

March 23, 2009

Ms. Elizabeth Southerland, Director  
Division of Assessment and Remediation  
Office of Superfund Remediation  
and Technology Innovation  
U.S. Environmental Protection Agency  
1200 Pennsylvania Avenue, N.W.  
Mail Code: 5204P  
Washington, DC 20460

SUBJECT: MEMORANDUM OF UNDERSTANDING CONSULTATION ON THE  
DECOMMISSIONING OF THE NWI BRECKENRIDGE SITE IN  
BRECKENRIDGE, MICHIGAN

Dear Ms. Southerland:

This letter is intended to discuss with you the decommissioning oversight actions that the U.S. Nuclear Regulatory Commission (NRC) has taken and intends to take, for the NWI Breckenridge (Breckenridge) site in Breckenridge, Michigan.

On October 9, 2002, the NRC and the U.S. Environmental Protection Agency (EPA) entered into a Memorandum of Understanding (MOU) on "Consultation and Finality on Decommissioning and Decontamination of Contaminated Sites." Under the MOU, EPA agreed to continue its Comprehensive Environmental Response, Compensation, and Liability Act deferral policy of not listing sites on the National Priorities List that are subject to NRC's licensing authority. The MOU provides that, unless an NRC-licensed site exceeds any of three trigger criteria contained in the MOU, EPA agrees to a policy of deferral to NRC decision-making on decommissioning without the need for consultation.

For sites that trigger the criteria in the MOU, NRC will consult with EPA at two points in the decommissioning process: (1) prior to NRC approval of the license termination plan or decommissioning plan, which NRC terms Level 1 consultation; and (2) following completion of the Final Status Survey (FSS), which NRC terms Level 2 consultation.

We are sending this letter as our Level 1 consultation for the Breckenridge site. The NRC has reviewed the derived concentration guideline levels (DCGLs) in the Supplemental Site Characterization Report (SSCR) dated June 27, 2007 (ML071800466), and the staff is planning to approve DCGLs for certain radionuclides for this site that exceed the soil concentration values in Table 1 of the MOU for residential use.

The site, currently owned by a Custodial Trust and located in Breckenridge, Michigan, is a 1.25 acre, mostly rural site located approximately four miles east of St. Louis, Michigan. Between the period of 1967 and 1970, licensed activities conducted at the site included the disposal of process wastes from a rare earth recovery operation. The license was terminated in April 1971, but a subsequent analysis determined that contamination remained in excess of guidelines for unrestricted use. Decommissioning of the Breckenridge site is complicated by the fact that it is now an unlicensed site, with cleanup being completed by a Custodial Trust. The Trust has limited funds to complete remediation coming from a bankruptcy settlement with the previous site owner. The Custodial Trust is proposing to decontaminate the site to meet the requirements in Title 10 of the Code of Federal Regulations, Part 20.1402 for unrestricted use using the site-specific DCGLs based on the resident farmer scenario. Since the Breckenridge site is not currently licensed, no license termination action will occur when remediation work is completed. When site remediation is completed, the NRC will verify this through a review of Breckenridge's FSS and NRC's own confirmatory survey data that the site has achieved the required cleanup levels.

The DCGLs contained in the SSCR are provided in the enclosure. The SSCR has both surface and subsurface soil DCGLs for the site. Two of the three subsurface cleanup values exceed the MOU residential soil concentration levels (i.e., Thorium-232 and Radium-226); none of the requested surface soil DCGLs exceeds the MOU residential soil concentration levels. Before the site is released for unrestricted use, the doses to the average member of the critical group at the Breckenridge site will be in compliance with NRC's criteria in Part 20 Subpart E that provides an all-pathways dose criteria of 0.25 millisieverts per year (25 millirem per year) and the criteria that doses be as low as reasonably achievable (ALARA). The dose criteria in Part 20 Subpart E are fully protective of the public health and safety, and were the result of a comprehensive rulemaking, including an accompanying generic environmental impact statement. Furthermore, individuals at this site would be expected to receive doses substantially below the 0.25 millisieverts per year (25 millirem per year) constraint level because of the ALARA consideration, conservative dose modeling assumptions, and the nature of the cleanup process itself, which often reduces residual contamination levels significantly below site DCGLs.

However, based on NRC's decommissioning experience, a Level 2 consultation may be necessary because the levels of subsurface residual radioactivity remaining after remediation may still exceed the MOU trigger levels. If this is the case, NRC will consult with the EPA in accordance with the MOU.

We request your staff's review of the enclosure and other relevant information, as specified in Section V.D.1 of the MOU. Please send us your views on the Breckenridge site within 90 days of receiving this notification.

E. Southerland

- 3 -

Following site remediation activities, the site will submit a FSS. NRC staff will review information contained in this survey report and will compare the remaining levels of residual radioactivity to the MOU trigger levels. If the FSS measurements exceed the MOU values, a consultation between the agencies will occur to identify and resolve any remaining issues. In the meantime, if you have any questions regarding this letter or the decommissioning activities at the Breckenridge site, please contact Mr. Keith I. McConnell, Deputy Director, Decommissioning and Uranium Recovery Licensing Directorate, at (301) 415-7295.

Sincerely,

/RA/

Larry W. Camper, Director  
Division of Waste Management  
and Environmental Protection  
Office of Federal and State Materials  
and Environmental Management Programs

Docket No.: 040-06264

License No.: SMB-833 (Terminated)

Enclosure:

Breckenridge Proposed Cleanup Values

cc w/enclosure:

NWI Breckenridge Service List

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## Breckenridge Proposed Cleanup Values

### Surface Soil Cleanup Values (pCi/g)

Radionuclide	Cleanup Value	EPA MOU*
U-238+D	2.5	74
Th-232	3.9	5
Ra-226	1.3	5

\* Residential

### Subsurface Soil Cleanup Values (pCi/g)

Radionuclide	Cleanup Value	EPA MOU*
U-238+D	21.5	74
Th-232	34	5
Ra-226	10.5	5

\* Residential

Enclosure