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United Nuclear Corporation  
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Services  
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Gentlemen:

The Nuclear Regulatory Commission has contracted Monsanto Research Corporation (Mound Laboratory) to prepare a Handbook of Nuclear Safeguards Measurement Methods. The scope of the handbook is to cover all applicable chemical assay, active NDA, passive NDA, and bulk measurement methods for all types of SNM bearing materials commonly encountered in the nuclear fuel industry (See Enclosure).

The purpose of the handbook is to meet the needs of both NRC and licensee safeguards management. It will provide the information necessary for a safeguards designer, manager, and/or regulator to select or evaluate SNM measurement method vis-a-vis specific material type. The handbook will not contain detailed experimental procedures but will cite key literature references to specific studies and procedures for implementation of the methods selected.

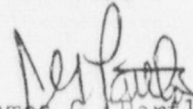
The handbook will be based on a Users and Literature Survey of SNM measurement methods. The users survey of NRC licensee and DOE contractor facilities will be conducted to determine the state-of-the-practice applications and performance of SNM measurement methods under routine in-plant conditions.

To assure that the users survey is conducted in a manner which will have minimum impact on licensees, Mound Laboratory personnel have obtained as much information as possible from documents possessed by NRC. To complete the handbook, additional information is needed and selected licensees will be visited by Mound personnel to obtain this information. The Mound personnel will contact you directly if a visit is necessary.

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The handbook will neither identify which licensees are using particular measurement methods for specific material types nor contain any classified information. We will appreciate any cooperation that you afford the Mound Laboratory personnel should they contact you for additional information. The Division of Safeguards believes that this document will be a valuable resource to both licensees and the NRC. I have been assured that the Mound personnel will confine their activities so as not to cause any disruption of your plant operations during their visit.

Sincerely,



James G. Partlow, Chief  
Material Control Licensing Branch  
Division of Safeguards

Enclosure:  
Project Description