



NUCLEAR METALS, INC.

PROJECT NUMBER
PROPOSED RULE #1 2061
(57 FR 14500)

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USNRC

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USNRC

July 20, 1992

Secretary
U.S. Nuclear Regulatory Commission
Washington, D.C. 20555

Attn: Docketing and Service Branch

Re: "Low-Level Waste Shipment Manifest Information and Reporting"
(Federal Register; Vol. 57, No. 77, 21 April 1992)

Dear Sir:

As a manufacturer of depleted uranium products and a utilizer of a wide spectrum of low-level radwaste treatment and disposal services, Nuclear Metals, Inc. (NMI) has extensive experience with the preparation of manifest forms and related documents. At present, with only three operational L.L.W. repositories and two (very similar) manifest forms (one form serves both U.S. Ecology sites in Nevada and Washington), there appears to be no significant problem with either the use of the forms or the consolidation of disposal data. We recognize that, with the establishment of additional repositories and facilities, standardization of a manifest could simplify data consolidation. Some specific comments and suggestions concerning the proposed amendments to 10 CFR Parts 20 and 61 follow. As regards the operation of a National L.L.W. Computer Data Base, we believe that the "Integrated Data Base: Spent Fuel and Radioactive Waste Inventories, Projections, and Characteristics," prepared annually for DOE by Oak Ridge National Laboratory since 1984, should be considered as a source of the desired information. It is established, comprehensive, and reports disposal information for both DOE and commercial L.L.W. in useful formats with helpful narrative background material. We suggest that this existing management information system could be modified or expanded to meet the informational needs of both NRC and state regulators.

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Disposal Container Descriptions. NRC should consider deleting "wooden box or crate" from its proposed list, since these containers are not accepted by any current disposal site and are unlikely to be accepted by any site established in the future. A useful addition to the list would be "woven polypropylene bulk bag." These containers are used for the disposal of contaminated soils and process sludges.

Waste Descriptors. NRC's background analysis decries vague descriptions of wastes and containers, but perhaps with unrealistic expectations. Wastes, in reality, frequently tend to be diverse and non-homogeneous. "Dry solid" or "dry active waste" may be broad categories; but, if wastes were minutely defined, there could be so many categories that they would subsequently have to be arbitrarily combined for purposes of meaningful analysis. The proposed listing of (25) categories may be excessive and ought to be consolidated unless there is a real need for this level of information. It might suffice, for example, to have one listing for all ion-exchange media instead of three separate ones. We would expect that in practice most glassware or labware would be combined with other wastes such as gloves, disposable lab coats, etc., and listed as "compactible trash." One category that might be added, on the other hand, would be "foundry wastes" which could include radioactive oxides, contaminated molds and crucibles, etc.

Applicability of Manifest. NRC's analysis reflects one oversight that could cause some confusion if not addressed. The term "Land Disposal" is used as though this is the only form of disposal. In fact, it is not. There are several currently licensed treatments that are themselves equivalent to disposal: burning of radiologically contaminated waste oils, thermal destruction of radioactive scintillation cocktails, and energy recovery burning of liquid "mixed wastes." In none of these processes is there a residual waste tracked or traced to the original generator. The residuals, if of negligible volume, are usually inextricably commingled, and are generally accounted for as process wastes attributable to the treatment facility. (The same approach is used for secondary wastes such as fly ash, filters and scrubber solids from DAW incineration and for spent grit and etching and polishing solutions from metal decontamination.) In view of the foregoing, it would appear that use of the NRC's Uniform Low-Level Radioactive Manifest would not be required by Section 20.2006 as proposed because such shipments would not be "intended for ultimate disposal at a licensed land disposal facility." Appendix F, however, does not specify land disposal facility, so there is some ambiguity on this point. A related question arises in cases




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where L.L.W. is shipped by a generator to an off-site treatment facility for processing and return, where "ultimate disposal at a licensed land disposal facility" may be deferred for an extended period of years because of denial of access or where the treated waste will be subsequently further processed for resource recovery (e.g., off-site incineration of uranium contaminated DAW and return of ashes, followed by leeching of the ashes and recovery of the uranium by the generator.) A separate but related issue, affecting the use of manifests for tracking purposes, is the potential for cross-contamination present in some processes, such as commercial incineration of DAW, when circumstances require the segregation and return of ash residues to the original waste generator.

NMI supports the objectives of NRC in standardizing L.L.W. manifesting and data management. We suggest, however, for the proposed regulatory changes to be fully effective, some modifications ought to be made to resolve inconsistencies and ambiguities relating to their applicability to transactions other than direct land disposal and volume reduction processing immediately followed by land disposal.

Sincerely,


Donald A. Barbour
Manager, L.L.R.W. Services

DAB:jlh





NUCLEAR METALS, INC.

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Record of Shipment

Shipped To: Secretary
U.S. Nuclear Regulatory Commission
Washington, DC 20555

Attention: Docketing and Service Branch

Date Shipped: 07/20/92
Via: Federal Express

MJO Number: 5371

Purchase Order No: N/A

Prepaid ☐

Collect ☐

Shipper: D.A. Barbour

Insured: ☐ Yes ☐ No

ITEM NO.	QUANTITY SHIPPED	DESCRIPTION
1	1	Data Package (3 pp)