



STATE OF MICHIGAN

DEPARTMENT OF NATURAL RESOURCES

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April 15, 2003

Mr. Sam Nalluswami, Ph.D., P.E.
United States Nuclear Regulatory Commission
Facilities Decommissioning Section
Low-Level Waste Decommissioning Projects Branch
Division of Waste Management
Office of Nuclear Materials Safety and Safeguards
Mail Stop T-7F27
Washington, DC 20555

Dear Mr. Nalluswami:

SUBJECT: Final Status Survey for Tobico Marsh State Game Area Site
NRC Letter, *Michigan Department of Natural Resources' Bay County Tobico Marsh State Game Area Site Decommissioning Plan*, Dated March 20, 2003.
License No.: SUC-1581, Docket No.: 040-09015

The Michigan Department of Natural Resources (MDNR) is responding to the NRC's letter dated March 20, 2003 concerning the statement that reads: "Also, the DP needs to include the contents of the Final Status Survey Report (Refer Page A22, Appendix A, Acceptance Review Checklist, attached to NRC's letter dated March 26, 2001." The intent of this letter is to provide clarification regarding the information contained in our submittal (the Decommissioning Plan (DP) addressing the assessment of the final radiological status survey of the Tobico Marsh SGA Site (Site).

As required by regulation (10 CFR 40.42 (g)(4)), MDNR's source materials license (SUC-1581) and NRC guidance for the preparation and review of DPs (NUREG-1727), Section 14 of the DP describes the basic design and acceptance criteria for radiological release surveys of facilities at the site. It identifies the radiological release criteria (derived from the NRC's Reg Guide 1.86) for structures, equipment, and components in Table 14-1. It further describes the design of final status radiological surveys and the compliance tests as those consistent with the guidance contained in MARSSIM (NUREG-1575).

The radiological assessment performed as part of the development of the derived concentration guideline levels (DCGLS) for the DP, supports the conclusion that excavation and removal of soils having elevated concentrations of residual radioactivity is unnecessary. As such, the DP recommends that no excavation or other removal activity involving slag impounded within the disposal cell be undertaken. The radiological assessment further shows that the protectiveness of the in place disposal cell, coupled with the virtual immobility of the radioactivity associated with the slag matrix, provide such a large margin of safety, that soils having thorium residues at their physical activity limit and disposed of within the cell, would not exceed the applicable annual public dose limit as specified in the decommissioning standard (10 CFR 20, subpart E). Consequently, MDNR concludes that no additional radiological assessment of the radioactivity within the disposal cell is warranted. Therefore, the DP does not address such a survey.

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The DP does recommend that some relatively minor activities be accomplished in support of the decommissioning process. Specifically, it recommends that the leachate collection and treatment system piping that penetrates through the in place clay cover over the cell be terminated and permanently sealed below the existing grade (beneath the surface of the cover) to preclude inadvertent access to leachate within the cell itself. As noted many times before, the LCTS system has never been used to pump, treat, or contain radioactive or potentially radioactive liquids.

In addition, MDNR is recommending the removal of a concrete slab previously used as a decontamination pad as well as the LCTS Building, as some of the LCTS system piping penetrations are under the slab of this building. Even though the LCTS system was never used as a radioactive system, the LCTS building has been used to temporarily store containerized low-level radioactive materials derived from previous sampling operations at the site. MDNR describes the radiological survey of this slab and the building in the DP even though, in the strictest sense, the radiological survey of these structures are not Final Status Surveys as they will be removed prior to the request for license termination.

Since the removal of the slab, the LCTS building and the termination of piping penetrations below grade will impact the clay cover in those discrete locations. MDNR does plan to perform a post closure radiological survey over the cover after it has been restored. The radiological survey planned is a penetrating gamma radiation survey taken at one meter above the ground surface and on a systematic grid. The objective of this survey will be to demonstrate that the cover repairs made following the removal of the structures and piping systems are effectively attenuating radiation above the cell. This survey is comparable to a Final Status radiological survey in that it is performed after all decommissioning activities have been completed in the area, and thus represents a measure of the final radiological status at the site. It is functionally different, however, in that it does not measure a concentration of residual radioactivity in comparison to the approved DCGL. Consequently, this survey has not been discussed in the DP.

In your March, 20, 2003 letter, you indicate that the DP needs to include the "*contents of the Final Status Survey Report.*" MDNR intends to submit a Final Status Survey Report in accordance with ~~10 CFR 40.42 (j)(2)~~ as the final step in decommissioning of the site. While final status surveys, *per se*, are not anticipated, the Final Radiological Status of the site will be documented in a report that includes an overview of the radiological conditions at the site, a summary of the radiological data previously collected from within the disposal cell during site characterization survey work, and the results of the post-closure, gamma radiation survey over the clay cover. MDNR believes that the DP addresses all of the required and relevant elements of the "Final Status Survey" as defined in regulation (10 CFR 40.42 (g)(4)).

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I hope that the additional information and clarification provided in this correspondence proves helpful to you and your staff in their review of the DP. If there are specific data or descriptors that we may have overlooked in preparing the DP, we would welcome the opportunity to provide such information.

If you have any questions, please contact me.

Sincerely,



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