

CINTICHEM, INC.

a wholly owned subsidiary of

Medi-Physics, Inc.

P.O. BOX 816, TUXEDO, NEW YORK 10987

(914) 351-2131

May 31, 1990

U. S. Nuclear Regulatory Commission
Document Control Desk
Washington, D. C. 20555

Gentlemen:

SUBJECT: Dockets 50.59 and 70-687, Order Modifying License

REFERENCE: (a) USNRC Letter February 13, 1990
(b) USNRC Letter March 28, 1990

Cintichem voluntarily ceased operation of the 5 MW research reactor and production of radioisotopes at the Sterling Forest laboratory on February 9, 1990, following the discovery of a leak in the reactor primary coolant pool system. The NRC, by references (a) and (b) above, modified Cintichem licenses R-81 and SNM-639 by essentially requiring a thorough investigation into the cause(s) of the leak(s) and remediation to assure leaktight integrity of the system(s) prior to resuming operation. Cintichem has since decided to decommission the reactor and radiochemical processing facilities. The decommissioning plan is currently being written and application for termination of licenses shall be submitted as specified in 10 CFR Parts 50.4, 50.82, 70.5 and 70.38 as soon as the Cintichem Decommissioning Plan is completed. The tentative general schedule for completing the decommissioning effort is as follows:

Submit Decommissioning Plan and application to terminate licenses	Sept. 1, 1990
Ship reactor fuel and isotope production target SNM for reprocessing	Jan. 30, 1991
Receive approval to proceed with decommissioning	Jan. 1991
Commence decommissioning	Feb. 1991
Complete decommissioning	Dec. 31, 1992

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The scheduled completion date is coincident with the Low Level Waste Policy Amendment Act deadline whereby all low level radioactive waste must be managed and disposed of within regional compacts. New York State is planning to have licensees store waste for an indefinite period after December 31, 1992, therefore, we want to be rid of all radioactive material prior to that date. Adherence to this general schedule is imperative to meet this objective.

Although Cintichem will decommission the reactor, some remediation of the leaktight integrity of certain sections of the reactor coolant pool system will be required. The Canal and the Gamma Pit will be used for shipping reactor spent fuel and isotope production target SNM for reprocessing. The Hold-up tank will be isolated and it will no longer be used to contain reactor primary coolant water.

Three documents are enclosed that report the results of detailed investigations of the unlined sections of primary coolant pool system (Canal, Gamma Pit and Hold-up tank) and specifications for repairing defects that were found in the Canal and the Gamma Pit. The Olson and Wright report, Non-destructive Testing Investigation, Concrete Integrity Evaluation describes the sonic impact echo evaluation methodology employed and concludes that the concrete is essentially sound except for discrete flaws that are characterized and located. The Construction Technology Laboratory report, Evaluation of Reinforced Concrete of the Gamma Pit, Canal and Hold-up Tank, describes the structural analysis methodology employed and summarizes findings and describes potential root causes for defects that were found. The Cintichem report, Repair of Canal and Gamma Pit Specifications 90-03 provides specifications for repair procedures and materials for restoring leaktight integrity as well as acceptance criteria for post-repair leaktightness.

The tentative schedule for repairing the Canal and Gamma Pit sections of the reactor coolant pool system is as follows:

Submit reports of investigations and repair specification to NRC	June 1, 1990
Submit repair specification to vendors for bidding	June 1, 1990
Vendor inspection for preparation of bids	June 7, 1990
Receive clearance from NRC, Region I on repair plan and acceptance criteria	June 15, 1990
Commence repair work	June 15, 1990
Complete repair work	July 2, 1990

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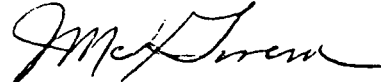
Leak test completed

July 9, 1990

Commence preparing fuel for shipment

July 30, 1990

Very truly yours,



J. J. McGovern
Plant Manager

JJMcG/bjc

Enclosures

cc: (with enclosures)

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Non-power Reactor Project Directorate
Division of Reactor Projects III, IV, V and
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*The docket # should be
50.54 JS Whitchurch
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Gentlemen:

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SUBJECT: Dockets 50.54 and 70-687, Order Modifying License

REFERENCE: (a) USNRC Letter February 13, 1990
(b) USNRC Letter March 28, 1990

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