program, and provides support to the Brownfields and land revitalization programs. The Branch makes contact with the media at Superfund sites and keeps them informed of cleanup status. The Branch also manages the Division's FOIA response program and administers the Superfund Technical Assistance Grants given to communities.

## Office of Enforcement

The Office consists of two Branches, the Cost Recovery Branch, which conducts potentially responsible party searches to assure recovery of Superfund money spent at removal and remedial sites, and the Oil and Prevention Branch, which conducts compliance monitoring and enforcement activities.

a. Cost Recovery Branch. The Branch's principal responsibility is to assure the recovery of Superfund money spent at removal and remedial Superfund sites by managing the cost recovery program. The Branch also collects evidence to determine the viability and liability of PRPs for the Division's projects, documents costs incurred by EPA to ensure recovery of moneys spent and provides support to the Office of Regional Council for cases in litigation or nearing litigation.

b. Oil and Prevention Branch. The Branch is responsible for compliance monitoring and enforcement activities associated with Section 311 of the Clean Water Act, Oil Prevention regulations, Section 112(r)(1) and (7) of the Clean Air Act, Risk Management Program, and Sections 302-312 of the Emergency Planning and Community Right to Know Act and Section 103 of the Comprehensive Environmental Response Compensation and Liability Act (CERCLA). These activities include planning and conducting on-site inspections to determine compliance with the regulations, review of prevention and response plans, and providing technical assistance to regulated entities and experts. It should be noted that no sampling activities occur during these inspections.

### D. Organizational Chart

Refer to Appendix A for the HSCD current organization chart.

### E. QA/QM Roles And Responsibilities

The overall responsibility for approving and implementing the Division's QMP rests with the office of the Division Director. Assisting in this effort are HSCD's Quality Assurance Coordinator (the Chief of the Technical Support Branch, in the Office of Technical and Administrative Support) and the other managers and supervisors in the Division. As outlined in Section A.3.i. of Region III's QMP it is the QAC's responsibility to develop and update the Division's QMP and to monitor its implementation.

All six Offices in the Division have a QA contact, who assists the Project Managers with data quality issues and helps ensure that the Division QMP is implemented during all site activities. The six Office QA Contacts are presented in Appendix B.

The HSCD works, where applicable, with the QA Staff of the Environmental Assessment and Innovation Division (EAID) to ensure that Agency, Region, Division, and project-specific QA requirements are met. The QA Staff is located in EAID's Office of Analytical Services and Quality Assurance (OASQA), in Ft. Meade, MD. The QA Staff responds to the HSCD's QA needs by resolving technical problems, reviewing QA/QM documents, answering requests for guidance or assistance and assuring that Quality System requirements are integrated into the overall US EPA contract, grant and IAG processes.

As described in Section A.3.c of the Regional QMP Project Managers in the Remedial and Federal Facilities Branches of the HSCD are responsible for ensuring that Agency and project-specific QA requirements are met on individual projects. Project Managers have the authority and responsibility for preparing and reviewing project specific documents and transmitting documents to EAID and to Regional technical experts for review. OSCs, SAMs, Work Assignment Managers (WAMs), and Brownfields Project Officers have similar responsibilities to work internally within EPA and with EPA contractors to coordinate laboratory scheduling and data review activities and ensure that project-specific QA requirements are met on individual projects.

Every removal, remedial and potential remedial site that is addressed by the Division has an individual Project Manager:

- i. For Site Assessment activities, the Project Manager is the SAM. After the planning process has been completed the SAM reviews and approves sampling plans for Preliminary Assessments/Site Investigations (PA/SI) if there is already an approved “master” QAPP for site assessment work. Each PA/SI report contains a detailed review and discussion of the quality of the data collected.
- ii. For Remedial activities (including Federal Facilities), the Project Manager is the RPM. The RPM reviews and approves the Sampling and Analysis Plan (SAP), which may include the project QA material, or the QAPP document itself. The RPM uses the recommendations of the OASQA review memo from the QA Staff in this approval process. The RPM will sign the cover sheet of the SAP or QAPP, indicating that it has been reviewed and accepted by EPA for site activities. This process is described in the March 6, 1997 memorandum from the HSCD Director, “New Sampling and Analysis Plan Approval Procedures” and the February 12, 2003 memo, “Planning for Successful Sampling and Analysis Activities.” RPMs are also responsible for labeling the “final” SAP/QAPP for the site file, ensuring that fund and enforcement field work is conducted according to this documentation, and attending appropriate QA training.
- iii. For Removal activities, each site is assigned an OSC. The OSC has the broad responsibility to ensure that the proper sampling and QA functions are performed during an emergency response. For removal assessments and sampling in support of removal actions, a Field Sampling Plan (FSP) is created and approved by the OSC. The Office of Preparedness and Response has a designated QA contact to assist the OSC in carrying out these responsibilities. OASQA’s laboratory and QA staff may be contacted to provide assistance, if needed.
- iv. For Project Managers who also manage contracts, grants and IAGs, they must also ensure that appropriate QA requirements are in place for sampling activities that are supported by EPA funding, including “master” or “generic” QAPPs from state and local governments and/or contractors.
- v. In addition to these traditional Superfund project activities, the Brownfields program has added another group of projects to the Division’s list of responsibilities. The Project Officers for the Brownfields projects report to the

Chief of the Brownfields and Land Revitalization Branch. Brownfields grant recipients are required to prepare QAPPs as a standard condition of their funding agreement and the Project Officers will review site-specific sampling plans before environmental samples are collected. Brownfields grant recipients should use Region 3's Brownfields QAPP template (Interim Final, March 2001) and Site-Specific SAP template (Draft Interim Final August 1999). EAID's QA Staff can assist the Project Officers in evaluating the grant recipient's Project Plan and determining if an individual sampling plan needs to be reviewed.

- vi. The regulatory program has added another group of projects to the Division's list of responsibilities. Compliance Inspectors for the regulatory programs report to the Chief of the Oil and Prevention Branch. Prior to conducting any on-site inspections, Compliance Inspectors develop a Health & Safety Plan that identifies such things as the name and address of the facility, type of facility, applicable safe work practices, applicable level of PPE, and the location of the nearest police station and hospital. The Health & Safety plans are reviewed by the Chief of the Oil & Prevention Branch. The Oil & Prevention Branch compliance inspectors will follow programmatic SOPs for all inspection activities, including enforcement activities. In addition, contractors may perform inspections on behalf of the EPCRA 302-312/CERCLA 103 program. Contractors are required to develop Health and Safety Plans prior to conducting any on-Site inspections.

#### F. Dispute Resolution

In order to resolve disputes related to QA as efficiently as possible, the Region will strive to resolve the issue at the lowest administrative level. As described in Section A.5 of the Regional QMP, the dispute resolution process will begin when either disagreeing party declares an issue to be irresolvable and sends written correspondence to the other party, defining the disputed issue. All parties shall make every effort to resolve disputes through discussion and negotiation. Should agreement not be reached at this level, the issue will be directed to the Divisional QAC. If the issue is not resolved, it will be directed to the Regional Quality Assurance Manager (RQAM). If necessary, the RQAM will work to resolve the problem with the Senior Management Representative to the Regional Quality Council. The resolving officials will document the resolution and provide it to the disputing parties.

## II. QUALITY SYSTEM COMPONENTS

The Quality System is designed to implement the goal of obtaining useable, defensible data of known quality. To this end, the major components of the Division's Quality System include:

- Quality Management Plans
- Systematic Planning Process
- Quality Assurance Project Plans
- Data Quality Assessments

- Training Plans
- Technical System Audits
- Standard Operating Procedures
- Quality System Assessments

Each of these components is addressed below.

A. Quality Management Plan (QMP)

This QMP has been prepared for the HSCD in accordance with Chapter 3 of the US EPA Quality Manual for Environmental Programs (CIO 2105-P-01-0, May 2000) and is generally valid for five years from date of approval. The QMP will be reviewed and approved by the RQAM. Updates to the QMP are to be made at least annually by the Chief of the Technical Support Branch (or his/her designee) and included in the QA Annual Report and Work Plan (QAARWP) or equivalent annual report.

It is also the policy of the Division that all programs, contractors, and agencies that use Division funding to generate environmental data will develop and implement QA programs that are documented in a Quality Management Plan, which conforms to EPA QA/R-2, EPA Requirements for Quality Management Plans (March 2001). The Project Manager should check the Region 3 Quality Management Plan Status Report which is available at: <http://www2.epa.gov/quality/epa-region-3-quality-management-plan-status-report> to determine whether an approved QMP currently exists or a new one needs to be developed. If a new QMP needs to be developed the plan shall be reviewed and approved by the RQAM before field work is conducted by the funding recipient.

B. Systematic Planning Process

It is the policy of this Division that the intended data uses will be defined before data collection begins, so that appropriate QA measures may be developed in advance. Data quality includes establishing the level of data validation and review. DQOs are established to ensure the utility of environmental data for its intended use. The intended data uses, level of quality, specific QA activities, and data acceptance criteria needed to meet the data quality needs of these uses will be described in each project or activity's QAPP.

For all environmental data collection efforts, Guidance for the Data Quality Objectives Process and QA/G-4HW: Data Quality Objectives Process for Hazardous Waste Site Investigations and EPA/240/B-06/004 Systematic Planning: A Case Study for Hazardous Waste Site Investigations – EPA QA/CS-1 are sources of guidance for implementing the DQO process. The results of the DQO process should be documented in the QAPP. Both documents can be found at: [www2.epa.gov/quality/qa\\_doc.html](http://www2.epa.gov/quality/qa_doc.html).

### C. Quality Assurance Project Plan

The QAPP should address records of traceability, adherence to prescribed protocols, descriptions of potential QA problems and corrective actions, quality of data collection and analyses, deficiencies that may affect quality, and the uncertainty limits for the results. QAPPs are expected to conform to the most recent version of "EPA Requirements for Quality Assurance Plans" (EPA QA/R-5). A checklist is available at:

<http://www2.epa.gov/quality/epa-qar-5-epa-requirements-quality-assurance-project-plans>

Each project conducted or overseen by the Division is implemented in accordance with a QMP, QAPP, Work Plan, Health and Safety Plan, and a FSP. These plans in turn satisfy the requirements of an enforcement agreement, contract, or other authorization under which the work is performed. It is the responsibility of the Project Manager to ensure this compliance through field oversight and document review. The project plans are used as checklists of DQOs, deliverables, activities, etc. Modifications to the Plans that are necessitated by unforeseen circumstances (e.g., field conditions, laboratory problems such as sample container breakage, etc.) are approved by the Project Manager. In order to reflect any changes in field/analytical testing methods or QA/QC protocols, generic QAPPs need to be reviewed annually by the Project Manager and submitted to OASQA QA staff for review as needed and reported in the Division's QAARWP or equivalent annual report.

For sites in the Office of Preparedness and Response, including emergency removals and enforcement removals, the OSCs, EPA's Removal Contractors and the QA Staff will work together to evaluate site documentation, as described below:

#### 1. START Contractor

The Superfund Technical Assistance and Response Team (START) program was developed under EPA's Long Term Contracting Strategy (LTCS) and combines the previously separate support activities of the Field Investigation Team (FIT) and Technical Assistance Team (TAT) into a single contract. The START contracts provide technical support to EPA's site assessment, response, prevention, and preparedness activities. EPA's START contractors are used to collect samples as part of CERCLA site assessments, removal assessments, fund-lead removal actions (post-removal confirmation sampling) and targeted Brownfields assessments. The START contractors have prepared generic QAPPs that are intended to be sufficiently broad-based to address collection/analysis of samples in support of these activities. These generic QAPPs must meet the requirements outlined in Section B.3.c of the Regional QMP. Refer to Appendix C for the current START contractors.

#### 2. RAC Contractor

The Remedial Action Contracts (RAC) provide professional architect/engineering services to the U.S. Environmental Protection Agency (EPA) to support response planning and oversight of activities under CERCLA as amended by SARA. The RAC contractors are used to collect samples as part of CERCLA remedial activities (RI/FS, engineering designs and evaluations and non-time critical removal actions) and have prepared generic QAPPs that are intended to be sufficiently broad-based to address collection/analysis of samples in support of

these activities. These generic QAPPs must meet the requirements outlined in Section B.3.c of the Regional QMP. Refer to Appendix C for the current RACs contractors.

### 3. ERRS Contractor

The Emergency and Rapid Response Services (ERRS) contracts provide emergency, time-critical removal, and quick remedial response cleanup services for the CERCLA, OPA and Underground Storage Tank (UST) programs. These contracts also may be used to provide cleanup support in instances of natural disasters, such as floods, pursuant to the Federal Response Plan, and to conduct international/transboundary responses to protect the American public or the environment per existing and/or incident-specific agreements with foreign governments. Refer to Appendix C for the current ERRS contractors.

These QAPPs are prepared at the onset of the START, RAC and ERRS contracts. These generic QAPPs also preclude the need to prepare individual QAPPs for each of the numerous sites addressed in the Office of Preparedness and Response. This means that the QA Staff will only review QAPPs for individual removal sites when asked or in special circumstances. This process is well suited to the type of work routinely performed in this Branch.

The START contractor does prepare FSPs, which are specific to each of the sites being investigated, prior to initiating field work (an exception would be the case of "emergency" removals). The approved, site-specific FSP should incorporate the generic QAPP and appropriate field SOPs by reference. Since a QAPP and FSP are the two components of an SAP, the use of a generic QAPP and development of site-specific FSPs satisfies the need for approved SAPs for environmental investigations.

As necessary, any unique activities (use of non-standard analytical methods or planned deviations from field SOPs) not contemplated in the generic QAPP should be incorporated into the appropriate section of the FSP. In these cases and if necessary, the WAM may consult with the QA Staff.

### 4. State-Prepared "Master QAPPs"

EPA R3 has Cooperative Agreements with several states in the Region. Under these Agreements, these states perform the majority of CERCLA site assessment and Brownfields site assessment activities. Similar to the process for the Office of Preparedness and Response, "master QAPPs" are prepared by each of the states to cover the work they are performing. These QAPPs are reviewed by EPA and should be reviewed annually and revised as necessary, with approval not to exceed the length of the agreement. Refer to Appendix D for states with CERCLA Site Assessment and Brownfields Cooperative Agreements with Region III.

### 5. PRP-Prepared QAPPs

PRPs prepare QAPPs to address the collection/analysis of samples in support of an enforcement-lead CERCLA action. The process for preparing and obtaining regulatory approval of a QAPP or other deliverable such as a FSP would be covered in the terms and conditions of the enforceable agreement between EPA and the PRP. QAPPs (and FSPs) would be prepared for

individual sites (i.e., they would be site-specific). In the case of QAPPs, Project Managers should provide this document to the QA Staff for review.

#### D. Standard Operating Procedures

SOPs for technical field work and laboratory work are typically established by the organization conducting the field work and sampling (e.g., EPA contractors, Federal Facility, state, etc.) and are referenced in their QAPPs, which must be approved by Region 3. Contractors performing field work for the Division have developed SOPs for various types of field activities, such as soil sampling, water sampling and sample shipping/packaging.

#### E. Data Quality Assessments

Data validation is conducted by EAID-OASQA QA Staff under an Environmental Services Assistance Team (ESAT) contract in accordance with the National Functional Guidelines for Data Review. Data validation is performed by OASQA QA Staff for compliance to these guidelines with respect to technical and contractual issues. Data collected and validated by PRPs or their contractors may be reviewed by OASQA QA Staff at the request of Project Managers who have the responsibility and authority to request such reviews. For Removal sites, data validation is performed by ESAT for analytical services procured through the Contract Laboratory Program (CLP). In addition, for Removal sites, data validation may be performed by the EPA START contractor for analytical services procured through the Delivery of Analytical Services (DAS) program with oversight by the Office of Preparedness and Response QA coordinator and the QA Staff, as needed.

A Data Quality Assessment (DQA) is the scientific evaluation of data to determine if data obtained from environmental data operations are of the right type, quality, and quantity to support their intended use. The most recent version of EPA QA/G-9: Guidance for Data Quality Assessment may be used by data generators, RPMs and technical support staff during the DQA. At a minimum, all environmental data shall be reviewed to ensure that the analytical measurement criteria specified in the approved QAPP have been achieved. Data shall be qualified in accordance with the data validation criteria specified in the approved QAPP.

After the data have been subjected to this initial data review process, it shall be evaluated to determine if the project's DQOs and sampling design criteria have been achieved. Data validation reports, field and laboratory audit reports, proficiency testing sample results and other quality control information may be used to make this determination. In addition, various statistical tests (e.g., t-tests, quartile tests, etc.) also may be conducted to help draw conclusions about the data.

#### F. Training Plans

HSCD's goal is to have all personnel aware of their QA/QM responsibilities and to provide applicable on-going training for all Project Managers. HSCD and OASQA QA Staff work together to assess and provide training through EPA, its labs and contractors. HSCD supports the training provisions as described in Section E.1 of the Regional QMP which can be found at: <http://www2.epa.gov/quality/quality-management-plan-region-3>.

It is the responsibility of the Associate Directors with assistance from the RQAM, QACs and the QA Staff to ensure that project managers and other appropriate staff have the necessary QA training. Training needs and opportunities will be identified and reported in the QAARWP or equivalent annual report.

#### G. Technical Systems Audits

Audits are the principal means to determine compliance with established quality procedures. EAID, if requested, has the authority and responsibility to conduct state and contractor laboratory audits and provide the Division with a copy of the audit report. Technical systems audits (TSAs) conducted by EAID will include on-site qualitative evaluation of the QA system and physical facilities for sampling and analysis.

#### H. Quality System Assessments

Quality System Assessments (QSAs) are conducted to identify weaknesses or deficiencies that may be present in the Division's quality program. These assessments can be performed by the Division or the RQAM/RQC at the project level, program level or at the divisional level. Additionally, Quality Staff from the Office of Environmental Information (OEI) conduct QSAs approximately every three years on the Division to assess its compliance with established quality procedures. Any deficiencies identified in the QSA process can then be addressed by the Division to ensure compliance with established quality procedures. Requirements for QSAs can be found in Section D.2 of the Regional Quality Management Plan which can be found at: <http://www.epa.gov/quality/quality-management-plan-region-3>

### III. PERSONNEL QUALIFICATIONS AND TRAINING

Within the Division, specialized QA training is generally provided upon identification of program-specific QA needs. The HSCD relies on OASQA for specialized knowledge with regard to chemistry, laboratory analysis, technical and contractual acceptability of data, and data review and validation. The Division also may seek the assistance of specialists within the Region (e.g., specialists from the Air, Radiation, and Toxics Division for air sampling and monitoring and radiation-related issues) or outside the region (e.g., Environmental Monitoring and Support Laboratory (EMSL) for complex statistical questions) to ensure that all types of sampling and data analysis will meet the Division and project-specific goals for data usability.

### IV. PROCUREMENT OF ITEMS AND SERVICES

Section E.2 (Procurement and Financial Assistance) of the Region III QMP discusses the quality requirements for the procurement of items and services.

During implementation of contracts and IAGs QA procedures in accordance with EPA regulations is assured by the Administrative Support Branch. Program QA requirements are included in contracts and IAG Sections to ensure that data quality is part of the work process. For procurements, requests for proposals will contain a description of QA requirements prior to advertisement and will be part of the criteria on which contractors are selected and their

performance rated. These requirements are presented in Section E.2.a – Procurement of Contracts and Section E.2.b.2 – Interagency Agreements of the Region III QMP.

Procurement actions or suppliers who provide services or items that directly affect the quality of results or products (e.g., sample collection, sampling plan preparation, analytical laboratory services) are monitored by the Project Managers involved in specific projects and by the Project Officers in the Administrative Support Branch. The responsible personnel must ensure that all procured items and services meet program and project goals, and that deliverables are timely and as specified.

## V. DOCUMENTS AND RECORDS

Documents such as QMPs, Work Plans, QAPPs, and other project-related reports are submitted to the Project Manager. The Project Manager has the responsibility and authority of requesting reviews from the appropriate technical project team members, such as the QA Staff at OASQA. The flow of document review relative to the collection of environmental data is also discussed in Sections II and VIII of this QMP. The Regional and Divisional QMPs state that QAPPs are valid for up to five years and must be updated for projects lasting longer more than five years. QAPPs should be reviewed and updated annually as needed.

Project managers also have the responsibility of updating the site file for each project. These files are kept in the HSCD file room which is managed by the Office of Technical and Administrative Support, with contractor support. Access to the files is limited to the file room contractor, EPA personnel, and those authorized by EPA. Any item that is removed from the file must be signed for by the recipient and materials are checked for completeness when returned. HSCD adheres to the Regional document and records management handling protocols presented in Section E.3 of the Region III QMP.

Compliance inspectors have the responsibility of updating the official inspection file for each inspection conducted. The Oil and EPCRA program files are kept in the HSCD file room which is managed by the Office of Technical and Administrative Support with contractor support. Access to the files is limited to the file room contractor, EPA personnel, and those authorized by EPA. Any item that is removed from the file must be signed for by the recipient and materials are check for completeness when returned. HSCD adheres to the Regional document and records management handling protocols presented in Section E.3 of the Region 3 QMP. The Risk Management Program files are kept in a separate file room waiting to be incorporated into the HSCD file room. The Oil & Prevention Branch manages this file room and access to files is limited to EPA personnel and those authorized by EPA. Any item that is removed from the file must be signed for by the recipient.

## VI. COMPUTER HARDWARE AND SOFTWARE

Currently, data collection, transfer, validation, and other processes are not conducted solely by electronic means within the Division. Any electronic submissions are accompanied by paper submissions, for which objectives and relevant guidance apply. HSCD and its external

partners and contractors will adhere to the computer and software protocols and policies discussed in Section E.4 of the Regional QMP.

## VII. PLANNING

The originating Project Manager coordinates with EAID (OASQA QA Staff) on all work assignments and IAGs during the planning phase. HSCD ensures that all requests for proposals will contain an acceptable description of the QA requirements prior to advertisement. All QA/QM Plans must be acceptable prior to awarding of a contract. IAGs include standard language requiring QA Plans before collecting environmental samples. The QA Plans will be reviewed and evaluated by OASQA and approved by the Project Manager. Upon completion of the monitoring activities, the Project Manager and OASQA will assess the actual performance of the planned activity and subsequent results.

For remedial Superfund sites, the originating Project Manager notifies OASQA and specifically the QA Staff of projects requiring data collection during the planning phase. A contact within the QA Staff will review QAPPs upon request. The RPM will approve or revise the project-specific QAPPs based on the review and recommendations of the QA Staff.

The Region negotiates Record of Decision (ROD) goals with Headquarters for each fiscal year and Headquarters tracks the ROD completions. These goals and time frames for project completion influence the number of documents and the amount of data collection that will be handled by the Division in a given year. OASQA, which supports the Division with respect to QA activities, annually contributes to the Region's QAARWP or equivalent annual report, outlining its activities and services for the HSCD.

## VIII. IMPLEMENTATION OF WORK PROCESSES

As sites are discovered and evaluated in the HSCD, they move through different parts of the organization. For example, an initial site discovery would be handled by the Site Assessment and Non-NPL Federal Facilities Branch. If an emergency response were necessary, the Office of Preparedness and Response would handle that activity and then the site would be examined as a potential candidate for the NPL. Once a site is proposed to the NPL, it ordinarily is assigned either to the appropriate Remedial Branch or the Federal Facilities Branch.

As a site moves through this evaluation and response process, the data generated for site evaluation are handled by the Branch QA/QM procedures as presented in this QMP. All remedial site sampling data are subjected to QA reviews administered by EAID (i.e., the QA Staff at OASQA). Site Inspection reports, RI/FS's, etc., are reviewed by Technical Support Branch toxicologists, biologists and geologists and by the Project Manager for technical and scientific accuracy.

RIs, whether federal or state lead projects, are conducted in accordance with Guidance for Conducting Remedial Investigations and Feasibility Studies Under CERCLA (Interim Final) (USEPA/540/G-89/004). This guidance lists the specific requirements for sampling plans, QA plans, and data evaluation which implement the requirements of the NCP. USEPA Publication

9285.7-09, PB92-963356, Guidance for Data Usability in Risk Assessment, is another source of guidance when scoping, performing, and reviewing such project activities.

All site-specific sampling and QA plans developed by contractors or grant recipients are reviewed and approved by the Region III site Project Manager in accordance with the recommendations of the QA section of the OASQA. Data collection activities during remedial cleanup actions are also supported by site-specific sampling and QA plans and are reviewed by the Project Manager.

## IX. ASSESSMENT AND RESPONSE

To ensure that a satisfactory level of QA capability is maintained in the Division, technical assistance may also be requested by HSCD from technical specialists within EAID. The EAID technical specialists will assist the Division with technical aspects of QA related to their expertise in air, water, toxic substances, hazardous waste, chemistry, field operations, and data operations. They will conduct field and laboratory performance audits, and conduct compliance monitoring inspections upon request from HSCD and inform the Division of the need for new methods.

The CLP Technical Project Officer (TPO) in OASQA manages and oversees the CLP laboratories within Region III. HSCD and OASQA's Client Services Team coordinate the procurement of non-CLP laboratory services using the Delivery of Analytical Services (DAS) process, as described in "EPA Region 3 Users' Guide for Acquiring Analytical Services." In order to control and evaluate labs generating DAS data for the Superfund Program, OASQA may perform on-site lab audit inspections and provide blanks and proficiency testing materials to verify a laboratory's credentials and to assess method performance, etc.

Field audits are used to determine whether all the planning steps have occurred and are actually being implemented as per the approved QAPP. OASQA staff may perform field audits on EPA contractors, IAG agencies, and private parties to determine whether field sampling is being properly conducted and the appropriate QA plans are being implemented. A checklist is used to document findings of the audit and is provided to the Project Manager when completed. Sites are coordinated through HSCD Programs or recommended by the QA Team as a result of documentation review.

Corrective actions taken in response to internal QSAs and external audits and assessments are verified as follows:

- Final response reports to internal QSAs and external audits and assessments are placed in Divisional files and held by the QA team at Fort Meade. Corrective actions taken are verified as soon as practicable following implementation of the recommendation(s) and at the next scheduled internal QSA.
- Corrective actions resulting from a finding will be subject to a limited internal re-audit. This type of corrective action usually results in significant changes to the quality system. The re-audit will focus not just on the corrective action taken, but may also be concerned with any consequential changes to other parts of the quality system.

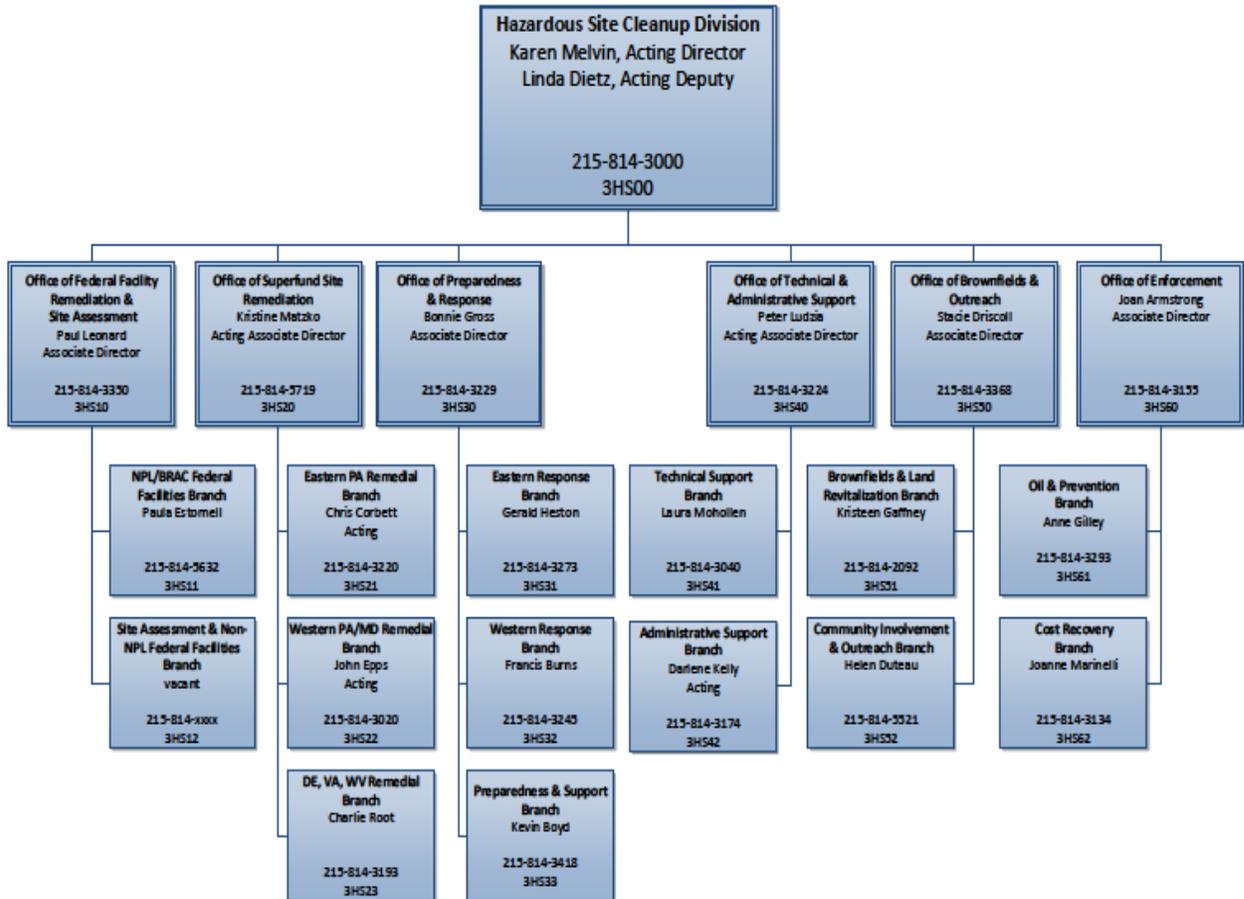
- Corrective actions that only require change in documentation are verified by a paper review. The Divisional QA Coordinator forwards the revised document to the RQAM or designee for review.

## X. QUALITY IMPROVEMENT

HSCD and the QA Team in OASQA meet regularly to discuss common issues and plan work activities. These meetings are used to review contractor performance, discuss data review issues, and address other items relevant to QA for the Superfund Program. The team also discusses, helps plan, and disseminates information with respect to new technologies, new directives, and new work processes. HSCD and the QA Staff constantly look for innovative ways to improve QA activities in the Region's Superfund programs.

## APPENDICES

# Appendix A – HSCD Organization Chart



Last Updated: November 30, 2015

## Appendix B – HSCD QA Contacts for the Divisional Offices

Office of Federal Facility Remediation & Site Assessment – Jim McCreary

Office of Superfund Site Remediation – Bhupi Khona

Office of Preparedness and Response – Stephanie Wenning

Office of Technical and Administrative Support – Jennifer Hubbard

Office of Brownfields and Outreach – Mike Taurino

Office of Enforcement – Mary Hunt

Current as of December, 2015.

## Appendix C – HSCD Contract Support

### A. Superfund Technical Assessment & Response Team Contracts (START) Contractors

TechLaw, Inc. – Contract End Date: 6/30/2020

Weston Solutions, Inc. – Contract End Date: 6/30/2020

### B. Remedial Acquisition Contracts (RAC) Contractors

EA Engineering, Science and Technology, Inc. - Contract End Date: 6/20/2017

Hydrogeologic, Inc. – Contract End Date: 6/27/2017

Tetra Tech, Inc. – Contract End Date: 6/5/2017

CDM Federal Programs Corporation – Contract End Date: 8/8/2017

### C. Emergency and Rapid Response Services (ERRS) Contractors

Guardian Environmental Services Company, Inc. – Contract End Date: 4/16/2017

Environmental Restoration, LLC – Contract End Date: 4/16/2017

Kemron Environmental Services, Inc. – Contract End Date: 4/17/2017

WRS Infrastructure & Environment, LLC – C Contract End Date: 5/24/2017

Current as of December, 2015.

Appendix D – States with CERCLA Site Assessment and Brownfields Cooperative Agreements with Region III

- A. Delaware
- B. Maryland
- C. Pennsylvania (Brownfields only)
- D. Virginia
- E. West Virginia
- F. District of Columbia

Current as of December, 2015.