July 26, 2011

Buffalo District, Corps of Engineers
1776 Niagara Street
Buffalo, New York 14207-3199

Dear [Name],

Thank you for your letter of July 20, 2011, which seeks to follow up on the June 2, 2011 conference call between the Corps’ Niagara Falls Storage Site (NFSS) project team and members of the Community Restoration Advisory Board. As discussed on the call, the Remedial Investigation detections of highly elevated levels (around 1,000pCi/L) of uranium in groundwater in the vicinity of the Interim Waste Containment Structure (IWCS) add to concerns that the IWCS is leaking. Given the importance of ensuring the isolation of the highly radioactive contents of the IWCS and investigating signs of leakage, it was anticipated that the Remedial Investigation Report Addendum (RIRA) would determine the source and the migratory extent of highly elevated uranium contamination. It was disappointing to find that the RIRA did not address the issue and no further sampling was carried out to establish the source or extent of uranium migration in this area. The integrity of the IWCS should be considered to be suspect until proved otherwise.

However, I and other community members are encouraged that the Corps has acknowledged the concern over IWCS leakage and the need to further investigate the uranium groundwater contamination south and east of the IWCS. You state in your letter, that the Corps looks forward to working with the community; please be assured that the feeling is mutual. The opportunity for community RAB members to have meaningful input into further sampling to address leakage concerns is much appreciated. As you are aware, the community commented extensively on the NFSS Remedial Investigation Report (RIR), yet community RAB members were not given an opportunity to review or have input into the RIRA field sampling plan.

Going forward, it seems we are entering a new phase of Corps transparency with the community, which can only lead to good public participation and improved communication. In response to a request by the Corps on June 2, 2011, I agreed to assist the Corps in developing a sampling plan to address the concerns regarding IWCS leakage and migration around the southern and eastern sides of the IWCS. On July 21, 2011, I received three maps of the Niagara Falls Storage Site, with a request to mark up the maps with suggested sampling locations. In my view, this approach is not the best way to proceed. A better approach is for the Corps to review the specific RI deficiencies that I have identified and for the Corps to suggest a sampling plan to address those significant data gaps. This has the advantage of a collaborative approach which also utilizes the Corps expertise, extensive resources and first-hand knowledge of the site. Once the Corps has produced the draft sampling plan, I would be happy to review the plan and submit detailed comments. The draft plan should also be posted to allow review by all interested community RAB members and the agencies.

Let me document the specific deficiencies of the RI/RIRA which are of concern:

i) No investigation of 1,000pCi/L of uranium groundwater contamination around the IWCS.

In 2003 the Corps detected unprecedented levels of uranium contamination (~1,000pCi/L) around the IWCS. Uranium was detected in temporary well TWP 833 south of the IWCS and in the sanitary sewer line east of the IWCS. The RI implicated the underground utility lines in migration of uranium away from the

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IWCS:

"The water line may be a preferential flow path exhibiting higher uranium concentrations than would be expected to be found in other flow paths through the native soil."

Surprisingly, there has been no further sampling or analysis of groundwater in this area. The RIRA, which was supposed to investigate uranium groundwater contamination south of the IWCS, did not investigate the most serious contamination south of the IWCS or determine the source of the contamination. Groundwater in the vicinity of TWP 833 is expected to move east toward the Central Drainage Ditch and not north in the general direction of flow.

ii) No investigation of the pipelines associated with Building 409. Are these pipelines allowing contamination to migrate past IWCS monitoring wells without being detected?

We discussed this specific concern, that a release from the IWCS may not be picked up by well OW-6B if existing pipelines in Building 409 provide preferred pathways for contamination to move away from the IWCS in the direction of the Central Drainage Ditch (CDD). On June 3, 2011, I submitted marked up drawings and explanatory notes to the Corps, identifying additional pipelines in Building 409, that appeared to have been overlooked by the Corps.

"I have marked the area of concern regarding the location of TWP 833 and a second fire protection water line leaving Building 409. The pipeline close to TWP 833, where 1,000ug/L of uranium has been detected in groundwater, is not shown on the Bechtel drawing or the USACE poster "Pipelines and Utilities". The three area of elevated uranium in groundwater, TWP 833, MH-06 and OW-11B have one thing in common - pipelines."

iii) No further delineation of the uranium plume south and east of the IWCS.

The RI identified an extensive uranium plume south and east of the IWCS, using uranium data for TWP 833, the sanitary sewer and well OW-11B. However, the RIRA removed the uranium plume by reclassifying the sewer water as surface water. This reclassification of the sewer water as surface water is not justified. Environmental monitoring results support the view that the uranium plume exists. Originally, water in the sewer was regarded as groundwater because of the age of the sewer line and the likelihood of constant infiltration and ex-filtration occurring. This view is supported by the detection of steadily increasing uranium in a down gradient monitoring well. Uranium in the sewer water is suspected of contaminating the groundwater outside of the sewer, which suggests the sewer is damaged and groundwater ex-filtration and infiltration is occurring. The extent of the uranium plume east of the IWCS is not known; it may extend into the water lines. Uranium levels in the sanitary sewer have not been measured since 2003.

iv) No investigation of the NFSS water lines.

A 10 inch cast iron drinking water line passes close to the SE corner of the IWCS, part of a dense network of water lines, which has not been investigated. The pipelines may be acting as preferential pathways for contamination migration across the NFSS.

I trust that the information supplied is sufficient for the Corps to proceed with drawing up an appropriate sampling plan to address these community concerns. I and other members of the Community RAB, look forward to reviewing the draft plan as soon as it is available. Please do not hesitate to contact me if further clarification is required on any points.
Sincerely,

Signature

Cc