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MEMO:

*DRIVEN BY A VISION
to be the best!*

COMMENTS ON:

DRAFT EE/CA FOR REMOVAL ACTIONS IN OUI AND OU2
FORMER LAKE ONTARIO ORDNANCE WORKS

Acres International Corporation
November 1994

Commentor: George C. Cornwell, P.E.
Chief, CEMRK-EP-TD
11 December 1994

SHOW-STOPPER COMMENTS

1. This document repeatedly refers to the asbestos cleanup as involving all the asbestos-containing materials - especially the siding panels. The asbestos cleanup authority for this project was a special case which was granted for loose, friable asbestos - not all asbestos. If the asbestos-containing materials on the site do not fall into the loose, friable category, they are not a part of this removal action.

OTHER COMMENTS

1. Page 2-9, section 2.1.6(b)5., last sentence of third paragraph:
Add the word "index" after the phrase "with an average plasticity".
2. Page 2-21, section 2.3.3(c):
Did Chem-Trol Pollution Services perform any investigations?
3. Page 2-21, section 2.3.3(c), third sentence.
The word "compound" should be pluralized.
4. Page 2-21, section 2.3.3(c), fourth sentence:
This sentence has some words left out.
5. Page 2-23, section 2.3.4(b)1., first sentence:
The word "form" should be "from".
6. Table 2-24:
The value for UO-DUP, Phenanthrene of "1,200,00" and the value for UO-3, Semi-Volatiles TICs of "20,440,00" are in error.
7. Page 2-24, section 2.3.4(b)2., third paragraph:
The value of "10,00" is in error.
8. Page 2-24, section 2.3.4(b)2., fourth paragraph:
When was this "recent" site visit?
9. Page 2-26, section 2.4.1, first paragraph:
Table 2-26 doesn't discuss pipeline locations.

10. Page 2-26, section 2.4.1, third paragraph:
The estimated volumes of sediment and water overlap each other.
11. Page 2-30, section 2.4.4, first sentence of first asbestos paragraph:
The word "corrugated" is misspelled.
12. Table 2-6, page 3 of 3:
What is the meaning of "y" in the table?
13. Figure 2-4:
The geologic section shown is erroneously marked to be found on Figure 2-6. The section is actually found on Figure 2-3.
14. Figure 2-4:
The word "potentiometric" in the title is misspelled.
15. Figure 2-7:
The word "potentiometric" in the title is misspelled.
16. Figure 2-15:
The reference to Figure 2-4 is in error and should be removed.
17. Page 3-4, section 3.4, third paragraph:
The acronyms "SDG" and "SCG" are used interchangeably and "SDG" is never defined.
18. Page 5-14, section 5.2.2, first paragraph, first sentence:
The second occurrence of the word "fixation" should be "treatment".
19. Page 5-17, section 5.2.3, fifth paragraph, first sentence:
The phrase "explosives and contaminated sediments" should read "explosives contaminated sediments".
20. Page 5-44, section 5.2.4, fourth paragraph, first sentence:
In the phrase "Chemical analyses shows" either the word "analyses" needs to be replaced with "analysis" or the word "shows" needs to be replaced with "show".

END OF COMMENTS

COMMENTS ON:

DRAFT EE/CA FOR REMOVAL ACTIONS IN OUI AND OU2
FORMER LAKE ONTARIO ORDNANCE WORKSAcres International Corporation
November 1994Commentor: Leland C. Fuerst
Chief, CEMRK-EP-T
23 December 1994

1. Page ES-3, last sentence:
The phrase "and asbestos-insulated hopper" should read "an asbestos-insulated hopper".
2. This document makes numerous references to previous work efforts at the site as Acres' efforts. Since Acres performed the work under contract with the Corps of Engineers, these references should be to the Corps of Engineers' efforts. The following is a list of locations:
 - Page 2-16, paragraph 2.3.1(a) heading
 - Page 2-16, paragraph 2.3.1(a) first sentence
 - Page 2-17, paragraph 2.3.1(b) heading
 - Page 2-17, paragraph 2.3.1(b) first sentence
 - Page 2-18, paragraph 2.3.2(b) heading
 - Page 2-18, paragraph 2.3.2(b) first sentence
 - Page 2-19, paragraph 2.3.2 (d) heading
 - Page 2-19, paragraph 2.3.2(d) first sentence
 - Page 2-21, paragraph 2.3.3 (d) heading
 - Page 2-21, paragraph 2.3.3 (d) first sentence
 - Page 2-22, paragraph 2.3.3(e) heading
 - Page 2-22, paragraph 2.3.3(e) first sentence
 - Page 2-23, paragraph 2.3.4(b) heading
 - Page 2-23, paragraph 2.3.4(b)1 first sentence
 - Page 2-32, paragraph 2.5.2 second sentence
 - Page 2-32, paragraph 2.5.3 second sentence
3. Pages 3-4 through 3-7, Tables 3-1 through 3-3:
This section begins with the definition of the acronym "SCG" at the beginning of the last paragraph on page 3-4. In the remainder of the referenced pages and tables the acronym "SDG" is generally used. Are they the same thing? If so, be consistent. If not, define "SDG".
4. Page 5-22, paragraph 5.2.3.1.A.2.b.2.
This paragraph refers to the use of the "National Guard property located north of Balmer Road", have the owners of this property been contacted to see how they feel about this potential use of their property? Additional references to this property are as follows:
 - Page 5-26, paragraph 5.2.3.1.R.2.h.1.

Page 5-27, paragraph 5.2.3.1.B.2.c.2.

Page 5-30, paragraph 5.2.3.2.A.2.b.2.

Page 5-32, paragraph 5.2.3.2.C.2.b.2.

Page 5-32, paragraph 5.2.3.2.C.2.c.2.

Page 7-2, paragraph 7.2, second bullet, first paragraph

5. Page 5-22, paragraph 5.2.3.1.A.2.c.1.

The phrase "at an on-site incinerator" should read "of an on-site incinerator".

6. Page 5-26, paragraph 5.2.3.1.B.2.b.1.

The incinerator mentioned here belongs to Roy F. Weston and may have been moved to the Alabama Army Ammunition Plant when its work was completed at Savanna.

7. Page 5-49, paragraph 5.2.4.C.2.

The last sentence should read "The Laidlaw facility in Roebuck, South Carolina, has been identified as a possible acceptable location."

END OF COMMENTS

Post-It™ brand fax transmittal memo 7671		# of pages ▶ 3
To <i>Justina Wesley</i>	From <i>Kent Johnson</i>	
Co. <i>USACOE - Balt Dist</i>	Co. <i>NYSDEC</i>	
Dept. <i>CENAB-EN-HN</i>	Phone # <i>(518) 457-9255</i>	
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Laura M. W. ...
Commissioner

December 30, 1994

U.S. Army Corp of Engineers
Baltimore District
(attn: CENAB-EN-HN, Ms. Justina Wesley)
City Crescent Building, Room 10200
10 South Howard Street
Baltimore, MD 21201

Re: Draft EE/CA

Dear Ms. Wesley:

The New York State Department of Environmental Conservation and United States Environmental Protection Agency have reviewed the "Draft Engineering Evaluation/Cost Analysis (EE/CA) for Removal Actions in Operable Units 1 and 2" for the former Lake Ontario Ordnance Works (LOOW) located in Lewiston/Porter, New York. The purpose of the EE/CA is to address interim removal actions measures at several identified areas at the LOOW site and to evaluate removal action alternatives in terms of effectiveness, implementability and cost criteria.

Upon review of the draft EE/CA, the agencies find the removal plans recommended to be a reasonable step in the remediation of the LOOW. The agencies view the removal actions proposed in the EE/CA as an interim action. Additional investigation, and possibly, remedial actions, will be necessary before a final remedial decision for the former LOOW can be made. In addition, the agencies offer the following comments to the draft report:

Page 5-12, Section 5.2.1, Alternative 3. Under the Section C.1.a, consideration 5 acknowledges that the excavated material may require treatment prior to disposal, in accordance with Land Disposal Restrictions (LDRs) if concentrations exceed LDR values. However, in Appendix B (Excavation-Disposal) does not appear to include costs which may be necessary to reduce the concentrations of contaminants in the excavated material to LDR levels.

Page 5-14, Section 5.2.1, Item C.1 Since active landfill disposal of contaminated material is on-going at the CWM Chemical Services facility, why is landfill disposal of the contaminated material from Area A not expected to be readily accepted by the public?

Page 5-14, Section 5.2.2: Change the second remedial alternative from removal-fixation-disposal to removal-treatment-disposal.

Page 5-38, Section 5.2.3.3: Attached are copies of a September 1981 drawing of the location and status (as of the drawings date) of underground lines at the CWM Chemical Services facility. CWM should be contacted to determine the current status of underground lines (whether they have been removed).

In addition, it appears from Figure 2-18, that a portion of the TNT lines run under the North Salts area or the northern berm of this inactive surface impoundment. If this is correct, extra precautions will need to be taken to ensure the stability of the berm.

Page 5-50, Section 5.3: Please be advised that, depending on the results of post-removal verification sampling and sampling of groundwater accumulation in excavations, a groundwater remedial system may be required as part of the long-term remedy for the Areas A & B, the TNT lines and the chemical waste sewer system.

Page 5-51, Section 5.3, Alternative 1: Aqueous treatment at CWM will be feasible depending on the capacity of the facility to handle the volume of water generated. Alternatives 2 and 3 also appear to be feasible.

Page 7-1, Section 7: All of the preferred removal actions will require confirmation sampling to assure that clean-up criteria have been achieved.

If you have any questions on these comments please contact Mr. Kent Johnson (NYSDEC) at (518) 457-9255 or ms. Carol Stein (USEPA) at (212) 264-5130.

Sincerely,



Paul R. Counterman, P.E.
Chief
Bureau of Western
Hazardous Waste Programs

Division of Hazardous Substances
Regulation

Paul D. Coulter

Andrew Bellina, P.E.

Chief

Hazardous Waste Facilities Branch

U.S.E.P.A. - Region II

cc: C. Stein, USEPA, Region II
J. Strickland, Region 9
J. Pizzuto, CWM
✓ W. Wertz
K. Johnson

Draft EE/CA for OU1 & 2, Lake Ontario Ordnance Works, NY

File: K:\TECHDATA\ARMS\mil\LOOW-1.DBF

Num	Name	Office	Page/Sheet	Discipline	Rm/Detail
1	MARSH	NAB-EN-HT	2-12	ENV	2.1.7.B

Include the units for the hydraulic gradients.

2 MARSH NAB-EN-HT 2-21 ENV 2.3.3.C
This section indicates that Chemical Waste Management (CWM) attributes the groundwater contamination to past Army activities, however, that has not been confirmed yet. Reword this section.

3 MARSH NAB-EN-HT 2-27 ENV 2.4.1
This section indicates that contaminated groundwater is not assumed. This does not appear to be a reasonable assumption based on the data. If remediation of the groundwater is beyond the scope or context of this investigation that is one thing, however, to make a blanket statement that groundwater is not contaminated seems naive.

4 MARSH NAB-EN-HT 2-27 ENV 2.4.2
ullet 2- This section contradicts the statement regarding groundwater contamination on page 2-27, 2.4.1. Coordinate.

5 MARSH NAB-EN-HT 2-29 ENV 2.4.3
This section indicates that ponded surface water within Area B may be discharge without treatment. This seems somewhat naive. Should consideration be given to requiring some level of treatment?

6 MARSH NAB-EN-HT TBL1-FIG19 ENV SECT 2
Please include page numbers for all Tables and Figures at end of this section.

7 MARSH NAB-EN-HT TABLE 2-6 ENV 3 OF 3
Indicate what the "Y" flag means.

8 MARSH NAB-EN-HT FIGURE 2-4 ENV
The cross section is referenced to Figure 2-6. This is not correct. Coordinate.

9 MARSH NAB-EN-HT FIGURE 2-11 ENV
Use different symbols for test pits and removal actions.

b. Identify Access Road "A".

Draft EE/CA for OU1 & 2, Lake Ontario Ordnance Works, NY

Num	Name	Office	Page/Sheet	Discipline	Rm/Detail
10	MARSH	NAB-EN-HT	FIGURE 2-17	ENV	
This Figure is impossible to read. Please clarify.					
11	MARSH	NAB-EN-HT	3-1	ENV	PARA 1
a. This section indicates that contaminated groundwater cleanup is a removal action objective, however, this contradicts page 2-27, 2.4.1. Coordinate.					
b. This section finishes with, "... it is anticipated that follow up remedial actions will ultimately address the remaining areas of concern." What are these "remaining areas of concern"?					
12	MARSH	NAB-EN-HT	3-2	ENV	3.1
This section references "Superfund-financed removal action", this is a FUDS financed project. Coordinate.					
	MARSK	NAB-EN-HT	3-4	ENV	3.4
Indicate what "SDGs" are.					
14	MARSH	NAB-EN-HT	TAB 3.1-3-5	ENV	
Include page numbers for all Tables.					
15	MARSH	NAB-EN-HT	TABLE 3-3	ENV	3 OF 3
Include Army Regulation governing explosives.					
16	MARSH	NAB-EN-HT	TABLE 3-5	ENV	3 OF 3
See previous comment.					
17	MARSH	NAB-EN-HT	4-3	ENV	4.3.1.1
Second paragraph- This section indicates that the time necessary for complete treatment may exceed one year. Is this a problem?					

Draft EE/CA for OU1 & 2, Lake Ontario Ordnance Works, NY

Nurn	Name	Office	Page/Sheet	Discipline	Rm/Detail
18	MARSH	NAB-EN-HT	4-6	EN-V	4.3.2
This section, and many others that follow, mention/specify disposal at specific TSD facilities (i.e., CWM landfill, CECOS' facility), we need be very careful that we do not specify a specific facility if there are other qualified sites available. This is especially true if the selection of the recommended remediation alternative is hinged on the disposal cost at the specific facility (CWM landfill). The author understands that the proximity of the CWM Landfill is very attractive from a cost perspective, however, since the Army is paying for the remediation, we decide where the waste goes.					
19	MARSH	NAB-EN-HT	4-7	ENV	4.6
Delete the references to CWM and Modern Landfills.					
20	MARSH	NAB-EN-HT	5-4	ENV	A.1.A.8
This section indicates that the effect of freeze/thaw was previously mentioned. The reader could not find such a reference. Coordinate.					
21	MARSH	NAB-EN-HT	5-4	ENV	A.1.C
This section indicates that the risk from residuals remains unchanged with the fixation process. I disagree with that statement. The risk is reduced by the fixation process. Coordinate.					
22	MARSW	NAB-EN-HT	5-8	ENV	B.1.A.5
This section indicates that the treated soil would be considered a non-hazardous waste. Do we know that for sure?					
23	MARSW	NAB-EN-HT	5-9	ENV	B.1.C
The assumption that the site could be used for unrestricted use seems somewhat optimistic.					
24	MARSH	NAB-EN-HT	5-10	ENV	B.2.B.3
The requirement for post remediation monitoring seems excessive. Is it really necessary?					
25	MARSH	NAB-EN-HT	5-11	ENV	B.3
The cost for remediation should include treatment of encountered groundwater. Wasn't it included in other alternatives?					

Draft EE/CA for OU1 & 2, Lake Ontario Ordnance Works, NY

Num	Name	Office	Page/Sheet	Discipline	Rm/Detail
26	MARSH	NAB-EN-HT	5-16	ENV	5.2.3
This section specifies "hot-gas decontamination", whereas in other areas it is referred to as incineration. Be consistent with nomenclature.					
27	MARSH	NAB-EN-HT	5-36	ENV	C.1.B
This section indicates that the treated soil can be used for beneficial uses. This seems like a big leap of faith. If the material does not have beneficial use and must be disposed of in a landfill does that change the recommendation.					
28	MARSH	NAB-EN-HT	5-38	ENV	5.2.3.3
If biotreatment is selected for the sediment, can't it also treat these 50 cy?					
29	MARSH	NAB-EN-HT	5-43	ENV	5.2.3.4
This section appears to contradict page 5-36, C.1.b. Coordinate.					
30	MARSH	NAB-EN-HT	5-44	ENV	5.2.4
This section mentions removal of the pipelines after being cleaned. Based on the data that we have is it necessary to remove the lines? If not, then state such.					
31	MARSH	NAB-EN-HT	5-45	ENV	5.2.4
How will the cleaning efficiency be checked (rinstate samples)?					
32	MARSH	NAB-EN-HT	5-47	ENV	A.2.A.4
If the treated material will be disposed of in a landfill, how will it be affected by freeze/thaw cycles?					
33	MARSH	NAB-EN-HT	5-50	ENV	5.3
Indicate how much aqueous material is expected.					
34	MARSH	NAB-EN-HT	TABLES 7-	ENV	
Include page numbers for all Tables.					
5	MARSH	NAB-EN-HT	8-1	ENV	
include complete reference titles.					

Draft EE/CA for OU1 & 2, Lake Ontario Ordnance Works, NY

Num	Name	Office	Page/Sheet	Discipline	Rm/Detail
36	MARSH	NAB-EN-HT	-	ENV	

The Remedial Investigation and Design POC for these comments is Russell Marsh at (410) 962-2227.