

**Quality Control Plan for In-House Development of  
Scope of Work  
for the NFSS Waste Containment Structure Characterization**

**Project:** Niagara Falls Storage Site, Lewiston, NY (FUSRAP)

**Product Description:** Scope of Work (SOW) for the Niagara Falls Storage Site Waste Containment Structure Characterization

Task includes:

A geophysical, non-intrusive survey that will characterize the Waste Containment Structure and immediate vicinity in the following manner:

- Locate buried equipment, drums, debris, and building foundations
- Map building foundation limits and contents
- Infer areas of increased water saturation; determine if water is pooled underneath WCS
- Identify bedrock fractures, faults, or other potential seismic pressure points to determine seismic susceptibility of WCS
- Detect voids, potential sinkholes, and caverns such as sand lenses under WCS or immediate vicinity
- Map bedrock and soil stratigraphy
- Illustrate and characterize landfill; identify contents of waste pile, determine existence of rebar in floor of buried buildings
- Map top of bedrock
- Locate sand and gravel channels
- Locate possible buried wells
- Locate contaminant plumes
- Hypothesize using generated data and previous site data and photographs the location and proposed objects
- Map clay fractures identified on the WCS

**Product Coordination:** Judith Leithner is the CELRB Project Manager and the point of contact for this product. Michelle Rhodes, Project Engineer, is the author of this SOW and will coordinate, with Mrs. Leithner, all scoping questions during the preparation of this SOW.

**Contracting Mechanism:** SAIC is a Cost-Reimbursable Indefinite Delivery Type Contract of the US Army National Guard.

**Client:**

Congress, especially local congressman:

Honorable John J. LaFalce, District office: Representative in Congress, 617 Federal Building, 111 W. Huron Street, Buffalo, New York 14202, (716) 846-4065; Fax: (716) 856-3821

**Stakeholders:** The US Government (property owner) and New York State Department of Environmental Conservation will be involved in the review of this product, but are not contributing funds. The Niagara Mohawk Power Authority and the United States Environmental Protection Agency will receive a courtesy copy of the Scope, but shall not be included in the formal review.

**Product Delivery Team:**

Name		Title	Grade
Judith Leithner Ph. D.,	CELRB-PE-EE	Project Manager	GS 12
Michelle Rhodes,	CELRB-PE-EE	Project Engineer	GS 05
Judy Flint,	CELRB	Geologist	GS-12
Christopher Hallam,	CELRB-PE-EA	Health Physicist	GS 12
Tony Cappella,	CELRB-PE-EA	Industrial Hygienist	GS 12
Craig Forget, P.E.,	CELRB-PE-S	Quality Control/Quality Assurance	GS 12
Michelle F. Barczak,	CELRB-OC	Counsel	GS 13
Don Erwin,	CELRE-RE-A	Real Estate	GS 12
Arleen Kreusch	CELRB-PA	Public Affairs	Contractor

**Supervision of the PDT Members (Team Leaders)**

These individuals review the work performed by members of their team (i.e. environmental engineering team, cost engineering team.) This is a QA check before a product leaves a section team. These individuals, along with the rest of the PDT and ITRT need to be sent electronic copies of the approved QCP, along with QCP updates.

Fred Boglione	Environmental Engineering
Dave Conboy	Environmental Analysis
Tom Bender	Coastal / Geotechnical
Larry Sherman	H & H

**Note:** Branch Chiefs sign off on QCPs. However, the QCP preparer needs to coordinate with the PDT, ITRT, team leaders and branch chiefs to verify they are available and committed to participate as specified in this QCP.

**Independent Technical Review (ITR) Team:**

A review by a qualified person or team, not affiliated with the development of a project/product, for the purpose of confirming the proper application of clearly established criteria, regulations, laws, codes, principles and professional procedures. It includes the verification of assumptions, methods, and level of complexity of the analysis. It also verifies the alternatives evaluated, appropriateness of data used, reasonableness of the results and functionality of the product relative to the customer's requirements.

The Independent Technical Review (ITR) Team is as follows:

Dave Conboy	CELRB	Environmental Engineer	GS-13
Jon Kolber	CELRB	Geotechnical Engineer	GS-12
Keith Hall	CELRB	Health Physicist	GS-11

An ITR Certification Statement, to be used by the team upon completion of their review, is included as an attachment to this QCP.

According to the HTRW Screening Matrix for Category B projects (Table 2), CX review is not required for this type of project.

Division Review of this SOW is not required because based on Table B-6-2 of the LRD QMP, approval level of this QCP is with Buffalo District.

**Projected Product Schedule:**

16 February 2000	-Assemble Boiler Plates
21 February 2000	-Distribute SOW to Product Delivery Team for Team Input
28 February 2000	-Incorporate Product Delivery Team Input
07 March 2000	-Distribute SOW to ITR Team, PDT & Section Team Leader Reviewers for Review and Comment
24 March 2000	-ITR & PDT meeting to discuss findings
24 March 2000	-Resolve ITR Team & PDT Comments
07 April 2000	-Product Team & ITR Team Sign-off on Comments
07 April 2000	-Legal signs
07 April 2000	-Distribute to NYSDEC for review and Comment
05 May 2000	-Resolve and Respond to NYSDEC
19 May 2000	-NYSDEC Sign-Off on Comments
22 May 2000	-Deliver SOW to A/E Program Manager for review of SOW & Cost Estimate
23 May 2000	-A/E Program Manager (Mike DeJohn) forwards SOW & Cost Estimate to Contracting
30 May 2000	-Receive Contractor's Proposal
06 June 2000	-Technical Review of Contractor's Proposal
09 June 2000	-Negotiate with Contractor
12 June 2000	-Award SOW to Contractor, Notice to Proceed

**Labor & Cost Estimates**

Funds for this effort were included in the FY00 budget for this project. No detailed labor cost estimate is needed.

**Signatures:**

Michelle Rhodes has coordinated with Judy Leithner and the Section Team Leaders of the listed team members to verify they are available and committed to participate as specified in this QCP.

**Prepared and submitted by:**

Michelle C. Rhodes  
Michelle Rhodes, Chemical Engineer, CELRB-PE-EE

3/1/00  
Date

**Reviewed by:**

Judith S. Leithner  
Judith S. Leithner, Project Manager, CELRB-PE-EE

3/1/00  
Date

Fred Bognone  
Frederick L. Bognone, Section Team Leader, CELRB-PE-EE

3/2/00  
Date

Stephen M. Yaksich  
Stephen M. Yaksich, Branch Chief, CELRB-PE-A

3/2/00  
Date

Craig M. Forget  
Craig M. Forget, Quality Coordinator, CELRB-PE-S

3/2/00  
Date

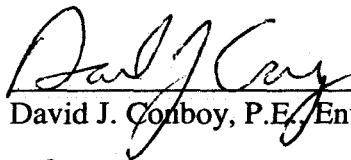
**Approved by:**

John L. Landahl  
John L. Landahl, Chief, Engineering & Planning Division

3/2/00  
Date

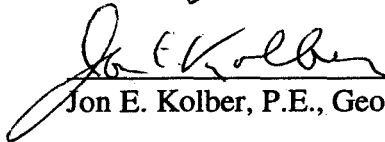
## COMPLETION OF INDEPENDENT TECHNICAL REVIEW

The Buffalo District has completed the Scope of Work (SOW) the Waste Containment Structure Characterization of the FUSRAP Niagara Falls Storage Site, 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 the law and existing Corps policy. The Characterization review was accomplished by the Niagara Falls Storage Site Product Team; and the independent technical review was accomplished by an independent team.




David J. Conboy, P.E., Environmental Analysis Team Leader, CELRB

5 MAY 00  
Date



Jon E. Kolber, P.E., Geotechnical Engineer, CELRB

12 MAY 00  
Date

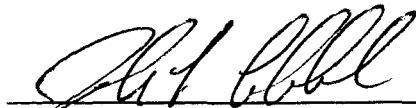


Keith J. Hall, Health Physicist, CELRB

5/5/00  
Date

## CERTIFICATION OF INDEPENDENT TECHNICAL REVIEW

As noted above, all concerns resulting from independent technical review of the project have been considered. The document has been fully reviewed.

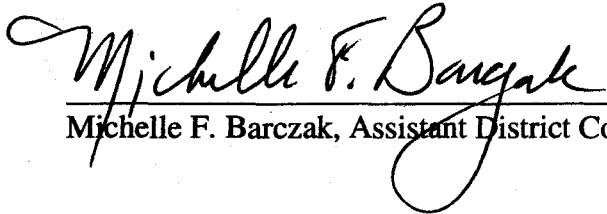


John L. Landahl, P.E., Chief, Planning and Engineering Division

5/18/00  
Date

## CERTIFICATION OF LEGAL REVIEW

The Scope of Work (SOW) for the Waste Containment Structure Characterization of the FUSRAP Niagara Falls Storage Site, Lewiston, New York, has been fully reviewed by the Office of Counsel, Buffalo District, and is approved as legally sufficient.

  
Michelle F. Barczak, Assistant District Counsel

  
Date