

New York State Department of Environmental Conservation

Division of Solid and Hazardous Materials

Bureau of Radiation & Hazardous Site Management, Room 460

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March 20, 2000

Mr. Raymond L. Pilon, Project Manager
U. S. Army Corps of Engineers
Buffalo District
1776 Niagara Street
Buffalo, New York 14207-3 199

Re: Lake Ontario Ordnance Works, Component 2 -Phase 1 Interim Removal Action

Dear Mr. Pilon:

The New York State Department of Environmental Conservation (the Department) has reviewed the "Draft Addendum to the Work Plan for the Phase I Remedial Investigation for the Lake Ontario Ordnance Works (LOOW), Niagara County, New York for Phase II Remedial Investigation." The draft work plan contains a proposed sampling program for the collection of additional information to investigate environmental impacts from past Federal Government ownership of the property.

The Department is concerned with the USACE's position not to further investigate several areas of the former LOOW due to "potential impacts from non-DOD site users". Sufficient information has not been presented which supports the DOD's contention that use of these area by others would have caused impacts to the environment. At areas where usage by others may have resulted in impacts, in addition to DOD related impacts, sufficient information has not been collected in order to make a determination of responsibility.

Also, the Department has stated on several occasions that the former LOOW site contains additional areas of possible Federal Government related contamination which have not been sufficiently investigated.

It is the position of the Department that all areas of the site potentially impacted as part of Federal Government ownership of the property must be investigated to determine the need for remedial action. Although the USACE has stated that certain areas/units at the site are "ineligible under the DERP program", sufficient justification supporting this position has not been submitted to the Department. The Department can not make a final



corrective action determination for the site until all areas of past Federal Government usage have had an adequate investigation.

Areas which have either not been investigated or have not been adequately investigated by the Federal Government include:

Underground Storage Tanks	Transformers
Former Nike Base	Underground utilities
Asbestos Contamination	Lead Based Paint
Well P12-2S area	Background Well BW-2S area
AFP-68 Waste Treatment Area (Area 24)	Former Rail Lines

Department Comments Are As Follows:

Section 1.2 - As stated above, the Department does not concur with the scope of the Phase II Remedial Investigation (RI).

Site Specific Sampling and Analysis Plans

General - For a Phase II investigation, the approach proposed focuses too heavily on “screening” samples. A greater emphasis on laboratory analysis is needed to provide sufficient information for decision making.

Section B-1.1 - As discussed in Department comments on the Phase I RI Report, “Pipe 1” and other underground piping in the vicinity of the former Nitration Areas must be investigated.

Section B-1.3.3 - Why are samples proposed to be collected from soils adjacent to piping exiting the bi-trinitrating and mononitrating houses instead of sampling the contents of the piping? Sampling the soils will not answer the question of whether the piping represents a risk.

Section B-1.3.4 - Given the geology (clay till) and hydrogeology (groundwater flow rate < 4"/yr) of the site, additional point spacing of 50’ appears excessive.

Why are samples proposed for the top of the Glaciolacustrine clay for the biased point? Sample selection should be based on field observations.

Table B-1-1 - Is “PAH screening” sensitive to TNT, TNT intermediaries and breakdown products?

Section B-2.2.2 - The work proposed in this section should be performed with consideration of the data needs of the proposed Interim Removal Action for the Drum Trench.

Section B-2.3.3 - Why are upgradient groundwater points proposed? General groundwater conditions at the facility have been well documented.

Section B-3.1 - The work proposed in this section should be performed with consideration to the data needs of the proposed Interim Removal Action for the Trash Pit.

Section B-3.3.4 - The Trash Pit is located in the vicinity of the former LOOW TNT production line1 . If underground lines are encountered, their contents should be sampled.

Table B-3-1 - Please note that this Table represents only the intervals which were sampled. Other intervals potentially exist with elevated contaminant levels.

Section B-4.2.1 - Is the removal action mentioned in this section still being considered? If so, please submit a work plan for review.

Section B-4.3.4 (80 point grid) - If (as stated in Section B-4.2.1) the purpose of this sampling program is to confirm contaminant presence/concentration after removal of 6" of soil, why isn't collection of a sample from 0-6" (after soil removal) proposed?

The placement of fill materials should not take place until full characterization of the area has been performed.

The minimal number of samples and lack of continuous sampling of boreholes (10' gap between samples) will not allow this investigation to provide sufficient information to make remedial decisions on the extent of contamination.

Section B-4.3.4 (location DO) - Please note that the surfaces at location DO and CO have been disturbed as part of the Chemical Waste Sewer Interim Removal Action. The proposed approach puts "blindness" on the investigation. Borings should be continuously sampled and screened with intervals exhibiting elevated field reading selected for analysis.

Section B-4.3.4 (location CO) The Phase I sampling location CO indicated the presence of organic compounds at all three intervals sampled (0-0.5', 3.5-4' & 13.6-14'). Why is the investigation limited to the 14- 16' interval?

Section B-4.3.4 - (location C500) - Sample selection should be based on field observations.

Section B-4.3.5 - The collection of groundwater samples as part of Geoprobe sampling should be considered. This method may allow greater flexibility by sampling "hot" areas first and evaluating the need for and location of additional groundwater points.

Section B-4.3.6 - Why are PAH analysis proposed for laboratory samples? Wouldn't the necessary information be collected as part of volatile and semi-volatile organic analysis? Why are metals analysis proposed? The Phase I investigation did not indicate metals contamination in the groundwater.

Table B-4-4 - Metals, PAH, and Cyanide analyses can be eliminated for laboratory samples.

Section B-5.2.1 - The area in the vicinity of Phase I sampling location Cl -7-BP1 (Drums on the east side of building) and the former Flare Stack area (G40-G500) need to be investigated.

Section B-5.3.4 - (Sampling and Analysis Plan for Locations HO...) - Screening should be expanded to include VOC's, PCBs, and PAHs.

Section B-5.3.5 - The Phase I groundwater investigation of this area was not sufficient. Groundwater sampling is necessary and justified in the vicinity of the Area 7 and Area 8 process areas.

Section B-6.3.4 - Sample selection should be based on field observations. Add VOCs to screening parameters.

Sections B-7 through B-11 - It would greatly assist in review of the work plan if a report on the results of the 1998 Interim Remedial Action (IRA), which addressed asbestos contamination on the Somerset Group property, were available for review.

Additional areas of the Somerset Group property are in need of investigation to determine possible impacts. These areas include: underground utilities, debris piles west of Area 30, and a partially buried well approximately 200' east of Area 2 1.

Section B-7.3.4 Portions of this area were excavated and backfilled as part of the 1998 IRA. Please make sure that samples are collected from below recent fill materials.

Section B-8.3.2 Please change the sample location interval to 25' in the PCASS-5-1 investigation area.

Section B-8.3.3 Given the geology (clay till) and hydrogeology (groundwater flow rate < 4"/yr) of the site, the proposed 75' spacing from location E200 is excessive.

Section B-8.3.4 (Location E200) Sample selection should be based on field observations.

Section B-8.3.4 (Location PCASS-3-3 and PCASS-3-4) Sample selection should be based on field observations. Screening should be expanded to include PAHs.

Section B-8.3.4 (Location PCASS-5-1, PCASS-5-2 & PCASS 5-4) Screening should be expanded to include PAHs and PCBs. Laboratory analysis of samples should be based on the results of field screening.

Section B-8.3.4 (Location PCASS-5-3) Replace laboratory samples for PAHs with Volatile and Semi-Volatile organics.

Section B-8.3.5 Location E200 should be re-sampled prior to installation of additional wells. The Groundwater investigation should focus on actual process areas. Given the hydrogeology groundwater sampling points should be located at potential source areas.

Section B-9.3.3 Given the geology (clay till) and hydrogeology (groundwater flow rate < 4"/yr) of the site, additional point spacing of 50' appears excessive. A 25' spacing is more appropriate.

Section B-10.3.4 Laboratory samples should be analyzed for Semi-volatile organics instead of metals.

Section B-12.3.3 Given the geology (clay till) and hydrogeology (groundwater flow rate < 4"/yr) of the site, the proposed 75' spacing from location G100 is excessive.

Section B-12.3.4 - Sample selection should be based on field observations.

Section B-12.3.5 - It may be helpful to review information on groundwater flow collected recently at areas of the Niagara Falls Storage Site (NFSS), immediately south of this area of investigation, prior to siting groundwater monitoring points.

Section B-14.1 - Soils data collected as part of the RI recently completed at the NFSS, may also be useful in determining a site background concentration for inorganic parameters.

The Department looks forward to the continued progress of this project. Please respond to these comments within 45 days. If you have any questions, please call me at (5 18) 457-9253.

Sincerely,



Kent D. Johnson
Engineering Geologist II

cc: C. Basham, USACE - Baltimore District
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Restoration Advisory Board
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