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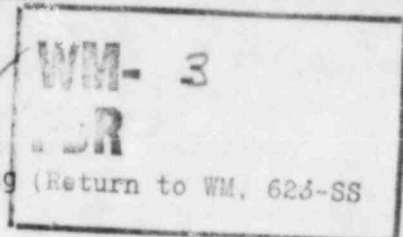
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WMLL: 204.1.5

MAR 03 1983

MEMORANDUM FOR: Janet Gorn
Office of Congressional Affairs

FROM: Edward Hawkins, Acting Chief
Low-Level Waste Licensing Branch

SUBJECT: CONGRESSIONAL INQUIRY REGARDING FREE LIQUIDS
IN RADWASTE

In response to your telephone request for information for Mr. Curtis Chief of Staff, (Senate Environmental Committee) regarding free standing liquids, we are providing several documents which provide a general background and rationale for our rule. We are also providing copies of the public comments related to this area. We hope that this information helps Mr. Curtis address the concerns in this area raised by Mr. William Bader of CRB Associates.

Mr. Bader is a consultant for the Dow Chemical Company, which markets a solidification system for nuclear power plant wastes. While Mr. Bader did not comment on the proposed rule, 10 CFR Part 61, Dow did provide two sets of comments. The Dow comments are attached.

The issues involving the Dow and Bader comments are complex. However, in general terms, it involves whether the NRC should require solidification of ion exchange resin and sludge wastes or allow waste generators the option of disposing of these wastes in a dewatered condition using a high integrity container (HIC). Our position is that we should allow waste generators the flexibility of using either option.

The free liquid issue is pertinent to resin and sludge solidification since the use of an HIC as an option to solidification would allow the disposal of dewatered wastes. Because of the difficulty in removing all of the water from ion exchange resins or sludges prior to shipment, we have allowed 1 percent drainable liquids for wastes packaged in HIC's. This amount of liquid does not pose a public health and safety problem in handling, transportation or disposal, but provides waste generators with a practical limit for which they can demonstrate compliance. The

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Barnwell, SC disposal facility also allows 1 percent free liquids in wastes disposed of in an HIC.

We have not imposed the 0.5 percent or 1 gallon limit (whichever is less) currently in place at the Hanford, WA facility for several reasons. First, it is more difficult to demonstrate compliance with the 0.5 percent value. Secondly, the additional liquid does not pose a health and safety problem. Lastly, the one gallon limit was not used because it discriminates against larger containers. Obviously a smaller container can more easily meet the one gallon requirement than can a larger container. For many waste generators larger containers have an economic advantage over smaller ones. Since the difference in liquids does not pose a health and safety problem, NRC staff believes it should allow waste generators the flexibility to choose a cost-effective container size to meet their specific needs.

If you have any questions regarding this information, please contact myself (427-4300) or T. Johnson (427-4697) of my staff.

Original Signed By

Edward Hawkins, Acting Chief
Low-Level Waste Licensing Branch

Enclosures: As stated above

OFC :	WMLL <i>PH</i> :	WMLL <i>EFH</i> :	WMLL <i>REB</i> :	:	:	:	:
NAME :	TCJohnson :	EFHawkins :	REBrowning :	:	:	:	:
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List of Attachments

1. General information on free liquid criteria
2. Rationale for free liquid limit based on pathway studies
3. FEIS analysis of comments on high integrity containers and free liquids
4. Comments received regarding high integrity containers and free liquids