



Environmental Chemical Corporation

TRANSMITTAL LETTER

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TO: [REDACTED]
U.S. Army Corps of Engineers Buffalo District
1776 Niagara Street
Buffalo, N. Y. 14207

DATE: 26 August 2010 PROJECT NO.: 5210.004
RE: Niagara Falls Storage Site (NFSS) - for the
Transportation and Disposal of Remedial Investigation
Derived and Legacy Waste

SENDING:

- Attached AND Under separate cover via MAIL the following items:
- Shop drawings Prints Plans Samples
- Copy of letter Change order Cert Payroll Specifications

COPIES	DESCRIPTION
1	Final Contractor Quality Control Plan

TRANSMITTED:

Submittal Schedule	Submittal Type Required	Classification
S Prior to Shipment	O Original	FIO For information only
A Per S/C Schedule	P Print/Photocopy	R1 PDT Review and Accept.
M Prior to Mobilization	E Electronic Format	R2 CX/LRD/HQ Rev./Accept.
W Prior to Commencing Work	M Microfilm	
Y Prior to Progress Payment	PH Photograph	

REMARK(S): If you have any questions please do not hesitate to call me at [REDACTED] or email me at [REDACTED]. My cell phone number is [REDACTED]

CC:

SIGNED:

Digitally signed by [REDACTED]
Date: 2010.08.26 17:14:36
-04'00'

[REDACTED]
Project Manager

SUBMITTAL REQUIREMENTS SUMMARY

NOTICES

1. To each item submitted, the Contractor shall attach a copy of this form and circle the title of the item being submitted.
2. Failure to submit required submittals as delineated on this form may result in withholding of payment in accordance with provisions of the Contract.
3. The Contract Administrator is responsible for distributing submittals to the requesting Department (e.g., Construction). The Department is responsible for further distributions (e.g., Site Superintendent).

Submittal		Scope of Work (SOW) Paragraph	Classification	ITR Required	Submittal Schedule (Calendar Days after NTP)	Submittal (No.) and Type
1	Draft Sampling and Analysis Plan	5.1.1	R1	Yes	14	E, O
2	Draft Health, Safety and Radiation Protection Plan	5.1.2	R1	Yes	14	E, O
3	Draft Quality Control Plan and ITR documentation	5.1.3	R1	Yes	14	E, O
4	Draft Waste Management, Transportation, and Disposal Plan	5.1.4	R1	Yes	14	E, O
5	Final Work Plans	5.1	R1	Yes	35	E, O
6	IDW and Legacy Waste Manifests and Shipping Documents	5.5.2	R1	Yes	7 days prior to waste shipments	E, O
7	Draft Close Out Report	5.6.1	R1	Yes	As Specified in 5.6.1 and 6.1	E, O
8	Final Close Out Report	5.6.1	R1	Yes	As Specified in 5.6.1 and 6.1	E, O

FINAL

**CONTRACTOR QUALITY CONTROL
PLAN**

**Niagara Falls Storage Site
Transportation and Disposal of
Remedial Investigation Derived
and Legacy Waste**

Lewiston, NY

August, 2010

Prepared for:



**US Army Corps
of Engineers**®
Buffalo District

U.S. Army Corps of Engineers
Buffalo District

Prepared by:



Environmental Chemical Corporation (ECC)
1125 Route 22 West
Bridgewater, NJ 08807

Prepared under:

Contract No.: W91ZLK-05-D-0009
Delivery Order 0004

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CONTRACTOR QUALITY CONTROL PLAN

Transportation & Disposal of Remedial Investigation and Legacy Waste Lewiston, New York

August 2010

I hereby certify that the enclosed Contractor Quality Control Plan, shown and marked in this submittal, is that proposed to be incorporated with Contract Number Contract No: W91ZLK-05-D-0009 Task Order No: 0004 at the Niagara Falls Storage Site (NFSS). This Contractor Quality Control Plan is in compliance with the Contract drawings and specifications, and is submitted for Government approval.

Reviewed and Approved by:

Digitally signed by [redacted]
Date: 2010.08.25 23:47:01 -04'00'

25 August 2010

Project Manager
[redacted], PMP

Date

Quality Control System Manager
Wilbur Stephan, CHMM

Date

Digitally signed by [redacted]
DN: [redacted], c=US, o=ECC,
ou=Environmental, email=[redacted]
Date: 2010.08.26 06:28:08 -04'00'

Program Manager,
[redacted], CHMM

Date

Accepted by:

USACE
Contracting Officer
[redacted]

Date

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ACRONYMS AND ABBREVIATIONS

AEC	Atomic Energy Commission
AHA	Activity Hazard Analysis
APP	Accident Prevention Plan
CIH	Certified Industrial Hygienist
CO	Contracting Officer
COC	Chain-of-Custody
CONUS	Continental United States
COR	Contracting Officer Representative
CQC	Contractor Quality Control
CQCP	Contractor Quality Control Plan
CSP	Certified Safety Professional
DFW	Definable Feature of Work
DoD	Department of Defense
DQCR	Daily Quality Control Report
ECC	Environmental Chemistry Corporation
EM	Engineer Manual
ERDA	Energy Research and Development Administration
ESQ	Environment, Safety, and Quality
FIO	For Information Only
GA	Government Approval
HPT	Health Physics Technician
I.C.E.	I.C.E. Services Group, Inc.
IDW	Investigation Derived Waste
IH	Industrial Hygienist
ITR	Independent Technical Review
LOOW	Lake Ontario Ordnance Works
LSA	Low Specific Activity
MED	Manhattan Engineer District
MSDS	Material Safety Data Sheet
MIS	Management Information System
NCR	Nonconformance Report
NFSS	Niagara Falls Storage Site
OSHA	Occupational Safety and Health Administration
OSTC	On-Site Transportation Coordinator
PgM	Program Manager
PHP	Project Health Physicist
PM	Project Manager
PPE	personal protective equipment
QA	quality assurance
QC	quality control
QCM	Quality Control Manager
QCSM	Quality Control System Manager
RFI	Request for Information
SAIC	Science Applications International Corp
SAP	Sampling and Analysis Plan
SOW	scope of work
SS	Site Superintendent
SSHP	Site Safety and Health Plan
SSHS	Site Safety and Health Supervisor

ACRONYMS AND ABBREVIATIONS (Continued)

T&D	Transportation and Disposal
TNT	trinitrotoluene
USACE	United States Army Corps of Engineers
WMTDP	Waste Management, Transportation, and Disposal Plan

1. INTRODUCTION

This Contractor Quality Control Plan (CQCP) for the Niagara Falls Storage Site (NFSS) was developed by Environmental Chemistry Corporation (ECC) for the United States Army Corps of Engineers (USACE), U.S. Army Engineer District, Buffalo, in accordance with the Contract No. W91ZLK-05-D-0009 Task Order No: 0004, and the Specifications for Transportation and Disposal of Remedial Investigation and Legacy Waste at the NFSS. Work conducted under this contract will be performed in accordance with all applicable Federal, State, and local laws and regulations. This CQCP is the basis of the project quality control (QC) system and provides an outline of the planned QC procedures for the project.

The primary function of quality management is to facilitate the correct performance of tasks to ensure that remediation and construction activities are performed according to plans and specifications, regardless of schedule or budget. However, proper implementation of quality management helps to avoid rework, thereby resulting in exceptional schedule and budget performance. This is achieved through the execution of a realistic plan to ensure that the required standards of quality remediation and construction are met and to preclude problems resulting from substandard quality. This CQCP defines the procedures for management and control of ECC personnel, subcontractors, and suppliers to ensure the completed project complies with contract requirements.

1.1 QUALITY CONTROL OBJECTIVES

The objective of the CQCP is to establish and describe the quality management system used to ensure that the project activities are conducted and documented in a planned and controlled manner. This plan defines the management structure, organization, responsibilities, and authorities needed to make certain that remediation and construction are performed according to plans and specifications. Performance of quality work and implementation of a quality assurance program are the responsibilities of all ECC staff members and subcontractors and can be achieved through a cooperative effort and commitment to quality by all personnel.

ECC's goal in the implementation of this CQCP is to ensure compliance with the contract specifications, drawings, applicable regulations and procedures, and to ensure that the appropriate quality standards for project activities are achieved and maintained. The Quality Control System Manager (QCSM) is responsible for implementing this program and assuring the performance of quality work. The QC staff is responsible for monitoring and evaluating the adequacy and implementation of this program and supporting procedures. The QCSM has the full support of management and is given the independence and authority necessary to accomplish assigned tasks.

1.2 SITE QUALITY CONTROL PLAN

This CQCP describes the QC requirements for handling, preparation, loading, transportation and disposal of waste containers presently stored at the Niagara Fall Storage Site. The CQCP will address activities associated with the sampling of containerized waste; packaging of containerized waste for Transportation and Disposal (T&D); and Loading of containerized waste for T&D. The CQCP is designed to monitor project contract compliance relating to inspection of the waste containers, loading, transportation and disposal activities utilizing the Three Phase Control system as described in Section 4.0 - Three Phases of Control. The Accident Prevention Plan (APP)/Site Safety and Health Plan (SSHP), waste inventory and manifest documentation requirements of the project, are the primary concern of this CQCP.

These requirements are detailed in the APP/SSHP and the Waste Management, Transportation, and Disposal Plan (WMTDP). This CQCP is designed to implement, modify, plan, and complete all task order operations in compliance with contract requirements using proper record-keeping and reporting procedures.

ECC will maintain responsibility for its work and the work of its subcontractors. To ensure compliance with contract requirements and maintain responsibility of all work performed under this contract, ECC will:

- Maintain qualified personnel, equipment, and facilities which are required for the completion of the project; and
- Provide a continuous inspection program to examine the quality of materials, maintain standards of workmanship, ensure remediation and construction standard excellence, evaluate unit performances, identify and correct deficiencies, and provide a finished project which meets or exceeds the contract requirements.

ECC will not consider this plan to be in effect without formal written acceptance of the Contracting Officer (CO). ECC understands that acceptance of this plan is conditional and will be based on continued compliance with the contract specifications. ECC acknowledges that the CO or Contracting Officer Representative (COR) may request changes or periodic updates to the CQCP to maintain contract compliance. The QCSM is responsible for managing and coordinating the Three Phase Control system and QC documentation. No work or testing may be performed unless the QCSM or a designated alternate is on-site.

2. PROJECT DESCRIPTION

The NFSS site is located in northwestern portion of Niagara County, New York approximately 10 miles northeast of Lewiston, New York and approximately five miles south of Lake Ontario (Figure 2-1). The NFSS occupies 191 acres located in the southwestern portion of the Lake Ontario Ordnance Works (LOOW) site.

2.1 SITE HISTORY

In 1942, the War Department obtained 7,500 acres in northwestern Niagara County, NY for the construction of a trinitrotoluene (TNT) production facility designated the Lake Ontario Ordnance Works. TNT production, production support, and storage areas were constructed on 2,500 acres in the eastern portion of LOOW. The remaining 5,000 acres surrounding the production area were left as an undeveloped buffer zone and allowed for possible expansion of the plant from 6 to 12 production lines. The plant expansion never occurred, and this acreage in the western portion of LOOW remained undeveloped. In 1943 after approximately 9 months of operation, LOOW was decommissioned due to excess production at other TNT plants. The 2,500 acre production area of LOOW was used by various Department of Defense (DoD) agencies including the Air Force and Navy. Two manufacturing plants were subsequently built on the property- Air Force Plant 68 and the Navy IPPP. The Army constructed NIKE Missile Battery NF-03/05.

In the mid 1940s approximately 1,500 acres in the southern portion of the LOOW were transferred to the USACE - Manhattan Engineer District (MED). The MED subsequently became the U.S. Atomic Energy Commission (AEC), then the Energy Research and Development Administration (ERDA), and finally the U.S. Department of Energy. Portions of the 1,500 acres were used for storage of radioactive materials during the development of the atomic bomb. However, from the 1950s to 1980s, radioactive materials formerly located throughout the 1,500 acre property were consolidated into the current 191 acre NFSS area.

2.2 SITE OWNERSHIP

The NFSS T&D Project work area is currently owned by Federal entities.

The USACE Buffalo District has requested all communications with current property owners to be conducted through the following USACE contact:

[REDACTED]
NFSS Project Manager
U.S. Army Corps of Engineers, Buffalo District
1776 Niagara Street
Buffalo, New York 14207-3199
Phone: [REDACTED]
Fax: [REDACTED]
E-Mail: [REDACTED]

2.3 DEFINABLE FEATURES OF WORK

The scope of work for the NFSS T&D project requires the following Definable Features of Work (DFWs) to be completed:

- Mobilization of needed support structures and equipment and site preparation;
- Obtaining dose rates of several Low Specific Activity (LSA) boxes (as necessary for disposal acceptance);
- Repackaging or over packing of waste containers;
- Preparation of containers for loading;
- Release surveys of shipping containers;
- Loading of containers;
- Pump out of storage tanks (liquid);
- Sizing of storage tanks;
- Site restoration and demobilization;

ECC will provide all necessary equipment and personnel to perform T&D activities as defined in the contract specifications. This work will be carried out during scheduled work hours of 7:00 am to 5:30 pm, Monday through Friday. Changes to this work schedule will be discussed with the COR at least 48 hours prior to the implementation of proposed changes.

3. QUALITY CONTROL ORGANIZATION

This CQCP describes the QC system that will be implemented by ECC to ensure that field work and sampling activities comply with the requirements of the project scope, project work plans, and the required field and analytical testing methods. This plan provides ECC and USACE quality assurance (QA) personnel with a schedule of project meetings, inspections, and submittals required for this project. The following sections describe the roles, responsibilities, and authorities of ECC's personnel associated with the activities for this project.

3.1 PROJECT ORGANIZATION

The project organization of key personnel, responsibilities, and lines of authority for the NFSS T&D project is described below. Resumes for project personnel are provided in Appendix E.

ECC is responsible for developing, modifying, and implementing the CQCP, which will be implemented independently of the QA oversight performed by representatives of the USACE. However, the CQCP will not be activated without formal written acceptance of the CO.

3.2 QUALITY CONTROL ORGANIZATION

A brief description of the roles and responsibilities of project personnel is described in the following sections.

Changes to the CQC staff organization require acceptance from the USACE CO and must be submitted in writing 7 days prior to the proposed change. Requests will include the names, qualifications, duties, and responsibilities of each proposed replacement. All such changes to CQC staff and notification/acceptance of the CO will be routed through the Project Manager (PM).

3.2.1 Program Manager

The ECC Program Manager (PgM), [REDACTED], is responsible for executive oversight and overall conformance of the work to USACE requirements and specifications, including technical, cost, and schedule. The PgM has the overall responsibility for the success and proper execution of the contract and all task orders. The PgM has the authority for signing contract modifications within specified contract amounts. The PgM's responsibility includes reviewing all required submittals, designating the PM and QCSM, and ensuring that the project schedule and budget allow sufficient resources to properly complete the required elements of the work in accordance with the approved work plans. The PgM also has the primary responsibility for tracking any proposed changes in the scope of work (SOW) for the overall project and reporting any proposed changes to the PM, QCSM, and the COR. The PgM interfaces directly with the USACE Buffalo District regarding contract execution and accountability, and is the primary point of contact for the contract.

3.2.2 Project Manager

The ECC PM, [REDACTED] organizes the assigned project staff and initiates project planning and implementation activities at the Task Order level. The PM controls the budget and schedule with the concurrence of the PgM, ensuring the contract requirements are met. The PM is responsible for managing all field activities related to the requirements of the SOW, including subcontractors. The PM has authority to initiate modifications to the contract and works with ECC's Contract Administrator (Ms. Barbara Growney) to submit a formal modification. The PM is responsible for preparing and submitting certified

pay requests to the USACE. The PM reports directly to the PgM and ensures that all project activities conform to USACE requirements and specifications. PM duties also include assigning responsibilities for preparing project reports and reviewing each form/report for accuracy and content.

3.2.3 Site Superintendent

██████████ ECC Site Superintendent (SS) shall manage the day-to-day activities on the site. The Site Superintendent shall be responsible for the safe execution of the work, will report to the ECC PM, and has responsibility for schedule adherence.

3.2.4 Corporate Environment, Safety and Health, and Quality Corporate Sponsor

In accordance with the ECC QA Program, an Environment, Safety, and Quality (ESQ) Sponsor will be assigned for this project. This position has overall responsibility and authority for developing and managing the Programmatic QC Plan. This person will serve as a technical advisor on quality-related matters and resource to the QCSM. ██████████ Certified Industrial Hygienist (CIH), Certified Safety Professional (CSP) and ECC Continental United States (CONUS) ESQ Manager will be the ESQ Corporate sponsor for this project.

3.2.5 Quality Control System Manager

The ECC QCSM/Quality Control Manager (QCM), Wilbur Stephan, is responsible for supervising all QC aspects of the project to ensure compliance with contract plans and specifications. The QCSM is responsible for overall management of the Contractor Quality Control (CQC) Program and has the authority to act independently in all QC matters. As supervisor of the CQC Program, the QCSM approves all submittals and supervises all QC procedures. The QCSM maintains communications between project management and project team members and acts as primary spokesman on quality matters when interfacing with external organizations.

██████████ has been identified as the alternate to the QCSM. In absence of the QCSM, ██████████ will have the same responsibilities and authority as the QCSM. Mr. LaBanc will be responsible for completing the DQCR's, performing QC Follow-up inspections, performing QC check of the manifests, and identifying QC deficiencies. The QCSM will be kept informed on the progress of the field activities and will be consulted on deficiencies identified in the field.

A copy of the QCSM appointment letter is included in this CQCP as Appendix A. The appointment letter describes the responsibilities of the QCSM and delegates sufficient authority to the QCSM to adequately perform CQC functions, including authority to stop work when such work is not in compliance with the contract.

QCSM Authority and Responsibility

The QCSM reports to the ECC Corporate ESH&Q Sponsor to facilitate required authority and organizational freedom, including sufficient independence from cost and schedule considerations. The QCSM has the overall responsibility and authority for the administration of all CQC Program-related activities. Generally, the QCSM is responsible for:

- Ensuring that the CQCP is implemented for the full scope of work; and
- Conducting regular reviews and reporting to the QCM and the PM regarding the status and adequacy of the CQC Program.

The QCSM for the project serves as primary spokesperson on matters related to the CQC Program, including formal communications with the USACE, and is responsible for verifying that activities affecting quality are correctly performed. The QCSM will provide a Daily Quality Control Report (DQCR) to the USACE. The QCSM is responsible for reviewing all attachments to the DQCR, such as the daily safety meeting records, new JSAs, etc.

To carry out this responsibility, the QCSM is given sufficient authority, access to work areas, and organizational freedom to perform the following functions:

- Identify quality problems;
- Initiate, recommend, or provide solutions to quality problems through designated channels;
- Identify the need for corrective action;
- Verify implementation of solutions and corrective actions;
- Assure that further processing, delivery, installation, or use of items or services are controlled until proper disposition of a nonconformance, deficiency, or unsatisfactory condition has occurred;
- Halt work, if work is not in compliance with the contract requirements;
- Certify that all submittals are in compliance with contract requirements; and
- Ensure that all certifications provided by others (e.g., equipment and material; and vendors or suppliers) are accurate and in compliance with contract requirements.

3.2.6 Quality Control Supervisor

The onsite QC Supervisor, [REDACTED] is responsible for coordinating and supervising all QC aspects of the planned field activities including sampling tasks to ensure compliance with project plans and specifications. The QCS will be present on-site during all field activities and is responsible for performing field QC functions. To carry out these responsibilities, the QCS is given the authority to perform the following QA functions:

- Lead all Preparatory Inspection meetings, if QCSM is not available;
- Prepare the DQCR;
- Identify, recommend, and oversee corrective actions for field deficiencies;
- Halt work, if work is not in compliance with the contract requirements;
- Coordinate with the PM for scheduling of required field QC testing requirements;
- Ensure that the quality of data meets project QA objectives as identified in the SAP;
- Ensure consistent QA/QC procedures are in-place during the performance of project sampling and analysis activities;
- Ensure that QA procedures for the sampling activities are conducted in a manner consistent with state regulations;
- Recommend any necessary corrective action procedures to maintain project QA objectives;
- Conduct field and laboratory audits to assure that project QA and QC requirements are implemented; and
- Check Chain-of-Custody (COC) records for correctness and accuracy.

3.2.7 Project Health Physicist

The Project Health Physicist (PHP), [REDACTED] will be responsible for the implementation of all radiation safety activities. The PHP also is responsible for the project radiation monitoring. The PHP will oversee all operations relating to radioactive material handling and post-remedial release of the survey units. The PHP will be functioning as both the PHP and SSHS regarding radiation and occupational safety monitoring and reporting functions. Specific duties of the PHP, and the forms used by the PHP, are detailed in the Site Safety and Health Plan, and the Radiation Protection Plan.

3.2.8 Site Safety and Health Specialist

The Site Safety and Health Supervisor (SSHS), [REDACTED], will be responsible for the following:

- Supervise daily on-site implementation and enforcement of the APP/SSHP;
- Ensure site compliance with federal, state, and Occupational Safety and Health Administration (OSHA) safety and health regulations and all requirements of the APP/SSHP including, but not limited to, radiation surveys, air monitoring, use of personal protective equipment (PPE), decontamination, site control, procedures used to minimize hazards, safe use of engineering controls, the emergency response plan, spill containment program, and documentation of the daily safety and health inspection results;
- Conduct all necessary on-site training;
- Stop work if unacceptable health or safety conditions exist, and take necessary action to re-establish and maintain safe working conditions;
- Consult with and coordinate any modifications to the APP/SSHP with the ECC Safety and Health Specialist, PHP, the PM, and the CO;
- Document the safety and health findings during daily quality control inspections;
- Recommend corrective actions for identified safety and health deficiencies; and
- Oversee the corrective actions in coordination with site management.

3.2.9 Health Physics Technician

For this project the Industrial Hygiene/Health Physics Technician (IH/HPT), [REDACTED] will be performing both SSHS and HPT responsibilities. [REDACTED] will report to and interface with the PHP for survey protocol and technical issues. The HPT will perform the radiation monitoring of the materials for disposal purposes; air monitoring; instrument maintenance and calibration; and radiological monitoring during the project. The HPT is responsible for maintaining the radiological survey records of the materials and the site.

3.2.10 Subcontractors

When other companies and/or subcontractors are involved in performing activities governed by the requirements of the CQCP, the responsibility and authority of such organizations will be clearly established and documented. Although ECC may delegate the establishment and execution of certain portions of the CQCP, ECC will retain the responsibility of the project QC program.

ECC anticipates utilizing three (3) subcontractors. ICE Services, Inc. is contracted to perform the coordination for T&D. WCS and US Ecology have been identified as the designated disposal facilities.

4. THREE PHASES OF CONTROL

The QCSM is responsible for implementing the core of the Quality Management System, the Three-Phase Control system, to ensure that all project work complies with requirements of the contract plans and specifications. The Three Phases of Control will be implemented for each DFW delineated in the work plan (DFWs are presented in Appendix B). The phases are described below. Required actions are listed for each phase.

4.1 PREPARATORY PHASE

The QCSM will notify the CO or COR at least 48 hours before beginning any of the required Preparatory Phase actions. The Preparatory Phase will be performed prior to the beginning of work on each DFW. This phase will include a meeting conducted by the QCSM and attended by the SSHS, the SS, other CQC personnel (as applicable), and the supervisor responsible for the DFW. The results of the preparatory phase actions will be documented by separate minutes prepared by the QCSM and attached to the DQCR. ECC will instruct workers as to the acceptable level of workmanship required to meet contract specifications. The Preparatory Phase will include the following activities:

- Review of each paragraph of the applicable specification sections;
- Review of the contract plans;
- Ensure that all materials and/or equipment were tested, submitted, and approved;
- Ensure that provisions were made to provide required control;
- Review of the testing plan;
- Ensure that provisions were made to provide the required QC inspection and testing;
- Examination of the work area to ensure that the required preliminary work is completed;
- Examination of the required materials and equipment to ensure that they are on-site and conform to the specifications;
- Review the APP/SSHP and appropriate Activity Hazard Analyses (AHAs) to ensure that applicable safety requirements are met and that required Material Safety Data Sheets (MSDS) were submitted;
- Discuss construction methods and procedures for conducting the work, including elimination of repetitive deficiencies, document tolerances, and workmanship standards; and
- Ensure that the portion of the plan for the work to be performed is accepted by the CO or COR.

4.2 INITIAL PHASE

The QCSM will notify the CO or COR at least 48 hours before each Initial Phase activity. The initial phase will be accomplished at the beginning of each DFW. The QCSM will ensure that the personnel responsible for the definable features of work are instructed concerning the acceptable level of workmanship required. The QCSM will document the results of the initial phase meeting as separate meeting minutes attached to the DQCR. The following will be accomplished during the Initial Phase:

- Check preliminary work to ensure that it is in compliance with contract and task order requirements;
- Review minutes of the preparatory meeting;
- Establish the level of workmanship required;
- Resolve conflicts;

- Check site and personnel safety to ensure compliance with the APP/SSHP and the appropriate activity hazard analysis; and
- Ensure that inspections and testing are scheduled.

The Initial Phase must be repeated for each new crew starting work on-site or if acceptable quality standards are not being maintained.

4.3 FOLLOW-UP PHASE

The QCSM or QC personnel will perform daily checks to ensure continuing compliance with the contract requirements, including control testing, until the completion of each DFW. The inspections and/or tests will be documented and included in the DQCR. Final follow-up checks will be conducted and all deficiencies corrected prior to the start of additional features of work. The follow-up checks will include the following:

- Ensure the work is in compliance with contract requirements;
- Check site and personnel safety to ensure compliance with the APP/SSHP and the appropriate activity hazard analysis;
- Ensure the quality of workmanship required is maintained;
- Ensure that scheduled testing is performed; and
- Ensure that nonconforming work is corrected.

4.4 ADDITIONAL PREPARATORY AND INITIAL PHASES

Additional Preparatory and Initial phases may be conducted on the same DFWs as determined by the USACE if the quality of on-going work is unacceptable; there are changes in the QC staff, the Project Management staff, or the work crew; work on a definable feature is resumed after a substantial period of inactivity; there is a change order for that specific activity; or other problems develop.

4.5 PROJECT COORDINATION MEETINGS

A Pre-work Conference will be held between the ECC Project Management team, including the PM, SS, QCSM, SSHS, and the USACE to review submittals, safety, labor relations, environmental protection, project schedule, payment, and procurement of materials. Other subjects concerning the project may be discussed at the discretion of ECC or the USACE.

The minutes of this meeting will be prepared by ECC's QCSM and reviewed by ECC's SS before distribution to all the organizations involved.

Once work commences, subsequent coordination meetings may be called by either ECC or the USACE to reconfirm mutual understandings and/or address deficiencies in the CQC system or project procedures which may require corrective action by ECC.

4.6 DEFICIENCY TRACKING

Deficiencies may be identified at any stage of the Three Phases of Control process. Defects and deficiencies identified will be recorded in the DQCR. Once identified, defects and deficiencies will be monitored closely until resolved through re-work, replacement, or other required performance. The status of each deficiency will be recorded on the DQCR until resolved. No additional work which builds on the deficient item will be permitted until the deficiency is corrected.

ECC requires its subcontractors to adhere to the CQCP and the APP/SSHP, including the provisions of Engineering Manual (EM) 385-1-1 (September, 2008). Acceptance of these plans and policies will be in written form. In addition, ECC requires subcontractors to have their own QC procedures specific to the type of work performed. ECC will review and approve subcontractor procedures before allowing subcontractors to begin work. Appropriate subcontractor QC plans and procedures directly affecting project work will be documented and written copies maintained onsite. All QC functions will be coordinated through the QCSM and documented in daily reports.

While onsite, all subcontractor personnel will be under the supervision and review of the QCSM and Site Superintendent (SS). Subcontractor deficiencies will be recorded on the DQCR. These conditions are documented in the subcontractor agreements prior to the start of any field work.

4.7 SAFETY INSPECTIONS

The SSSS will perform daily safety inspections throughout the project. The inspections will evaluate site operations and will be reported daily in the DQCR. In addition, the SSSS will conduct daily safety meetings with all site personnel and document the meetings using the Daily Safety Meeting form. This form will be attached to the DQCR and sent to the COR daily. All ECC QC and Safety and Health personnel are experienced and trained to identify and correct any deficiencies in site operations. Deficiencies and corrections will be recorded on the DQCR and will include the area of deficiency, type of deficiency, corrective action to be taken or already taken, the responsible party for corrective action, date of follow-up inspection(s), and signature of the investigating QCSM.

All on-site inspections will be considered a matter of record. The inspections will be filed in ECC's Quality Control Section and submitted in the appropriate contract formats.

4.8 COMPLETION INSPECTION

The QCSM will conduct a Completion Inspection of all DFWs to verify that the work performed meets the requirements of plans, specifications, quality, workmanship, and completeness. Three types of completion inspections are performed:

- Quality Control Completion Inspection;
- Pre-Final Inspection; and
- Final Acceptance Inspection.

Completion inspections are discussed and defined in Section 7.3, Completion Inspections.

5. SUBMITTAL CONTROL PROCEDURES

ECC will review and modify the Submittal Registry (ENG Form 4288), received from the USACE, that reflect any additional submittals deemed necessary. ECC will submit the items listed on the Submittal Register and any submittals required by the contract specifications. Each submittal will be in compliance with the contract requirements. The QCSM will check and approve each submittal, and complete each respective transmittal form (ENG Form 4025). The Submittal Register template to be used is presented in Appendix C.

The Submittal Register is the submittal scheduling document and will be used to control submittals throughout the life of the contract. The Submittal Register and progress schedules will be coordinated and updated as requested.

The Submittal Register will be maintained by the QCSM. Listings will be grouped by section number and listed in numerical sequence of the transmittal number shown on ENG Form 4025.

5.1 SCHEDULING

Submittals covering a complete system or interrelated components will be coordinated and submitted concurrently. Certifications to be submitted with the applicable drawings also will be scheduled. The approved Submittal Register will specify the scheduled dates for submittals.

5.2 TRANSMITTAL

Submittals to the USACE will be transmitted with ENG Form 4025. Each item to be submitted will be identified to ensure proper listing of the specification paragraph and sheet number of the contract/design drawings pertinent to the data submitted for each item. ENG Form 4025 will accompany each copy of a submittal.

5.3 DEVIATIONS

For submittals that include proposed deviations requested by ECC, the "Variation" column on ENG Form 4025 will be checked. ECC will establish in writing the rationale for the deviation and annotate the deviations of the submittal.

5.4 INDEPENDENT TECHNICAL REVIEW

As per the requirements of the contract, and incorporated into the quality control process, all work plan documents will be subject to an Independent Technical Review (ITR) prior to submission to the USACE for review and approval.

The purpose of the ITR will be to:

- 1 – Review documents for their technical completeness;
- 2 – Review documents for conformance with contract specifications and/or design drawings; and
- 3 – Review documents for compliance with applicable regulations and standards.

All work plans, drawings, or other project document deliverables (i.e., close out) will be checked by ECC who is responsible for their preparation. Once the document has met the ECC' internal quality review, the document(s) will be sent to the ITR for review.

All comments, edits, or revisions made to the document(s) by the ITR will then be incorporated into a final draft document which will be forwarded to the USACE for review.

Each document requiring ITR, upon being submitted to the USACE for review, shall contain an ITR completion certificate. This completion certificate will certify that the ITR has reviewed the project document as part of the quality control process. The certificate will include the name and address of the ITR entity, name(s) of the ITR reviewers, and date(s) the review was performed.

ECC has identified Science Applications International Corp (SAIC) as the third party ITR for the NFSS T&D project. SAIC, although having a contract with ECC, will function independently regarding the preparation of all project documents.

5.5 CERTIFICATION

The QCSM is responsible for certifying that all submittals are in compliance with contract requirements and for ensuring that all certifications provided by others (i.e., vendors and suppliers) are accurate and in compliance with contract requirements.

5.6 REQUIRED SUBMITTALS

The required submittals (as applicable) for this project are categorized as follows:

- SD-01 Preconstruction Submittals;
- SD-07 Certificates;
- SD-11 Closeout Submittals.

No activities will be performed prior to receipt of the required approvals of applicable submittals. The QC staff will check to ensure that all materials and/or equipment are tested, submitted, and approved during the Preparatory Phase of QC inspections.

5.7 SUBMITTAL CATEGORIES

Government Approval

Submittals subject to Government Approval (GA) are noted as such in the contract specifications and the Submittal Register. Each submittal required under the contract will be transmitted to the USACE on or before the scheduled submittal date as listed in the Submittal Register. Submittals receiving GA will be stamped and dated as such.

For Information Only

Although approval of the USACE is not required on For Information Only (FIO) submittals, the USACE may require re-submittal of any item or material that is not in compliance with the contract specifications.

Both GA and FIO classified submittals will be sent to individuals on the distribution list (Appendix F).

5.8 CERTIFICATES OF COMPLIANCE

Any quality compliance certificates required for the project will include the following:

- Name and address of the contractor;
- Project name and location;
- Quantity and date of the shipment or delivery of the certified material; and
- Signature of an official authorized to certify the quality of the material for the manufacturer.

6. TESTING

Testing and test control practices support project work activities. Testing is conducted for two purposes:

- To verify conformance to quality requirements (i.e., proof tests prior to installation, pre-operational tests and construction tests, product certification tests); and
- To provide data for use in other activities (i.e., field and/or laboratory tests conducted to provide design input data).

For NFSS the testing performed will include, but is not limited to, radiological analyses of physical samples. Physical samples include those obtained for waste characterization, and unrestricted release.

6.1 OPERATIONAL TESTING

Operational testing will be conducted to verify that the materials and techniques used in the performance of this SOW are in compliance with project specifications and in conformance with established parameters. Results will be documented and provided to the USACE as required by project specification.

6.2 ACCEPTANCE TESTING

Acceptance testing will be conducted to identify specific conditions that must be achieved for the work or material to be within acceptable quality parameters. Testing methods and procedures will be performed by approved laboratories and the information will be forwarded to the USACE as required. Acceptance testing will be performed for backfill and compaction of placed backfill.

6.3 TESTING REQUIREMENTS

ECC and its subcontractors will adhere to the approved Sampling and Analysis Plan (SAP) for waste characterization of containerized waste and wastewater. The SAP specifies sample requirements and procedures for the program to ensure that the radiological data collected are of known and adequate scientific quality.

7. INSPECTIONS

A structured control system will be implemented for each major work task and will include preparatory, initial, follow-up, and safety inspections. The QCSM or QCS will ensure that no work proceeds until the appropriate inspection phase is performed. In addition to the QC staff, other project personnel will implement this control system as part of their normal duties/responsibilities.

7.1 INSPECTION PHASES

The ECC inspection program consists of three phases of inspections prior to and during the task performance and coincides with the Three Phases of Control. This inspection approach ensures QC in the field through multiple inspections during all phases of job performance for each DFW. The Three Phases of Control are outlined in detail in Section 4.0 of this CQCP.

7.2 INSPECTION ACTIVITIES

The different types of QC inspection activities performed under the CQCP include the following activities.

Field Inspections

Primarily visual examinations, but may include measurements of materials and equipment being used, techniques employed, and the final products. These inspections confirm that a specific guideline, specification, or procedure for the activity is successfully completed. They are performed either during remediation, backfill, and/or site restoration, or shortly after completion of the work. The results will be documented in the DQCR.

Field Tests

Tests or analyses conducted in connection with site activities, and performed primarily on samples or work in-progress to determine whether the project requirements are being met. Field tests are performed upon receipt of the material to provide prompt confirmation or rejection of the material. Work in-progress is tested to minimize the potential of rework being required as a result of defective material or work.

Receiving Inspections

Inspections that include a visual examination and/or measurement of materials obtained from suppliers when they arrive at the site. They are performed to verify that the materials received meet design specifications, are free of defects, and were not damaged in transit.

Radiological Surveys

Surveying includes the establishment of background and direct gamma scanning of incoming and outgoing equipment and transportation vehicles to document free-release criteria has been met. I.C.E. Services Group, Inc. (I.C.E.) will provide transport vehicles, including tanker trucks and semi tractor trailers, drivers, and the OSTC for the project. The project HPT will perform periodic instrument checks, radiological surveys including; scans of waste containers, transport vehicles, and site equipment. The HPT will also maintain radiological zones and controls, perform surveys of personnel and equipment, and complete instrument and data records, with oversight by the PHP.

7.3 COMPLETION INSPECTIONS

Three types of Completion Inspections are performed to verify that the work performed meets the requirements of plans, specifications, quality, workmanship, and completeness:

Quality Control Completion Inspection

Based on the USACE's concurrence that the work is nearing completion and prior to the Pre-final Inspection, the QC staff conducts a detailed inspection for conformance to requirements. The COR is notified of the inspection date so he/she may participate. An itemized deficiencies list is prepared identifying items that do not conform to plans and contract specifications. The list is submitted to the USACE. All deficiencies will be corrected within 5 days of the inspection.

Pre-Final Inspection

Notice is given to the USACE 14 days prior to the Pre-Final Inspection. The notice includes assurance that all specific items previously identified as unacceptable, along with all remaining contract work, will be completed by the date scheduled for the Pre-Final Inspection.

Final Acceptance Inspection

Notice is given to the USACE 14 days before the Final Acceptance Inspection and includes assurance that all specific items previously identified as unacceptable, if any, along with all remaining work performed under the contract will be complete and acceptable by the date scheduled for the Final Acceptance Inspection.

At a minimum, the QCSM or the QCS will perform Final Inspections of the NFSS T&D storage area to ensure removal of containerized waste has been completed.

8. NOTIFICATION OF NONCOMPLIANCE

This section describes the procedures for controlling noncompliant items with specified design requirements by tracking them from identification through acceptable corrective action. All project personnel are responsible for identifying deficiencies and notifying the QCSM.

8.1 IDENTIFYING DEFICIENCIES

The QCSM will be notified of all deficiencies identified during the course of site activities to ensure that each deficiency is documented, reported, and tracked; corrective actions are implemented; and follow-up verification is conducted.

The QCSM will include the identified deficiencies in the DQCR, noting the item found to be deficient, date, time, location, applicable drawing number, specification number, the person who identified the deficiency, and the status of the item to which the deficiency applies (installed, awaiting installation, deficiency identified upon receipt, item previously accepted but in storage, etc.).

When an item is identified as deficient, the QCSM will describe the item/condition in the DQCR, complete a Nonconformance Report (NCR), and enter the NCR in the QC database tracking system. The QC database serves as the daily reminder file of identified deficiencies so the QCSM can monitor their status. The NCR form provides the hard documentation of the status of the deficiency and includes the documented history of the deficiency as corrective action proceeds.

The QCSM will update the status of the deficiency in the QC database daily or when there is a change in status. Before the work activities of the day begin, the QCSM will access the database and note the deficiencies that require follow-up verification that day. New or changed status will be entered into the database at the end of each day. The DQCR will include a report on each NCR/deficiency that was completed and closed out for that day.

8.2 COMPLETION INSPECTION PUNCH LIST

Completion Inspections conducted by the QCSM may result in the development of a punch list of nonconforming items to approved design, plans, and specifications. During the course of each Completion Inspection the QCSM will document items of noncompliance in a punch list that will serve as input to the QC database for items requiring corrective action. The QC database will serve to track the follow-up of open items and identify the completion and close-out dates.

The QCSM will monitor the punch list corrective action database on a daily basis until all corrective actions are complete and the punch list is closed out.

8.3 NOTIFICATION

The CO or COR will be informed of the identification and progress toward resolution of nonconforming items and/or conditions. This is accomplished through the reporting requirements stated in implementing procedures and/or plans or through attendance at coordination meetings.

9. FIELD QUALITY CONTROL

The field control component of the CQCP includes:

- Procedures for documenting and justifying any field actions do not conform to the CQCP;
- Documentation of all pre-field activities such as equipment check-out, calibrations, and manufacturer inspections;
- Documentation of field measurement QC data;
- Documentation of field inspection activities during the project; and
- Documentation of post-field activities including sample shipment, receipt, and laboratory analysis.

9.1 FIELD CHANGES TO CQCP

Changes to this CQCP, procedures, testing requirements, or personnel may be required to adjust for unforeseen circumstances. Changes may be required by the USACE in the event that identified procedures do not provide adequate control, or may be initiated by ECC to ensure that QC objectives are met.

Should modifications to this CQCP become necessary or desirable, the QCSM will notify the COR in writing in the form of a Request for Information (RFI). The notification will include a description of the proposed change, the reason(s) for requesting the change, and the date upon which the change needs to become effective along with other pertinent information. Proposed or requested changes will not be considered in effect until written approval is granted by the USACE. ECC will make every effort to provide as much lead time to the USACE as possible.

9.2 PRE-FIELD ACTIVITIES

Pre-field activities include equipment calibrations, Preparation Inspections, and a copy of the manufacturer inspections for materials to be incorporated into the project.

Equipment will be inspected and calibrated according to manufacturer's requirements prior to field use. Inspection of heavy construction equipment will be recorded daily on the Equipment/Vehicle Inspection Form. Calibration of field testing equipment will be recorded on the Testing Equipment Calibration Form. All equipment inspections and calibrations will be conducted by personnel with specific training and experience. These forms will be collected by the QCSM daily and attached to the DQCR. Examples of these forms are provided in Appendix D, QC Forms.

9.3 FIELD MEASUREMENT QUALITY CONTROL

Field measurement data for the NFSS T&D project will be limited to direct dose rate measurements of several LSA boxes. For these tests, results will be included on the DQCR as they become available to the QCSM.

9.4 INSPECTION OF FIELD ACTIVITIES

Field activities will be inspected on a daily basis, and more frequently as required by the QCSM. The QCSM will make daily inspections of all work in progress, recording all deficiencies on the DQCR and noting the corrective action to be implemented. The SSHS will inspect all activities for safety and conformance to the project plans and specifications.

9.5 POST-FIELD ACTIVITIES

Post-field activities will include shipping samples for analysis off-site. These items will be tracked by the QCSM. Upon receipt of test results or other disposition of the post-field activities, such activity will be recorded in the DQCR.

9.6 SUBCONTRACTOR CONTROL

Activities of subcontractors will be under the direct supervision of the SS or their designee. Inspections of all subcontractor work, including Preparatory, Initial and Final Phase inspections will be conducted by the QCSM or their designee.

10. DOCUMENTATION AND CERTIFICATIONS

QC reports include the following items (QC forms are presented in Appendix D):

- Daily Quality Control Report:
 - Description of work
 - Weather
 - Rainfall
 - Temperature
 - Work performed by ECC
 - Work performed by subcontractors
 - Specific inspections performed
 - Type and location of tests performed and results of the tests
 - Verbal instructions received from the CO / COR
 - Submittal action
 - Delivery of equipment and materials
 - Off-site surveillance of fabricated items
 - Remarks
- Preparatory, Initial, and Final Inspection Reports;
- Equipment Daily Checklists;
- Nonconformance Report; and
- Record of SOW Clarifications.

10.1 FILES

ECC maintains three distinct forms of files for project documentation:

- Hard copy
- Management Information System (MIS) software
- MIS backup discs

10.2 MANIFESTS / SHIPPING PAPERWORK

All manifests generated as part of the shipping of the remedial investigation or legacy waste and Investigation Derived Waste (IDW) will be retained in the ECC project files under the control of the QCSM or their alternate.

Prior to the designated USACE representative signing the manifests ECC's Transportation Coordinator and QCSM, or alternate, will review the paperwork to verify information contained on the manifest is complete and correct. An agreed upon standard manifest template will be agreed to by the USACE prior to shipment of loaded railcars.

Items that will be checked on the manifests will include:

- Total number of waste containers or quantity loaded on transport vehicle;
- List of waste containers that have been placed onto the transport vehicle;
- Radiological activity associated with each transport vehicle; and
- Any discrepancies identified during loading of the transport vehicle.

10.3 CERTIFICATIONS

The following statement will be included on each DQCR:

"On behalf of the Contractor, I certify that this report is complete and correct and equipment and material used and work performed during this reporting period is in compliance with the contract drawings and specifications to the best of my knowledge, except as noted in this report."

The QCSM will present a certificate of completion stating that the "work has been completed, inspected, tested, and is in compliance with the contract."

FIGURES

FIGURE 1
SITE LOCATION MAP

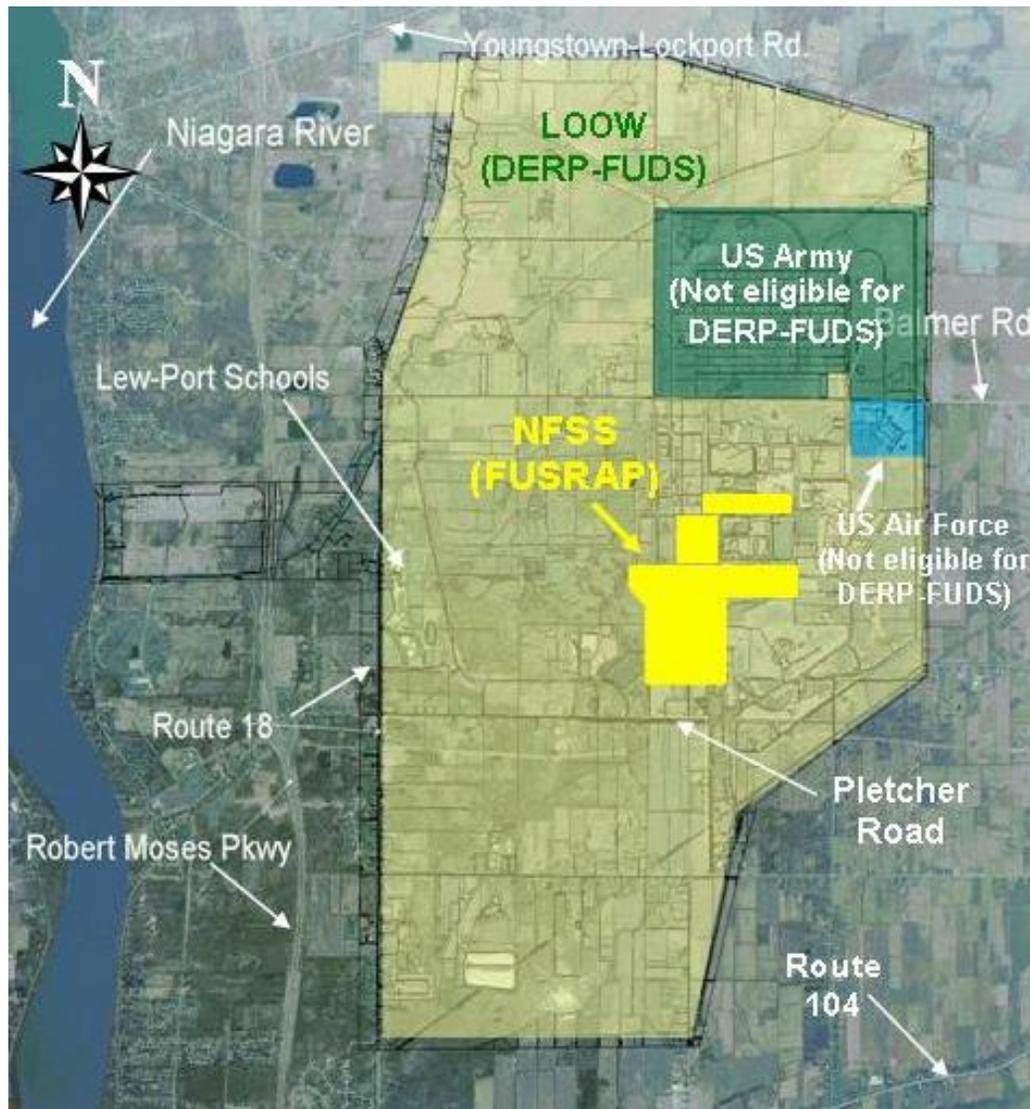


FIGURE 1
NFSS SITE LOCATION MAP

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APPENDIX A
LETTER OF AUTHORITY TO QCSM

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August 3, 2010

[REDACTED]
1125 Route 22 West
Bridgewater, NJ 08807

Subject: Appointment as Quality Control Manager, W91ZLK-05-D-0009 Delivery Orders 0004

Dear [REDACTED],

This letter is in reference to the USACE, Contract No. W91ZLK-05-D-0009 Delivery Orders 0004, titled "Transportation and Disposal of Investigative Derived and Legacy Waste" Niagara Falls Storage Site, Lewiston, NY.

You have been appointed as the Quality Control Manager (QCM) for this project. As the QCM, you are expected to fulfill all quality control roles and responsibilities specified in the contract for your position.

Responsibilities

If not specified in the contract, you are expected to perform the following duties:

1. Ensure that quality control personnel reporting to you or working for our subcontractors meet required qualifications;
2. Review and understand project-specific quality control plans; ensure that these plans contain the appropriate defineable features of work (DFW), testing plan, and submittal register for the project. Draft recommended modifications to the approved plan if the plans are substandard and obtain the required approvals. Ensure that the project-specific quality control plan is maintained current at the project;
3. Ensure that the submittal register meets project requirements and is appropriately linked to the critical path project schedule. Manage or monitor the submittal process to ensure that we are meeting the submittal register requirements;
4. Ensure that the Four Phases of Control (Preparatory Meeting, Initial Inspection, Follow-up Inspection, and Closeout Inspection) are being planned, performed, and documented for each DFW;
5. Ensure that daily quality control inspections are performed and documented;
6. Ensure that all quality control testing is being performed in accordance with the testing plan, that the testing results are being reviewed for conformance with requirements, that the records of the testing contain all of the required documentation;
7. Ensure that all materials and equipment delivered to the job site are inspected and certified to ensure that they conform with project requirements;
8. Monitor project documentation including records, photographs, and logbooks to ensure that the records and documents meet project requirements. Maintain and organize documentation in accordance with the project closeout requirements;
9. Maintain project documentation on the client project portal and on the ECCONET project portal;
10. Ensure that non-conformances are identified and corrected in a timely manner. Report and investigate quality incidents, and develop lessons learned;
11. Notify contracts and operations personnel of any subcontractor who consistently does not conform to contract plans and specifications. Document your findings on ECCONET;

Corporate Office

1240 Bayshore Highway
Burlingame, CA 94010

Phone: (650) 347-1555

Fax: (650) 347-8789

www.ecco.net

12. Consult appropriate client personnel if there is any question about the interpretation of plans and/or specifications;
13. Do not accept or approve any substantive changes without written notification from the appropriate authority;
14. Conduct project surveillances, issue prompt reports to operations personnel, and ensure appropriate closeout of action items from the surveillance. Use the ECCONET Project Dashboard to summarize your findings; and,
15. Provide training to all project personnel including subcontractors on the project quality control process and requirements. Ensure that each person understands their responsibilities for delivering a quality deliverable to our client and stakeholders.

Authority

You and your quality control staff have the authority to stop work if it is not of adequate quality, fails to meet required specifications, or poses an imminent safety hazard. Your responsibility in such a situation is to ensure proper resolution of the issue(s). If there is a disagreement between you and the Project Manager regarding the resolution of substandard work or an imminent safety hazard, contact me for guidance.

Relationship

As the QCM, you have a direct reporting relationship to me for quality control and issue resolution. You also have an indirect reporting relationship to the Project Manager to facilitate execution of the quality control process.

If you have any questions, or need additional information, please contact me at [REDACTED]

Sincerely,

[REDACTED] CIH, CSP, CQM, CHMM
Vice President
Environment, Safety, and Quality

Distribution: [REDACTED]

ECC Project File



August 3, 2010

██████████
1125 Route 22 West
Bridgewater, NJ 08807

**Subject: Appointment as Alternate Quality Control Manager, W91ZLK-05-D-0009
Delivery Orders 0004**

Dear ██████████,

This letter is in reference to the USACE, Contract No. W91ZLK-05-D-0009 Delivery Orders 0004, titled "Transportation and Disposal of Investigative Derived and Legacy Waste" Niagara Falls Storage Site, Lewiston, NY.

You have been appointed as the Alternate Quality Control Manager (Alt QCM) for this project. As the Alternate QCM, you are expected to fulfill all quality control roles and responsibilities specified in the contract for your position.

Responsibilities

If not specified in the contract, you are expected to perform the following duties:

1. Ensure that quality control personnel reporting to you or working for our subcontractors meet required qualifications;
2. Review and understand project-specific quality control plans; ensure that these plans contain the appropriate defineable features of work (DFW), testing plan, and submittal register for the project. Draft recommended modifications to the approved plan if the plans are substandard and obtain the required approvals. Ensure that the project-specific quality control plan is maintained current at the project;
3. Ensure that the submittal register meets project requirements and is appropriately linked to the critical path project schedule. Manage or monitor the submittal process to ensure that we are meeting the submittal register requirements;
4. Ensure that the Four Phases of Control (Preparatory Meeting, Initial Inspection, Follow-up Inspection, and Closeout Inspection) are being planned, performed, and documented for each DFW;
5. Ensure that daily quality control inspections are performed and documented;
6. Ensure that all quality control testing is being performed in accordance with the testing plan, that the testing results are being reviewed for conformance with requirements, that the records of the testing contain all of the required documentation;
7. Ensure that all materials and equipment delivered to the job site are inspected and certified to ensure that they conform with project requirements;
8. Monitor project documentation including records, photographs, and logbooks to ensure that the records and documents meet project requirements. Maintain and organize documentation in accordance with the project closeout requirements;
9. Maintain project documentation on the client project portal and on the ECCONET project portal;
10. Ensure that non-conformances are identified and corrected in a timely manner. Report and investigate quality incidents, and develop lessons learned;
11. Notify contracts and operations personnel of any subcontractor who consistently does not conform to contract plans and specifications. Document your findings on ECCONET;

Corporate Office

1240 Bayshore Highway
Burlingame, CA 94010

Phone: (650) 347-1555

Fax: (650) 347-8789

www.ecco.net

12. Consult appropriate client personnel if there is any question about the interpretation of plans and/or specifications;
13. Do not accept or approve any substantive changes without written notification from the appropriate authority;
14. Conduct project surveillances, issue prompt reports to operations personnel, and ensure appropriate closeout of action items from the surveillance. Use the ECCONET Project Dashboard to summarize your findings; and,
15. Provide training to all project personnel including subcontractors on the project quality control process and requirements. Ensure that each person understands their responsibilities for delivering a quality deliverable to our client and stakeholders.

Authority

You and your quality control staff have the authority to stop work if it is not of adequate quality, fails to meet required specifications, or poses an imminent safety hazard. Your responsibility in such a situation is to ensure proper resolution of the issue(s). If there is a disagreement between you and the Project Manager regarding the resolution of substandard work or an imminent safety hazard, contact me for guidance.

Relationship

As the Alternate QCM, you have a direct reporting relationship to me for quality control and issue resolution. You also have an indirect reporting relationship to the Project Manager to facilitate execution of the quality control process.

If you have any questions, or need additional information, please contact me at [REDACTED]

Sincerely,

[REDACTED] CIH, CSP, CQM, CHMM
Vice President
Environment, Safety, and Quality

Distribution: [REDACTED]
ECC Project File

APPENDIX B
DEFINABLE FEATURES OF WORK

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Definable Features Of Work	
1	Mobilization and Site Preparation
2	Sampling and Analysis
3	Repackaging / Overpacking Containers
4	Preparation of Containers for Loading
5	Release Surveys for Shipping Containers
6	Loading of Containers
7	Pump Out of Storage Tanks (liquid waste)
8	Sizing of Storage Tanks
9	Site Restoration and Demobilization

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APPENDIX C
SUBMITTAL REGISTER

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APPENDIX D
QUALITY CONTROL FORMS

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Environmental Chemical Corporation

COMPLETION INSPECTION PUNCH LIST

Contract No.: _____ Date: _____

Description and Location of Work Inspected: _____

Specs Section: _____ Reference Contract Drawings: _____

A. Personnel Present:

<u>NAME</u>	<u>POSITION</u>	<u>COMPANY</u>
1.		
2.		
3.		
4.		
5.		
6.		
7.		
8.		
9.		
10.		

B. Status of Inspection:

C. Workmanship is acceptable. Yes No If not, explain:

On behalf of ECC, I certify that the work inspected is complete and meets the performance specifications cited above and that all material and equipment used and work performed was completed in accordance with approved plans and work instructions and meets contract delivery order requirements.

Quality Control Supervisor

Date



Environmental Chemical Corporation

ENVIRONMENTAL CHEMICAL CORPORATION
QUALITY ASSURANCE UNIT

CORRECTIVE ACTION REQUEST FORM

CAR # _____ Date: _____
Project or Area _____
Date of Nonconformance _____
Responsible Manager _____

Nonconformance/findings:

Signature of person reporting nonconformance: _____

Root Cause Analysis:

Corrective Action:

Person responsible for CA: _____ Expected Completion Date: _____

Project Level Follow-up:

Signature of PM or PgM: _____ Date Submitted: _____

QCM Follow-up:

Inspection Required: YES NO If yes, projected date: _____ Completed: _____

Signature of QCM: _____ Date closed: _____

**ENVIRONMENTAL CHEMICAL CORPORATION
DAILY QUALITY CONTROL REPORT**

Report No.: 001 Date:
 Contract No.: W912P4-07-D-0005
 Project Title and Location:
 Weather: _____ Precipitation: 0.00" Temp: Min. ____° Max. ____°
 Average Wind Speed (MPH): XX
 Direction: XX

1. Contract/Subcontractors and Area of Responsibility:

NUMBER	TRADE	HOURS	EMPLOYER	LOCATION/DESCRIPTION WORK
1				
2				
3				
4				
5				

Total Management Man-hours: 00.0

Union Craft Subcontract Labor and Area of Responsibility:

5				
6				
7				
8				
9				
10				
11				
12				
13				
14				

Total Labor force Man-hours: 00.0

ENVIRONMENTAL CHEMICAL CORPORATION

2. **Operating Plant or Equipment: (Not Hand Tools)**
 -

3. **Work Performed: (Indicate location and description of work performed by prime and/or subcontractors. When network analysis is used, identify work by NAS activity number)**
 -

4. **Results of Control Activities: (Indicate whether P-Preparatory, I-Initial, or F-Follow-up phase, Final Inspection)**
 - P – None
 - I – None
 - F – None
 - Final - None

5. **Tests Performed and Test Results: (Identify test requirements by paragraph number in specifications and/or sheet number in plans.)**
 -

6. **Material / Equipment Received: (Note inspection results and storage provided.)**
 -

7. **Subcontractors and Areas of Responsibility for Work Performed Today:**
 -

8. **Submittals Reviewed:**

(a) Submittal No.	b) Spec/Plan Reference	c) By Whom	d) Action
None.			

9. **Job Safety: (List items checked, results, instructions and corrective actions taken.)**
 -

10. **Remarks: (Instructions received or given. Conflict(s) in Plans and/or specifications. Delays encountered.)**

ENVIRONMENTAL CHEMICAL CORPORATION

Contractor's Verification: On behalf of the Contractor, I certify this report is complete and correct, and all materials and equipment used and work performed during this reporting period are in compliance with the contract plans and specifications, to the best of my knowledge, except as may be noted above.


CQC System Manager

Date

	Environmental Chemical Corporation	CONSTRUCTION INSPECTION CHECKLIST			EQUIPMENT
PROJECT/TASK:		COMPANY:			
DATE:	TIME:	M T W Th F Sa Su <small>(Circle One)</small>			
Type of Inspection: <small>(Check One)</small> <input type="checkbox"/> Daily <input type="checkbox"/> Incoming <input type="checkbox"/> Outgoing					
Make/Description:		Model:	I.D. No:		
Inspected By: (Name and Signature)					
EQUIPMENT	Acceptable	Not Acceptabl	N/A	COMMENTS AND ACTION TAKEN	
Operation/Owners Manual					
Brakes					
Brake Lights					
Reverse Signal Alarm					
Horn/Air Horn					
Tires/Tracks					
Steering					
Seat Belt					
Operating Controls					
Fire extinguisher					
Lights					
Defroster					
Mirrors					
Instruments					
Coupling Devices					
Bed/Cargo Area					
Tailgate and latch					
Tarp/covers					
Windshield Wipers					
Windshield/Window Glass					
Mudflaps/Rock guards					
Exhaust Systems					
Hitches and Safety Cables					
Hydraulic Lines/ Air Hoses					
Engine Oil Level					
Hydraulic Oil Level					
Rollover Equipment					
Cleanliness					
Comments:			Fuel Level: ¼ ½ ¾ F Hour Meter: Odometer:		

Noted deficiencies must be approved by the Construction Manager and/or Health and Safety Officer prior to operation.

NFSS FUSRAP Site

Revision 1 Final 0

Contact No. W91ZLK-05-D-0009 Task Order No: 0004

Contractor Quality Control Plan

This inspection form is to be filled out at the start of the work shift upon deliveries by the Equipment/Truck Operator to ensure that the equipment/truck is safe to operate and is free from apparent damage, which could cause failure while in use. Once completed, this form is to be given to the Site Construction Manager or Safety Officer to be kept on file on-site. In all cases, consult the manufacturer's data to ensure compliance with all inspection criteria, which may not be indicated.

PREPARATORY PHASE CHECKLIST		SPEC SECTION	DATE
(CONTINUED ON SECOND PAGE)			
CONTRACT NO.	DEFINABLE FEATURE OF WORK	SCHEDULE ACT NO.	INDEX #
PERSONNEL PRESENT	GOVERNMENT REP NOTIFIED _____ HOURS IN ADVANCE	YES <input type="checkbox"/>	NO <input type="checkbox"/>
	NAME	POSITION	COMPANY/GOVERNMENT
SUBMITTALS	REVIEW SUBMITTALS AND/OR SUBMITTAL REGISTER. HAVE ALL SUBMITTALS BEEN APPROVED?	YES <input type="checkbox"/>	NO <input type="checkbox"/>
	IF NO, WHAT ITEMS HAVE NOT BEEN SUBMITTED?		
	ARE ALL MATERIALS ON HAND?	YES <input type="checkbox"/>	NO <input type="checkbox"/>
	IF NO, WHAT ITEMS ARE MISSING?		
	CHECK APPROVED SUBMITTALS AGAINST DELIVERED MATERIAL. (THIS SHOULD BE DONE AS MATERIAL ARRIVES.)		
	COMMENTS:		
MATERIAL STORAGE	ARE MATERIALS STORED PROPERLY?	YES <input type="checkbox"/>	NO <input type="checkbox"/>
	IF NO, WHAT ACTION IS TAKEN?		
SPECIFICATIONS	REVIEW EACH PARAGRAPH OF SPECIFICATIONS.		
	DISCUSS PROCEDURE FOR ACCOMPLISHING THE WORK.		
	CLARIFY ANY DIFFERENCES.		
PRELIMINARY WORK & PERMITS	ENSURE PRELIMINARY WORK IS CORRECT AND PERMITS ARE ON FILE.		
	IF NOT, WHAT ACTION IS TAKEN?		

PREPARATORY PHASE CHECKLIST		SPEC SECTION	DATE
(CONTINUED FROM FIRST PAGE)			
CONTRACT NO.	DEFINABLE FEATURE OF WORK	SCHEDULE ACT NO.	INDEX #
TESTING	IDENTIFY TEST TO BE PERFORMED, FREQUENCY, AND BY WHOM. _____		

	WHEN REQUIRED? _____		

	WHERE REQUIRED? _____		

	REVIEW TESTING PLAN. _____		
SAFETY	ACTIVITY HAZARD ANALYSIS APPROVED? YES <input type="checkbox"/> NO <input type="checkbox"/>		
	REVIEW APPLICABLE PORTION OF EM 385-1-1. _____		

MEETING COMMENTS	NAVY PWDROICC COMMENTS DURING MEETING.		

OTHER ITEMS OR REMARKS	OTHER ITEMS OR REMARKS:		

QC MANAGER _____		DATE _____	

INITIAL PHASE CHECKLIST		SPEC SECTION	DATE
CONTRACT NO.	DEFINABLE FEATURE OF WORK	SCHEDULE ACT NO.	INDEX #
PERSONNEL PRESENT	GOVERNMENT REP NOTIFIED _____ HOURS IN ADVANCE.		YES <input type="checkbox"/> NO <input type="checkbox"/>
	NAME	POSITION	COMPANY/GOVERNMENT
PROCEDURE COMPLIANCE	IDENTIFY FULL COMPLIANCE WITH PROCEDURES IDENTIFIED AT PREPARATORY. COORDINATE PLANS, SPECIFICATIONS, AND SUBMITTALS.		
	COMMENTS: _____		
PRELIMINARY WORK	ENSURE PRELIMINARY WORK IS COMPLETE AND CORRECT. IF NOT, WHAT ACTION IS TAKEN?		
WORKMANSHIP	ESTABLISH LEVEL OF WORKMANSHIP.		
	WHERE IS WORK LOCATED? _____		
	IS SAMPLE PANEL REQUIRED? YES <input type="checkbox"/> NO <input type="checkbox"/>		
	WILL THE INITIAL WORK BE CONSIDERED AS A SAMPLE? YES <input type="checkbox"/> NO <input type="checkbox"/> (IF YES, MAINTAIN IN PRESENT CONDITION AS LONG AS POSSIBLE AND DESCRIBE LOCATION OF SAMPLE) _____		
RESOLUTION	RESOLVE ANY DIFFERENCES.		
	COMMENTS: _____		
CHECK SAFETY	REVIEW JOB CONDITIONS USING EM 385-1-1 AND JOB HAZARD ANALYSIS		
	COMMENTS: _____		
OTHER	OTHER ITEMS OR REMARKS		
_____ QC MANAGER		_____ DATE	

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Contractor Quality Control Plan



Environmental Chemical Corporation

MATERIAL INSPECTION AND RECEIVING CHECKLIST

Contract No.: _____ Date: _____

Description and Location of Work Inspected: _____

Specs Section: _____

Reference Contract Drawings: _____

On behalf of ECC, I certify that the work inspected is complete and meets the performance specifications cited above and that all material and equipment used and work performed was completed in accordance with approved plans and work instructions and meets contract delivery order requirements.

Quality Control Representative

Date

	Environmental Corporation	Chemical	SITE H/S INSPECTION FORM	Page 1 of 4
Site Information:				
Project Name:		Date of Inspection:		
Company(s):		Type of Inspection: <input type="checkbox"/> Daily <input type="checkbox"/> Weekly <input type="checkbox"/> Monthly <input type="checkbox"/> Quarterly		
Tasks or Activities Observed:				
Persons Conducting Inspection:				
Name	Company	Name	Company	
A. General Workplace Conditions				
Category	Observations (N/A if Not Applicable)	Action required <input type="checkbox"/> Yes <input type="checkbox"/> No		
Walking/Working Surfaces				
Aisles and Passageways				
Platforms/Scaffolding				
Ladders				
Stairs				
Exits/Egress				
Roadways				
Excavations/Trenches				
Ventilation				
Lighting				
Noise Exposure				
Ergonomics				
Potable Water				
Sanitation Facilities				
Temperature Extremes				
B. Hazardous Materials Use & Storage				
Category	Observations (N/A if Not Applicable)	Action required <input type="checkbox"/> Yes <input type="checkbox"/> No		
MSDSs Available				
Material Labeling				
Storage Conditions				
Storage Containers Condition				
Chemical Storage Compatibility				
Compressed Gas Storage & Use				
Waste Storage/Disposal				

	Environmental Chemical Corporation	SITE H/S INSPECTION FORM	
			Page 2 of 4
C. Motor Vehicles & Power Equipment			
Category	Observations (N/A if Not Applicable)	Action required <input type="checkbox"/> Yes <input type="checkbox"/> No	
Seatbelts & Back-up Alarms			
Dozer Equipment			
Scraper Equipment			
Road Grader Equipment			
Water Trucks			
Front End Loader/Backhoe Equip.			
Cranes/ Hoists & Rigging			
Forklifts			
Other Heavy Equipment			
D. Hazard Controls			
Category	Observations (N/A if Not Applicable)	Action required <input type="checkbox"/> Yes <input type="checkbox"/> No	
General Site Controls			
Work Zone Delineation			
Lockout Systems			
Accident Prevention Signs and Tags			
Barricades			
Hole Covers			
Electrical Grounding & GFCI Use			
E. Emergency Systems			
Category	Observations (N/A if Not Applicable)	Action required <input type="checkbox"/> Yes <input type="checkbox"/> No	
Emergency Instructions			
Fire Protection			
Eye Wash and Showers			
First Aid Kits/Stations			
Emergency Rescue Equipment			
F. Protective Equipment Use & Compliance			
Category	Observations (N/A if Not Applicable)	Action required <input type="checkbox"/> Yes <input type="checkbox"/> No	
Eye Protection			
Ear Protection			
Respiratory Protection			
Head Protection			
Hand Protection			
Foot Protection			
Body Protection			
Fall Protection			

	Environmental Chemical Corporation	SITE H/S INSPECTION FORM	
		Page 3 of 4	
G. Hand/Power Tools and Power Systems			
Category	Observations (N/A if Not Applicable)	Action required <input type="checkbox"/> Yes <input type="checkbox"/> No	
Hand Tools Condition			
Portable Power Tools Condition			
Welding/Burning Equip. Condition			
Power Tools Guarding			
Electrical Power Generator			
Pneumatic Power Generator			
H. Remediation Waste Management			
Category	Observations (N/A if Not Applicable)	Action required <input type="checkbox"/> Yes <input type="checkbox"/> No	
Waste Properly Categorized			
Cross Contamination Minimized			
Containers in Good Condition			
Waste Storage			
Staging/Stockpiling of Soil/Debris			
Decontamination Water			
I. Project Environmental Programs			
Category	Observations (N/A if Not Applicable)	Action required <input type="checkbox"/> Yes <input type="checkbox"/> No	
Dust Control			
Odor Control			
Oil and Spill Prevention			
Stormwater/Erosion Control Activities			
J. Environmental Management System			
Category	Observations (N/A if Not Applicable)	Action required <input type="checkbox"/> Yes <input type="checkbox"/> No	
Pollution Prevention			
Recycling			
Paper Conservation			
HS Continual Improvement			
Employee Participation			
K. Other Environmental Safety and Health Conditions or Work Practices			
Category	Observations (N/A if Not Applicable)	Action required <input type="checkbox"/> Yes <input type="checkbox"/> No	

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Contractor Quality Control Plan



Environmental Chemical Corporation

NONCONFORMANCE REPORT

PROJECT NO. _____	PAGE ____ OF ____
PROJECT NAME _____	DATE: _____
NONCONFORMANCE:	
IDENTIFIED BY: _____ DATE: _____	
CORRECTIVE ACTION REQUIRED:	
TO BE PERFORMED BY: _____ DATE: _____	
MUST CORRECTION BE VERIFIED? YES ____ NO ____	
TO BE VERIFIED BY: _____ PREPARED BY: _____ DATE: _____	
CORRECTIVE ACTION TAKEN:	
PERFORMED BY: _____ DATE: _____	
VERIFIED BY: _____ DATE: _____	

APPROVED BY: _____ DATE: _____

_____ DATE: _____



ECC

Preparatory Phase Inspection Meeting Minutes

Project: _____

Date: _____

Agenda No. _____

Contract No.: Definable Feature of Work: _____

Specification Section(s): _____

USACE Notified?: Yes Hours In Advance: 48hr Discussed Operation with COR? Yes

Personnel Present:

No.	Name	Organization	Position
1			
2			
3			
4			
5			
6			
7			
8			
9			
10			
11			
12			

I. Preliminary Correspondence and Planning

II. Submittals

1. Have all submittals been reviewed?:
2. Are all materials present?:
3. Check approved submittals against delivered material?:
4. Comments:

III. Material Storage

1. Are materials stored properly?: (water-sensitive materials stored inside building)
2. If not, describe corrective action:

IV. Specifications, Drawings & Work Plans

1. Review pertinent specifications:
2. Review pertinent contract drawings:
3. Review pertinent work plans:
4. Operational Procedure:
5. Clarify any differences/variances:

V. Preliminary Work and Permits

1. Are appropriate permits secured?:
2. Boring permits?
3. Utility Clearance (one-call) (Yes – on file)
4. Other?

VI. Testing and Documentation

1. Review testing plans/requirements?:
2. Tests or samples to be performed/collected, frequency and by whom:
3. List Testing facilities:
4. Test facilities approved?:
5. Results due/expected:
6. Sample documentation (Chain of Custody Forms, Sample log)

VII. Safety

1. Review applicable sections of EM 385-1-1:
2. Review Site Safety & Health Plan:
3. Review relevant activity hazard analysis:
4. Other comments:

VIII. Comments:

QCSM:

APPENDIX E

RESUMES

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APPENDIX F
DISTRIBUTION LIST

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Contractor Quality Control Plan

5 hard copies & 1 electronic copy to



NFSS Project Manager
U.S.Army Corps of Engineers
Buffalo District Office
1776 Niagara Street
Buffalo, NY 14207-3199

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