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# Contractor Quality Control Plan

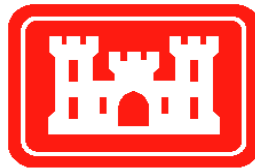
## Niagara Falls Storage Site Building 401 Demolition Lewiston, New York

Contract No. W912P4-07-D-0003-0002

Prepared by:  
TPMC-EnergySolutions Environmental Services, LLC




Prepared for:  
U.S. Army Corps of Engineers, Buffalo District  
Buffalo, New York



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

August 2010

	<p align="center"><b>Title</b></p> <p align="center">Contractor Quality Control Plan</p>	<p align="center"><b>Document No.</b></p> <p align="center">NFSS-0007-1</p>	<p align="center"><b>Revision</b></p> <p align="center">Rev.0</p>
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**Contractor Quality Control Plan**  
**Niagara Falls Storage Site**  
**Building 401 Demolition**  
**Lewiston, New York**


Authored By: [REDACTED] 14 JULY 10  
[REDACTED] TES Quality Assurance Director Date

Reviewed By: [REDACTED] 14 JULY 10  
[REDACTED], PhD, CHP – TES Program Manager Date

Approved By: [REDACTED] 03 AUGUST 10  
[REDACTED], PM / CQC System Manager Date

- New Plan
- Title Change
- Plan Revision
- Plan Rewrite

Effective Date \_\_\_\_\_

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**CERTIFICATION OF INDEPENDENT TECHNICAL REVIEW**

**COMPLETION OF INDEPENDENT TECHNICAL REVIEW**

TES, LLC (TES) has completed the *Niagara Falls Storage Site Contractor Quality Control Plan* for the Niagara Falls Storage Site Building 401 Demolition Project, Lewiston, New York. Notice is hereby given that an independent technical review has been conducted that is appropriate to the level of risk and complexity inherent in the project, as defined in the Quality Control Plan. During the independent technical review, compliance with established policy principles and procedures, utilizing justified and valid assumptions, was verified. This included review of assumptions; methods, procedures, and material used in analyses; alternatives evaluated; the appropriateness of data used and level of data obtained; and reasonableness of the results, including whether the product meets the customer's needs consistent with existing USACE policy.

[Redacted Signature]

Signature/ TES Independent Technical Reviewer

Date 14 JULY 2010

[Redacted Signature]

Signature/ TES Independent Technical Reviewer

Date 14 JULY 2010

[Redacted Signature]

Signature/ TES Independent Technical Reviewer

Date 14 JULY 2010

[Redacted Signature]

Date 14 JULY 2010

**Independent Technical Review Team Members:** [Redacted]

**CERTIFICATION OF INDEPENDENT TECHNICAL REVIEW**

Significant concerns and the explanation of the resolution are as follows:


Item	Technical Concerns	Possible Impact	Resolutions
<b>Field Sampling and Analysis Plan</b>			
1	See attached sheets		

As noted above, all concerns resulting from independent technical review of the plan have been resolved.

[Redacted Signature]


Signature/ [Redacted]

Date 28 MAY 10

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A. Quality Control Organization (See Attachment 1, *Quality Control Organization Chart*.)

Brian Clayman (Project Manager), Responsible for preparation and certifying pay estimates and contract submittals.

Brian Clayman, Contractor Quality Control (CQC) System Manager. The CQC System Manager will be on-site at all times during demolition activities. The CQC System Manager may be assigned duties as Project Manager in addition to quality control. Reports to the Project Manager, if another individual is the Project Manager, related to demolition- and construction-related activities.

Mike Benedetto, Alternate Contractor Quality Control (CQC) System Manager. When filling the position of CQC System Manager, this individual will be on-site at all times during demolition activities. Reports to the Project Manager related to demolition- and construction-related activities.

Mike Benedetto, Site Safety and Health Officer (on-site)

Terry Doyle (VP Finance and Administration), Responsible for executing contract modification (office)


CQC staff personnel will be assigned as necessary and they will be physically present during demolition activities related to their areas of responsibility. These individuals may perform other duties but will be allowed sufficient time to perform their assigned quality control duties as described in the Quality Control Plan.

B. Resumes of the following individuals are located in Attachment 2, *Resumes*:

1. CQC System Manager
2. Alternate CQC System Manager
3. Site Safety and Health Manager
4. Individual responsible for preparation and certifying pay estimates and contract submittals
5. Individual responsible for executing contract modification


C. The CQC System Manger and Alternate CQC System Manager have completed the course “Construction Quality Management for Contractors.” A copy of course certificates are located in Attachment 3, *CQM for Contractors Course Completions*.

D. A copy of the letter to the CQC System Manager and Alternate CQC System Manager, signed by an authorized official of the firm, which describes the responsibilities and delegates sufficient authorities to adequately perform the functions of the CQC System Manager, including authority to stop work which is not in compliance with the contract are located in Attachment 4, *Letter to the*

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*CQC System Manager and Alternate CQC System Manager.* A copy of the letter is to be submitted to Contracting Officer.

- E. A copy of the CQC System Manager letter of direction(s) to all other various quality control representatives outlining duties, authorities, and responsibilities are located in Attachment 5, *CQC System Manager Letters of Direction*. A copy of the letter is to be submitted to Contracting Officer.
- F. The following subcontractors will be utilized on this project:  
DEMCO for demolition activities for site access for field surveys and sampling.  
DigSafe of New York for identification of underground utilities.  
Fifty-Six Services, Inc. for Asbestos Abatement
- G. After the preconstruction meeting and prior to acceptance of the CQCP by the USACE, the CQC System Manager and Radiological Control Manager (RCM) or authorized representative will meet with the Contracting Officer and Area Engineer or authorized representative and review the CQCP. The RCM and the USACE HP will ensure that radiological QC issues are addressed. The meeting minutes will be prepared and provided by TES.
- H. The CQC staff will implement the three phase control system for the work specified in accordance with TPMC QIP 8.3, *Three Phase Inspection*. The major Definable Features of Work for this project are identified in Attachment 6, *Major Definable Features of Work*. The Preparatory and Initial Phase inspections will be tracked utilizing Attachment 7, *Tracking-Preparatory and Initial Phase Inspections*. All open items will be tracked until completion. The Contracting Officer will be notified at least 48 hours in advance of the commencement of the preparatory and initial phases.
- I. For payment purposes, the bid items have been broken down into a Schedule of Values. The proposed Schedule of Values is identified in Attachment 8, *Schedule of Values*.
- J. Contractor Quality Control field testing will be tracked utilizing Attachment 9, *CQC Field Testing*. Tests will be performed to verify control measures are adequate to provide a product that conforms to contract requirements. Inspections and acceptance testing, as appropriate, will be performed using TPMC QIP 8.1, *Inspections, Surveillances, and Tests*. Inspection personnel conducting inspections and acceptance will be qualified and certified, as appropriate, in accordance with TPMC QIP 2.4, *Qualification and Certification of Inspection Personnel*.
- K. The following USACE-approved testing laboratory is proposed for use on this project:  
TestAmerica and GEL


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The laboratory testing procedures will be checked to ensure they meet contract requirements, facilities and testing equipment will be verified to ensure availability and comply with testing standards, instrumentation calibration data will be checked against certified standards, documentation and test identification control number system prepared, results of all tests will be recorded on the CQC report for the date taken.

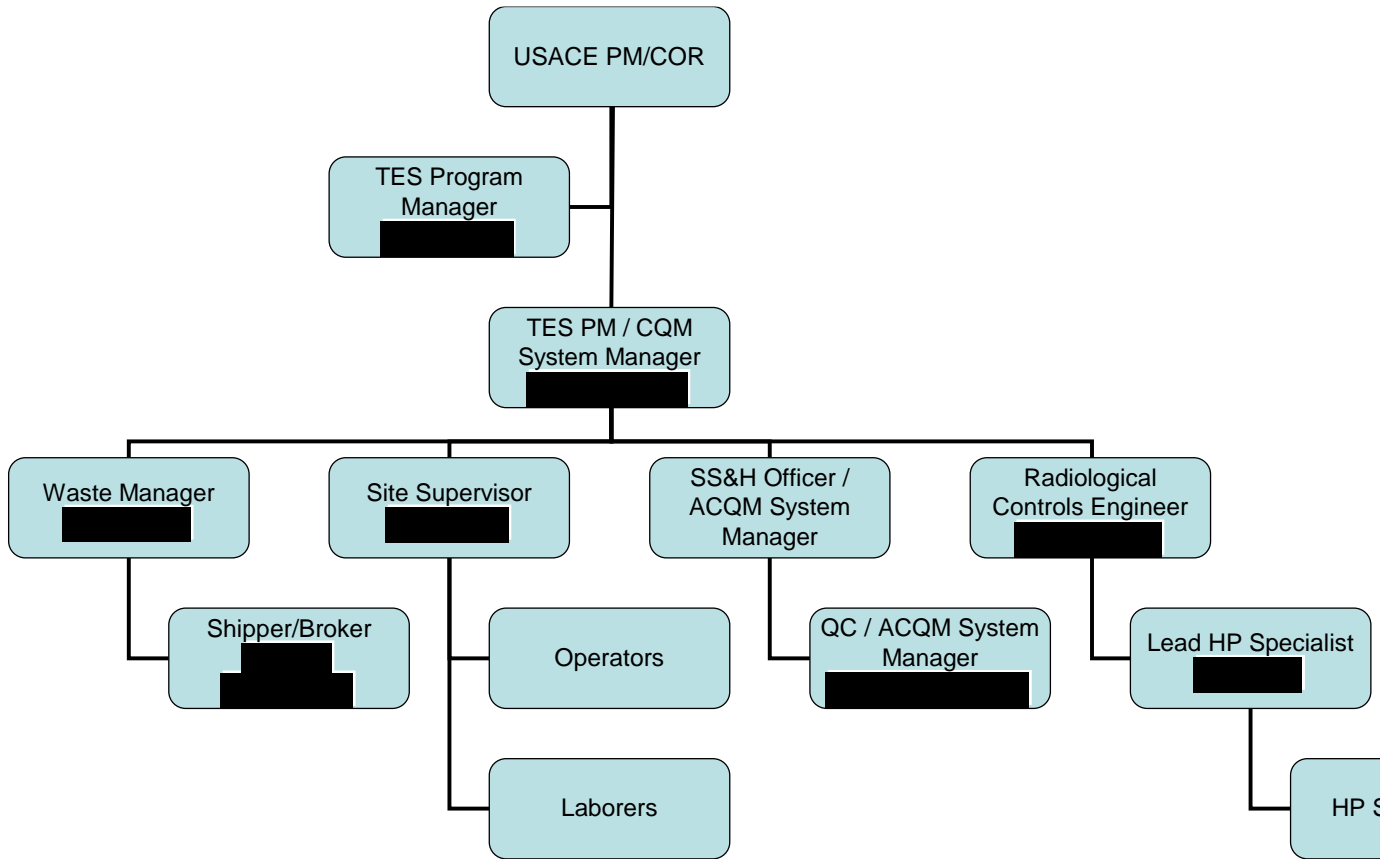
- L. Construction deficiencies will be tracked from identification through acceptable corrective action utilizing Quality Control System (QCS), which uses Attachment 10, *Deficiency Tracking Log*, and a punch list during final inspection. The corrective action will be checked after implementation to verify effectiveness of the action to prevent recurrence.
- M. Submittals will be tracked utilizing Attachment 11, *Submittal Register*. Submittals will be generated, reviewed, approved, and controlled as appropriate in accordance with TPMC QIP 4.1, *Document Control*, and TPMC QIP 2.5, *QA Program Administration Document Development*.
- N. Attachment 12, *CQC Report*, will be utilized. CQC Reports will be prepared daily and submitted to the Government Representative. Other reports to be attached to the daily report are:
  - Preparatory Phase Inspection Checklist
  - Initial Phase Inspection Checklist

Attachments:


1. Quality Control Organization Chart
2. Resumes
3. CQC course certificates
4. Letter to the CQC System Manager and Alternate CQC System Manager
5. CQC System Manger Letters of Direction
6. Major Definable Features of Work
7. Tracking – Preparatory and Initial Phase Inspections
8. Schedule of Values
9. CQC Field Testing
10. Deficiency Tracking Log
11. Submittal Register (ENG Form 4288R)
12. CQC Report

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**ATTACHMENT 1: QUALITY CONTROL ORGANIZATION**





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**ATTACHMENT 4: LETTER TO THE CQC SYSTEM MANAGER AND ALTERNATE CQC**

**Energy Solutions, LLC**  
**1009 Commerce Park, Suite 100**  
**Oak Ridge, TN 37804**

**31 MAY 2010**

**Contractor Quality Control System Manager**  
**Address**

**RE: Quality Control**  
**Niagara Falls Storage Site Building 401 Demolition**  
**Contract No. W912P4-07-D-0003-0002**

Dear Luke Servedio:

This is a Letter of Direction to you outlining your duties and responsibility as our Contractor Quality Control System Manager on the above referenced project.


- You will be responsible for preparing and maintaining the Submittal Register Form 4288 for the duration of the project. You are required to check all work for compliance to applicable specifications and procedures as to the quality for the services being proposed for this project. This responsibility also applies to all subcontractors, off-site laboratory, and suppliers.
- You will make, on a continuing basis, sufficient daily follow-ups to ensure that all work activities are in conformance with the specifications and Statement of Work (SOW).
- You will be responsible for all testing, as required; a qualified testing laboratory will be furnished to you, as outlined in the TES Quality Control Plan.
- The quality control system will include three phases of control and tests. You are directed to TPMC QIP, 8.3, *Three Phase Inspection*.
- You will be present during all testing and coordinate all such tests as required in accordance with the specifications and Corps of Engineers Representative.
- All control phases and tests shall be recorded daily on the Quality Control Report and submitted the following day covered by the report to the Government Representative in accordance with the SOW.

Sincerely,

[Redacted Signature]

[Redacted Title]

President  
TPMC- EnergySolutions Environmental Services

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31 MAY 2010

**DEMCO**  
238 Lein Road West  
Seneca, NY 14224

**Alternate Contractor Quality Control System Manager**  
**Address**

**RE: Quality Control**  
**Niagara Falls Storage Site Building 401 Demolition**  
**Contract No. W912P4-07-D-0003-0002**

Dear Michael Benedetto:

This is a Letter of Direction to you outlining your duties and responsibility as our Contractor Quality Control System Manager on the above referenced project.


- You will be responsible for preparing and maintaining the Submittal Register Form 4288 for the duration of the project. You are required to check all work for compliance to applicable specifications and procedures as to the quality for the services being proposed for this project. This responsibility also applies to all subcontractors, off-site laboratory, and suppliers.
- You will make, on a continuing basis, sufficient daily follow-ups to ensure that all work activities are in conformance with the specifications and Statement of Work (SOW).
- You will be responsible for all testing, as required; a qualified testing laboratory will be furnished to you, as outlined in the TES Quality Control Plan.
- The quality control system will include three phases of control and tests. You are directed to TPMC QIP, 8.3, *Three Phase Inspection*.
- You will be present during all testing and coordinate all such tests as required in accordance with the specifications and Corps of Engineers Representative.
- All control phases and tests shall be recorded daily on the Quality Control Report and submitted the following day covered by the report to the Government Representative in accordance with the SOW.

Sincerely,

[Redacted Signature]

[Redacted Name]

President  
TPMC- EnergySolutions Environmental Services

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**ATTACHMENT 5 CQC SYSTEM MANAGER LETTERS OF DIRECTION**

**May 31, 2010**

MEMORANDUM FOR RECORD


SUBJECT: Quality Control, Niagara Falls Storage Site Building 401 Demolition, Contract No. W912P4-07-D-0003-0002


Dear Quality Control Staff:

This is a Letter of Direction to you outlining the duties and responsibilities of the Contractor Quality Control Staff on the above referenced project.

- All Quality Control and project personnel have the authority to immediately stop any segment of work not complying with plan/spec, and the removal and/or replacement of any defective work.
- Quality Control personnel have the authority to act as the agent of the TES Team in matters pertaining to Quality Control for the above mentioned project.
- Quality Control personnel, to include the Site Supervisor (SS) and the Site Safety and Health Officer (SSHO), will supervise and coordinate inspections/tests necessary to the project.
- Quality control personnel, to include the SS and the SSHO will certify that material/equipment delivered on site comply with plan/spec and reports any deficiencies to the CQCSM or alternate.
- Quality Control personnel, to include the SS and the SSHO have the authority to remove any individual who fails to perform work in a skillful, safe, and workman-like manner or whose work does not comply with approved plans/specs.
- Quality Control personnel do not have the authority to deviate from plans/specs without prior approval, in writing, from the CO or COR.
- Quality Control personnel will ensure that the QCP and CQCP as well as other regulatory compliance drivers are on site and in the job site file with the most recent approved revisions, as necessary.
- Quality Control personnel shall ensure that all drawings and specifications being used are current and updated showing all deviations from the baseline.

Sincerely,

  
 Project Manager  
 NFSS Building 401 Demolition  
 TPMC- EnergySolutions Environmental Services


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**ATTACHMENT 6: MAJOR DEFINABLE FEATURES OF WORK**

**Contract No. W912P4-07-D-0003-0002**  
**Niagara Falls Storage Site Building 401 Demolition**  
**TPMC-EnergySolutions Environmental Services, LLC**

**Major Definable Feature of Work**

<b>ID No.</b>	<b>Major Definable Feature of Work</b>
1	Mobilization
2	Pre-demolition-Surveys/ACM Abatement
3	Structural Demolition
4	Post Demolition Surveys
5	Demobilization


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**ATTACHMENT 7: TRACKING – PREPARATORY AND INITIAL PHASE INSPECTIONS**

**Contract No. W912P4-07-D-0003-0002**  
**Niagara Falls Storage Site Building 401 Demolition**  
**TPMC-EnergySolutions Environmental Services, LLC**

**Tracking – Preparatory and Initial Phase Inspections**

Major Definable Feature of Work	Preparatory Scheduled	Preparatory Conducted	Initial Scheduled	Initial Conducted


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**ATTACHMENT 8: SCHEDULE OF VALUES**

**Contract No. W912P4-07-D-0003-0002**  
**Niagara Falls Storage Site Building 401 Demolition**  
**TPMC-EnergySolutions Environmental Services, LLC**

**Schedule of Values**

<b>Bid Item No.</b>	<b>Activity No.</b>	<b>Description</b>	<b>Feature ID No.</b>	<b>Amount</b>


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**ATTACHMENT 9: CQC FIELD TESTING**

**Contract No. W912P4-07-D-0003-0002**  
**Niagara Falls Storage Site Building 401 Demolition**  
**TPMC-EnergySolutions Environmental Services, LLC**

**CQC Field Testing**

Spec Section	Para	Description of Test	Test Frequency	Test Date	Test Results	Pass Fail

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**ATTACHMENT 10: DEFICIENCY TRACKING**

**Contract No. W912P4-07-D-0003-0002**  
**Niagara Falls Storage Site Building 401 Demolition**  
**TPMC-EnergySolutions Environmental Services, LLC**

**Deficiency Tracking**


<b>Item No.</b>	<b>Description</b>	<b>Date Noted</b>	<b>Date Scheduled for Correction</b>	<b>Date Corrected</b>




	<b>Title</b>	<b>Document No.</b>	<b>Revision</b>
	Contractor Quality Control Plan	NFSS-0007-1	Rev.0

**ATTACHMENT 11: SUBMITTAL REGISTER**


ACTIVITY NO	TRANSMITTAL NO	SPEC SECT	DESCRIPTION OF ITEMS SUBMITTED	PARAGRAPH #	CLASSIFICATION GOVT OR A/E REVWR	SCHEDULE DATES			ACTION	
						SUBMIT	APPR NEEDED BY	MATERIAL NEEDED BY	ACTION CODE	DATE OF ACTION
(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	(K)
1	NFSS-0006		60-Day Schedule		GA	11-May-10	11-Jun-10	NO		
2	NFSS-0007		Draft Quality Control Plan	4.2	GA	3-Jun-10	4-Jul-10	NO		
3	NFSS-0008		Draft Engineering Survey	4.3	FIO	11-May-10	28-May-10	NO		

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4	NFSS-0009	Draft Site Operations Plan	4.4	GA	1-Jun-10	28-Jun-10	NO		
5	NFSS-0010	Draft Demolition Plan	4.5	GA	9-Jul-10	9-Jul-10	NO		
6	NFSS-0011	Draft Accident Prevention Plan/Safety and Health Plan	4.6	GA	4-Jun-10	4-Jul-10	NO		
7	NFSS-0012	Draft SAP	4.7	GA	3-Jun-10	4-Jul-10	NO		
8	NFSS-0013	Draft Waste Management, Transportation, and Disposal Plan	4.8	GA	1-Jun-10	28-Jun-10	NO		
9	NFSS-0014	Final Quality Control Plan	4.2	GA					
10	NFSS-0015	Final Engineering Survey	4.3	FIO					
11	NFSS-0016	Final Site Operations Plan	4.4	GA					
12	NFSS-0017	Final Demolition Plan	4.5	GA					
13	NFSS-0018	Final Accident Prevention Plan/Site Safety and Health Plan	4.6	GA					
14	NFSS-0019	Final SAP	4.7	GA					


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15	NFSS-0020	Final Waste Management, Transportation, and Disposal Plan	4.8	GA					
16	NFSS-0021	Schedule	4.11	GA					
17	NFSS-0022	Meeting Minutes	3.4.2.2	FIO					
18	NFSS-0023	Preconstruction Rad. Survey	3.0	FIO					
19	NFSS-0024	Results of Surveys and Sampling	3.8.4	FIO					
20	NFSS-0025	Waste Profile Sheets	3.6.11.1	GA					
21	NFSS-0026	Waste Manifests and Bills of Lading	3.6.11.1	GA					
22	NFSS-0027	Certificates of Disposal and Completed Waste Shipment Records	3.6.11.8	FIO					
23	NFSS-0028	Post Construction Radiological Surveys	3.1.4	FIO					
24	NFSS-0029	Equipment Radiological Decontamination Verification Surveys	3.9.2	GA					
25	NFSS-0030	Draft Project Completion Report	6.0	GA					
26	NFSS-0031	Final Project Completion Report	6.0	GA					

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**SUBMITTAL FORM, JAN 96**

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## **ATTACHMENT 12: CQC REPORT**

This report will be outlined within the QCS and updated daily, as per the SOW for this contract.