



UNITED STATES  
NUCLEAR REGULATORY COMMISSION

WASHINGTON, D.C. 20555-0001

January 18, 1994<sup>5</sup>

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

Dear Mr. McGovern:

This is in response to your letter, dated December 8, 1994, requesting that Condition H of Amendment No. 6 to License No SNM-639 be amended to extend the scheduled completion date of the decommissioning of your Tuxedo, New York, facility for 12 months. Condition H requires that Cintichem complete the decommissioning of its Tuxedo, New York, facility within 36 months of the effective date of Amendment No. 6. Amendment No. 6 became effective on January 16, 1992, and, as such, Cintichem is required to complete the decommissioning project by January 16, 1995. Condition H also allows for an extension to the scheduled completion of the decommissioning project if Cintichem demonstrates good cause based on technical feasibility (including circumstances that arise which were not foreseeable or were beyond Cintichem's control) or risk reduction considerations.

Your letter stated that delays have been the result of an increase in the scope of the decommissioning due to additional contamination being found under the hot cells and hot cell ventilation ducts, as well as the need to change the manner in which the hot cells were decontaminated and dismantled. In addition, you indicated that delays in receiving approval from the Department of Energy (DOE) to ship spent fuel to DOE's Savannah River facility for reprocessing, the lack of definitive criteria for residual radioactive material to be left at the site at the completion of decommissioning activities, and maintaining or gaining access to low-level waste disposal facilities added to the delay in completing the decommissioning operations in accordance with license condition H.

During a telephone call on December 16, 1994, NRC staff requested a schedule of the decommissioning activities during the 12 month extension period. By letter dated December 16, 1994, you provided this information, indicating that the actual estimated additional time you would require to complete decommissioning your facility was 9 months and that you had "built in" a contingency period of 3 months to allow for unforeseeable or uncontrollable delays in completing the decommissioning of your facility.

U.S. Nuclear Regulatory Commission staff has reviewed both your request and the additional information supplied in response to the staff's request and has concluded that the delay in the completion of the decommissioning of your Tuxedo, New York, facility is justifiable and meets the conditions described in Condition H of License Amendment No. 6 of your license. NRC staff has concluded that, because of the decommissioning tasks that remain to be completed at your facility, including a determination by the NRC staff as to the disposition of the potentially contaminated bedrock, it is not unreasonable to expect that some delays may be experienced in completing the

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During the staff's review of your request, the NRC staff determined that a typographical error had been included in the Finding of No Significant Impact and Safety Evaluation Report developed by the staff in response to Cintichem's July 15, 1993, request for an exemption from the requirements of 10 CFR 20.1001 - 20.2401, as well as the schedular exemption issued to Cintichem on January 3, 1994. The error involves the expiration date of the schedular exemption. The Finding of No Significant Impact, Safety Evaluation Report and Exemption erroneously list the expiration date of your Special Nuclear Materials license, and thus the schedular exemption, as December 15, 1995. The correct date of the expiration date of your license and the schedular exemption is December 15, 1996.

(ORIGINAL SIGNED BY:)

OFC	LLDP	*	LLDP	*	<del>WBC</del>	*	LLDP	*
NAME	NORlando/wd		MWeber		Rechner		Ullenn	
DATE	1/9/95		1/10/95		1/17/95		1/18/95	

ACNW: YES — NO ✓  
IG : YES — NO ✓  
LSS : YES — NO ✓

Delete file after distribution: Yes ☐ No ☒

## MATERIALS LICENSE

Pursuant to the Atomic Energy Act of 1954, as amended, the Energy Reorganization Act of 1974 (Public Law 93-438), and Title 10, Code of Federal Regulations, Chapter I, Parts 30, 31, 32, 33, 34, 35, 39, 40 and 70, and in reliance on statements and representations heretofore made by the licensee, a license is hereby issued authorizing the licensee to receive, acquire, possess, and transfer byproduct, source, and special nuclear material designated below; to use such material for the purpose(s) and at the place(s) designated below; to deliver or transfer such material to persons authorized to receive it in accordance with the regulations of the applicable Part(s). This license shall be deemed to contain the conditions specified in Section 183 of the Atomic Energy Act of 1954, as amended, and is subject to all applicable rules, regulations and orders of the Nuclear Regulatory Commission now or hereafter in effect and to any conditions specified below.

Licensee		
1. Cintichem, Inc.	3. License number	SNM-639 Amendment No. 7
2. Sterling Forest Research Center Tuxedo, NY 10987	4. Expiration date	December 15, 1996
	5. Docket or Reference No.	070-00687
6. Byproduct, source, and/or special nuclear material	7. Chemical and/or physical form	8. Maximum amount that licensee may possess at any one time under this license
A. Uranium- 235 (≥ 20% enriched)	A. Any form	A. 350 gm. of contained U-235
B. Plutonium	B. Encapsulated Sources	B. 80 gm. Pu-Be neutron source
C. Any Radioactive Material between Atomic Nos. 3 and 83 inclusive mingled with SNM and authorized for possession under New York State byproduct license No. 729-0322	C. Any	
9. Authorized Use: For possession and storage at the site of the Cintichem, Inc. facility in Tuxedo, NY. Use as necessary in the decommissioning of the reactor building, hot laboratory building and waste storage building and areas associated with the operations carried out under license SNM-639.		
10. Conditions:		
A. Licensed material shall be possessed, used and stored at the Cintichem, Inc. facility located on Long Meadow Road in Tuxedo, NY.		
B. Licensed material shall be used or under the supervision of the decommissioning Project Manager.		

**MATERIALS LICENSE**  
**SUPPLEMENTARY SHEET**

License number

**SNM-639**

Docket or Reference number

**070-00687**

**Amendment No. 7**

- C. Except as specifically provided otherwise in this license, the licensee shall conduct its program in accordance with the statements, representations, and procedures contained in the documents, including all enclosures, listed below. The Nuclear Regulatory Commission's regulations shall govern unless the statements, representations and procedures in the licensee's application and correspondence are more restrictive than the regulations.
- |                        |                           |
|------------------------|---------------------------|
| 1. October 19, 1990,   | 16. July 15, 1992,        |
| 2. January 11, 1991,   | 17. October 22, 1992,     |
| 3. January 14, 1991,   | 18. November 6, 1992,     |
| 4. January 28, 1991,   | 19. December 15, 1992,    |
| 5. February 19, 1991,  | 20. July 15, 1993,        |
| 6. March 8, 1991,      | 21. August 26, 1993,      |
| 7. April 17, 1991,     | 22. August 27, 1993,      |
| 8. April 24, 1991,     | 23. October 1, 1993,      |
| 9. May 21, 1991,       | 24. January 3, 1994,      |
| 10. June 25, 1991,     | 25. February 1, 1994,     |
| 11. July 17, 1991,     | 26. March 31, 1994,       |
| 12. August 6, 1991,    | 27. October 17, 1994,     |
| 13. October 2, 1991,   | 28. December 8, 1994, and |
| 14. January 8, 1992,   | 29. December 16, 1994.    |
| 15. February 19, 1992, |                           |
- D. In addition to the statements, representations and procedures made in the aforementioned letters the licensee will conduct decommissioning operations in accordance with the statements, representations and procedures outlined in the licensee's request to renew license SNM-639 dated September 15, 1989, and letter dated June 29, 1990, unless the statements, representations and procedures in the aforementioned letters are not appropriate to the decommissioning activities or the Commission's regulations are more restrictive.
- E. The licensee may make minor changes to the conditions described in this license, without a license amendment, provided that:
1. These changes do not involve an unreviewed safety question;
  2. The changes do not cause a significant increase in radiation exposure to employees or;
  3. The changes do not cause a decrease in the protection of the public health and safety and the environment offered by the existing license condition.

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A change shall be deemed to involve an unreviewed safety question if an accident analysis for the change: (i) results in consequence values exceeding the values of the accident analysis described in the licensee's decommissioning plan, as supplemented, or the probability of occurrence for the types of events there evaluated is judged to increase; (ii) reveals a possibility for an accident of a different type than previously evaluated or; (iii) the margin of safety defined in the basis for any technical specification is reduced.

Prior to initiating any changes to the license conditions allowed under Condition E the licensee shall prepare a safety evaluation of the effect of the change. This evaluation shall be reviewed and approved by the licensee's Nuclear Safeguards Committee and, as appropriate, the licensee's Radiation Safety/ALARA Committee and shall provide the basis for determining that the change will not involve an unreviewed safety question, a significant increase in radiation exposure to employees or a decrease in the protection of the public health and safety and the environment offered by the existing license condition. Records of evaluations and approvals of changes shall be maintained by the licensee.

F. The licensee shall decontaminate the reactor building, hot laboratory building, waste storage building and areas associated with the operations carried out under license SNM-639 to the unrestricted release criteria specified in NRC Regulatory Guide 1.86 and New York State criteria outlined in Table 5 of Section 38.29 of 12 NYCRR 38. In those instances where NRC and New York State criteria differ the more restrictive criteria will apply. In addition to the criteria outlined above the licensee shall ensure that:

1. Prior to demolition all buildings and structures exhibit exposure rates of less than 5  $\mu$ R/hr above background at one meter;
2. The results of all soil characterization data are submitted to, approved by, and verified by NRC prior to release of the site. NRC's evaluation will ensure that exposure to this soil will not result in a dose to the public in excess of the criteria established in Condition G, following unrestricted release of the site.

G. The licensee shall develop residual soil contamination limits that the licensee intends to use as unrestricted release criteria. These criteria will be based on the principle that residual contamination shall be as low as reasonably achievable (ALARA). The licensee shall submit these limits to NRC for evaluation, within 6 months of the effective date of this amendment. This deadline may be extended by the Commission if the licensee demonstrates good cause based on technical feasibility (including circumstances that arise which were not foreseeable or were beyond the control of the licensee). Upon review and approval by NRC, the licensee shall ensure that all soil remaining on-site at the completion of the decommissioning operations is within these criteria.

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License number  
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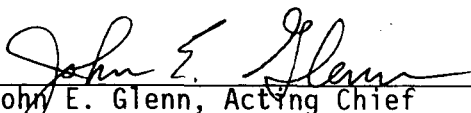
Amendment No. 7

- H. As outlined in the licensee's decommissioning plan, as supplemented, the licensee shall complete the decommissioning by January 16, 1996. This deadline may be extended by the Commission if the licensee demonstrates good cause based on technical feasibility (including circumstances that arise which were not foreseeable or were beyond the control of the licensee) or risk reduction considerations.
- I. The licensee shall maintain records of information important to safe and effective decommissioning at the Cintichem facility located on Long Meadow Road in Tuxedo, NY per the provisions of 10 CFR 70.38.

FOR THE U.S. NUCLEAR REGULATORY COMMISSION

Date: January 18, 1995

By:

  
John E. Glenn, Acting Chief  
Low-Level Waste and Decommissioning  
Projects Branch  
Division of Waste Management  
Office of Nuclear Material Safety  
and Safeguards  
Washington, DC 20555

NRC STAFF EVALUATION OF CINTICHEM'S REQUEST TO EXTEND THE  
DECOMMISSIONING OF THEIR TUXEDO, NEW YORK FACILITY FOR AN ADDITIONAL 12 MONTHS

On January 16, 1992, the Nuclear Regulatory Commission (NRC) issued a license amendment to Cintichem, Inc. authorizing the decommissioning of their Tuxedo, New York facility (Amendment No. 6 to License No SNM-639). Condition H of this license amendment requires that Cintichem complete the decommissioning of their facility within 36 months of the effective date of the license amendment, i.e. by January 16, 1995. Condition H also allows for an extension to the scheduled completion of the decommissioning project if Cintichem demonstrates good cause based on technical feasibility (including circumstances that arise which were not foreseeable or were beyond Cintichem's control) or risk reduction considerations.

In a letter dated December 8, 1994, Cintichem requested that Condition H be amended to extend the scheduled completion date of the decommissioning of their Tuxedo, New York, facility for 12 months. Cintichem stated that delays in completing the decommissioning were the result of an increase in the scope of the decommissioning due to additional contamination being found under the hot cells and hot cell ventilation ducts, as well as the need to change the manner in which the hot cells were decontaminated and dismantled. In addition, Cintichem indicated that delays in receiving approval from the Department of Energy (DOE) to ship spent fuel to DOE's Savannah River facility for reprocessing, the lack of definitive criteria for residual radioactive material to be left at the site at the completion of decommissioning activities, and maintaining or gaining access to low-level waste disposal facilities added to the delay in completing the decommissioning operations in accordance with license condition H. During a telephone call on December 16, 1994, NRC staff requested a schedule of the decommissioning activities during the 12 month extension period. This additional information was provided in a letter dated December 16, 1994, and also indicated that the actual estimated additional time required to complete decommissioning your facility was 9 months and that Cintichem had "built in" a contingency period of 3 months to allow for unforeseeable or uncontrollable delays in completing the decommissioning of their facility.

NRC staff has reviewed Cintichem's request and the additional information supplied in response to the staff's request and concluded that the delay in the completion of the decommissioning of Cintichem's Tuxedo, New York, facility is justifiable and meets the conditions described in Condition H of License Amendment No. 6 to License No SNM-639. In addition, the additional decommissioning activities are not expected to significantly change the types or increase the amounts of effluents released off-site, increase individual or cumulative occupational radiation exposures, significantly impact on construction, or significantly increase the potential for or consequences from radiological accidents. Therefore, an environmental assessment should not be necessary based on the categorical exclusion at 10 CFR 51.22(c)(11). Finally, NRC staff concluded that, because of the decommissioning tasks that remain to be completed at Cintichem's facility, including a determination by the NRC staff as to the disposition of the potentially contaminated bedrock, it is not unreasonable to expect that some delays may be experienced in completing the decommissioning within 9 months and that a contingency period of 3 months is appropriate.

Enclosure