

## **Quality Control Plan for In-House Development of Scope of Work**

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

**Product Description:** Scope of Work (SOW) for Data Management, Environmental Modeling and Risk Communication of the Niagara Falls Storage Site.

**Tasks include:**

Integration of, evaluation of, and entry into an environmental database, conceptual site and groundwater model design, web-based data visualization, data extraction, spatial and temporal distribution of contaminants and site structures, contaminant trend plots, fate and transport model, monitoring optimization, risk communication, USACE software training, participation in public meetings

**Product Coordination:** Judith Leithner is the CELRB Project Manager and the point of contact for this product. Fredrick Boglione, Team Leader for the Environmental Engineering Section, will provide functional managerial interface with Judith Leithner for project management purposes. Michelle Rhodes, Project Engineer, is the author of this SOW and will coordinate, with Mrs. Leithner and Mr. Boglione, all scoping questions during the preparation of this SOW.

**Contracting Mechanism:** HydroGeologic, Inc. is a Cost-Reimbursable Indefinite Delivery Type Contract of the US Army Corps of Engineers Buffalo District.

**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), New York State Department of Environmental Conservation, 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:**

| <b>Name</b>                          | <b>Title</b>                      | <b>Grade</b> |
|--------------------------------------|-----------------------------------|--------------|
| Judith Leithner Ph. D., CELRB-PE-EE  | Project Manager                   | GS 12        |
| Fredrick Boglione, P.E., CERLB-PE-EE | Functional Manager                | GS 13        |
| Michelle Rhodes, CELRB-PE-EE         | Project Engineer                  | GS 05        |
| Christopher Hallam, CELRB-PE-EA      | Health Physicist                  | GS 12        |
| Alfred Kozminski, CELRB-PE-EA        | Chemist                           | GS 11        |
| Craig Forget, P.E., CELRB-PE-S       | Quality Control/Quality Assurance | GS 12        |

|                      |          |                |            |
|----------------------|----------|----------------|------------|
| Michelle F. Barczak, | CELRB-OC | Counsel        | GS 13      |
| 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, environmental analysis team, etc.) 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, P.E. | Environmental Engineering |
| Dave Conboy, P.E.   | Environmental Analysis    |
| Larry Sherman, P.E. | 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:

|                   |       |                |       |
|-------------------|-------|----------------|-------|
| Judy Flint,       | CELRB | Hydrologist    | GS-12 |
| Dave Brancato,    | CELRL | Risk Assessor  | GS-12 |
| Mike Barton, P.E. | CELRB | Civil Engineer | GS-12 |

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 of this SOW 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 the Buffalo District.

**Signatures:**

Michelle Rhodes has coordinated with Judy Leithner, Fred Boglione 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

February 4, 2000  
Date

**Reviewed by:**

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

23 February, 2000  
Date

V/A  
Frederick L. Boglione, Section Team Leader, CELRB-PE-EE

Date

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

2 March 00  
Date

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

20 MARCH 00  
Date

**Approved by:**

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

3/24/00  
Date

### **Projected Product Schedule:**

|                  |  |
|------------------|--|
| 16 February 2000 | -Assemble Boiler Plates  |
| 09 March 2000    | -Scoping Meeting   |
| 23 March 2000    | -Receive Scoping Meeting Summary from HydroGeologic  |
| 10 April 2000    | -Distribute SOW to Product Delivery Team for Team Input                                    |
| 17 April 2000    | -Incorporate Product Delivery Team Input   |
| 24 April 2000    | -Distribute SOW to ITR Team, PDT & Section Team Leader<br>Reviewers for Review and Comment |
| 08 May 2000      | -ITR & PDT meeting to discuss findings   |
| 08 May 2000      | -Resolve ITR Team & PDT Comments   |
| 22 May 2000      | -Product Team & ITR Team Sign-off on Comments  |
| 22 May 2000      | -Legal signs   |
| 22 May 2000      | -Deliver SOW to A/E Program Manager for review of SOW &<br>Cost Estimate                   |
| 23 May 2000      | -A/E Program Manager (Mike DeJohn) forwards SOW & Cost<br>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   |
| 16 June 2000     | -Award SOW to Contractor, Notice to Proceed  |

### COMPLETION OF INDEPENDENT TECHNICAL REVIEW

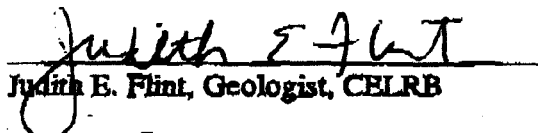
The Buffalo District has completed the Scope of Work (SOW) for a Task Order for Data Management, Environmental Modeling and Risk Communication of the FUSRAP Niagara Falls Storage Site, Lewiston, New York. Notice is hereby given that an independent technical review has been conducted that is appropriate 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 Data Management, Environmental Modeling and Risk Communication review was accomplished by the Niagara Falls Storage Site Product Team; and the independent technical review was accomplished by an independent team.



Michael F. Barton, P.E., Civil Engineer, CELRB

7/26/00

Date



Judith E. Flint, Geologist, CELRB

7-27-00

Date



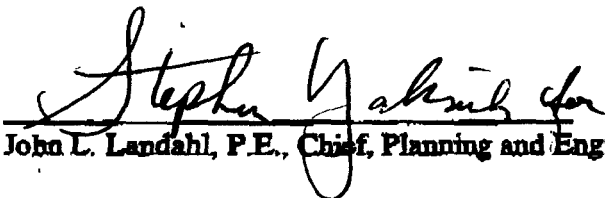
David J. Brancato, Risk Assessor, CELRL

8-01-00

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

8/7/00

Date