

**New York State Department of Environmental Conservation**

**Division of Environmental Remediation**

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Joe Martens  
Commissioner

November 5, 2013

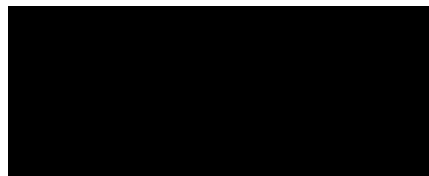
[REDACTED]  
Special Projects Branch Chief  
USACE-Buffalo District  
1776 Niagara Street  
Buffalo, New York 14207

Re: Niagara Falls Storage Site Balance of Plant, Investigation to Refine the Extent of Soil Contamination

Dear [REDACTED]

The New York State Department of Environmental Conservation (the "Department") has received and reviewed the above referenced document which will attempt to delineate soil contamination by sampling 378 locations across the NFSS, expose and evaluate the sanitary sewer in EU11, perform a geophysical survey in the area south of the IWCS. In addition, the document was sent to the New York State Department of Health for review. Attached are our combined comments.

Thank you for the opportunity to comment on this document. If you have any questions on this matter, please contact [REDACTED].



Remedial Bureau A

█ [REDACTED]  
[REDACTED] USEPA R-2  
[REDACTED] NYSDEC Region9  
[REDACTED] DOH  
[REDACTED] NCHD

█ [REDACTED] NYSDEC R9  
[REDACTED] NYSDEC R9  
[REDACTED] NYSDOH  
[REDACTED] NYS DOH  
[REDACTED] NYSDEC  
[REDACTED] NYSDEC

DEC's Comments On  
Niagara Falls Storage Site  
Refine the Extent of Soil Contamination  
October 2013  
Lewiston, New York

General comment: Tasks associated with the last investigation, specifically the sampling of the installed wells were not accomplished. These tasks need to be completed.

Comment 1: Section 3.2 states: "Three soil samples are to be collected from each boring, with each sample representing the following intervals: 0 to 15 cm (0 to 0.5 feet), 15 to 61 cm (0.5 to 2 ft) below grade, and 61 cm to 91 cm (2 to 3 ft) below grade." As indicated several times before, this Department interprets the 5pCi/g /15 pCi/g CERCLA criteria for Ra-226 and Ra-228 (respectively) being based on samples need to be collected every 6". Analyzing soil collected over a longer depth interval would be inappropriate unless a radiological scan of the soil within the intervals is uniform. Otherwise, this department would find it acceptable if a sample was collected from the highest 6" interval within each subsurface interval.

Comment 2: Section 3.4 states: "Hager-Richter Geoscience will perform a geophysical survey to identify the presence of utilities and other subsurface features in the area south of the IWCS,...". A geophysical survey was already conducted in this area (2001). What is the purpose of the new survey (identifying these locations because of the drilling which will be performed in the area)? It would seem that the area was geophysical surveyed in 2001. Was this area not included in last years' investigation? Relative to last years' investigation, the subsurface anomalies that were identified need to be evaluated and should be included in this investigation.

Comment 3: What affect does the fence around the IWCS have on the EM surveys?

DOH's Comments On  
Niagara Falls Storage Site  
Refine the Extent of Soil Contamination  
October 2013  
Lewiston, New York

Comment 1: What type of soil would be used to backfill the 378 boreholes?

Comment 2: What is the purpose of spreading the soil samples on plastic-lined surfaces for screening if the samples will be analyzed in the lab anyway? Extensive screening (as proposed) is time-consuming and increases the chance of cross contamination.

Comment 3: Why the matrix spike and matrix spike duplicate samples are not required for Ra-226 determination?

Comment 4: The groundwater in the LWBZ flows northwest, but proposed excavations are all located east of OW11B (fig 11). Also, I don't see much sampling in east of EU 9, which is west of IWCS.

Comment 5: For VOCs analysis, refrigeration or chemical preservation should be considered at collection time to preserve content integrity.

Comment 6: For VOCs, scanning, attention should be given to selecting the right lamps (depending on the type of VOCs) and to the effect of humidity on the performance of the PID.