



**Battelle**

*Putting Technology To Work*

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September 16, 1996

Mr. G. Mike McCann  
U.S. Nuclear Regulatory Commission  
Region III  
801 Warrensville Road  
Lisle, Illinois 60532-4351

Dear Mr. McCann:

**Subject: Correction to Decommissioning Plan, Appendix E to the "Decontamination and Decommissioning License Application, Battelle Memorial Institute"**

Battelle inadvertently chose the uncorrected electronic version of the Decommissioning Plan plan to send to the NRC in the "Decontamination and Decommissioning License Application, Battelle Memorial Institute" addressed to Kevin Null dated September 1, 1994.

The copy of the plan that was sent did not contain the revised Section 2.1.3.3.4 Soil Remediation discussing soil release criteria we told Mr. Pierson, USNRC HQ, would be included. Attached is revised page 2-18 containing revised Section 2.1.3.3.4. We apologize for any inconvenience this may have caused in association your review of the plan.

If you have any further questions on this matter please contact me at your earliest convenience.

Sincerely,

Stephen J. Layendecker  
Safety, Health and Environmental Support  
Manager/Radiation Safety Officer

Attachment (1)

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12. Perform interim radiological surveys to determine the progress and depth to which material must be removed to achieve complete decontamination.
13. Perform a Planned Final Radiation Survey, including areas of the building not covered in the D&D plan, and then notify DOE that the building is ready for an IVC survey when the radiological survey indicates that the area has been successfully decontaminated and the waste has been removed.
14. Restore the building as required when the area is certified as releasable free from radiological restrictions. The restoration operations do not constitute a radiological hazard to the workers or the public.

**2.1.3.4.4 Soil Remediation.** The soil near or under the buildings may be contaminated. The ground near and under the buildings, especially along buried sewer lines, will be surveyed to determine the presence of radioactive contamination greater than naturally occurring for the vicinity. All soil found to be contaminated above background will be evaluated to determine the appropriate remedial action consistent with the NRC-approved release criteria as presented in Attachments 1 and 2 of this plan. Such action could include leaving it undisturbed, in situ remediation, providing appropriate cover, or removal and shipment to a burial site. The areas affected by the soil removal will be restored as appropriate.

#### **2.1.3.5 Environmental Safety and Assessment**

Key environmental safety and health aspects of the D&D project have been assessed in the Environmental Assessment and Finding of No Significant Impact (06/14/90). In this assessment, the potential for radiological exposure and impacts on human health and the environment, non-radiological impacts such as chemical, physical, and biological, and socioeconomic impacts focusing on transportation and employment have been considered in detail.

Estimates of potential exposures which may be experienced by D&D workers, Battelle staff, or the public were derived based on information available about the source term. The results showed that under normal operations, the exposure rates in all D&D areas will be well below the appropriate guidelines [2.18-2.20]. Even under accident conditions where all mitigative measures become inoperable, the estimated exposure was three orders of magnitude and five orders of magnitude below these guidelines for West Jefferson and King Avenue, respectively.

Additionally, other "worst case" scenarios were considered for release of radionuclides to the environment. Again, the conclusion was that such releases were extremely unlikely and that the environmental consequences of any release were insignificant. An ALARA policy has been adopted by Battelle for this project. In order to maintain doses as low as reasonably achievable, all preventive, administrative, and protective measures will be employed to the maximum practical extent (see section 3.2). Additionally, monitoring of exposure rates,