**USACE Huntington District**
**Huntington, West Virginia**

# FINAL REPORT

# QUALITY CONTROL PLAN

## Restoration Advisory Board Support Services
## Plum Brook Ordnance Works
## Sandusky, Ohio

**Contract No. W91237-08-T-0041**

Stillwater Environmental Services, Inc.
May 2008

200.1e
G05OH001810_08.04_0501_a

# FINAL REPORT

# QUALITY CONTROL PLAN

## Restoration Advisory Board Support Services
## Plum Brook Ordnance Works
## Sandusky, Ohio

**Contract No. W91237-08-T-0041**

**Prepared for**

**USACE Huntington District**
**502 Eighth Street**
**Huntington, West Virginia 25701**

**Prepared by**

**Stillwater Environmental Services, Inc.**
**724 South Miami Street**
**West Milton, Ohio 45383**
**937.478.2322**

**May 2008**

## TABLE OF CONTENTS

I. Purpose ..... 1
II. References ..... 1
III. General ..... 1
IV. Quality Control Plan ..... 2
V. Internal Quality Control ..... 2
VI. Quality Control (QC) Review Team ..... 2
VII. Quality Assurance Work Plan ..... 3
VIII. Organizational Chart ..... 5
IX. Quality Control Review Team ..... 5

# QUALITY CONTROL PLAN

**Restoration Advisory Board Support**
**Plum Brook Ordnance Works, Sandusky, Ohio**

**Contract Number: W91237-08-T-0041**

## I. Purpose

This Quality Control Plan (QCP) presents the policy and specific actions that are being implemented by Stillwater Environmental Services, Inc. (Stillwater) on this program to insure that high quality products are produced on time, within budget, and within U. S. Army Corps of Engineer (USACE) standards. It defines the responsibilities and roles of each member of the project team.

## II. References

A. CELRH 5-2-7 Quality Management Plan.
B. ER 1110-1-2 Engineering and Design Quality Management
C. CELRDC 5-1-1 Quality Management Plan
D. Applicable ISO 9000 processes - based on procedures and work instructions from Huntington District Corps of Engineers, Engineering /Construction Division (http://www.lrh.usace.army.mil/ct/quality/)

## III. General

A. Type of Project

This project includes the administrative support of the Plum Brook Ordnance Works (PBOW) Restoration Advisory Board (RAB). The RAB is the Department of Defense's mechanism to involving the community, installation representatives, the U.S. Environmental Protection Agency (EPA), state regulatory agencies, and local officials. The PBOW RAB meets regularly, usually once per quarter or when crucial project–related information is available. The RAB meets at BGSU Firelands College in Huron, Ohio. Stillwater Environmental Services, Inc. is contracted to provide comprehensive administrative support to this RAB effort.

B. Location

Huntington, West Virginia, West Milton and Sandusky, Ohio

C. Customer/Sponsor

The customer for this project is the Huntington District of the U.S. Army Corps of Engineers (USACE).

D. Project Description

Stillwater will provide RAB technical and administrative support through the following tasks:

(1) RAB/Public Meeting Support, including all meeting notices and publications, agendas, minutes and maintenance of the RAB mailing list

(2) Coordinating Poster Sessions and Community Surveys,

(3) Development and distribution of quarterly Fact Sheets,

(4) Composing articles for the annual FUDS newsletter,

(5) Annual update of the Community Relations Plan.

## IV. Quality Control Plan

An effective QCP is important to the undertaking of this program due to the various degrees and aspects of public involvement and interaction. An effective QCP will ensure that high quality products and services will be produced that satisfy USACE standard practices, policies and guidelines.

## V. Internal Quality Control

All required tasks shall be performed by qualified representatives of Stillwater Environmental Services, Inc. Each individual will be responsible for ensuring a quality product through internal checks, review and interaction with the other internal members assigned to the project and applicable USACE points of contact. Each task will be conducted with full communication between team members and USACE contacts. Only quality products approved by appropriate USACE contacts will be released from the review team.

## VI. Quality Control (QC) Review Team

The QC Review Team shall consist of Helen Owens - Project Manager (PM) and Jacob Wilson – Environmental Technician. The QC review team and their responsibilities are:

1. Helen Owens - Works directly with the USACE Point of Contact (POC) on the assigned project, and acts as the prime contact for the contractor. Reviews all documents, correspondence, materials produced and services provided to USACE as part of the specific contractual agreement, verifying that all project aspects are conducted in accordance with standard practices, policies and guidelines.

2. Jacob Wilson – Will work in conjunction with the PM by reviewing completed work to insure accuracy of work completed and insure that all USACE requirements are met.

## VII. Quality Assurance Work Plan

Quality assurance (QA) review of all products and services provided by the contractor will be reviewed by the appropriate contractor manager, and Jacob Wilson and Helen Owens will ensure quality within standard USACE practices, policies and guidelines, prior to official submittal.

Independent technical reviews will be conducted by senior, technically qualified professionals, who have not been directly involved with product development and who will ensure that:

- The concepts, assumptions, features, methods, analyses, and details are appropriate, fully coordinated, and correct,
- An appropriate range of feasible alternatives was evaluated,
- The problems, opportunities, and issues are properly defined and scoped,
- The analytical methods used are appropriate and yield reliable results,
- The results and recommendations are reasonable, within policy guidelines, and supported by the presentation,
- Any deviations from policy, guidance, and standards are appropriately identified and have been properly approved,
- The products meet the customers' needs

All reports, documents, products, and related materials that are prepared by the contractor will be on file in their office. All Reports, documents, products and related materials will be sent to the POC or approved USACE entity for review and approval.

The following QA Work Plan will be followed:

<u>RAB / Public Meeting Support</u>

1. The contractor will make all arrangements for RAB/Public meetings, including preparation and publication of meeting notices and arrangements for appropriate meeting space.
2. The contractor will act as meeting facilitator and take minutes of each RAB/Public meeting.
3. The contractor will provide presentation and handout materials necessary for each RAB/Public meeting, as directed by the POC, and provide necessary presentation equipment. All materials will be reviewed by the QC team to insure accuracy prior to submittal to POC for approval.
    - If POC approves of presentation and handout materials, the contractor will finalize and prepare materials for meeting.
    - If POC disapproves, the contractor will note editions/corrections and return to step 3.
4. The contractor will provide draft RAB/Public meeting minutes to the POC, after review by QC team, for review and comment, with approved minutes distributed to all RAB members.

Poster Session Support

1. The contractor will provide all equipment, materials and personnel necessary and to erect, and disassemble, display booth at the Erie County Fair.
2. The contractor will complete presentation / information handouts and materials for display and submit recommendations for fair promotional materials, after review by QC team, for review by POC.
    - If POC approves of presentation and promotional materials, finalize for fair.
    - If POC disapproves, note discrepancies and return step 2.
3. Attend each day of fair to provide interested attendees with POC-approved presentation materials, informational handouts and related promotional materials.

Community Surveys

1. The contractor will prepare survey materials, under USACE direction, and conduct survey using personal interviews and/or mailings.
2. The contractor will analyze and tabulate survey results, followed by QC Team review. Reviewed data will be forwarded to POC for review and comment.
    - If POC approves survey results, send data to POC.
    - If POC disapproves, note discrepancies and return to step 2.
3. The contractor will present findings, after approval by USACE, at next RAB/Public meeting.

Fact Sheets

1. Prepare and distribute Fact Sheets of current and/or on-going activities, using monthly project fact sheet updates from USACE.
2. QC Review Team will review each Fact Sheet prior to submittal to USACE to insure accuracy.
    - If POC approves Fact Sheet, send out to RAB mailing list members.
    - If POC disapproves, note discrepancies and return to step 1.

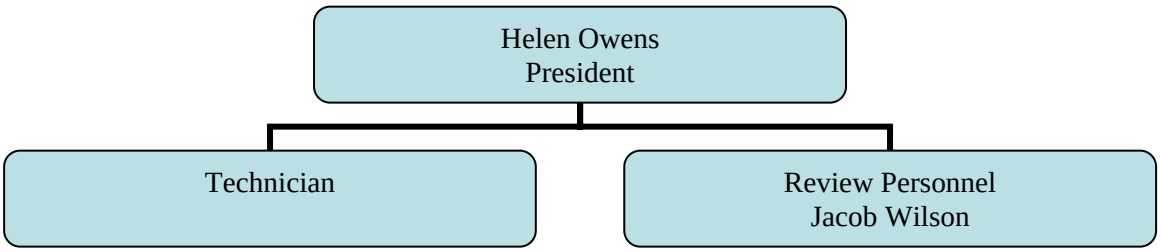
FUDS Newsletter

1. Develop articles for the annual FUDS newsletter, based on the contractor's knowledge of the project and input from POC.
2. The QC team will review each PBOW-related article for the newsletter, checking for accuracy, followed by submittal to USACE for review and approval.
    - If POC approves Newsletter, copy and send to POC and RAB mailing list.
    - If POC disapproves, note discrepancies and return to step 1.

Community Relations Plan

1. Update Community Relations Plan to reflect most up-to-date information available.
2. QC team will review Plan for accuracy, followed by submittal to POC.
    - If POC approves Plan, send data to POC.
    - If POC disapproves, note discrepancies and return to step 1.

## VIII. Organizational Chart




Resumes of Review Team members are included as an attachment to this Quality Control Plan.

## IX. Quality Control Review Team

| | |
|---|---|
| Project Name | RAB Support – Plum Brook Ordnance Works, Sandusky, Ohio |
| Timeframe | April 2008-March 2009 |
| Contract Number | W91237-08-T-0041 |
| Review Team Members | Helen Owens, Project Manager |
| | Jacob Wilson, QC Review |

# Team Member Resumes

**Helen J. Owens**
724 South Miami Street
West Milton, Ohio 45383
Home - (937) 698-5090  Cell - (937) 478-2322

**Education**:
A.A.S., Environmental Quality Assurance, 1977
B.S., Business Management, June 2004

**Years of Experience**: 30

**Active Registrations:**
Class I Wastewater Operator, Ohio
Class I Laboratory Analyst, Ohio

**Summary of Experience and Qualifications**:
With over 30 years experience as an environmental consultant and technician, Ms. Owens has diverse experience in air and water pollution evaluations including protocol development, management of field activities, data collection, industrial and municipal wastewater treatment, process evaluations, and compliance consulting.

Ms. Owens is currently providing technical support to the US Army Corps of Engineers-Huntington District on the Restoration Advisory Board for the Plum Brook Ordnance Works, Sandusky, Ohio. Her responsibilities include public outreach activities, coordination of public meetings, newsletters, development of the Community Relations Plan, and other tasks as directed by the USACE Project Manager. Also for the Huntington District, Ms. Owens provides technical support in the collection of seasonal groundwater level fluctuations to support groundwater modeling development, and collection and interpretation of monitoring well water levels, coordination and implementation of an off-site well survey to determine migration patterns of contaminants. In addition to the Huntington District, Ms. Owens also provides contractor support to USACE–Nashville District on the Remedial Investigation / Feasibility Study of the former Plum Brook Ordnance Works (PBOW), located in Sandusky, Ohio. PBOW manufactured TNT and DNT in WWII and investigations have identified 16 areas of concern with regard to soil and groundwater contamination.

Ms. Owens currently provides program support to the City of Marysville, Ohio where she is responsible for the implementation of the Industrial Pretreatment Program (IPP). Ms. Owens provides similar support services to the City of Mason, Ohio. Her services include development of an industrial user survey; permit writing, and coordination of industrial compliance activities, enforcement and development of Local Limit parameters. Ms. Owens has served as the Contract Pretreatment Coordinator for the City of Middletown, Ohio.

Ms. Owens provided technical guidance to industrial operations in troubleshooting specific wastewater treatment problems, including the development and implementation of an industrial wastewater operator training seminar, evaluation of industrial wastewater treatment operations

Resume – Helen J. Owens, continued

and making recommendations to achieve and maintain regulatory compliance. She has also been responsible for the day-to-day operation of sanitary wastewater treatment plants as a contractor to the USACE, and small municipal and industrial facilities.

Ms. Owens' experience includes numerous projects, such as groundwater monitoring well and soil sampling, storm water monitoring, Phase I environmental assessments, preparation of air and wastewater permit applications, development of Spill Prevention, Control and Countermeasure (SPCC) Plans under the direction and review of a Professional Engineer, air emissions monitoring programs and environmental audits of industrial facilities.

In addition to working full-time as a consultant, in 2005 Ms. Owens opened her own business to support USACE in maintaining electronic documents in a database and on the Huntington Districts' Formerly Used Defense Site (FUDS) website. This activity is on-going and is conducted on a part-time schedule.

**Jacob Wilson**
648 S. Miami St.
West Milton, Ohio 45383
(937) 753-9686

**Education:**

A.A.S., Wildlife Management, 2005
Hocking Technical College, Nelsonville, Ohio

A.A.S., Natural Resources Conservation, 2005
Hocking Technical College, Nelsonville, Ohio

High School Diploma, 2000
Environmental Science
Miami Valley Career Technology Center, Clayton, Ohio

**Summary of Experience and Qualifications:**

February 2006 to Present – Community Oil Station, West Milton, Ohio
Commercial Truck Driver

- Hazmat endorsed
- Inventory and ordering of product
- Money handling and deposit
- Customer relations

June 2005 to December 2005 – Ohio Division of Wildlife, Oak Harbor, Ohio
Natural Resource Specialist

- Construction
- Water level management
- Equipment operations
- Public relations
- Waterfowl check station
- Building and grounds maintenance
- Event planning and setup
- Worked with and around different watercrafts

March 2005 to May 2005 – U.S. Forest Service, Nelsonville, Ohio
Volunteer Internship

- Trail maintenance
- Forestry equipment operation
- Safety training and practice
- GIS/GPS mapping
- Campground maintenance

Resume – Jacob Wilson, continued

April 2001 to September 2001 – U.S. Fish and Wildlife Service, Bethel Alaska
Field Technician

- Collected field data to determine the nesting success of waterfowl
- Identification of migrating waterfowl to support migration count
- Entered field data into database
- Use of hand held GPS for ground navigation
- Conducted daily check in using satellite phone
- Established and constructed remote field camp
- Communication of ground and weather conditions with bush pilots
- Conducted safe practices in extreme backcountry situations
- Worked in and around small aircraft

Special Skills

- Training and experience with GIS/GPS operations.
- Ability to operate diverse types of machinery to accomplish the goals of the project.
- Have had technical training in Microsoft office programs.
- Focused on accomplishing the objectives of the project.
- Ability to identify native plant species of the eastern deciduous forests.