



UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
WASHINGTON, D. C. 20555

AUG 26 1993

License Nos. SNM-639  
R-81

*See Reports*

Docket Nos. 70-687  
50-54

Mr. James J. McGovern  
President/Plant Manager  
Cintichem, Inc.  
P.O. Box 816  
Tuxedo, New York 10987

Dear Mr. McGovern:

On October 22, 1992, Cintichem submitted residual soil contamination limits to the Nuclear Regulatory Commission. These proposed limits were submitted in accordance with Condition G of Amendment 6 to License SNM-639, which required Cintichem to develop residual soil contamination limits that will be used as unrestricted release criteria at your Tuxedo, New York facility. Your proposed criteria included residual radioactive contamination limits for soil that would remain on the surface areas at your facility and for soil containing higher levels of radionuclides, that would be buried at the site (subsurface areas).

NRC staff has completed its review of Cintichem's proposed residual soil contamination criteria. Our evaluation is summarized in Enclosure 1. Based on our evaluation, the proposed limits for the surface areas appear to result in doses of less than 10 millirem per year (mrem/yr) to hypothetical individuals residing at the site and are As Low as Reasonably Achievable (ALARA), considering available remediation technologies and measurement capabilities. Therefore, your proposed surface criteria are acceptable as proposed.

The proposed limits for the subsurface areas result in doses of less than 10 mrem/yr only as long as the contaminated soil remains in place and is covered by at least three feet of uncontaminated soil. If the site is released for unrestricted use, as required by NRC's definition of decommissioning at 10 CFR Part 50.2 and 10 CFR Part 70.4, there is nothing to prevent future site residents from removing the cover(s) and distributing the soil around the site. This could lead to doses to future site residents that are higher than acceptable to NRC. As such, NRC cannot approve the limits outlined for the subsurface areas at the site. NRC would find it acceptable if you applied the surface limits to all soil left at the site, regardless of the depth of placement or the amount of uncontaminated material covering the contaminated soil.

As discussed during our teleconference on April 13, 1993, if you still intend that the site be released for unrestricted use and the reactor and special nuclear materials licenses terminated, you should plan on remediating soil at the site to comply with the surface soil limits.

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*2/17/11  
Debate:  
ACDW*

You indicated during our teleconference that because of the cost of disposal of the contaminated soil in a licensed low-level radioactive waste disposal facility you may wish to explore other options for the decommissioning of the facility, such as the maintenance of a radioactive materials license until the contaminated material no longer poses a significant risk to potential future residents at the site. As was discussed, consideration of options other than unrestricted release may involve lengthy reviews by NRC and there is no guarantee that an option other than unrestricted release will be approved. In addition, because of the radionuclides in the contaminated soil, this option may require that Cintichem obtain the approval of the New York State Department of Labor (NYS DOL) and the New York State Department of Environmental Conservation (NYS DEC). The contaminated soil would then become subject to the regulatory authority of these agencies. If you intend to explore the option of maintaining either an NRC or State radioactive materials license until the contaminated material no longer poses a significant risk to potential future residents at the site, additional information will be required to evaluate the maintainance of a license under this option. The information required by NRC is outlined in Enclosure 2. The State of New York may require additional information to evaluate such a request. In order to ensure that the decommissioning of your facility continues in accordance with the timeframes established in your license, I am requesting that Cintichem inform NRC of it's decision regarding the option Cintichem intends to use for the disposal of the contaminated soil within 60 days. If you require additional time to evaluate the options available to you to dispose of the contaminated soil, please inform us as soon as possible.

This letter has been coordinated with NRC's Office of Nuclear Reactor Regulation.

If you have any questions, please contact me at (301) 504-2560.

Sincerely,  
*Original Signed By*  
 John H. Austin, Chief  
 Decommissioning and Regulatory  
 Issues Branch  
 Division of Low-Level Waste Management  
 and Decommissioning

Enclosure: As stated  
 cc: Attached list

\* See previous concurrence

OFC :	LLDR*		LLDR*		LLDR*		LLDR*		DRSS/RI*	
NAME:	DOrlando		BEid		JParrótt		WLahs		TDragoun	
DATE:	5/21/93		5/21/93		5/24/93		/ /93		5/26/93	

OFC :	OGC*		LLDR*		NRR*		NRR*		LLDR	5
NAME:	KWinsberg		MWeber		TMichaels		SWeiss		JAustin	
DATE:	5/28/93		6/09/93		6/10/93		6/11/93		8/26/93	

license until the contaminated material no longer poses a significant risk to potential future residents at the site. However, as was discussed, consideration of options other than unrestricted release may involve lengthy reviews by NRC and there is no guarantee that an option other than unrestricted release will be approved.

This letter has been coordinated with NRC's Office of Nuclear Reactor Regulation.

If you have any questions, please contact me at 301 504-2560.

Sincerely,

John H. Austin, Chief  
Decommissioning and Regulatory  
Issues Branch  
Division of Low-Level Waste Management  
and Decommissioning

Enclosure: As stated  
cc: Attached list

Ticket N/A

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DATE:	5/21/93	<input checked="" type="checkbox"/>	5/21/93	<input checked="" type="checkbox"/>	5/24/93	<input checked="" type="checkbox"/>	1/93		5/26/93	

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