

Bulk Fuel Construction

Gustavus, Alaska

Quality Control Plan

May 2011

USACE Contract No. W911KB-07-D-0016
Task Order No. 0005

Owner:

U.S. Army Corps of Engineers
P.O. Box 6898
JBER, Alaska 99506-6898
Phone: (907) 753-5618
Fax: (907) 753-2544

Contractor:

Western Marine Construction, Inc.
2775 Harbor Ave. SW, Suite A
Seattle, WA 98126
Phone: (206) 622-9161
Fax: (206) 622-9170

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OBJECTIVE

General:

Western Marine Construction Inc's (WMC's) Quality Control (QC) Program provides a framework to ensure that quality is integrated into every aspect of our project operations. The objectives of the Quality Control Program include compliance with technical specifications and current regulations through the submittal process and using the U.S. Army Corps of Engineers' (USACE's) Definable Feature of Work (DFW) 3-phase inspection system. WMC's objective is to provide this system to the USACE while also ensuring the health and safety of the workers as well as remaining on schedule and within budget. This plan identifies CQC activities to be implemented to ensure that work elements are performed per specifications and in conformance with approved submitted plans.

Scope of Work:

This task order is for installation of a new marine header and barge fill pipelines. Work will be performed at the new dock and within a portion of the dock road right-of-way. The dock is located on property vested in the state of Alaska. WMC will construct the work as shown on the drawings attached to the "Bulk Fuel Construction, Gustavus, Alaska" Request for Proposal (RFP).

Definable Features of Work:

- Pipe Welding
- Pressure Testing
- Heat Shrinkable Pipe Sleeves
- Pipe Placement on Structure
- Underground Installation

CQC ORGANIZATION RESPONSIBILITIES & AUTHORITIES

CQC Personnel and Organization:

Kriss Hart, President of WMC has the authority and responsibility for implementing the project CQC Plan. Kriss will serve as the CQC System Manager for this project. Kathy Lochman, Patrick McHugh and Doug Arnold will serve as alternate Quality Control Personnel and will assist with CQC responsibilities as needed.

CQC Personnel Experience

Resumes of the CQC personnel are attached

CQC Activities:

CQC activities include actions that verify and document that the materials, processes, components, and systems are in accordance with project quality requirements. CQC activities will include:

- Submittal Review (review all submittals for compliance)
- Material Receipt and Check Out (document quantity and compliance)
- Review Hazard Analysis (document review and implementation for each task)
- Preparatory Meeting and Inspections (review of plans, specifications, and material)
- Initial Inspections (document beginning feature safety and workmanship)
- Follow-up Inspections (document compliance on work in progress)
- Punch-out Inspection
- Pre-final Inspection
- Final Acceptance Inspection

These and other activities identified at the site meetings will be implemented to control the quality and safety of the work site and features on this project.

PROCEDURES

Preparatory, Initial and Follow-Up Inspections

The CQC shall hold a Preparatory Meeting before work begins on a particular DFW.

These meetings and inspections will include:

- Understand the Definable Feature of Work
- Review Activity Hazard Analysis (AHA) for specific DFW
- Adequate Personal Protective Equipment (PPE) is available and in good condition
- Ensure that all Personnel have the Necessary Training
- Ensure all MSDS sheets are onsite and current for all materials
- Check all Emergency Equipment and review Emergency Procedures
- Check that all Equipment has been Inspected for this DFW
- Take personnel comments and revise plans if needed
- Watch initial operations and keep communications open
- If required complete initial and follow up inspections and review procedures with participants

Control of Work and Testing

The CQC System Manager must perform the following tasks:

- Ensure that contract Specifications are being followed properly.
- Document results for all work locations and DFWs
- Document weather conditions and the effect on work
- Monitor all work locations frequently
- Maintain good communications with operations, management, and government representatives

NON-CONFORMANCE / CORRECTIVE ACTION

Non-Conforming Items and Activities

Non-conforming items and activities are those which do not meet the project requirements. When such a condition is identified, WMC will implement a corrective action program to:

- Document the item or procedure and determine the cause and its effect on the project performance and the integrity of the completed work.
- Correct or replace the non-conforming item in the most efficient and effective manner.
- Verify and document that the corrective action taken is successful.
- Implement and document methods to avoid reoccurrence of the problem.

Documentation of Non-Conformance

The CQC officer will document any non-conformance item on the Daily Report. The Daily Report will clearly show what is not complying, the date discovered, the date the work was corrected, and how the correction was accomplished. These reports will be maintained in the project office and a copy will be given to the Contracting Officer's Representative (COR) for review. The CQC officer will document on the daily report the corrective actions taken.

Implementation of Corrective Action

The CQC officer will have the authority to halt work on any item until corrective actions are taken. The CQC officer will not allow work to be added to or built upon non-conforming work unless the COR concurs that the correction can be made without disturbing continuing work.

Once the item or procedure has been corrected the CQC officer will monitor to assure that similar items do not reoccur. Reoccurring non-conformances will be investigated to determine the root cause of the problem so as to eliminate or minimize future occurrences of the non-conformance.

DOCUMENTATION

Documents

WMC recognizes the importance of documenting CQC activities and results to demonstrate work quality. To this end the following items will be maintained:

- **Daily CQC Report**, this will serve as the document for recording all performance, weather, inspections, deficiencies, corrections, equipment, labor, safety issues, directives, changes, and other comments and notes. This report will be provided to the COR daily on the following weekday. The format will be per the attached form with sequential numbering for each workday.
- **Non-Compliance Checklist**, documenting work that does not comply and the correction.
- **Preparatory Meeting Minutes and AHA**, conducted at the beginning of each DFW.
- **Project Photos**, showing work activities.
- **Material Certifications**, for Contractor provided materials.
- **Testing Results**, for all testing performed.

CHANGES

The CQC Plan will be reviewed and changes in personnel, procedures, forms, and scope will be made as needed. These changes will be made in writing and submitted to the contracting officer as an addendum to the quality control plan. Personnel changes between CQC System Manager and Alternates will be noted on the daily report.

Attachments

Organization Chart

Resumes

CQC Certificates

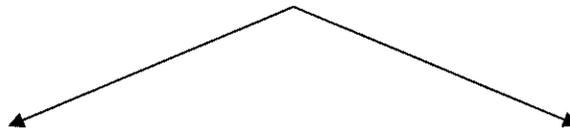
Letter of Authority

Contractor's Daily Control Report

Contractor's Organization Chart

Western Marine Construction, Inc.
OFFICE ADMINISTRATION

Bill Kerzie, Accounting and Records
(206) 622-9161
FAX (206) 622-9170



Joe Zech,
Site Safety and Health Officer

Kriss Hart, Project Manager,
CQC Systems Manager

**Kurtis Lawson, Kriss
Hart, Alternate SSHO**

**Kathy Lochman, Patrick McHugh
or Doug Arnold, Alternate CQC**

Doug Arnold, Superintendent
Rocky Hahn, Alternate Superintendent



Suppliers/Vendors

WMC Field Crew

PERSONNEL EXPERIENCE

- A. Kriss E. Hart
- B. Project Assignment: **CQC System Manager, Project Manager**
- C. Western Marine Construction, Inc.
- D. Years with WMC: 30
- E. Education:
 - Juneau/Douglas High School
 - Western Washington University
 - Oregon State University (pre-engineering)
- F. Active Registrations:
 - Licensed Tug Operator
 - Certified Diver
- G. Specific Experience / Project Qualifications:
 - Mr. Hart has 24 Years experience as Project Manager and Superintendent for WMC in marine construction including; piledriving, underwater drilling, dredging, blasting, excavation, outfalls, mooring systems, rock production, breakwaters, revetments, docks, floating breakwaters and facilities, ferry terminals, dolphins, etc. Kriss has had experience in weather and tidal conditions similar to this project location.
 - Mr. Hart has training and experience in surveying, CQC Control/Management, HAZWOPER, First Aid / CPR, and project management. He has been directly involved in most of Western Marine's projects since 1981.

PERSONNEL EXPERIENCE

- A. Joseph E. Zech, P.E., Vice President
- B. Project Assignment: **Site Safety & Health Manager**
Project Manager
- C. Firm: Western Marine Construction, Inc.
- D. Joined WMC in February 2000
- E. Education:
 - Roosevelt High School (Seattle, WA)
 - Seattle University, BSCE

Active Registrations and Certifications

- USACE: Construction Quality Management for Contractors
- First Aid/CPR Certified
- Professional Engineer, State of Alaska #9552
- Professional Engineer, State of Washington #30118
- Professional Engineer, State of California #43230

- F. Specific Experience / Project Qualifications

Joe was in charge of design, construction and business development for various engineering firms from 1981 to 1986 and for his own construction company from 1986 to 1992. From 1992 to 2000 Mr. Zech was employed by another Alaska General Contractor as Project Manager and then General Manager responsible for the entire Alaska market where he worked with Western Marine on various projects that required their marine expertise and experience. He has had extensive construction and management experience in Alaska marine projects including but not limited to piling (sheet & other), dolphins, marine transportation and an extensive knowledge of the design and construction of arctic foundations and piling work. Since joining Western Marine in February 2000, Joe has been directly involved with all aspects of management and the successful completion of Wrangell Narrows Dredging, King Cove Dredging and Float Project, Ouzinkie Small Boat Harbor, Naknek Boulder Removal and ,most recently, Sand Point Harbor Improvements.

PERSONNEL EXPERIENCE

- A. Doug Arnold
- B. Project Assignment: **Alternate CQC,
Superintendent**
- C. Western Marine Construction, Inc.
- D. Years with WMC: 24
- E. Education:
 - Tacoma High School
 - Western Washington University
- F. Active Registrations:
 - Licensed Tug Operator
- H. Specific Experience / Project Qualifications:
 - Mr. Arnold has 24 Years experience as Superintendent and General Foreman for WMC in the Marine Construction Industry. This includes; Breakwaters, Boat Harbors, piledriving, underwater drilling, dredging, blasting, excavation, outfalls, mooring systems, rock production, breakwaters, docks, floating breakwaters, ferry terminals, dolphins, etc. Mr. Arnolds has had an extensive background in all aspects of marine construction in many cities throughout the State of Alaska.
 - Mr. Arnold has training and experience in CQC/Management, Marine Fire Fighting and Confined Space Entry, HAZWOPER, First Aid / CPR, and project supervision He has been directly involved in most of Western Marine's projects since 1987.

Kathy Streveler Lochman

Alternate Contract Quality Control

PROFESSIONAL EXPERIENCE – 15 Yrs

Quality Assurance Representative – 10 Yrs
Project Manager – 5 Yrs
Site Superintendent – 5 Yrs
Construction Company Owner-5 Yrs

ROLES AND RESPONSIBILITIES

Mrs. Lochman has served as a project manager, site superintendent, chemist and as quality control system manager. She has estimated task orders, written proposals and work plans, overseen the execution of projects and been responsible for the successful completion of assigned task orders.

RELEVANT EDUCATION

B.S., Chemistry, University of Hawaii, Manoa 1993

RELEVANT SPECIALIZED TRAINING

Cost Reimbursement Contracting, School of Business and Public Management
OSHA Inspection/Compliance for Construction and Operation Activities
HAZWOPER, 40 hour
HAZWOPER, annual refreshers 1995-2008
ADEC Qualified Person
USACE – Construction Quality Management for Contractors, 2006

RELEVANT EMPLOYMENT HISTORY

CONTRACTOR TO US ARMY CORPS OF ENGINEERS--Quality Assurance
Representative for previous TERC and other contracts, 1994-2004
HOURLY WAGE

BETHEL NATIVE CORPORATION – Project Manager/Site Superintendent, 2004-2008
HOURLY WAGE

FAIRWEATHER CONSTRUCTION-Owner 2003-2010

AHTNA Engineering Services-2009

WESTERN MARINE CONSTRUCTION-Spring 2009-Present

PERSONNEL EXPERIENCE

Kurtis Larson, Project Engineer
Project Assignment: **Assistant CQC**
Safety and Health Assistant
Firm: Western Marine Construction, Inc.

Joined WMC in February 2007

Education:

Montour High School, Pittsburgh, PA
Alfred University, BA, Biology

Training and Certifications

USACE: Construction Quality Management for Contractors
40 HR OSHA (HAZWOPER including HAZMAT, HAZCOM, and
respirator fitting)
EM 61 Subsurface Detection Equipment
Z Surveyor GPS Training
Cold Water Survival Certified
First Aid/CPR Certified

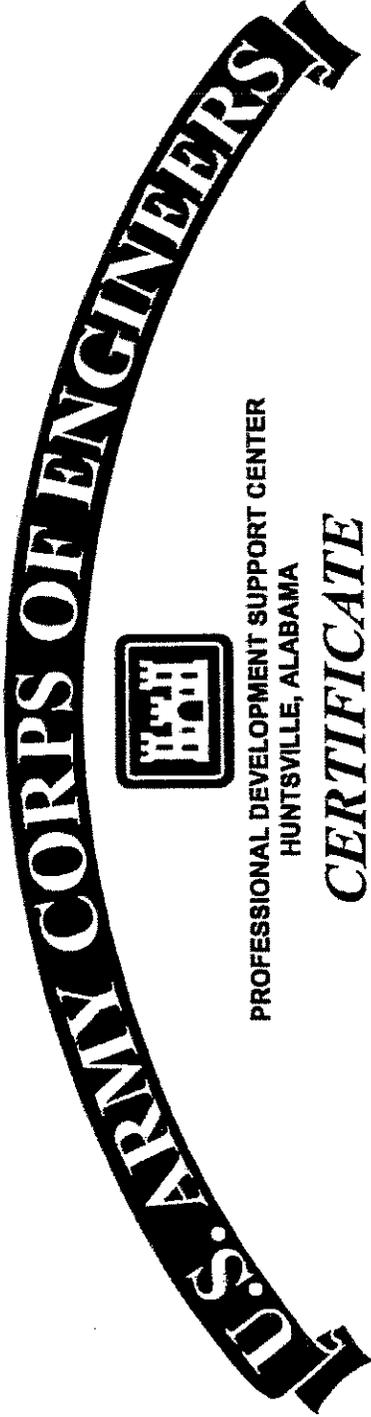
Specific Experience / Project Qualifications

Kurtis recently joined Western Marine as a Project Engineer to assist in all aspects of the Alaska marine construction activities. Kurt has had experience in Alaska as a NMFS Fisheries Observer and also worked as an Engineering Technician and Geophysical Assistant on an Ordinance Removal project in Kahului, HI for Parsons Engineering. Kurtis recently has been working on the Sand Point Harbor Improvement project and has been directly responsible for all turbidity testing, rock gradation testing, holding weekly safety meetings and assisting with general day-to-day Quality Control duties. Kurtis also has been directly involved with manufacturing and transporting "B" Rock for the Bethel Bank Stabilization and Armor rock for the False Pass Harbor project as well as assisting with all of the required rock gradation tests and barge draft measurements for tonnage of rock transported.

PERSONNEL EXPERIENCE

- A. Patrick M. McHugh
- B. Project Assignment: **Alternate CQC**
- C. Western Marine Construction, Inc.
- D. Joined Western Marine Construction December 2009
- E. Education:
 - Samamish High School, Bellevue WA
 - Washington State University
- F. Active Certifications:
 - USACE- Construction Quality Management for Construction
 - Certified Erosion and Sediment Control Lead
 - First Aid/CPR Certified
 - Certified Diver
- I. Specific Experience / Project Qualifications:

Patrick graduated for the Washington State University school of Architecture with a degree in Construction Management in 1996. After graduation, Patrick's role as Project Engineer consisted of quality control manager on several fast track multi-million dollar projects. These early projects set the foundation for a carrier in construction with a complete understanding of needed systems to ensure quality construction. Patrick was promoted to Project Manger and then Senior Project Manager over the next 12 years. In 2009 Western Marine Construction recruited Patrick to join the team and aid in management, estimating and project quality control. Since joining Western Marine Patrick has been involved in the completion of the Chignik Harbor Dredging, Sand Point Mooring Floats and preconstruction on both Angoon and Hoonah ferry terminal replacements for the Alaska Department of Transportation.



PROFESSIONAL DEVELOPMENT SUPPORT CENTER
HUNTSVILLE, ALABAMA

CERTIFICATE

This is to certify that

Kriss Hart

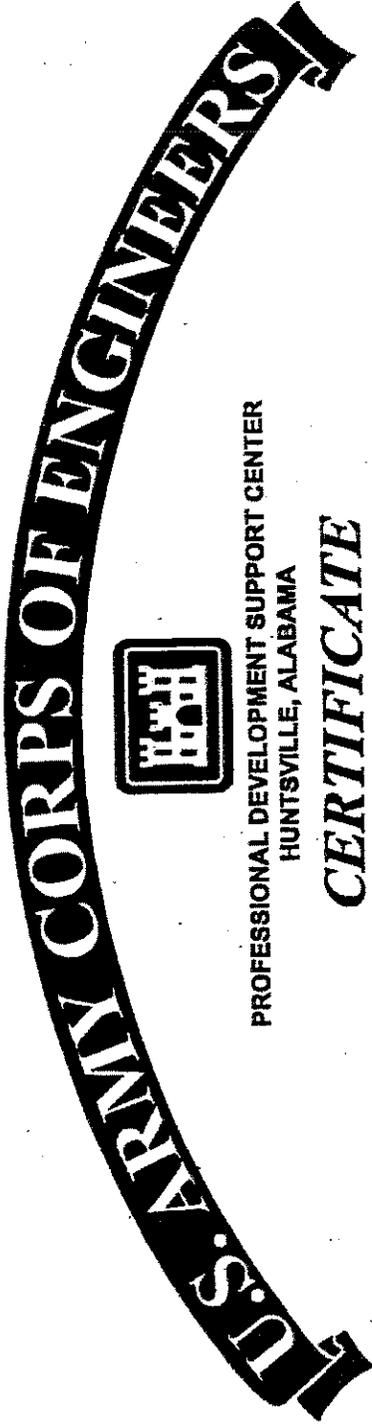
has completed the Corps of Engineers Training Course

CONSTRUCTION QUALITY MANAGEMENT FOR CONTRACTORS

Given at AGC of Alaska By Alaska 6th & 7th of April 1998
Location Instructional District Date

Thomas L. Johnson
Facilitator

Gary J. Anderson
Chief, USACE Professional Development Support Center



PROFESSIONAL DEVELOPMENT SUPPORT CENTER
HUNTSVILLE, ALABAMA

CERTIFICATE

This is to certify that

Doug Arnold

has completed the Corps of Engineers Training Course

CONSTRUCTION QUALITY MANAGEMENT FOR CONTRACTORS

Given at AGC Of Alaska By 16th & 17th of April, 2002
Location Instructional District Date

Thomas C. Johnson
Facilitator

Gary J. Anderson
Chief, USACE Professional Development Support Center



PROFESSIONAL DEVELOPMENT SUPPORT CENTER
HUNTSVILLE, ALABAMA

CERTIFICATE

This is to certify that

Kathy Lochman

has completed the Corps of Engineers Training Course

CONSTRUCTION QUALITY MANAGEMENT FOR CONTRACTORS

Given at AGC of Alaska By Anchorage May 12, 2006
Location Instructional District Date


Facilitator


Chief, USACE Professional Development Support Center

THIS CERTIFICATE EXPIRES FIVE YEARS FROM DATE OF ISSUE



PROFESSIONAL DEVELOPMENT SUPPORT CENTER
HUNTSVILLE, ALABAMA

CERTIFICATE

This is to certify that

Patrick McHugh

has completed the Corps of Engineers Training Course

CONSTRUCTION QUALITY MANAGEMENT FOR CONTRACTORS

Wilsonville, OR Portland February 26, 2010

Given at _____ By _____ Date _____
Location Instructional District

Facilitator

THIS CERTIFICATE EXPIRES FIVE YEARS FROM DATE OF ISSUE

LETTER OF AUTHORITY

To: Kathy Lochman
Patrick McHugh
Doug Arnold

I, Kriss Hart, will act as the CQC System Manager for the Gustavus Bulk Fuel Construction project. In my absence, by this letter I designate you, Kathy Lochman, Patrick McHugh and Doug Arnold as alternate CQC Manager's, with all the authority to implement the plan in accordance with the contract documents.



Kriss Hart, President

WESTERN MARINE CONST., INC.

DAILY QUALITY CONTROL REPORT

DAY _____ **DATE** _____

Weather -- Temperature _____ **Wind** _____ **Seas** _____ **Precipitation** _____

WORK PERFORMED TODAY:

PREPARATORY / INITIAL PHASE: YES _____ (Attach Report)
FEATURE(S): _____ MEETING SCHEDULED FOR _____

INSPECTION(S) PERFORMED: NO _____ YES _____ (Attach Report)

TEST(S) PERFORMED: NO _____ YES _____ (Attach Report)

JOB SAFETY: (Actions taken / inspections conducted)

Safety Meeting Held This Date _____ Yes (minutes in Log)
Lost Time Accidents This Date _____ Yes (Attach Report)
Haz. Mat'l/Waste Released _____ Yes (Attach Report)

MATERIAL (Attach Report):

INSTRUCTIONS RECEIVED:

REMARKS:

CONSTRUCTION EQUIPMENT (Brought onto Jobsite or Removed, Also Note Major Mechanical)

<u># of Units</u>	<u>Type / Description</u>	<u>Capacity</u>	<u>Notes</u>
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____

LABOR: (WMC)

<u>Number of Persons</u>	<u>Trade</u>	<u>Hours Worked</u>
_____	<u>OPERATOR</u>	_____
_____	<u>LABORER</u>	_____
_____	<u>FORMAN</u>	_____
_____	<u>BOATMAN</u>	_____
_____	_____	_____
_____	_____	_____
Total Hours Worked This Date		_____

SUBCONTRACTORS ON SITE

<u>Company</u> <u>Persons Today</u>	<u>Work Description</u>	<u>#</u>
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____

NOTES

CONTRACTOR'S VERIFICATION: The above report is complete and correct, and all material and equipment used and work performed this date is in compliance with the contract plans and specifications except as noted.

SIGNED: _____
 C QC MANAGER