UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

'91 FEB 19 P1:42

Issuance of Orders to Cintichem, Incorporated, Authorizing Disposition of Component Parts and Terminating Facility License No. R-87	Docket No. 50-54 REQUEST FOR HEARING and PETITION TO INTERVENE

Pursuant to 10 CFR §2.714, the New York State Department of Environmental Conservation ("DEC") hereby petitions the Nuclear Regulatory Commission ("NRC") for an order(s) granting a hearing and leave to intervene and participate as a party in any proceeding which is held related to the approval of Cintichem, Incorporated's October 19, 1990, plan for decontamination of their facility and disposal of radioactive components, or some alternate disposition plan for the facility and the granting of Orders authorizing implementation of the approved plan and terminating the facility license and any further NRC jurisdiction over the facility.

The name of the persons to whom communication regarding this petition should be addressed and upon whom service of all pleadings or other documents should be made are:

Susan C. Quine
Senior Attorney
Office of General Counsel
New York State Department
of Environmental Conservation
50 Wolf Road - Room 608
Albany, New York 12233-1500
(518/485-8466)

Paul Merges
Bureau of Radiation
Division of Hazardous Substances
Regulation
New York State Department of
Environmental Conservation
50 Wolf Road - Room 510
Albany, New York 12233
(518/457-2225)

As grounds for its Petition to Request a Hearing and Leave to Intervene, DEC respectfully alleges that:

(1) Petitioner is a duly constituted Department of the Government of the State of New York.

(2) Pursuant to Section 274 of the Atomic Energy Act, an Agreement between New York State and the Atomic Energy Commission [now the Nuclear Regulatory Commission ("NRC")] was entered into, effective October 15, 1962, and as amended, said Agreement provides that the NRC shall discontinue regulatory authority in New York State under Chapters 6, 7, and 8 and Section 161 of the Atomic Energy Act.

(3) Petitioner is the agency of the State of New York which shares responsibility for the administration of NRC's agreement state program and has jurisdiction to regulate discharges of radioactive materials to the environment pursuant to the Department's authority under the Environmental Conservation Law ("ECL") Articles 3, 17, 19 and 27, and the Department's promulgated rules and regulations at 6 NYCRR Part 360, 380, 750-757 and 703 to regulate the release of radioactivity to the environment and consistent with its authority relating to by-product materials, source materials and special nuclear materials in quantities not sufficient to form a critical mass in a manner consistent with Section 274 of the Atomic Energy Act of 1954, as amended.

(4) Petitioner is the Department of the State of New York responsible for the administration of the State's Environmental Conservation Law ("ECL"). It is the agency most intimately involved with and responsible for analyzing environmental impacts. The

Petitioner's resources, expertise and familiarity with the locale of the proposed project will be of considerable assistance to the NRC.

(5) Petitioner is the Department of the State of New York having jurisdiction over the State Pollutant Discharge Elimination System ("SPDES"), pursuant to ECL Article 17, Titles 7 and 8 and 6 NYCRR Parts 750-757, and the United States Environmental Protection Agency, pursuant to Section 402 of the Clean Water Act, has determined that the Department's SPDES permit program fulfills the requirements of the National Pollution Discharge Elimination System ("NPDES").

(6) Petitioner is the Department of the State of New York with jurisdiction to regulate discharges of pollutants (including radioactive materials) into the waters of the State and with authority to maintain the cleanliness and purity of such waters pursuant to the Clean Water Act, ECL Article 17 and 6 NYCRR Parts 380, 703, 750-757.

(7) Petitioner is the Department of the State of New York with jurisdiction over the maintenance and safeguarding of the air resources of this State from pollution and with the power to abate and prevent air pollution in the State pursuant to ECL Article 19 and Section 116 of the Clean Air Act, 42 U.S.C. §7416.

(8) In May 1989, Petitioner entered into a letter of agreement with the NRC formalizing the understanding of the NRC and the State of New York regarding jurisdiction at the Cintichem site (copy attached as Exhibit A).

(9) On June 6, 1990, the Petitioner and Cintichem entered into an Order on Consent (copy attached as Exhibit B) addressing radioactive contamination in ground and surface waters at the facility and continued commercial and manufacturing operations at the facility. Petitioner and Cintichem agreed in paragraph 12 therein that "any activity to be undertaken by Respondents [Cintichem] in furtherance of decommissioning pursuant to NRC license amendment or order shall be exclusively governed by NRC except to the extent NRC commits any such matter in writing to be regulated by the Department."

(10) This request for a hearing is made as a formal means of registering DEC's responsibilities and concerns as noted above and formally preserving the rights of DEC in respect to these proceedings to ensure DEC's interest in the decommissioning process can be adequately represented. DEC is confident that close communication can be assured between DEC staff and NRC staff by virtue of our agreement state status and the course of dealing that was established pursuant to the 1989 Letter of Agreement as well as at the time of the Order on Consent was negotiated.

(11) If a hearing is granted, DEC's interest cannot be adequately represented by any other party to the proceeding.

(12) Granting DEC's request for a hearing and party status will not result in any prejudice to, or substantial additional burden upon, any existing parties, and is in the public interest.

WHEREFORE, Petitioner respectfully requests that the NRC grant a hearing and grant the New York State Department of Environmental Conservation full party status to this proceeding.

Respectfully submitted,

NEW YORK STATE DEPARTMENT OF
ENVIRONMENTAL CONSERVATION

Susan C. Quine

Susan C. Quine
Senior Attorney

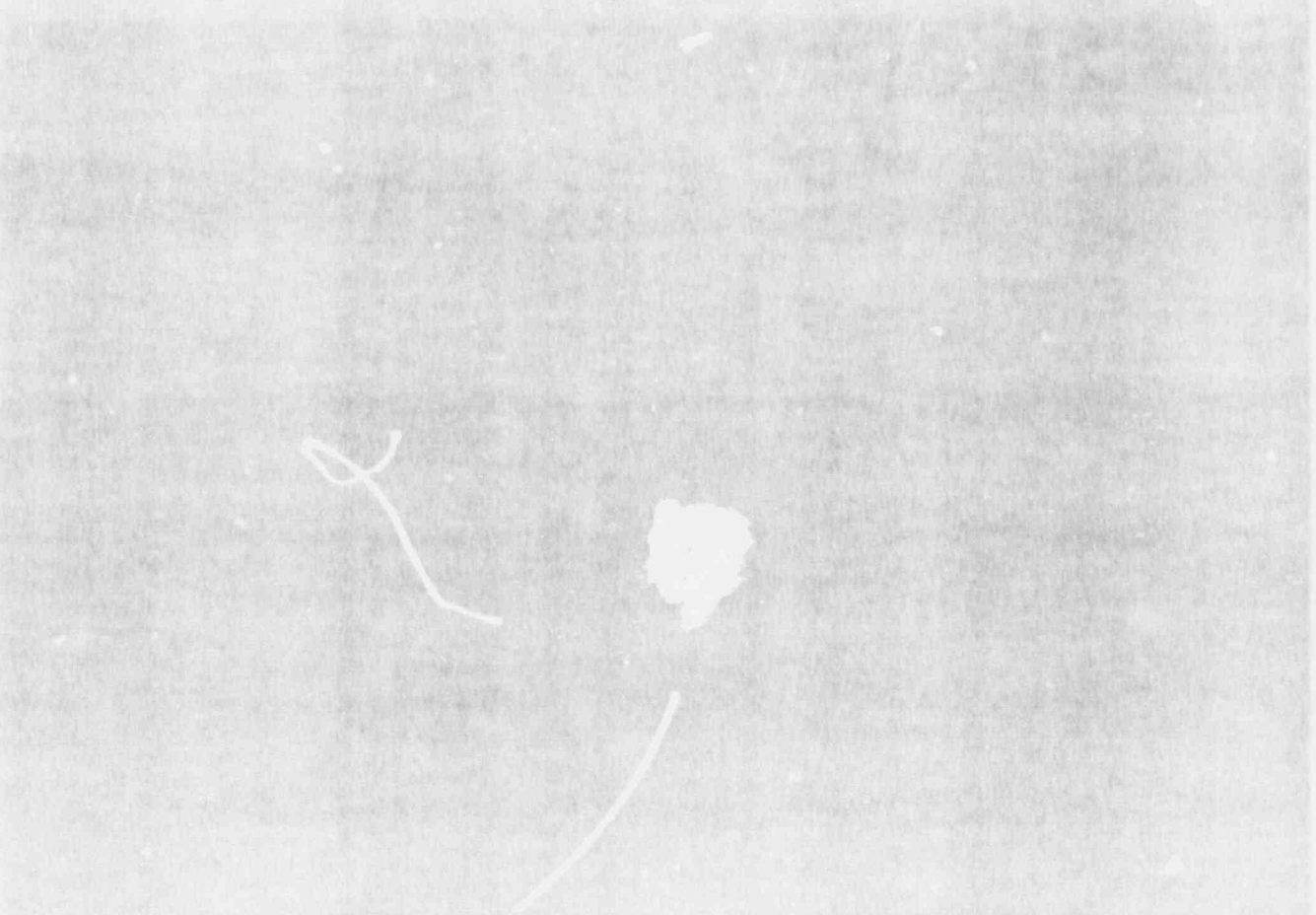
Dated: February 14, 1991
Albany, New York

Office of General Counsel
U.S. Nuclear Regulatory Commission
Washington, DC 20555

Mr. Philip Yachmetz, Attorney for Cintichem
Senior Counsel
Hoffman-LaRoche
340 Kingsland Avenue
Building 85
Nutley, New Jersey 07110-1199

Exhibit

A



LETTER OF AGREEMENT

This is to confirm the general agreement reached during a September 23, 1987 meeting between the U.S. Nuclear Regulatory Commission staff and two agencies of the State of New York, the Department of Labor and the Department of Environmental Conservation, regarding jurisdiction over activities at the Cintichem, Inc. facility in Tuxedo, New York and the impact of that jurisdiction on inspection and enforcement activities conducted by the respective agencies. As a result of that meeting and previous discussions, the agencies agreed that there was a need to formalize the understanding of NRC and State of New York jurisdiction at the Cintichem site and to establish a procedure for the interaction and coordination between the respective agencies on inspection and enforcement activities.

A. With regard to statutory authority it is understood that:

(1) The NRC has exclusive jurisdiction over the Cintichem research reactor pursuant to 10 CFR Part 50 and NRC License No. R-81;

(2) The possession and use of special nuclear material outside of the research reactor is covered by NRC License No. SNM-639 and is also under the exclusive jurisdiction of the NRC. This jurisdiction extends to any area of the Cintichem site where SNM is possessed or used.

(3) The State of New York, through an agreement between the NRC and the State pursuant to Section 274 of the Atomic Energy Act, has exclusive jurisdiction over the possession and use of byproduct material anywhere on the Cintichem site, exclusive of the reactor; and

(4) Nothing in this Letter of Agreement changes or modifies in any way the statutory jurisdiction of the NRC and the State of New York.

B. Given the aforementioned jurisdictions, the following has been agreed to regarding inspection activities.

(1) Reactor operations authorized under NRC License R-81 will continue to be inspected exclusively by NRC;

(2) The possession and use of byproduct material under New York State License Number 729-0322, such as the production of radiopharmaceuticals where the presence of SNM is not expected, will continue to be inspected exclusively by the State; and

(3) The remaining areas of the Cintichem site, where the use of byproduct material under State license and special nuclear material under NRC License SNM-639 is not physically separable, will be subject to inspection by both the NRC and the State. Each of the three agencies will enforce their respective regulations, as applicable.

C. We further agree that, with respect to situation B.(3) above, the following procedures will govern the activities with regard to onsite inspections:

(1) Each of the three agencies will notify the others of their intent tu conduct an inspection at the Cintichem facility;

(2) Each of the three agencies reserves the right to accompany the agency conducting the inspection, on the inspection;

(3) The three agencies will coordinate enforcement actions on a case-by-case basis in order to minimize duplication or inconsistent inspection findings, citations, orders, civil penalties, etc., in areas of dual responsibility. Each of the three agencies reserves the right to pursue further enforcement action if it is required by law or otherwise deemed necessary; and

(4) Copies of licensee responses to enforcement actions by the agency conducting the inspection will be provided to each of the other agencies. The three agencies will make a good faith, best efforts attempt to come to timely agreement as to the acceptability of the licensee's corrective actions. However, the agency conducting the inspection will have final responsibility for the acceptability of the corrective actions. Each agency reserves the right to obtain additional information from the licensee as permitted by law, if required or otherwise deemed necessary by that agency.

FOR THE U. S. NUCLEAR REGULATORY COMMISSION

/s/ R. Knapp May 1, 1989

Malcolm R. Knapp, Director Date
Division of Radiation Safety and Safeguards

FOR THE NEW YORK STATE DEPARTMENT OF LABOR

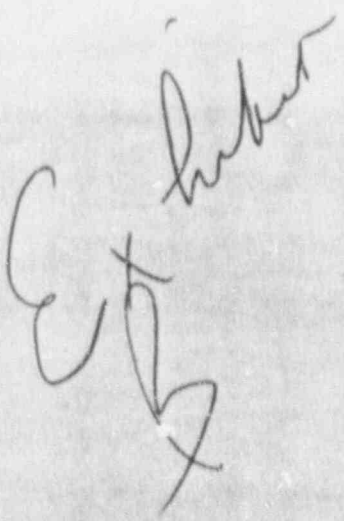
F. J. Bradley 5-11-89

Francis J. Bradley Date
Principal Radiophysicist

FOR THE NEW YORK STATE DEPARTMENT OF
ENVIRONMENTAL CONSERVATION

5-15-89

N. G. Kaul, Director Date
Division of Hazardous Substances
Regulation



STATE OF NEW YORK
DEPARTMENT OF ENVIRONMENTAL CONSERVATION

In the Matter of Violations of the Environmental Conservation Law ("ECL"), Articles 3, 17, 19 and Parts 201, 380, 703, 750-757 of Title 6 of the Official Compilation of Codes Rules and Regulations of the State of New York ("6 NYCRR") by:

ORDER ON CONSENT

CASE #D200059005

CINTICHEM, INC., and MEDI-PHYSICS, INC.,

Respondents.

WHEREAS:

1. The New York State Department of Environmental Conservation ("Department") is the Department of the State of New York having jurisdiction over the State Pollutant Discharge Elimination System ("SPDES"), pursuant to Environmental Conservation Law ("ECL") Article 17, Titles 7 and 8 and 6 NYCRR Parts 750-757, and the United States Environmental Protection Agency, pursuant to Section 402 of the Clean Water Act, has determined that the Department's SPDES Permit Program fulfills the requirements of NPDES.

2. The Department is the agency of the State of New York with jurisdiction to regulate certain discharges of radioactive materials to the environment pursuant to the Department's authority under the ECL, and consistent with its authority relating to by-product materials, source materials and special nuclear materials in quantities not sufficient to form a critical mass in a manner consistent with Section 274 of the Atomic Energy Act of 1954, as amended.

3. The Department is the agency of the State of New York with jurisdiction to regulate discharges of pollutants (including radioactive materials) into the waters of the State and with authority to maintain the cleanliness and purity of such waters pursuant to the Act, ECL Article 17 and 6 NYCRR Parts 380, 703, 750-757.

4. The Department is the agency of the State of New York with jurisdiction over the maintenance and safeguarding of the air resources of this State from pollution and with the power to abate and prevent air pollution in the State pursuant to ECL Article 19.

5. The Department is the agency of the State of New York with jurisdiction pursuant to ECL Articles 3, 17 and 19 and the Department's promulgated rules and regulations at 6 NYCRR Parts 380 and 703 to regulate the release of radioactivity to the environment.

6. The New York State Department of Labor ("DOL"), pursuant to the Labor Law, Section 27, General Business Law, Article 28-D and 12 NYCRR Part 38 regulates certain of Respondents' activities regarding the use and presence of radioactive material at the facility including buildings 2 and 4, and pursuant to 12 NYCRR Section 38.22 has issued License No. 729-0322 in respect to the possession and use of by-product material.

7. The respective jurisdictions of the Nuclear Regulatory Commission and the State of New York are reflected in the May, 1989 Letter of Agreement which is attached and made apart hereof

as Appendix A. It sets forth the understanding of the signatories as to the jurisdictions of the agencies.

8. Pursuant to Section 274 of the Atomic Energy Act, an Agreement between New York State and the Atomic Energy Commission [now the Nuclear Regulatory Commission ("NRC")] was entered into, effective October 15, 1962, and as amended, said Agreement provides that NRC shall discontinue regulatory authority in New York State under Chapters 6, 7 and 8 and Section 161 of the Atomic Energy Act with respect to: A. By-product materials; B. Source materials; and C. Special nuclear materials in quantities not sufficient to form a critical mass. Consistent with the Atomic Energy Act, the said Agreement does not provide for discontinuance of any authority (and the Commission retains authority and responsibility) with respect to the construction and operation of any utilization facility.

9. Cintichem, Inc., is a wholly-owned subsidiary of Medi-Physics, Inc. Cintichem, Inc., and Medi-Physics, Inc., hereinafter referred to as "Respondents", own, operate and/or maintain control over a radiopharmaceutical manufacturing facility, consisting primarily of a 5 megawatt research reactor, radioisotope production laboratories and low-level radioactive waste storage areas, which encompasses an area of approximately 100 acres in the County of Orange, Town of Tuxedo, State of New York ("the facility" or the "site").

10. Respondents allege, and the Department does not concede, as follows: the NRC, pursuant to the Atomic Energy Act, has licensed Cintichem, Inc. to operate the nuclear reactor and

hot cells pursuant to NRC License R-81. The initial license was issued to the Union Carbide Corporation, construction having been completed in 1959. The plant was fully operational by 1961. The license was transferred in 1981 to Union Carbide Subsidiary B (UCS). The initial license was renewed through June 30, 2000 by NRC's order of September 28, 1984, and, as renewed, transferred from UCS to Cintichem, Inc. by NRC's order of July 2, 1985. The 1984 License renewal included an environmental assessment by NRC. The NRC's Finding of No Significant Impact, dated September 14, 1984 concluded that continued operation of the reactor will not lead to changes in effluents released from the facility to the environment, and will not result in any significant environmental impacts on air, water, land or biota in the area. Respondents' reactor is licensed pursuant to Section 104 of the Atomic Energy Act, and is a "utilization facility" as defined at Section 11(cc) thereof. The reactor utilizes and Respondents' License SNM-639 authorizes use and possession of special nuclear material by the licensee in a quantity more than sufficient to form a critical mass.

11. The Union Carbide Corporation, Respondents' predecessor in interest, consented to the Department's issuance of an Order, dated September 13, 1978, wherein it agreed, among other things, to limit the emission of airborne Iodine-131 to the atmosphere to not exceed 12 curies per year and to make every effort to keep the emission of Iodine-131 below the level of one curie per month until the Department established a new emission limit for Iodine-131.

12. Respondents voluntarily shut down the reactor on February 9, 1990. On February 13, 1990, the NRC issued an Order Modifying License which modified NRC Licenses R-81 and SNM-639 and prohibited the re-start of the reactor prior to NRC authorization. On April 4, 1990, Respondents announced that they do not intend to re-start the reactor and that they will seek NRC approval of a plan to decommission Buildings 1 and 2 at the site and, to the extent appropriate, approval from DOL. This Order recognizes that as and when the NRC approves such a plan, the Department will proceed to modify this Order as appropriate to accommodate decommissioning procedures authorized by NRC and, to the extent appropriate, by DOL. Any activity to be undertaken by Respondents in furtherance of decommissioning pursuant to NRC license amendment or order shall be exclusively governed by NRC except to the extent NRC commits any such matter in writing to be regulated by the Department. Respondents have reserved all rights to be heard with respect to any such modification.

13. This Order recognizes that Respondents will be modifying their commercial manufacturing operations at the site to phase out substantially all such operations at Buildings 1 and 2 (except for repackaging of Molybdenum-99 and Xenon-133) within 60 days and to continue operations at Building 4 in a substantially similar mode as in the past several years: product research and development and production and/or redistribution of finished radiopharma- ceutical products, including, but not limited to, various "cold kit" radiopharmaceutical preparation kits, the filling of technetium 99m generators and a Xenon gas

production line. The types of airborne radioactive emissions from this building will continue to consist primarily of Xenon-133 and, to a lesser extent, Iodine-125, Iodine-131, and other noble gases. Airborne emissions of all radionuclides other than Xenon, argon and krypton from Building 4 will not exceed the maximum permissible concentration ("MPC") as averaged over the previous twelve consecutive months at the point directly before a discharge is made into the air pursuant to 6 NYCRR Part 380, and the Xenon, argon and krypton limit will be as further specified in paragraph II of this Order. Except as noted above, where there is a mixture in air or water of more than one radionuclide, the limiting values for purposes of 6 NYCRR Section 380.9 shall be determined in accordance with 6 NYCRR Part 380, Appendix 5, Note a (1).

14. On June 4, 1984, the Department issued a SPDES permit (#NY0004464) to Respondents for their wastewater system discharge to the Indian Kill Brook at outfall 001 and for their non-contact cooling water discharge to the storm drain thence to the Indian Kill Reservoir at outfall 002 for the period July 1, 1984, to June 30, 1989. The SPDES permit prohibits the discharge of industrial or radioactive wastewater at outfall 002. A timely filed SPDES permit renewal application is pending before the Department.

15. On December 14, 1989, Respondents first notified NRC Region I and on December 18, 1989 advised the Department of radioactive contamination at manhole S-4 at the facility. The Department alleges and Respondents do not concede that on

October 18, 1989, groundwater which infiltrated the Building 2 basement contained radioactivity in concentrations from 1.5 x 10^{-4} to 1.8 x 10^{-3} microcuries per milliliter, which are between 5,000 and 60,000 times the MPC level (3 x 10^{-8}) established in 6 NYCRR §380.9 for mixtures of radionuclides for which either the identity or the concentration of any radionuclide is unknown. The Department further alleges and Respondents do not concede that: (a) Respondents did not notify the Department that there was a discharge of radioactive material to an uncontrolled area as required by 6 NYCRR §380.7 until December 19, 1989 and therefore were in violation of that section during that time; (b) since October 18, 1989, the uncontrolled discharge caused or contributed to instances of exceedences of the ambient groundwater standards established in 6 NYCRR §703.5(a)(2)(iv) pursuant to ECL §17-0501. (i.e., the standards of raw water quality for radioactivity is 1000 picocuries per liter gross beta.); and (c) an identified source of the uncontrolled discharge of radioactive materials to the groundwater was leaks in the hot cell ventilation duct.

16. On December 19, 1989, and January 2, 1990, the Department conducted an inspection of Respondents' facility and collected groundwater samples from the area marked S-4 on the map attached and made a part hereof as Appendix B. Sampling point S-4 is located up-gradient and in line of flow to the Indian Kill Reservoir which is being used as a drinking water supply for nearby residents. The Department alleges and Respondents do not concede that analysis of the water samples at S-4 indicated that

the samples contained iodine-131 at concentrations exceeding the ambient groundwater standards established in 6 NYCRR §703.5(a)(2)(iv). Respondents allege and the Department does not concede that no radioactivity in excess of standards passed beyond the site boundary.

17. During an extreme rain event on February 9, 1990, from 12:30 a.m. until 8:30 a.m., Respondents made three separate discharges of water (of approximately 10,000 gallons each) containing radioactive materials from the retention pond (S-12) through outfall 002. The Department alleges and Respondents do not concede that these discharges were in violation of the effluent limitations in SPDES permit #NY0004464 as they included radioactivity in discharges to the Indian Kill Reservoir, which were prohibited by the terms of the permit.

18. The Department alleges and Respondents do not concede on February 9, 1990, the concentration of iodine-131 in water pumped from the (S-3) storm drain was also measured and found to exceed the ambient groundwater standards established in 6 NYCRR §703.5(a)(2)(iv). This water was treated by ion-exchange and released through SPDES permit outfall 001.

19. The Department alleges and Respondents do not concede that on February 10, 1990, Respondents violated the effluent limitations in SPDES permit #NY0004464 when unauthorized discharge of water from the retention pond, including water from the S-3 and S-4 storm drains, containing Iodine-131 and other radioactive material was discharged through outfall 002 to the Indian Kill Reservoir.

20. The Department alleges and Respondents do not concede that on February 13, 1990, the concentration of Iodine-131 in ground water collected from well drilling at MW5 exceeded the ambient groundwater standards established in 6 NYCRR §703.5(a)(2)(iv). (MW5 is identified on the map attached and made a part hereof as Appendix C.)

21. The Department alleges and Respondents do not concede, that as described in paragraphs 15 through 20 inclusive, Respondents violated the following provisions of the ECL and rules and regulation promulgated thereunder:

ECL §§ 17-0501, 17-0505, 17-0507, 17-0511, 17-0701, 17-0803, and 6 NYCRR §§703.5(a)(2), and 751.1.

22. The Department alleges and Respondents do not concede, that as described in paragraphs 15 through 20 inclusive, Respondents failed to make every effort to keep radiation exposure in uncontrolled areas as low as practicable in violation of 6 NYCRR §380.4(a).

23. 6 NYCRR §201.2(a) prohibits, except as provided in §201.6, any person from commencing construction of an air contamination source or proceeding with a modification without having a valid permit to construct issued by the Commissioner.

24. 6 NYCRR §201.2(b) prohibits the operation or use of an air contamination source unless the owner has a valid certificate to operate (or is operating pursuant to an order of the Department). The Department alleges and Respondents do not concede that Respondents do not have a DEC certificate to operate the air contamination sources they currently operate at the

facility. Although Respondents do not have permits which the Department alleges are required by 6 NYCRR Part 201 and 6 NYCRR §380.3(a), airborne emissions of Iodine-131 at Emission Point 2A have been governed by the 1978 Consent Order and emission of xenon, argon and krypton have been governed by a June 6, 1968, regulatory letter from William J. Kelleher of the New York State Department of Health to the Union Carbide Corporation ("the 1968 DOH letter").

25. Respondents are subject to the provisions of 6 NYCRR Part 380 ("Prevention and Control of Environmental Pollution by Radioactive Materials") inasmuch as there continue to be airborne emissions of radioactive materials from Respondents' facility which are within DEC's jurisdiction to regulate.

26. 6 NYCRR §380.4(b)(1) provides in pertinent part as follows:

> ... no person shall discharge into the air ... in any uncontrolled area any concentration of any radioactive material which, if averaged over any year, would exceed the limit thereof set forth in section 380.9 schedule 2 ... [A]ny such concentration shall be determined at the point directly before a discharge is made into the air....

27. 6 NYCRR §380.3(b) allows the Department to allow the limit for a concentration of radioactive material to be exceeded at the point of discharge if the applicant for a permit shows that "radioactive waste discharges are 'as low as practicable' and that exposures in any uncontrolled area do not exceed those in subdivisions (a) and (b) of section 380.4 of this Part."

28. Revision of the 1978 Order and the 1968 DOH letter is appropriate at this time in view of the foregoing.

29. Respondents have taken extensive measures to investigate the cause of radioactive materials found in groundwater at the site, to stop further releases, to determine the extent and magnitude of contamination resulting from the releases, and to mitigate the effects of radioactive materials released. These measures were taken with the knowledge of officials of NRC and DEC, and pursuant to their direction under the NRC license and relevant State jurisdiction, respectively, and have included:

a. collecting and analyzing for the presence of radioactivity numerous samples of water at Respondents' facility as well as samples of water in the Indian Kill Reservoir and Indian Creek, and samples of aquatic biota and sediment in the Indian Kill Reservoir;

b. constructing nine monitoring wells at the site, and several other points within Building 2 where groundwater below the building can be sampled;

c. establishing a system to collect and process water to remove radioactivity prior to discharge; and

d. initiating measures to shut down and decommission Buildings 1 and 2 at the site.

30. Respondents without any admission of fact or law, and while denying that the Department has jurisdiction over NRC licensed facilities or activities at the site, and having waived their right to a hearing as provided by law, and having consented

to the issuance and entry of this Order for purposes of settlement, but reserving all rights to be heard with respect to any modification to this Order, and with respect to the resolution of disputes as contemplated by paragraph XXIV of this Order, agree to be bound by the terms, provisions and conditions set forth below in this Order.

Now, having considered this matter and being duly advised, IT IS ORDERED THAT:

I. The 1978 Order is superseded with respect to all its obligations provided, however, the Department does not waive its right to enforce violations of the 1978 Order, if any, in the event the Department seeks to enforce violations of this Order. Respondents do not waive any rights or defenses available under the 1978 Order, this Order or as otherwise may be available by law.

II. No later than 270 days after the effective date of this Order, or within the time provided pursuant to paragraph IV(D) of this Order, which ever is later, Respondents shall submit applications for permits (or renewals of existing permits) for all points of airborne radioactive emissions relating to commercial manufacturing operations at the facility as and to the extent required by the Department's regulations. Pending the issuance by the Department of such permits and/or certificates, continued airborne radioactive emissions relating to commercial manufacturing operations shall be limited as follows:

(A) As to the airborne radioactive emissions from Buildings 1 and 2 (Emission Point 2-A, as identified in Appendix A of this Order):

(1) there shall be no commercial manufacturing operations except for repackaging of radioisotopes involving molybdenum-99 and xenon-133 at Buildings 1 and 2, and airborne radioactive emissions shall not exceed the following:

(a) Molybdenum-99 : MPC;

(b) Xenon-133: (i) through the 60th day after the effective date of this order, the limit shall be as specified by the NRC licenses as now in effect or hereafter modified, (ii) after the 60th day after the effective date of this Order, MPC;

(c) Iodine-131: not to exceed 170 millicuries per month;

(d) all other emissions shall not exceed the limits specified by the NRC licenses as now in effect or hereafter modified.

(2) the limits of subparagraph (A)(1) of this paragraph shall be modified (by modification to this Order) as appropriate to be consistent with the exercise of jurisdiction by NRC as and when there is such an exercise.

(B) Airborne radioactive emissions from Building 4 shall be governed as follows:

(1) Until futher determined pursuant to this subparagraph emissions of Xenon-133 and other noble gases from emission point 2B in Building 4 shall not exceed the limits

specified in the 1968 DOH letter i.e., the release of argon, krypton, and xenon to an uncontrolled area shall not exceed 50 times the limits set forth in Table #3, Schedule II, Column 1, Appendix 1 of Part 16 of the New York Sanitary Code (superseded by 6 NYCRR §380.9, Appendix 5). Within 45 days after the effective date of this Order, Respondents shall submit to the Department an approvable demonstration that this emission (or any other emission limit Respondents propose at that time), when combined with all other airborne radioactive emissions from the site, will meet the requirements of 6 NYCRR §380.3(b) consistent with the technical specifications reflected in the NRC licenses. This demonstration must include: (i) dose estimates showing that the emissions will not result in doses that exceed the limits of 6 NYCRR §380.4 and (ii) a specific and detailed description of measures taken to ensure that the amount of all radioactive materials discharged through emission point 2B is as low as practicable. The Respondent's submittal and the Department's determination upon this submittal shall be governed primarily by 10 CFR §§20.105 and 20.106 and NRC Regulatory Guide 1.109 as well as by 6 NYCRR Part 380. The procedures of Paragraph XII of this Order apply to this submittal except that the Department must notify the Respondents of approval or disapproval of the initial submittal within 30 days;

(2) Airborne emissions of all radionuclides other than Xenon-133 will not exceed MPC averaged over the previous twelve months at the point of discharge pursuant to 6 NYCRR Part 380.

(3) Within 10 days after the effective date of this Order, Respondents shall install thermoluminescent dosimeters ("TLD") at the locations indicated on Appendix B. The dosimetry system used (including the selected phosphor composition and the read out instrument and procedures) must have a sensitivity of 0.5 millirem. At each of the locations, an array of at least three TLD elements shall be installed at a height between 0.6 and 1.3 meters above ground level, within one meter of the existing chain link fence. The TLDs shall be replaced at 30-day intervals. The TLDs collected from the field shall be read within seven calendar days of collection and the results reported to the Department within five business days after Respondents' receipt of results of the readings from the provider of the reading service. Reports of results must include documentation of calibration, all raw data, calculations and corrections made (including those for fading), and an estimate of the error.

(C) all other airborne emissions of radioactive materials from all emission points at the facility shall meet the requirements of 6 NYCRR §380.3(b);

(D) Respondents shall report to the Department, by no later than the 15th day of the next succeeding month, the total activity, by radionuclide, of radioactive material released through emission points 2A and 2B (as identified in Appendix B of this Order);

III. Respondents shall continue to implement the ventilation duct and ground and surface water radioactivity

monitoring plan that is presently in place at the facility, consisting of the following measures:

(1) sampling S-4 and the nine on-site monitoring wells on a weekly basis;

(2) monitoring of air pressure in and around the hot cell ventilation duct on a weekly basis;

(3) sampling of ground water and surface water from the other sampling points on-site on a weekly basis;

(4) reporting available sampling data on a weekly basis to the Department;

(5) treatment by ion exchange at S-4 until the water in S-4 tests below 10% MPC for seven consecutive days before ion exchange treatment;

(6) daily sampling of the reservoir at the intake point to the filtration system, until such time as all water testing on-site shows levels below 10% of MPC for seven consecutive days prior to testing, at which time reservoir sampling shall thereafter be conducted on a weekly basis;

(7) sampling of groundwater from S-4 and the monitoring wells on the site to determine the effectiveness of the repairs that were made to the hot cell ventilation duct in December 1989 and January 1990. Groundwater from S-4 shall be sampled daily and groundwater from the monitoring wells on the site shall be sampled three times a week until the concentration of radionuclides in the samples collected from S-4 and all monitoring wells are below 10% of MPC and do not increase for seven consecutive days. After that time, samples are to be

collected weekly. If the concentration of radionuclides in any sample collected exceeds 10% of MPC, daily sampling of S-4 and thrice-weekly sampling of all monitoring wells shall be resumed until the concentration of radionuclides in the samples collected from S-4 and all monitoring wells are below 10% of MPC and do not increase for seven consecutive days;

(8) gamma isotopic analysis of samples from S-4, S-13 and all the monitoring wells at a sensitivity such that the detection limit is at least 1 x 10^{-8} microcuries per milliliter for I-131; gamma isotopic analysis of all other samples at a sensitivity such that the detection limit is at least 0.1 MPC for I-131.

(9) Respondents shall notify the Department no later than one hour after the occurrence of any of the following:

(a) the detection of a fivefold or greater increase in the concentration of any radionuclide as compared to the average concentration of that radionuclide in the previous two samples collected from the same sampling point;

(b) the detection of any radionuclide at a level greater than 10 percent of MPC not previously detected at that sampling point since February 9, 1990; and

(c) the detection of concentrations of any radionuclide at or above MPC.

IV. Airborne Emission Evaluation Program ("AEE Program").

(A) Within 15 days after the effective date of this Order Respondents shall retain an independent third party to prepare and submit a work plan for evaluating the airborne

emissions of all radioactive materials from all operations at the facility (the "AEE Program"). Within 30 days after the Department's approval of that third party, Respondents shall submit the AEE Program to the Department. The AEE Program must be approved by the Department in accordance with Paragraph XII of this Order and must include procedures for the following:

(1) identifying all airborne emission points and all airborne emissions;

(2) evaluating the effectiveness of Respondent's methods for determining the rate and total activity of each radionuclide in airborne emissions;

(3) accurately determining the rate and total activity of each radionuclide in airborne emissions;

(4) evaluating the effectiveness of Respondent's methods for determining the radionuclide collection efficiency (a numerical measure of the percentage of radionuclides and other contaminants removed by the emission control equipment) of the existing emission control equipment and accurately determining the efficiency of the existing emission control equipment, including the standards and NRC regulatory guides to be applied;

(5) evaluating the soundness, integrity, and effectiveness of all ventilation systems for areas in which radioactive materials are used, transported, processed, or stored; and

(6) developing preliminary designs for any needed replacements or modifications of the existing ventilation system, including emission control and monitoring systems, necessary to

ensure compliance with applicable regulations and to keep emissions of radioactive material as low as practicable.

(B) In the event that Respondents will continue the repackaging activities described at paragraph II(A) of this Order for more than 270 days after the effective date of this Order, Respondents shall submit to the Department the AEE program work plan contemplated by subparagraph (A) of this paragraph with respect to such activity concurrent with the application for permit for those emissions;

(C) The AEE Report must be submitted to the Department 75 days after the Department's approval of the AEE Program. The AEE Report must include the following:

(1) the results and conclusions of the evaluations required in paragraph IV(A);

(2) an analysis of the degree to which airborne emissions of radioactive materials are as low as practicable;

(3) recommendations and preliminary designs for the replacement or improvement of emission control and monitoring equipment;

(4) procedures to ensure that airborne emissions of radioactive materials are as low as practicable and procedures to ensure compliance with all applicable rules and regulations of the Department.

(D) Within 30 days after the Department's approval of the AEE Report, or within 270 days after the effective date of this Order, whichever is later, the Respondents shall submit to the Department complete application(s) for all required permits

and/or certificates for airborne emissions including those which are necessary to implement the recommendations in the approved AEE Report.

V. Use of outfalls 001 and 002 (in SPDES Permit # NY0004464) shall be in accordance with the following:

(A) Respondents shall immediately cease using outfall 002 for any discharges of effluent and surface water runoff from 002 to Indian Kill Reservoir except as authorized pursuant to this paragraph V. Respondents shall continue to divert water from the retention pond to outfall 001 consistent with the following:

(1) Respondents shall continue to sample and discharge from the retention pond to 001 as follows:

(a) Make all discharges from the retention pond in a batch mode to the 001 discharge point to the Indian Kill Creek downstream of the reservoir, in accordance with an established written procedure to be approved by the Department, following sampling and gamma spectral analyses to ensure that the radioactive content is below the applicable MPC's.

(b) In the event that heavy rains or surface run-off to the retention pond requires that, to preserve its integrity, the retention pond be emptied or lowered, prior to the completion of the analysis, on a batch basis, continuous pumping to the 001 discharge point may begin. In that case, sampling and analysis of the holding pond shall be done on an hourly basis until the batch release process can be re-established.

(c) Respondents shall immediately upon detection notify the Department (by telephone within one hour; by written means as soon as reasonably possible) should any radioactivity be measured above background levels in the retention pond or at S-1, or, should any unanalyzed release from the retention pond occur to the Indian Kill Reservoir. For purposes of this notification the sensitivity of analysis shall be such that at least 0.1 times the applicable MPC's can be detected.

(2) Within 15 days after the effective date of this Order, Respondents shall submit to the Department in a good faith, objective proposal for interim diversion of S-7 water away from the retention pond. The proposal shall provide an evaluation of alternatives which shall reflect appropriate engineering and environmental considerations, including time for completion and cost factors. Within 15 days after Respondents' submittal the Department must notify Respondents of approval or disapproval of the proposal; as and when approved by the Department the proposal shall be deemed part of this Order.

(3) Pending completion of the proposal contemplated by subparagraph V(A)(2), if storm water flow emergency circumstances arise under which reliance on the approved method for emptying the retention pond (as set forth in subparagraph V(A)(1) of this Order) will not enable preservation of the physical integrity of the retention pond, or when storm water in-flow to the retention pond exceeds the 700 gallons per minute pumpout capacity from the retention pond, whichever occurs

first (the "emergency condition") Respondents shall immediately so notify the Department (immediately by telephone, and by written means as soon as reasonably possible) and thereafter proceed as follows: (i) excavate a temporary modification to the stream channel at S-7 to divert storm flow at S-7 from the retention pond and to the reservoir; (ii) immediately after the emergency condition ceases to exist, Respondents shall restore the stream channel at S-7 to its condition prior to the temporary modification and shall immediately so notify the Department by telephone and written means; (iii) during the emergency condition diversion, Respondents shall perform grab samples once every four hours, testing for parameters identified in paragraph V(A)(1)(c) and suspended solids and pH.

(4) Within 270 days after the effective date of this Order, Respondents shall submit to the Department a complete application for a SPDES permit reflecting a proposal for the permanent diversion of all flows which enter the retention pond to Indian Kill Brook. The diversion at S-7 away from the retention pond into Indian Kill Brook may be incorporated into the SPDES application for the permanent diversion. The completion and maintenance of the permanent diversion, will be incorporated as a condition in the SPDES permit.

(B) The concentration of radionuclides in wastewater released through outfall 001 of SPDES permit #NY0004464 shall not exceed MPC when averaged over the year and for mixtures of radionuclides, the sum of the ratios rule in 6 NYCRR §380.9(1) shall apply. Respondents shall report to the Department, by no

later than the 15th day of the next succeeding month, the total activity, by radionuclide, of radioactive material released through outfall 001. Discharges of radionuclides through outfall 001 shall be sampled as follows: (A) Routine grab samples shall be collected and analyzed biweekly; all samples shall be collected in the 001 outfall before the discharge enters the Indian Kill; and (B) At least two grab samples representative of the discharge shall be collected and analyzed prior to the discahrge of the contents of the process water tanks through the 001 outfall.

VI. Within 30 days after the effective date of this Order, Respondents shall retain qualified independent, third parties to conduct the Audit Studies set forth in subparagraphs VI(A) and (B) (as to all such similar matters, paragraph VIII of this Order applies). The Audit Studies must be signed by both an independent third party who is a professional engineer licensed to practice by the New York State Department of Education and an independent third party who is a certified health physicist. Within 21 days after the Department's acceptance of third parties to conduct any of these Audit Studies, the Respondents shall submit to the Department for approval an Audit Study Work Plan detailing how each such Study is to be conducted, including milestones for completion of identified component activities (to include achieving completion of all Audit Studies within three months of approval by the Department). The Audit Study Work Plan shall be undertaken for purposes of assisting the Department in administering applications for permits pursuant to paragraph II

of this Order. The Audit Study Work Plan must identify those activities that have already been undertaken in response to previous orders or directions from the Department, the NRC, or the New York State Department of Labor. The Department will give due consideration to any reports which are prepared by the Cintichem External Audit Board and any reports which are required as a result of the exercise of jurisdiction by NRC, as satisfaction of the requirements of this paragraph. Any such reports may be substituted for the studies required pursuant to the Audit Study Work Plan upon the approval of the Department. The Audit Study Work Plan will be reviewed and approved by the Department in accordance with Paragraph XII of this Order. On approval, the Audit Studies Work Plan becomes a part of this Order, and non-compliance with these work plans will constitute a violation of this Order. The Audit Studies shall be the subject of completed reports submitted to the Department for approval not later than the due dates approved in the Audit Study Work Plan. The Audit Studies shall address the following:

(A) An analysis of operations related to commercial manufacturing at the facility (including management, operation, and maintenance practices and contingency plans) to assess their effectiveness in preventing environmental contamination, maintaining releases of radioactive materials to the environment as low as practicable, and detecting and responding to unintentional releases and failures of facility structures. This analysis must include recommendations for improvements and modifications to facility management, operation, and maintenance

procedures and facility contingency plans to increase effectiveness in those areas.

(B) An environmental audit of the operations related to commercial manufacturing at the facility to identify and quantify all releases to the environment which are known upon the exercise of due diligence correlated to the applicable environmental regulations, and assessed as to the degree which the facility is complying with applicable regulations.

VII. The Respondents shall develop and implement a remedial program addressing radioactivity in groundwater and soil at the site which remedial program shall include a Remedial Investigation, and if the Department determines it is necessary on the basis of the existence of a threat to the environment taking into consideration applicable environmental criteria, a Feasibility Study (as contemplated by paragraph XVI of this Order), design and implementation of the selected remedial alternatives and operation, maintenance and monitoring of the selected remedial alternative for all radioactive contamination at the facility; provided, however, that such remedial program shall not encompass matters governed by decommissioning of Buildings 1 and 2 pursuant to NRC license amendment or order, except to the extent NRC commits any such matter in writing to be regulated by the Department.

VIII. Respondents shall employ qualified personnel or shall retain professional consultants, contractors, laboratories, quality assurance/quality control personnel and data validators acceptable to the Department to perform the technical,

engineering and analytical obligations required by this Order. The experience, capabilities and qualifications of the firms or individuals selected by Respondents shall be submitted to the Department within 10 days after the effective date of this Order, or within 10 days of the selection of the proposed firms or individuals, whichever is later. The Department's approval of these firms or individuals shall be obtained prior to initiation of any activities for which the Respondents and such firms or individuals will be responsible.

IX. Within 30 days after the effective date of this Order, Respondents shall make available to the Department all data within their possession and control regarding environmental conditions on-site and off-site and other information described below, unless such data have previously been provided to the Department or the Department advises the Respondents that such data are not necessary to be submitted based on the Department's review of the data at the Respondents' facility.

(A) A brief history and description of the Site;

(B) A comprehensive list and copies of all existing relevant reports (including all annual reports submitted to the United States Nuclear Regulatory Commission) with titles, authors and subject matter, as well as a description of the results of all previous investigations of the Site and areas in the vicinity of the Site, including copies of all available topographic and property surveys, engineering studies and aerial photographs.

X. Within 60 days after the effective date of this Order, Respondents shall submit to the Department a Remedial

Investigation Work Plan (which may include the "Hydrogeologic Investigation Work Plan" prepared by Leggette, Brashears and Graham, Inc., dated February 1990) for a Remedial Investigation Study. The Work Plan shall include, but not be limited to, the following:

(A) A review of work completed, conclusions and recommendations from the "Hydrogeologic Investigation Work Plan";

(B) A chronological description of any necessary anticipated Remedial Investigation activities together with a schedule for the performance of these activities;

(C) A Sampling and Analysis Plan which shall include:

(1) A quality assurance project plan that describes the quality assurance and quality control protocols necessary to achieve the data quality objectives. Included in this plan shall be the designation of a data validation expert together with a description of such individual's qualifications and experience.

(2) A program of sampling and analysis of the quality of water and the sediments in the Indian Kill Reservoir and the stream flowing from the retention pond to the Indian Kill Reservoir and the Indian Kill Brook downstream of the 001 outfall sufficient to identify any contamination emanating or which may emanate from the facility (via air, water or earth);

(3) A program of sampling and analysis of aquatic biota (including plankton, rooted aquatic vegetation invertebrates, fish and benthic organisms), from the Indian Kill Reservoir and the stream flowing from the retention pond to the

Indian Kill Reservoir and the Indian Kill Brook downstream of the 001 outfall for radioactive content as necessary;

(4) Characterization of the vertical and horizontal extent of surface and groundwater contamination at and emanating from the site;

(D) A health and safety plan for the protection of persons at and in the vicinity of the Site during the performance of the Remedial Investigation which shall be prepared in accordance with applicable standards and reviewed and approved by a certified health physicist. Supplemental items shall be added to this plan by the Respondents as required by the Department as necessary to ensure the health and safety of all persons at or in the vicinity of the site during the performance of any work pursuant to this Order.

XI. As provided for in paragraph XII, the Department shall notify Respondents in writing of its approval or disapproval of the Remedial Investigation Study Work Plan and if the Respondents should submit any necessary revisions. As and when the Plan is approved by the Department, Respondents shall perform the Remedial Investigation Study in accordance with it.

XII. The Department shall review each of the submittals made by the Respondents pursuant to this Order, and shall notify the Respondents in writing of its approval or disapproval of the submittal. All approved submittals shall be attached to this Order and shall become an enforceable part of this Order. If the Department disapproves a submittal, it shall so notify the Respondents in writing, and shall state the reasons for its

disapproval. Within 30 days of receiving written notice (or such longer time period as is designated by the Department in the written notice) that its submittals have been disapproved, Respondents shall make a revised submittal which addresses and resolves all of the Department's stated reasons for disapproving the first submittals. After receipt of the revised submittal, the Department shall notify the Respondents in writing of its approval or disapproval of the revised submittal. If the Department disapproves the revised submittal it shall so notify the Respondent in writing, and shall state the reasons therefore. If within the following 15 days, the parties cannot resolve their differences, either party may request that the dispute be settled in accordance with the dispute resolution procedures set forth in Paragraph XXIV of this Order.

XIII. In accordance with the time schedule contained in the approved Work Plan, Respondents shall perform the Remedial Investigation and submit the status reports and other deliverables as defined in the Work Plan and identify any additional data that must be collected. The Remedial Investigation Report shall be prepared and certified by an engineer licensed to practice by the State of New York, who may be an employee of a Respondent, or an individual or member of a firm which is authorized to offer engineering services in accordance with Article 145 of the New York State Education Law, who shall certify that all activities that comprised the Remedial Investigation were performed in full accordance with the approved Work Plan.

XIV. After receipt of the Remedial Investigation Report, the Department shall determine if the Remedial Investigation was conducted and the Report prepared in accordance with the Work Plan and this Order. As provided for in paragraph XII, the Department shall notify the Respondents in writing of its approval or disapproval of the Report.

XV. The Department reserves the right to require a modification and/or an amplification and expansion of the Remedial Investigation and Report by Respondents if the Department determines, as a result of reviewing data gererated by the Remedial Investigation or as a result of reviewing any other data or facts, that further work is necessary.

XVI. If the Department determines in accordance with paragraph VII of this order that the investigations pursuant to paragraphs VI, VII and/or X of this Order indicate that remediation is necessary, Respondents shall prepare a feasibility study to evaluate appropriate remedial measures. After review and approval of the selected remedial measures by the Department, Respondents shall develop a remedial action plan for implementation of the remedial measures, and, upon approval of this plan by the Department, the Plan shall become an enforceable part of this Order.

The Department shall notify Respondents in writing of its approval or disapproval of the feasibility study and remedial action plan in accordance with paragraph XII of this Order.

XVII. The Department shall have the right to obtain split samples, duplicate samples, or both, of all substances and

materials sampled by Respondents and the Department shall also have the right to take its own samples. Respondents shall make available to the Department the results of all sampling and/or tests or other data generated by Respondents with respect to implementation of this Consent Order, and shall submit these results in the status reports required under the Work Plan.

XVIII. Respondents shall provide notice to the Department at least 10 business days in advance of any field activities other than routine sampling, to be conducted pursuant to paragraphs X and XVI this Order. Field activities may proceed with less than 10 business day's advance notification, if agreed to by the Department or its authorized representatives and may proceed immediately if Respondents determine safety or environmental considerations require immediate work, provided, however, Respondents will immediately notify the Department of the work and scope of the work.

XIX. In addition to the permits or other approvals required pursuant to paragraph II of this Order, Respondents shall obtain whatever other permits, easements, rights-of-way, rights-of-entry, approvals or authorizations are necessary to perform Respondents' obligations under this Order.

XX. Respondents hereby consent to the entry upon the Site or areas in the vicinity of the Site which may be under the control of the Respondents, by a duly designated employee, consultant, contractor or agent of the Department or any State agency provided the identity of said consultant, contractor or agent of the Department has previously been supplied to Respondents and

suitable confidentiality protections have been arranged for purposes of inspection, sampling and testing and to ensure Respondents' compliance with this Order. During implementation of the Remedial Program, Respondents shall provide the Department with suitable office space at the site, including access to a telephone, and shall permit the Department full access to relevant records and job meetings.

XXI. Within 45 days after the effective date of this Order, Respondents shall obtain and provide to the Department financial assurance in the form of an irrevocable letter of credit in the amount of five million dollars ($5,000,000) for the completion of work as described in paragraphs II, III, IV, VI, VII, X, XI, XIII, and XVI of this Order and for any repairs, remediation or mitigation work determined to be necessary. Respondents shall establish an irrevocable standby trust fund, with an initial deposit of one thousand dollars ($1,000.00). The irrevocable letter of credit and the irrevocable trust fund agreement shall meet the following requirements:

(A) Letter of Credit

(1) Is identical to the wording specified in Appendix D for letters of credit, which is attached hereto and made a part hereof;

(2) Is issued by a New York State or federally chartered bank, savings bank, or savings and loan association, which has its principal office in New York, unless otherwise approved by the Department; and

(3) Is accompanied by a letter from Respondents referring to the Letter of Credit by number, issuing institution and date and providing the following information: the name and address of the facility and/or site which is the subject of the Order and the amount of funds securing the Respondents' performance of all their obligations under the Order.

(B) Standby Trust

(1) Is identical to the wording specified in Appendix E, which is attached hereto and made a part hereof;

(2) The irrevocable standby trust fund shall be the depository for all funds paid pursuant to a draft by the Department against a letter of credit or payments made under the performance bond as directed by the Department;

(3) The trustee shall be an entity which has the authority to act as a trustee and whose trust operations are regulated and examined by a federal or New York agency;

(4) Is accompanied by an executed certification of acknowledgment that is identical to the wording specified in Appendix F.

XXII. Respondents shall establish and maintain the standby trust fund until terminated by the written agreement of the Department, the trustee and Respondents, or of the trustee and the Department if Respondents cease to exist. Respondents shall maintain the letter of credit until the Department provides written notification to Respondents that the financial assurance is no longer required for compliance with this Order. In the event that the Department determines that Respondents have failed

to perform any of their obligations under this Order, the Department may proceed to have the financial assurance deposited into the standby trust; provided, however, that before the Department draws on the letter of credit the Department shall notify Respondents in writing of the obligation(s) which they have not performed, and Respondents shall have a reasonable time, not to exceed thirty (30) calendar days, unless approved in writing by the Department, to perform such obligations(s).

XXIII. At any time, Respondents may apply to the Department to substitute other financial assurances in a form, manner and amount acceptable to the Department.

XXIV. Dispute Resolution.

(A) The Department and Respondents shall attempt to resolve expeditiously and informally any disagreements concerning implementation of this Order or any work required under this Order. In the event any dispute arising under this Order is not resolved expeditiously through informal means, either party, desiring dispute resolution under this paragraph, shall give prompt written notice to the other party.

(B) Within ten days after the service of notice of dispute pursuant to this paragraph, the party which gave the notice shall serve on the other party a written statement of the issues in dispute, the relevant facts upon which the dispute is based, and factual data, analysis or opinion supporting its position, and all supporting documentation on which such party relies (hereinafter called the "Statement of Position"). The other party shall serve its Statement of Position, including

supporting documentation, no later than ten days after receipt of the complaining party's Statement of Position. In the event that these 10-day time periods for exchange of Statement of Position may cause a delay in the work being performed under this Order, the time periods may be shortened upon and in accordance with notice by the Department.

(C) In the event that the dispute has not been resolved within 5 days after the exhange of statements of position, Department staff shall refer the dispute to the Commissioner (or designee thereof) who shall determine either: (1) a resolution of the dispute; or (2) that a hearing is required to resolve a question of fact, in which latter case the dispute will be forwarded to the Department's Office of Hearings for an expedited hearing consistent with relevant provisions of 6 NYCRR Part 621.

(D) An administrative record of any dispute under this paragraph shall be maintained by the Department. The record shall include the written notification of such dispute, the Statements of Position served pursuant to the preceding subparagraph, a record of hearing in the event a hearing is held, and any other relevant information. The record shall be available for review by all parties.

(E) Upon review of the administrative record, the Commissioner (or designee) shall issue a final decision and order resolving the dispute. With respect to the final determination of the Commissioner (or designee), the Respondents shall have those rights granted pursuant to Article 78 of the Civil Practice

Law and Rules (CPLR) of New York, provided that a Petition is filed within ten days of the receipt of final decision and order issued by the Commissioner or his designee. In the review of any dispute under this paragraph, either by the Commissioner or pursuant to Article 78 of the CPLR, the Respondents shall have the burden of proving that there is no rational basis for the Department's position. The invocation of the procedures stated in this paragraph shall not extend or postpone the Respondents' obligations under this Order with respect to the disputed items, unless and until the Department finds, or the Court orders, otherwise.

XXV. Respondents shall not suffer any penalty under any of the terms of this Order, or be subject to any proceeding or actions for any remedy or relief if it cannot comply with any requirements hereof because of an act of God, war, or other condition as to which negligence or willful misconduct on the part of the Respondents was not a proximate cause, including but not limited to, delays attributable solely to weather conditions or difficulties in obtaining necessary easements, permits (assuming Respondents have actively, timely and in good faith proceeded to obtain such permits) or rights-of-way. An act of God is an unforseeable disaster arising exclusively from natural causes which the exercise of ordinary human prudence could not have prevented. This provision shall in no way excuse delays or failures to perform which are the result of increased cost expenses. Respondents shall within five (5) days notify the Department in writing when it obtains knowledge of any such

condition and shall include in such notice the measures taken and to be taken by Respondents to prevent or minimize any delays and shall request an appropriate extension or modification of the terms of this Order. Respondents shall have the burden of proving that an event is a defense to compliance with this Order pursuant to this section. Failure to give such notice in a timely manner shall constitute a waiver of any claim that a delay is not subject to penalty pursuant to this section.

XXVI. The failure of the Respondents to comply with any term of this Order shall be a violation of this Order and the ECL.

XXVII. Penalties. In respect of the aforesaid alleged violations, a civil penalty in the amount of $300,000 (three hundred thousand) is hereby assessed against Respondents, which amount shall be paid by Respondents to the Department not later than 20 days after the effective date of this Order.

XXVIII. Respondents shall be liable for payment of the sums set forth below as stipulated penalties for each day or part thereof that the Respondents are in violation of the submittal requirements of paragraphs II, III, IV, V, VI, VII, X, XI, XIII, and XVI of this Order and continue to accrue through the final day of correction of any violation. A submittal shall be deemed to have been made when postmarked or provided to a private courier service and submittals shall be sent as provided in paragraph XXXVI of this Order. All penalties begin to accrue on the first day the Respondents are in violation of the terms of this Order. The following stipulated penalties shall be due and payable within fifteen days of receipt of notification from the

Department assessing the penalties. If such payment is not received within 15 calendar days after such notification by the Department is received by the Respondents, interest shall be payable at the rate of nine percent on the overdue amount from the day of which it was due through, and including the date of payment. Penalties shall be paid by check or money order made payable to "New York State Department of Environmental Conservation" and delivered personally or by certified mail, return receipt requested, to the Department's Deputy Commissioner/General Counsel at the address set forth in paragraph XXXVI of this Order. Payment of the penalties shall not in any way alter Respondents' obligation to complete performance under the terms of this Order. Stipulated penalties shall be due and payable under this paragraph pursuant to the following schedule:

PERIOD OF NONCOMPLIANCE	PENALTY PER DAY
1st day through 15th day	$ 1,000
16th day through 30th day	$ 5,000
31st and thereafter	$10,000

XXIX. Nothing contained in this Order shall be construed as barring, diminishing, adjudicating or in any way affecting any of the Department's rights including, but not limited to, the following:

(A) the Department's right to bring any action or proceeding against anyone other than Respondents, their director(s), officers, employees, servants, agents, successors and assigns;

(B) the Department's right to enforce this Order against Respondents, their directors, officers, employees, servants, agents, succesrors and assigns in the event that Respondents shall fail to satisfy any of the terms hereof;

(C) the Department's right to bring any action or proceeding against Respondents, their directors, officers, employees, servants, agents, successors and assigns with respect to claims for natural resources damages as a result of the release of hazardous substances or constituents or radioactive materials at or from the Site or areas in the vicinity of the Site; provided, however, that upon Respondents' completion of the Remedial Investigation and the Department's determination that a Feasibility Study will not be required, Respondents may seek modification of this Order to eliminate this paragraph; and

(D) the Department's right to bring any action or proceeding against Respondents, their directors, officers, employees, servants, agents, successors and assigns with respect to hazardous substances that may be present at the Site or that may have migrated from the Site.

XXX. This Order shall not be construed to prohibit the Commissioner or his duly authorized representative from exercising any summary abatement powers

XXXI. Respondents shall indemnify and hold the Department, the State of New York, and its representatives and employees harmless from all claims, suits, actions, damages and costs of every name and description arising out of or resulting from the fulfillment or attempted fulfillment of this Order by

Respondents, their directors, officers, employees, servants, agents, heirs, successors or assigns. Respondents do not assume liability for the negligent or intentionally tortious acts of the Department, the State of New York and their representatives or employees.

XXXII. The Effective Date of this Order shall be the date it is signed by the Commissioner (or designee).

XXXIII. If Respondents desire that any provision of this Order be changed, they shall make timely written application to the Commissioner, setting forth reasonable grounds for the relief sought. A copy of such written application shall be delivered or mailed as noted in paragraph XXXVI of this Order.

XXXIV. Within 60 days after the Effective date of this Order, Respondents shall file a declaration of covenants and restrictions with the Orange County Clerk to give all parties who may acquire any interest in the site notice of this Order. The Department will consent to the removal of such declaration upon the fulfillment of the terms of this Order.

XXXV. In the event Respondents propose to convey the whole or any part of their ownership interest in the facility or site, Respondents shall, not fewer than 60 days prior to the proposed conveyance, notify the Department in writing of the identity of the transferee and of the nature and date of the proposed conveyance and shall notify the transferee in writing, with a copy to the Department, of the applicability of this Order.

XXXVI. All communications required by this Order shall be transmitted as follows:

(A) Written communications shall be by United States Postal Service, by private courier service, or hand delivered as follows:

(1) Communication from Respondents shall be made as follows:

(a) Marc Gerstman, Esq.
Deputy Commissioner and General Counsel
New York State Department of Environmental Conservation
50 Wolf Road
Albany, New York 12233-1500

(b) Director, Bureau of Radiation
New York State Department of Environmental Conservation
50 Wolf Road
Albany, New York 12233

(2) Copies of work plans and reports shall be submitted as follows:

(a) five copies to the Director, Bureau of Radiation

(b) two copies to NYSDEC, Region 3, Regional Director

(3) Communication to be made from the Department to the Respondents shall be made as follows:

(a) Mr. James McGovern
Cintichem, Inc.
Long Meadow Road
P.O. Box 816
Tuxedo, New York 10987-0816

(b) John D. Alexander, Esq.
Senior Counsel
Hoffmann-LaRoche, Inc.
340 Kingsland Street
Nutley, NJ 07110-1199

(c) G.S. Peter Bergen
LeBoeuf, Lamb, Leiby & MacRae
520 Madison Avenue
New York, New York 10022

(4) The Department and Respondents respectively reserve the right to designate additional or different addresses for communication or written notice to the other.

(B) Telephone communications from Respondents required pursuant to paragraph V(A)(1)(c) and V(A)(3) shall be made as follows:

(1) telehpone: 1-800-457-7362

(2) telecopy: 1-518-457-1088; or

1-518-457-3978

XXXVII. Respondents, their officers, directors, agents, servants, enployees, successors and assigns shall be bound by this Order.

XXXVIII. The terms hereof shall constitute the complete and entire Order between Respondents and the Department concerning the Site. No terms, conditions, understandings or agreements purporting to modify or vary the terms hereof shall be binding unless made in writing and subscribed by the party to be bound. No informal advice, guidance, suggestions or comments by the Department regarding reports, proposals, plans, specifications, schedules or any other submittals shall be construed as relieving Respondents of their obligations to obtain such formal approvals as may be required by this Order.

Dated: June 6, 1990

Thomas C. Jorling
Commissioner
New York State Department of
Environmental Conservation

By: Thomas C. Jorling

CONSENT BY RESPONDENT

Respondent hereby consents to the issuing and entering of the foregoing Order, waives its right to a hearing herein as provided by law, and agrees to be bound by the provisions, terms and conditions contained herein.

BY: Fredrick S Fuest

TITLE: President, Medi-Physics, Inc.

DATE: May 22, 1990

State of New Jersey)
) ss.:
County of Bergen)

On this 22nd day of May, 1990, before me personally came Fredrick Fuest, to me known, who being duly sworn, did depose and say that he resides in Mahwah New Jersey; that he is the President of Medi-Physics Inc., the corporation described in and which executed the foregoing instrument; that he knew the seal of said corporation; that the seal affixed by the order of the Board of Directors of said corporation, and that he signed his name thereto by like order.

Donna Sherman

Notary Public

DONNA SHERMAN
Notary Public of New Jersey
My Commission Expires March 2, 1994

CONSENT BY RESPONDENT

Respondent hereby consents to the issuing and entering of the foregoing Order, waives its right to a hearing herein as provided by law, and agrees to be bound by the provisions, terms and conditions contained herein.

BY: _____

TITLE: EXECUTIVE VICE PRESIDENT

DATE: MAY 22, 1990

State of ~~New York~~ NEW JERSEY)
) ss.:
County of PASSAIC)

On this 22nd day of MAY, 1990 before be personally came DAVID J GALLAHER, to me known, who being duly sworn, did depose and say that he resides in TUXEDO, NEW YORK; that he is the EXECUTIVE VICE PRESIDENT of CITICHEM, the corporation described in and which executed the foregoing instrument; that he knew the seal of said corporation; that the seal affixed to said instrument was such corporate seal; that it was so affixed by the order of the Board of Directors of said corporation, and that he signed his name thereto by like order.

_____
Notary Public

DONNA SHERMAN
Notary Public of New Jersey
My Commission Expires March 2, 1994

LETTER OF AGREEMENT

This is to confirm the general agreement reached during a September 23, 1987 meeting between the U.S. Nuclear Regulatory Commission staff and two agencies of the State of New York, the Department of Labor and the Department of Environmental Conservation, regarding jurisdiction over activities at the Cintichem, Inc. facility in Tuxedo, New York and the impact of that jurisdiction on inspection and enforcement activities conducted by the respective agencies. As a result of that meeting and previous discussions, the agencies agreed that there was a need to formalize the understanding of NRC and State of New York jurisdiction at the Cintichem site and to establish a procedure for the interaction and coordination between the respective agencies on inspection and enforcement activities.

A. With regard to statutory authority it is understood that:

(1) The NRC has exclusive jurisdiction over the Cintichem research reactor pursuant to 10 CFR Part 50 and NRC License No. R-81;

(2) The possession and use of special nuclear material outside of the research reactor is covered by NRC License No. SNM-639 and is also under the exclusive jurisdiction of the NRC. This jurisdiction extends to any area of the Cintichem site where SNM is possessed or used.

(3) The State of New York, through an agreement between the NRC and the State pursuant to Section 274 of the Atomic Energy Act, has exclusive jurisdiction over the possession and use of byproduct material anywhere on the Cintichem site, exclusive of the reactor; and

(4) Nothing in this Letter of Agreement changes or modifies in any way the statutory jurisdiction of the NRC and the State of New York.

B. Given the aforementioned jurisdictions, the following has been agreed to regarding inspection activities.

(1) Reactor operations authorized under NRC License R-81 will continue to be inspected exclusively by NRC;

(2) The possession and use of byproduct material under New York State License Number 729-0322, such as the production of radiopharmaceuticals where the presence of SNM is not expected, will continue to be inspected exclusively by the State; and

(3) The remaining areas of the Cintichem site, where the use of byproduct material under State license and special nuclear material under NRC License SNM-639 is not physically separable, will be subject to inspection by both the NRC and the State. Each of the three agencies will enforce their respective regulations, as applicable.

C. We further agree that, with respect to situation B.(3) above, the following procedures will govern the activities with regard to onsite inspections:

(1) Each of the three agencies will notify the others of their intent to conduct an inspection at the Cintichem facility;

(2) Each of the three agencies reserves the right to accompany the agency conducting the inspection, on the inspection;

(3) The three agencies will coordinate enforcement actions on a case-by-case basis in order to minimize duplication or inconsistent inspection findings, citations, orders, civil penalties, etc., in areas of dual responsibility. Each of the three agencies reserves the right to pursue further enforcement action if it is required by law or otherwise deemed necessary; and

(4) Copies of licensee responses to enforcement actions by the agency conducting the inspection will be provided to each of the other agencies. The three agencies will make a good faith, best efforts attempt to come to timely agreement as to the acceptability of the licensee's corrective actions. However, the agency conducting the inspection will have final responsibility for the acceptability of the corrective actions. Each agency reserves the right to obtain additional information from the licensee as permitted by law, if required or otherwise deemed necessary by that agency.

FOR THE U. S. NUCLEAR REGULATORY COMMISSION

M R Knapp May 1, 1989

Malcolm R. Knapp, Director Date
Division of Radiation Safety and Safeguards

FOR THE NEW YORK STATE DEPARTMENT OF LABOR

F.J. Bradley 5-11-89

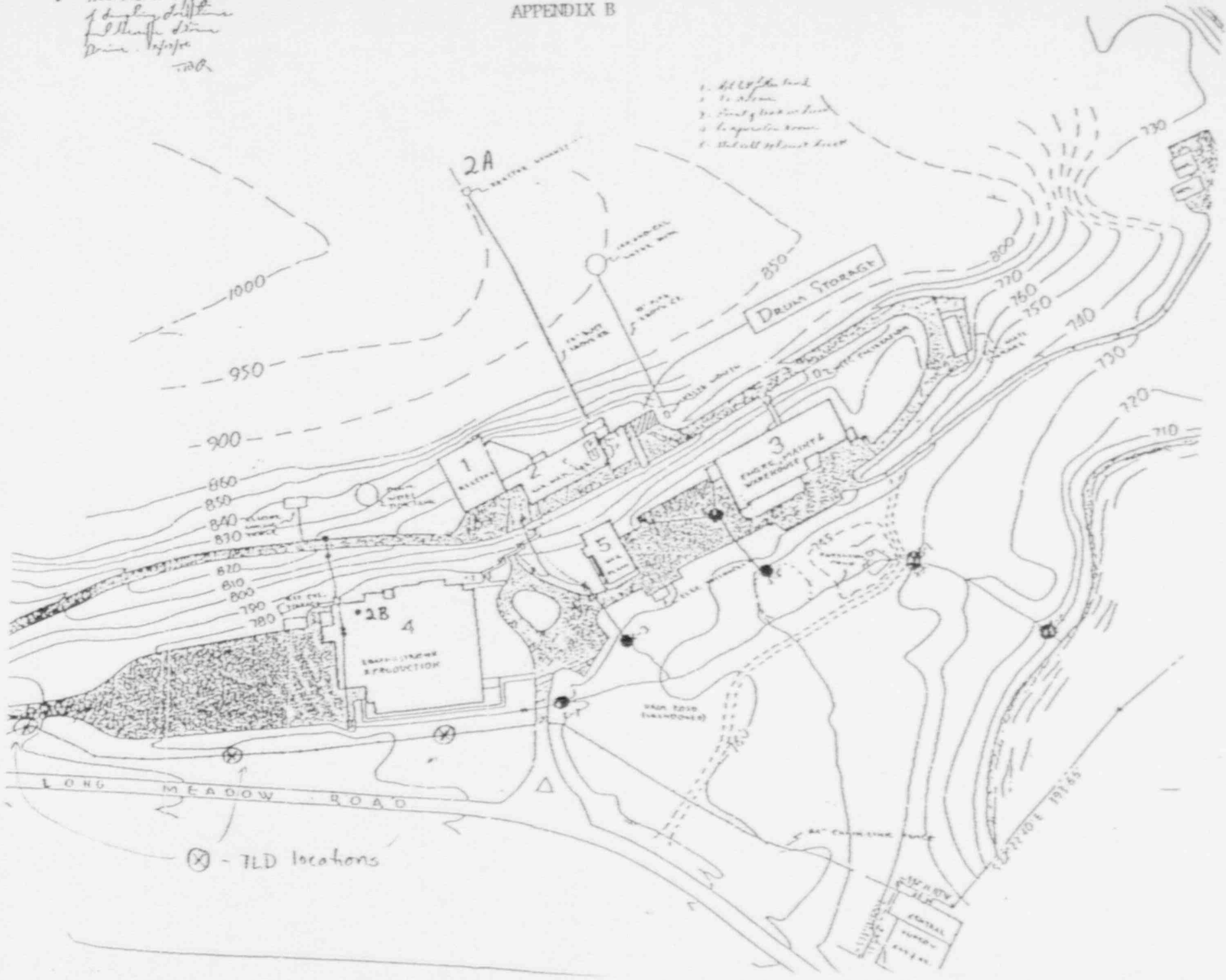
Francis J. Bradley Date
Principal Radiophysicist

FOR THE NEW YORK STATE DEPARTMENT OF
ENVIRONMENTAL CONSERVATION

5-15-89

N. G. Kaul, Director Date
Division of Hazardous Substances
Regulation

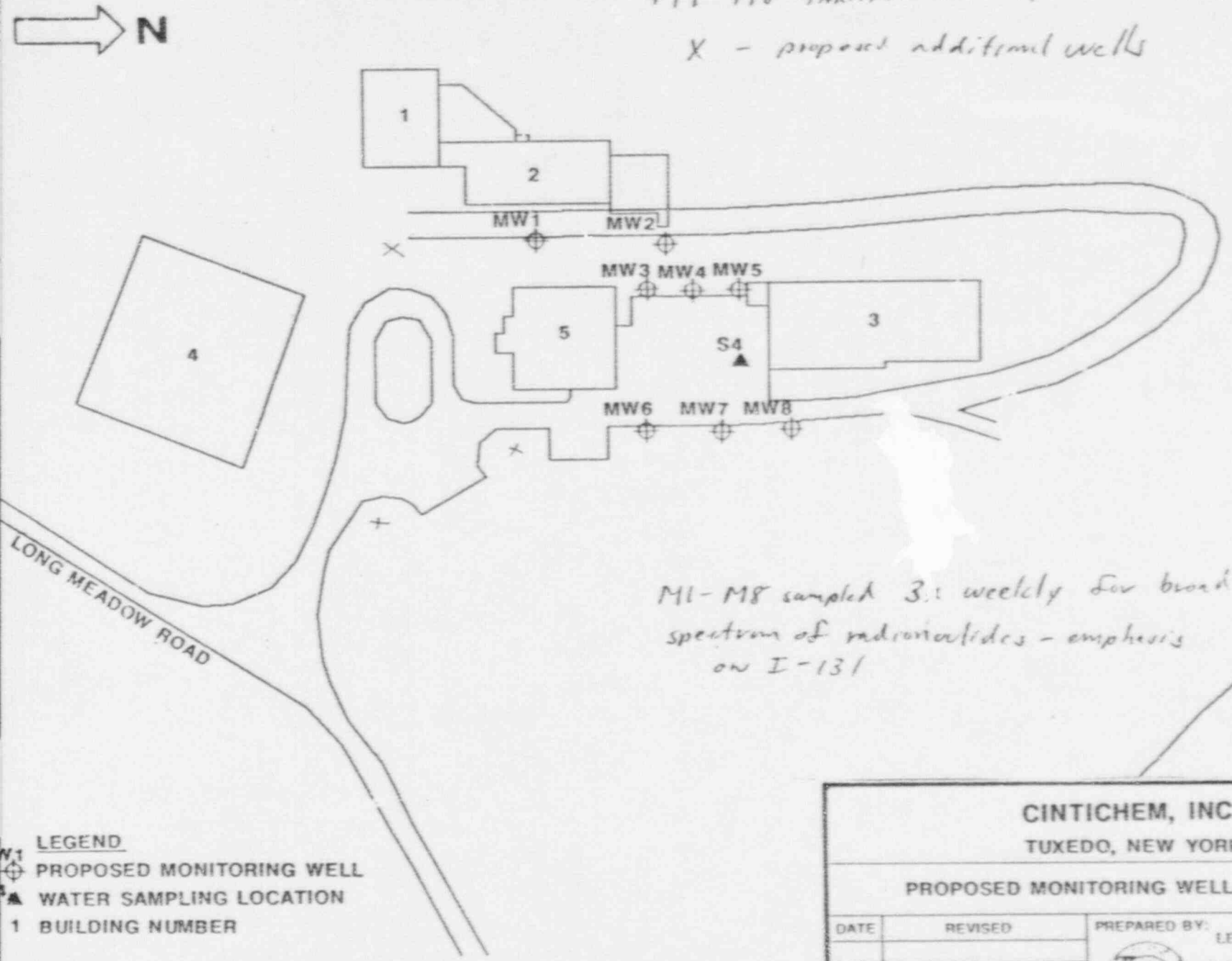
APPENDIX B


2A
DRUM STORAGE
1
2
3
4
5
*2B
LONG MEADOW ROAD
1000
950
900
850
800
770
760
750
740
730
720
710
860
850
840
830
820
810
800
790
780
⊗ - TLD locations

APPENDIX C

M1-M8 indicate currently installed wells

X - proposed additional wells



M1-M8 sampled 3x weekly for broad spectrum of radionuclides - emphasis on I-131

LEGEND

M1 PROPOSED MONITORING WELL

S4 WATER SAMPLING LOCATION

1 BUILDING NUMBER

SOURCE: BASE CONSTRUCTED BY THE OSBORN COMPANY, DRAWING NUMBER 6847-L1, 2/24/58

CINTICHEM, INC.

TUXEDO, NEW YORK

PROPOSED MONITORING WELL LOCATIONS

DATE	REVISED

PREPARED BY:

LEGGETTE, BRASHEARS & GRAHAM, INC.
Professional Ground Water Consultants
225 Franklin Avenue
Midland Park, NJ 07432
201-652-4270

APPENDIX D

IRREVOCABLE LETTER OF CREDIT WORDING

_____, 1990

Commissioner
NEW YORK STATE DEPARTMENT OF
ENVIRONMENTAL CONSERVATION
50 Wolf Road
Albany, New York 12233

Dear Sir or Madam:

We hereby establish our Irrevocable Standby Letter of Credit No. _____ in your favor, at the request and for the account of _____company name and address_____ up to the aggregate amount of ___amount written out___ U.S. Dollars ($ amount), available upon presentation by you of:

(1) Your sight draft, bearing reference to this letter of credit No. _____, and

(2) Your signed statement reading as follows: "I certify that the amount of the draft is payable pursuant to the terms and provisions of the _____, 19__, Consent Order executed by the New York State Department of Environmental Conservation and _____company_____ in order to remedy contamination identified at _____(site and location)_____.

This letter of credit is irrevocable and issued for a period of at least one (1) year. This letter of credit is effective as of ( ) and shall expire on ( ), but such

expiration date shall be automatically extended for a period of ( ) on ( ), unless, at least 120 days before the current expiration date, we notify both you and company by certified mail that we have decided not to extend this letter of credit beyond the current expiration date. In the event you are so notified, any unused portion of the credit shall be available upon presentation of your sight draft for 120 days after the date of receipt by both you and company, as shown on the signed return receipts.

Whenever this letter of credit is drawn on under and in compliance with the terms of this credit, we shall duly honor such draft upon presentation to use, and we shall deposit the amount of the draft directly into the standby trust fund of company or any other NJEP account in accordance with your instructions.

This letter of credit is subject to [insert "the most recent edition of the Uniform Customs and Practice for Documentary Credits, published by the International Chamber of Commerce," or "the Uniform Commercial Code"].

Very truly yours,

[Name of Issuing Bank]

[Signature and Title of Official]

[Date]

APPENDIX E

STANDBY TRUST AGREEMENT WORDING

TRUST AGREEMENT

Trust Agreement, "Agreement", entered into as of (date) by and between company known as "Grantor and issuing institution the "Trustee".

Whereas, the New York State Department of Environmental Conservation "NYSDEC", an agency of the State of New York, has entered into a Consent Order Number _____ with Grantor dated _____, 19__), to cleanup environmental contamination identified at site and location, a copy of which is annexed hereto as Schedule "A", pursuant to which Grantor is obligated to establish a trust fund to assure the availability of funds to secure the performance of Grantor's obligations under that Consent Order.

Whereas, the Grantor, acting through its duly authorized officers, has selected the Trustee to be the trustee under this Agreement, and the Trustee is willing to act as trustee.

Now, therefore, the Grantor and the Trustee agree as follows:

Section 1. Definitions. As used in this Agreement:

(a) The term "Grantor" means company who enters into this Agreement and any successors or assigns of the Grantor.

(b) The term "Trustee" means the Trustee who enters into this Agreement and any successor trustee, who has the authority to act as a trustee and whose trust operations are regulated and examined by a Federal or New York agency. The name, address, and title of the Trustee is:

_____

_____

_____

(c) The term "Commissioner" means the Commissioner of the New York State Department of Environmental Conservation.

(d) The term "Beneficiary" means the New York State Department of Environmental Conservation.

(e) The term "NYSDEC" means the New York State Department of Environmental Conservation.

Section 2. Identification of Facilities and Cost Estimates. This Agreement pertains to the facilities and cost estimates identified on attached Schedule "A".

Section 3. Establishment of Fund. The Grantor and the stee hereby establish a trust fund, the "Fund", for the benefit of NYSDEC. The Grantor and the Trustee intend that no third party have access to the Fund except as herein provided. The Fund is

established initially as consisting of the property, which is acceptable to the Trustee, described in Schedule "B", attached hereto. Such property and any other property subsequently transferred to the Trustee is referred to as the Fund, together with all earnings and profits thereon, less any payments or distributions made by the Trustee pursuant to this Agreement. The Fund shall be held by the Trustee, IN TRUST, as herein provided. The Trustee shall not be responsible nor shall it undertake any responsibility for the amount or adequacy of, nor any duty to collect from the Grantor, any payments necessary to discharge any liabilities of the Grantor established by the NYSDEC.

Section 4. Payment for Performance of Administrative Consent Order. The Trustee shall make payment from the Fund as the NYSDEC Commissioner shall direct, in writing, to provide for the payment of the costs of performing Grantor's obligations under the _____, 19__, Consent Order (annexed hereto as Schedule "A"). The Trustee shall reimburse the Grantor or other persons, as specified by NYSDEC, in such amounts as the NYSDEC shall direct in writing. In addition, the Trustee shall refund to the Grantor such amounts, as the NYSDEC specifies in writing. Upon refund, such funds shall no longer constitute part of the Fund, as defined herein.

Section 5. Payment Comprising the Fund. Payments made to the Trustee for the Fund shall consist of cash or securities acceptable to the Trustee.

Section 6. Trustee Management. The Trustee shall invest and reinvest the principal and income of the Fund and keep the Fund invested as a single fund, without distinction between principal and income, in accordance with general investment policies and guidelines which the Grantor may communicate in writing to the Turstee from time to time, subject, however, to the provisions of this Section. In investing, reinvesting, exchanging, selling and managing the Fund, the Trustee shall discharge his/her duties with respect to the Trust fund solely in the interest of the beneficiary and with the care, skill, prudence and diligence under the circumstances then prevailing which persons of pruduce, acting in like capacity and familiar with such matters, would use in the conduct of an enterprise of a like character and with like aims, except that:

(i) Securities or other obligations of the Grantor, or any other owner or operator of the facilities or any of their affiliates, as defined in the Investment Company Act of 1940, as amended, 15 U.S.C. 80a-2(a), shall not be acquired or held, unless they are securities or other obligations of the Federal or a State government;

(ii) The Trustee is authorized to invest the Fund in time or demand deposits of the Trustee, to the extent insured by an agency of the Federal or State government; and

(iii) The Trustee is authorized to hold case awaiting investment or distribution uninvested for a reasonable time and without liability for the payment of interest thereon

Section 7. Commingling and Investment. The Trustee is expressly authorized in its discretion:

(a) To transfer from time to time any or all of the assets of the Fund to any common, commingled or collective trust fund created by the Trustee in which the Fund is eligible to participate, subject to all of the provisions thereof, to be commingled with the assets of other trusts participating therein; and

(b) To purchase shares in any investment company registered under the Investment Company Act of 1940, 15 U.S.C. 80a-1 et seq., including one which may be created, managed, underwritten, or to which investment advice is rendered or the shares of which are sold by the Trustee. The Trustee may vote such shares in its discretion.

Section 8. Express Powers of the Trustee. Without in any way limiting the powers and discretions conferred upon the Trustee by the other provisions of this Agreement or by law, the Trustee is expressly authorized and empowered:

(a) To sell, exchange, convey, transfer, or otherwise dispose of any property held by it, by public or private sale. No person dealing with the Trustee shall be bound to see to the application of the purchase money or to inquire into the validity or expedience of any such sale or other disposition;

(b) To make, execute, acknowledge and deliver any and all documents of transfer and conveyance and any and all other instruments that may be necessary or appropriate to carry out the powers herein granted;

(c) To register any securities held in the Fund in its own name or in the name of a nominee and to hold any security in bearer form or in book entry, or to combine certificates representing such securities with certificates of the same issue held by the Trustee in other fiduciary capacities, or to deposit or arrange for the deposit of such securities in a qualified central depository even though, when so deposited, such securities may be merged and held in bulk in the name of the nominee of such depository and with other securities deposited therein by another person or to deposit or arrange for the deposit of any securities issued by the United States Government or any agency or instrumentality thereof, with a Federal Reserve bank, but the books and records of the Trustee shall at all time show that all securities are part of the Fund;

(d) To deposit any cash in the Fund in interest-bearing accounts maintained or savings certificates issued by t.e Trustee, i.: its separate corporate capacity, or in any other banking institution affiliated with the Trustee, to the extent insured by an ag-ncy of the Federal or State government; and

(e) To compromise or otherwise adjust all claims in favor of or against the Fund.

Section 9. Taxes and Expenses. All taxes of any kind that may be assessed or levied against or in respect to the Fund and all brokerage commissions incurred by the Fund shall be paid from the Fund. All other expenses incurred by the Trustee in connection with the administration of this Trust, including fees for legal services rendered to the Trustee, the compensation of the Trustee to the extent not paid directly by the Grantor and all other proper charges and disbursements of the Trustee shall be paid from the Fund.

Section 10. Annual Valuation. The Trustee shall annually, at least 30 calendar days prior to the anniversary date of establishment of the Fund, furnish to the Grantor and to the NYSDEC a statement confirming the value of the Trust. Any securities in the fund shall be valued at market value as of no more than 60 calendar days prior to the anniversary date of establishment of the Fund. The failure of the Grantor to object in writing to the Trustee within 90 calendar days after the

statement has been furnished to the Grantor and the NYSDEC shall constitute a conclusively binding assent by the Grantor, barring the Grantor from asserting any claim or liability against the Trustee with respect to matters disclosed in the statement.

Section 11. Advice of Counsel. The Trustee may from time to time consult with counsel, who may be counsel to the Grantor, with respect to any questions arising as to the construction of this Agreement of any action to be taken hereunder. The Trustee shall be fully protected, to the extent permitted by law, in acting upon the advice of counsel.

Section 12. Trustee Compensation. The Trustee shall be entitled to reasonable compensation for its services, as agreed upon in writing from time to time with the Grantor.

Section 13. Successor Trustee. The Trustee may resign or the Grantor may replace the Trustee, but such resignation or replacement shall not be effective until the Grantor has appointed a successor and this successor accepts the appointment. The successor trustee shall have the same powers and duties as those conferred upon the Trustee hereunder. Upon the successor trustee's acceptance of the appointment, the Trustee shall assign, transfer and pay over to the successor trustee the funds and properties then consituting the Fund. If for any reason the Grantor cannot or does not act in the event of the resignation of the Trustee, the Trustee may apply to a court of competent

jurisdiction for the appointment of a successor trustee or for instructions. The successor trustee shall specify the date on which it assumes administration of the trust in writing sent to the Grantor, the NYSDEC and the present Trustee by certified mail 10 calendar days before such change becomes effective. Any expenses incurred by the Trustee as a result fo any of the acts contemplated by this Section shall be paid as provided in Section 9.

Section 14. Instructions to the Trustee. All orders, requests and instructions by the Grantor to the Trustee shall be in writing, signed by such persons as are designated in the attached Schedule "C". The Trustee shall be fully protected in acting without inquiry in accordance with the Grantor's orders, requests and instructions. All orders, requests, and instructions by the NYSDEC to the Trustee shall be in writing, signed by the NYSDEC Commissioner or his designee and the Trustee shall act and shall be fully protected in acting in accordance with such orders, request and instructions. The Trustee shall have the right to assume, in the absence of written notice to the contrary, that no event consitituting a change or a termination of the authority of any person to act on behalf of the Grantor or NYSDEC hereunder has occurred. The Trustee shall have no duty to act in the absence of such orders, request and instructions from the Grantor and/or NYSDEC, except as provided herein.

Section 15. Amendment of Agreement. This Agreement may be amdended by an instrument in writing executed by the Grantor, the Trustee and the NYSDEC or by the Trustee and the NYSDEC if the Grantor ceases to exist.

Section 16. Irrevocability and Termination. Subject to the right of the parties to amend this Agreement, as provided in Section 15, this Trust shall be irrevocable and shall continue until terminated at the written agreement of the Grantor, Trustee, and the NYSDEC or of the Trustee and the NYSDEC, if the Grantor ceases to exist. Upon termination of the Trust, all remaining trust property, less final trust administration expenses, shall be delivered to the Grantor.

Section 17. Immunity and Indeminifcation. The Trustee shall not incur personal liability of any nature in connection with any act or omission, made in good faith, in the administration of this Trust or in carrying out any directions by the Grantor or the NYSDEC issued in accordance with this Agreement. The Trustee shall be indemnified and saved harmless by the Grantor or the Fund, or both, from and against any personal liability to which the Trustee may be subjected by reason of any act or conduct in its official capacity, including all expenses reasonably incurred in its defense in the event the Grantor fails to provide such defense.

Section 18. Choice of Law. This Agreement shall be administered, constructed and enforced according to the laws of the State of New York.

Section 19. Interpretation. As used in this Agreement, words in the singular include the plural and words in the plural include the singular. The description headings for each Section of this Agreement shall not affect the interpretation or the legal efficacy of this Agreement.

In Witness Whereof the parties have caused this Agreement to be executed by their respective officers, duly authorized, and their corporate seals to be hereunto affixed and attested, as of the date first above written:

_____
(Signature of Grantor/Title)

ATTEST:

_____
[Title/Seal]

_____
(Signature of Trustee)

ATTEST:

_____
[Title/Seal]

SCHEDULE A

Instructions to the Grantor:

Include here a copy of the Consent Order.

SCHEDULE B

Instructions to the Grantor:

Include here the intial amount of money the Consent Order requires you to deposit in the irrevocable standy trust fund.

$ _____ in cash

$ _____ in securities

SCHEDULE C

Instructions to the Grantor:

Include here the required information of your designee for communication with the Trustee.

individual's name, title

company

APPENDIX F

CERTIFICATION OF ACKNOWLEDGEMENT

CERTIFICATION OF ACKNOWLEDGEMENT

State of

County of

On this ____ day of _____, 19__, before me personally came ____name____ to me known, who being by me duly sworn, did depose and say that she/he resides at _____ _____, that she/he is ____(title)____ of ____company____, the corporation described in and which executed the Trust Agreement pursuant to Consent Order Number ___ entered into by ____company____ on _____, 19__; that she/he knows the seal of said corporation; that the seal affixed to such instruments is such corporate seal; that it was so affixed by order of the Board of Directors of said corporation, and that she/he signed her/his name thereto by like order.

_____
(Notary Public)

review and comment on the proposed outline for the final report.

Dated at Rockville, Maryland, this 3d day of January, 1991.

For the U.S. Nuclear Regulatory Commission.

F. Eltawila,

Chief, Accident Evaluation Branch, Division of Systems Research, Office of Nuclear Regulatory Research.

[FR Doc. 91-617 Filed 1-11-91; 8:45 am]

BILLING CODE 7590-01-M

[Docket No. 50-54]

Cintichem, Incorporated Proposed Issuance of Orders Authorizing Disposition of Component Parts and Terminating Facility License

The U.S. Nuclear Regulatory Commission (the Commission) is considering issuance of Orders authorizing Cintichem, Incorporated (the licensee) to dismantle the reactor facility and dispose of the component parts, and termination of Facility License No. R-87, in accordance with the licensee's application dated October 19, 1990.

The first of these Orders would be issued following the Commission's review and approval of the licensee's detailed plan for decontamination of the facility and disposal of the radioactive components, or some alternate disposition plan for the facility. This Order would authorize implementation of the approved plan. Following completion of the authorized activities and verification by the Commission that acceptable radioactive contamination levels have been achieved, the Commission would issue a second Order terminating the facility license and any further NRC jurisdiction over the facility. Prior to issuance of each Order, the Commissioin will have made the findings required by the Atomic Energy Act of 1954, as amended (the Act), and the Commission's regulations.

By February 15, 1991, the licensee may file a request for a hearing with respect to issuance of the subject Orders and any person whose interest may be affected by this proceeding and who wishes to participate as a party in the proceeding must file a written petition for leave to intervene. Requests for a hearing and petitions for leave to intervene shall be filed in accordance with the Commission's "Rules and Practice for Domestic Licensing Proceedings" in 10 CFR part 2. Interested persons should consult a current copy of 10 CFR 2.714 which is available at the Commission's Public Document room, the Gelman Building, 2120 L Street NW., Washington, DC 20555. If a request for a hearing or petition for leave to intervene is filed by the above date, the Commission or an Atomic Safety and Licensing Board, designated by the Commission or by the Chairman of the Atomic Safety and Licensing Board Panel, will rule on the request and/or petition and the Secretary or the designated Atomic Safety and Licensing Board will issue a notice of hearing or an appropriate order.

As required by 10 CFR 2.714, a petition for leave to intervene shall set forth with particularity the interest of the petitioner in the proceeding, and how that interest may be affected by the results of the proceeding. The petition should specifically explain the reasons why intervention should be permitted with particular reference to the following factors: (1) The nature of the petitioner's right under the Act to be made a party to the proceeding; (2) the nature and extent of the petitioner's property, financial, or other interest in the proceeding; and (3) the possible effect of any order which may be entered in the proceeding on the petitioner's interest. The petition should also identify the specific aspect(s) of the subject matter of the proceeding as to which petitioner wishes to intervene. Any person who has filed a petitition for leave to intervene or who has been admitted as a party may amend the petition without requesting leave of the Board up to fifteen (15) days prior to the first prehearing conference scheduled in the proceeding, but such an amended petition must satisfy the specificity requirements described above.

Not later than fifteen (15) days prior to the first prehearing conference sheduled in the proceeding, a petitioner shall file a supplement to the petition to intervene which must include a list of the contentions which are sought to be litigated in the matter. Each contention must consist of a specific statement of the issue of law or fact to be raised or controverted. In addition, the petitioner shall provide a brief explanation of the basis of the contention and a concise statement of the alleged facts or expert opinion which support the contention and on which the petitioner intends to rely in proving the contention at the hearing. The petitioner must also provide references to those specific sources and documents of which the petitioner is aware and on which the petitioner intends to rely to establish those facts or expert opinion. Petitioner must provide sufficient information to show that a genuine dispute exists with the applicant on a material issue of law or fact. Contentions shall be limited to matters within the scope of the amendments under consideration. The contention must be one which, if proven, would entitle the petitioner to relief. A petitioner who fails to file such as supplement which satisfies these requirements with respect to at least one contention will not be permitted to participate as a party.

Those permitted to intervene become parties to the proceeding, subject to any limitations in the order granting leave to intervene, and have the opportunity to participate fully in the conduct of the hearing, including the opportunity to present evidence and cross-examine witnesses.

A request for a hearing or a petition for leave to intervene must be filed with the Secretary of the Commission, U.S. Nuclear Regulatory Commission, Washington, DC 20555, Attention: Docketing and Service Branch, or may be delivered to the Commission's Public Document room, the Gelman Building, 2120 L Street NW., Washington, DC by the above date. Where petitions are filed during the last ten (10) days of the notice period, it is requested that the petitioner promptly so inform the Commission by a toll-free telephone call to Western Union at 1-(800) 325-6000 (in Missouri 1-(800) 342-6700). The Western Union operator should be given Datagram Identification Number 3737 and the following message address to Seymour H. Weiss: Petitioner's name and telephone number; date petition was mailed; Cintichem, Incorporated, and publication date and page number of this Federal Register notice. A copy of the petition should also be sent to the Office of the General Counsel, U.S. Nuclear Regulatory Commission, Washington, DC 20555, and to Mr. Phillip Yachmetz, Senior Counsel, Hoffman-LaRoche, 340 Kingsland Avenue, Building 85, Nutley, New Jersey 07110-1199, attorney for licensee.

Nontimely filings of petitions for leave to intervene, amended petitions, supplemental petitions and/or requests for hearing will not be entertained absent a determination by the Commission, the presiding officer or the Atomic Safety and Licensing Board that the petition and/or request should be granted based upon a balancing of the factors specified in 10 CFR 2.714(a)(1)(i)-(v) and 2.714(d).

For further details with respect to this action, see the licensee's application dated October 19, 1990, which is available for public inspection at the Commission's Public Document room, the Gelman Building, 2120 L Street NW., Washington, DC 20555.

Dated at Rockville, Maryland, this 4th day of January 1991.

For the Nuclear Regulatory Commission.

Seymour H. Weiss,

Director, Non-Power Reactor, Decommissioning and Environmental Project Directorate Division of Reactor Projects—III, IV, V and Special Projects, Office of Nuclear Reactor Regulation.

[FR Doc 91-815 Filed 1-11-91; 8:45 am]

BILLING CODE 7590-01-M

[Docket No. 50-213]

Connecticut Yankee Atomic Power Co.; Issuance of Amendment to Facility Operating License

The U.S. Nuclear Regulatory Commission (Commission) has issued Amendment No. 134 to Facility Operating License No. DPR-61 issued to Connecticut Yankee Atomic Power Company, which revised the Technical Specifications for opertion of the Haddam Neck Plant located in Middlesex County, Connecticut. The amendment is effective as of the date of issuance.

The amendment modified the Technical Specifications to establish a new Technical Specification 3/4.4.12, "Failed Fuel Rods," with a limit of 160 failed fuel rods during operation of Cycles 16 and 17. The proposed limit of 160 failed fuel rods is consistent with the dose equivalent Iodine limit of Microcurie/gm in the Technical Specifications.

The application for the amendment complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act), and the Commission's rules and regulations. The Commission has made appropriate findings as required by the Act and the Commission's rules and regulations in 10 CFR chapter I, which are set forth in the license amendment.

Notice of Consideration of Issuance of Amendment and Opportunity for Hearing in connection with this action was published in the **Federal Register** on July 23, 1990 (55 FR 29926) corrected July 31, 1990 (55 FR 31116). No request for a hearing or petition for leave to intervene was filed following this notice.

The Commission has prepared an Environmental Assessment related to the action and has determined not to prepare an environmental impact statement. Based upon the environmental assessment, the Commission has concluded that the issuance of this amendment will not have a significant effect on the quality of the human environment.

For further details with respect to the action see (1) the application for amendment dated June 25, 1990, as supplemented July 19, 1990, (2) Amendment No. 134 to License No. DPR-61, (3) the Commission's related Safety Evaluation, and (4) the Commission's Environmental Assessment. All of these items are available for public inspection at the Commission's Public Document Room, the Gelman Building, 2120 L Street NW., Washington, DC and at the Russell Library, 123 Broad Street, Middletown, Connecticut. A copy of items (2), (3) and (4) may be obtained upon request addressed to the U.S. Nuclear Regulatory Commission, Washington, DC 20555, Attention: Director, Division of Reactor Projects—I/II.

Dated at Rockville, Maryland this 4th day of January 1991.

For the Nuclear Regulatory Commission.

Alan B. Wang,

Project Manager, Project Directorate I-4, Division of Reactor Projects—I/II, Office of Nuclear Reactor Regulation.

[FR Doc. 91-814 Filed 1-11-91; 8:45 am]

BILLING CODE 7590-01-M

[Docket No. 50-219]

GPU Nuclear Corporation; Issuance of Amendment to Facility Operating License

The U.S. Nuclear Regulatory Commission (Commission) has issued Amendment No. 143 to Provisional Operating License No. DPR-16 issued to GPU Nuclear Corporation (GPUN, the licensee), which revised the license for the operation of the Oyster Creek Nuclear Generating Station located in Ocean County, New Jersey. The amendment is effective as of the date of issuance.

The amendment revises Provisional Operating License No. DPR-16, License Condition 2.C.(7) to accommodate implementation of a 21 month operating cycle with a 3 month outage, or a 24 month plant refueling cycle for the core spray spargers surveillance intervals. License Condition 2.C.(7) requires that inspections of all accessible surfaces and welds of both core spray spargers and repair assemblies be performed. The remainder of the application will be acted upon at a later date.

The application for the amendment complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act), and the Commission's rules and regulations. The Commission has made appropriate findings as required by the Act and the Commission's rules and regulations in 10 CFR chapter I, which are set forth in the license amendment.

Notice of Consideration of Issuance of Amendment and Opportunity for Hearing in connection with this action was published in the **Federal Register** on October 18, 1990 (55 FR 42294). No request for a hearing or petition for leave to intervene was filed following this notice.

The Commission has prepared an Environmental Assessment related to the action and has determined not to prepare an environmental impact statement. Based upon the environmental assessment, the Commissioin has concluded that the issuance of this amendment will not have a significant effect on the quality of the human environment.

For further details with respect to the action see (1) The application for amendment dated September 21, 1990, (2) Amendment No. 143 to License No. DPR-16, (3) the Commission's related Safety Evaluation, and (4) the Commission's Environmental Assessment. All of these items are available for public inspection at the Commission's Public Document Room, the Gelman Building, 2120 L Street NW., Washington, DC and at the Ocean County Library, Reference Department, 101 Washington Street, Toms River, New Jersey 08753. A copy of items (2), (3) and (4) may be obtained upon request addressed to the U.S. Nuclear Regulatory Commission, Washington, DC 20555, Attention: Director, Division of Reactor Projects-I/II.

Dated at Rockville, Maryland this 27th day of December 1990.

For the Nuclear Regulatory Commission.

Alexander W. Dromerick,

Senior Project Manager, Project Directorate I-4, Division of Reactor Projects—I/II, Office of Nuclear Reactor Regulation.

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BILLING CODE 7590-01-M

[Docket Nos. 50-259, 50-260, 50-296]

Tennessee Valley Authority (Browns Ferry Nuclear Plant Units 1, 2 and 3), Exemption

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The Tennessee Valley Authority (TVA or the licensee) is the holder of Operating License Nos. DPR-33, DPR-52 and DPR-68 which authorizes operation of the Browns Ferry Nuclear Plant, Units 1, 2 and 3, respectively. These licenses provide, among other things, that Browns Ferry (BFN), is subject to all rules, regulations, and Orders of the Commission now or hereafter in effect. BFN, Units 1, 2 and 3 are boiling water