

ENVIRON

September 19, 2006

Peter Lee, Ph.D
U.S. Nuclear Regulatory Commission – Region III
801 Warrenville Road
Lisle, IL 60532

Re: Supplemental Site Characterization Work Plan
Breckenridge Disposal Site, Breckenridge, Michigan

Dear Dr. Lee:

Enclosed with this cover letter is a revised Supplemental Site Characterization Work Plan (SSCPWP) for the Breckenridge Disposal Site. The SSCWP has been revised to address United States Nuclear Regulatory Commission's (NRC's) comments provided to the earlier June 2005 draft version of the Work Plan, NRC comments to ENVIRON's April 25, 2006 Revised Dose Assessment Methodology Letter, and the laboratory results from the confirmation sample collected from the CWA-3 on July 16, 2006. This Work Plan is submitted, at the direction of the NRC, to facilitate a more accurate identification of waste volumes remaining at the Site that require further excavation and management as part of the remedial design.

Also enclosed with this letter are the responses to NRC comments to the June 2005 draft version of the Work Plan as documented in a June 23, 2005 NRC Telephone Conversation Record.

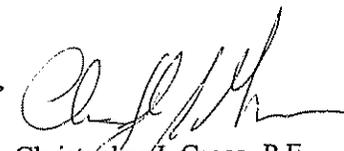
Please contact David Heidlauf, Christopher Greco, or myself at (312) 853-9430 if you have any questions.

Respectfully submitted,

ENVIRON International Corporation


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MT:rms

Enclosures

cc: James L. Cameron – NRC Region III, Chief, Decommissioning Branch
George M. McCann – NRC Region III, Senior Health Physicist, Decommissioning Branch
Bruce A. Berson – NRC Region III, Regional Counsel
The Custodial Trust
Bill Thomas – IEM, Inc.
Alan S. Tenenbaum – U.S. Department of Justice (w/o enclosure)
Helena Healy – U.S. Environmental Protection Agency, Headquarters (w/o enclosure)
Gaylene Vasaturo – U.S. Environmental Protection Agency, Region V (w/o enclosure)
James Stropkai – State of Michigan, Department of Attorney General (w/o enclosure)
Scott Cornelius – Michigan Department of Environmental Quality (w/o enclosure)

**Response to NRC Comments to the
June 2005 Draft Version of the
Supplemental Site Characterization Work Plan**

Response to NRC Comments¹ to the June 2005 Draft Version
of the
Supplemental Site Characterization Work Plan

Comment 1. Derived Concentration Guideline Level (DCGL)

The waste contains the decay chain of natural uranium and thorium. Ra-226 is in equilibrium with U-238. Most of the dose comes from Ra-226. The Kd of the U-238 is not sensitive to the total dose from the decay chain. The Kd of the Ra-226 should be determined rather than U-238. The site specific Kd should be based on laboratory analysis of the soil collected from the site. If the national data is used, the sensitivity analyses will be required to justify the value for the Kd.

Response: This comment was addressed in the April 25, 2006 Revised Dose Assessment Methodology prepared by ENVIRON International Corporation on behalf of the Custodial Trust.

Comment 2. Volume of Surface Contaminated Soil

The depth of the near surface contamination varies from location to location. Please provide your method for estimating the surface waste volume.

Response: Additional borings have been proposed in the revised Supplemental Site Characterization Work Plan at locations that have historic surface samples that exceed the surface DCGLs, but do not have data regarding deeper activity levels, and at locations that have pre-excavation trenching identified surface contamination. A limited number of additional borings may also be completed based on the results of the gamma radiation walkover survey.

Comment 3. Volume of Subsurface Contamination Soil

Please justify the number of proposed core borings in order to demonstrate that they are sufficient to determine the concentration profile of the subsurface contamination.

Response: The sampling approach proposed in the revised Supplemental Site Characterization Work Plan is designed to provide horizontal and vertical definition of the materials exceeding the 2006 updated DCGLs. ENVIRON has reviewed existing Site data in the context of the 2006 updated DCGLs to design a cost effective delineation program for impacted subsurface materials that can be completed with current Site account funds. A limited number of additional step-out delineation borings may be conducted based on the results of the updated proposed core boring program.

¹ NRC June 23, 2005 Telephone Conversation Record.

**VELSICOL CHEMICAL CORPORATION
BRECKENRIDGE DISPOSAL SITE**

**SUPPLEMENTAL SITE CHARACTERIZATION
WORK PLAN**

Prepared for:

The Custodial Trust

Submitted to:

United States Nuclear Regulatory Commission

Prepared by:

ENVIRON International Corporation
123 North Wacker Drive, Suite 250
Chicago, Illinois

September 2006

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C O N T E N T S **(continued)**

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Table 3:	Background Data Summary
Table 4:	Proposed Background Levels

F I G U R E S

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Figure 3:	July 14, 2006 Sampling Location Map
Figure 4:	Site Map with GPR and Magnetic Gradiometer Anomalies Overlay
Figure 5:	Historical Subsurface Data Compilation Map
Figure 6:	Historical Surface Data Compilation Map
Figure 7:	Estimated Extent of Subsurface Impacts
Figure 8:	Proposed Boring Locations

A P P E N D I C E S

Appendix A:	July 14, 2006 Laboratory Report
Appendix B:	Background Data Backup
Appendix C:	ProUCL Output
Appendix D:	Field Log Sheet

ACRONYMS AND ABBREVIATIONS

AEC	Atomic Energy Commission
Bgs	below ground surface
CWA	confirmed waste area
DCGLs	Derived Concentration Guideline Levels
ENVIRON	ENVIRON International Corporation
GM	Gieger-Mueller
GPR	ground penetrating radar
GPS	Global Positioning System
IEM	Integrated Environmental Management, Inc.
LANL	Los Alamos National Laboratory
m ²	square meters
m ³	cubic meters
mrem/yr	millirem per year
MCC	Michigan Chemical Corporation
NRC	Nuclear Regulatory Commission
ORAU	Oak Ridge Associated Universities
PPE	personal protective equipment
PWAs	potential waste areas
RCRA	Resource Conservation and Recovery Act
RESRAD	Dose modeling software
Sciencetech	Sciencetech Inc.
Site	Breckenridge Disposal Site, Breckenridge, Michigan
SSCWP	Supplemental Site Characterization Work Plan
TCLP	Toxicity characteristic Leach Procedure
UCL	upper confidence limit
USEPA	United States Environmental Protection Agency
Velsicol	Velsicol Chemical Corporation
2x2 NaI	2-inch by 2-inch sodium iodide gamma scintillation detector