

Georgia Institute of Technology

SCHOOL OF NUCLEAR ENGINEERING AND HEALTH PHYSICS

ATLANTA, GEORGIA 30332

BAMAY LI PI: OI

(404) 894-3800

NEELY NUCLEAR RESEARCH CENTER

May 25, 1984

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Mr. David M. Verrelli, Chief Reactor Projects Branch U.S. Nuclear Regulatory Commission, Region II 101 Marietta Street, N.W. Atlanta, Georgia 30303

Subject: Inspection Report No. 50-276/84-02

Dear Mr. Verrelli:

This letter is my response to the referenced inspection of the Georgia Tech AGN-201 reactor on April 11-12, 1984.

Enclosed is a copy of the Dismantling and Disposal Plan for the AGN-201 which I sent to Mr. Cecil O. Thomas of NRC for approval. This plan was reviewed and approved by the Luclear Safeguards Committee of Georgia Tech (see appended letter). Immediately following approval of this plan by NRC, Georgia Tech will proceed to dismantle and dispose of the AGN-201.

Item: The proposed emergency plan has not been appropriately revised to reflect changes in the onsite emergency response organization for the AGN-201.

The revised emergency procedures for the AGN-201 are appended. The telephone numbers of the emergency director and all support organizations are now available in the Nuclear Engineering Program Office.

Item: No radiological exercise has been conducted since September 9, 1980 when Grady Memorial Hospital participated with the licensee in a drill involving a simulated personnel contamination problem.

An emergency drill involving personnel contamination problem is being planned for the summer of 1984 in conjunction with Grady Hospital.

Item: Update agreement with Grady Hospital and provide in emergency plan for biennial review and periodic update.

8407060004 840612 PDR ADOCK 05000276 0 PDR The agreement with Grady Hospital will be updated this summer. A review of the emergency plan adequacy will be conducted after the emergency drill.

I hope that you will find our answers to the questions raised in the referenced report satisfactory. Should you need additional clarification or information please let me know.

Sincerely yours,

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Ratib A. Karam Interim Director

RAK/jlr

pc: President Pettit Dr. T.E. Stelson Dr. J. Spurlock Dr. J. Brighton Dr. J. Kallfelz Nuclear Safeguards Committee

Enclosures: As stated



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Georgia Institute of Technology

SCHOOL OF NUCLEAR ENGINEERING AND HEALTH PHYSICS ATLANTA, GEORGIA 30332

NEELY NUCLEAR RESEARCH CENTER

(404) 894-3600

May 25, 1984

Mr. Cecil O. Thomas, Chief Standardization Special Project Branch Nuclear Regulatory Commission Washington, D.C. 20555

Dear Mr. Thomas:

RE: DOCKET #50-276

The Georgia Institute of Technology holds License #R-111 to operate an AGN-201 training reactor on its campus at Atlanta, Georgia. The continued use of this reactor in the Institute programs is no longer justified, so the decision has been made to shut down, decommission, and dispose of the reactor. Some attempts have been made to locate another possible user to whom the reactor might be transferred, but up to this time no likely candidate has been identified.

The decision of the Institute is to remove all components of the reactor which contain special nuclear materials, and to return this fuel to its owner, the U.S. Department of Energy. The purpose of this letter is to inform NRC of our plan.

The reactor may still be in operable condition, but has not been operated since 1979. It contains all of the U-235 fuel of the core, and the fueled control rods. All control instrumentation is connected.

Available records show that the AGN-201 was operated at Georgia Tech for a total of 683.75 hours. Assuming that all operations were performed at a power level of 100 milliwatts the total energy generated is 68.4 watt-hours. The total radioactivity of fission products in the fuel is estimated to be 0.03 µCi per gram which is about two orders of magnitude less than the natural radioactivity in U-235.

We plan to remove the fuel from the reactor following the procedures outlined in the Dismantling Plan, package it in approved containers (to be specified by DOE representatives at ORNL, Mr. William Pryor, in accordance with NRC and DOT requirements), and move it to the storage vault of the GTRR, Georgia Tech Research Reactor.

After the fuel has been removed, the Institute will perform a comprehensive radiation survey, will transmit the results to NRC, and will ultimately request termination of license #R-111 and residual reactor hardware and facilities. The Ra-Be neutron source will be retained.

The enclosed Dismantling Plan discusses in detail the procedures to be used, and the precautions to be employed to protect the general public. During the defueling of the reactor, the Institute will utilize the services of a re-licensed AGN-201 senior operator, Dr. J. Narl Davidson of Georgia Tech.

Review of the license #R-111 and Technical Specifications documentation reveals no requirement for an amendment to remove fuel from the Georgia Tech AGN reactor. Furthermore, review by the Georgia Tech Nuclear Safeguards Committee concludes that removal of the fuel is consistent with the Technical Specifications and that it does not constitute an unreviewed safety question.

Sincerely yours,

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R.A. Karam Interim Director Nuclear Research Center

RAK/jlr

pc: President Pettit Dr. T.E. Stelson Dr. J. Spurlock Nuclear Safeguards Committee

DISMANTLING AND DISPOSAL PLAN

I. Introduction

The Georgia Institute of Technology currently possesses an AGN-201 Training Nuclear Reactor under License No. R-111 (Docket No. 50-276). This facility is being defueled in preparation for ultimate disposal of the entire reactor. However, only the fuel will be removed and relocated at this time. To permit the transfer of the fuel, this document provides for the dismantling of the component parts and disposal of the fuel as prescribed by the NRC Regulatory Guide 1.86, "Termination of Operating Licenses of Nuclear Reactors."

The procedure for disassembly will be to remove the reactor control rods, the Ra-Be startup source and then the separate bections of the core assembly. The Ra-Be source will be placed in the source container (a Pb pig). The fission plate, fuel sections of the control rods and fuel assemblies (polyethylene discs) will be separated into two, approximately equal amounts (according to U-235 content), wrapped in polyethylene bags, and placed in NRC and DOT approved shipping containers for storage. After all fuel and the startup neutron source are removed, the electrical connections for the control rod drives and other instrumentation will be disconnected. All components and areas will be checked for contamination and decontaminated where required.

The fuel will be temporarily stored in the GTRR vault. When all approvals are received the fuel will be shipped off-site to DOE, Oak Ridge, Tennessee in accordance with all Federal and State Regulations. All used filter papers, wiping papers and rage, and gloves will be disposed of as rad-waste, according to the Georgia Tech and other applicable regulations. All protective clothing will be handled according to Georgia Tech procedures. No effluents will be disposed of through cold-drains or normal waste procedures until shown to be within applicable limits. During the entire operation, great care will be taken to protect both the operations personnel and the general public from exposure to ionizing radiations, and to keep any necessary exposure as low as reasonably practicable.

II. Dismantling Procedure

A. General Procedures

For the accomplishment of the defueling operations, Dr. R.A. Karam will be present at all times. A licensed operator will be present as a consultant. In addition the Institute Radiation Safety Officer, Mr. Robert Boyd, will monitor the operations for radiological safety aspects. All personnel involved in the operation will receive instructions of the operation at a pre-defueling meeting. A radiation work permit

will be issued for the job.

B. Hazard Evaluation

1. <u>Nuclear Safety</u>. A nuclear excursion would be the most serious type of accident that could occur during the disassembly and removal of the reactor core. However, it is one of the least likely of all credible accidents. To obtain criticality, the complete core assembly, including all fuel discs, the two fueled safety rods and the fueled coarse control rod must be assembled within a nearly optimum reflector.

Nuclear Safety will be maintained by first removing the fuel from safety and control rods and storing it in the shipping container. The combined fuel content of the rods is approximately 45 grams of U-235.

The core itself contains approximately 620 grams of U-235 and, with the rods removed, has a negative reactivity in excess of three percent (3%) in 4 k/k.

The core disassembly will be done in the reactor room area. As the fuel discs are removed, they will be placed on a workbench covered with clean protective paper. Discs from the two halves of the core will be stored in separate shipping containers, approximately 350g U-235 per container.

A portable fast neutron survey meter will be in continuous operation during the disassembly of the core as an indicator of neutron multiplication. However, a detailed critical mass determination by neutron multiplication measurements will not be performed since the maximum reactivity increase that can be achieved by repositioning the fuel discs is less than the worth of the control rods.

As a further precaution, a temporary cadmium safety rod will be inserted into the core tank glory hole tube prior to disassembly of the core. This cadmium rod will remain in place during the disassembly of the top half of the core. The rod will be removed then by pushing it out as the glory hole liner tube is removed.

The removal and disassembly of the reactor core will be performed under the supervision of Dr. R.A. Karam. Whenever left unattended, the reactor facility will be locked, with access controlled by Dr. R.A. Karam.

2. <u>Radiation Safety</u>. Radioactive contamination could arise from three sources: the reactor core, activation products outside the core and the Ra-Be startup source. Fixed surface contamination produces external radiation exposures; airborne contamination adds an inhalation nazard. Thorough surveys of the reactor and core components and comprehensive monitoring of air and personnel during disassembly will prevent accidental and/or excessive exposures to contamination hazards. Such monitoring will be supervised by the Institute's Radiation Safety Officer, and/or the health physics technologist.

Respiratory protective equipment and coveralls will be worn by all persons in the reactor room when the core tank is initially opened, and until the absence of airborne contamination has been definitely established.

The 10 mCi Ra-Be startup source will be removed from the reactor after the removal of the safety and control rods. The source will be wipe-tested immediately after removal and stored in a shielded container.

Personal monitoring devices are worn by all individuals entering the AGN reactor room under any condition. This regulation will continue to be strictly enforced during all of the procedures contained in this Dismantling Plan.

3. <u>Mechanical Safety</u>. The most probable type of accident is that which might be called mechanical and may result from either human error or mechanical failure. The probability of human error will be minimized by making adequate preparation for the work (see Section C) and by following a predetermined plan of action (see Section D). The probability of mechanical failure will be minimized by thorough inspection of all equipment in advance.

C. Preparation (Check List)

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- 1. Radiation Protection
 - a. The following instruments will be checked for proper operation, then placed in the reactor room for use.
 - 1. Air sampler
 - 2. Fast neutron survey meter
 - Gamma dose rate survey meter (Cutie Pie or Radector)
 - Contamination survey meter (End-window Geiger Counter)
 - b. The following supplies will be collected and placed in the reactor room:
 - Glass fiber filters and filter holders for air sampling.
 - Whatman filters or Nucon smears for wipe tests.
 - Individual concainers for air sample and wipe test filters.
 - Shielded storage container for storing the Ra-Be startup source.
 - 5. Appropriate breathing apparatus (face

mask) will be worn as required by the Radiation Safety Officer.

- Coveralls, lab coats and gloves.
- 6. 7. Radioactive waste container.
- Cadmium safety rod. 8.

Work Area and Tools 2 .

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- Clear reactor room of extraneous large items and clean the work area with vacuum cleaner. a.
- Collect the following tools and place in b. reactor room:
 - 1. Hand tools (socket and allen wrenches) required for disassembly.
 - Handling tool for removing the Ra-Be 2 . source.
 - Fuel storage and shipping containers. 3.
 - Operating crane for lifting the thermal 4.
 - column, core tank and upper graphite reflector.
- The following items will also be placed in C . the reactor room:
 - Plastic bags or sheeting on which to place control rods and fuel components, 1. and for packaging such components. 2. Labels for dismantled core components.
- D. Procedures

Disassembly

- 1. Removal of the Thermal Tank, Part No. 2-000139.
 - Remove bolts that secure the thermal a . tank assembly to the water tank.
 - Attach lifting frame, T-000458, to b. the flange of the thermal tank with the bolts provided, and hoist carefully from the water tank.

2. Removal of control and safety rod capsules (part No. 2-000184).

- Insert temporary cadmium safety rod a . into glory hole.
- Remove the bottom cover plate b. (2-000169) by loosening and turning

the latching dogs, Part No. 2-000358. (Note: Gasket Part No. 2-000593, should come off with the cover.)

- c. Remove Dash Pot assembly (Part No. 2-000510 shown on 2-000184) by grasping the knurled surface and unscrew by hand (right-hand thread), then lower carefully out of the main frame assembly.
- d. Remove the rod capsule-and-tube assembly by unscrewing (right-hand thread) cap 2-000195, using a 1/2" socket wrench, until detached, and lower carefully out of the control rod main frame assembly.
- e. Remove rod capsule from rod tube by gripping the two tubes by hand and unscrewing. This thread is LEFT HAND; if the other direction is used, the capsule O-ring seal will be opened and the active material will be exposed.
- f. Remove U-fuel from control rods, wipe-test for removable radioactivity wrap in plastic and place in shipping container.
- g. Remove and wipe-test the Ra-Be startup source. Place it in the portable storage container.

3. Core Disassembly

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The entire disassembly of the reactor core will be performed in the presence of Professor R.A. Karam with a minimum of two persons present during each step of the operation. However, the total number of people present will be minimized. The following procedure will be followed in the sequence indicated:

- Start membrane filter air sampler operating in close proximity to reactor core.
- b. The two individuals to be in the reactor room as the core is opened will wear the appropriate face masks and gloves.

c. The upper end plate of the core tank will be removed, with special care being taken of the O-ring gasket.

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- d. After the air sampler has been allowed to run several minutes, the filter will be removed and counted on the low background gamma ray detector. Another filter will be placed in the air sampler and collection of a second sample will started. As soon as the absence of an airborne contamination hazard is established, the face masks will be dispensed with.
- e. Lifting lugs will be screwed into the threaded sockets in the upper main reflector and this reflector will then be lifted out of the core tank.
- f. As each piece of the core assembly is removed, a representative area of approximately 100 cm will be wiped with a filter paper or Nucon smear. The smears will be retained for later analysis to determine quantities of removable contamination throughout the core. Each core component will then be completely wiped with "wiping tissues" and these wipings will be disposed of as radioactive wastes.
- g. The fuel discs will be removed one at a time, beginning with the tip of the core and working downward through disc No. 4. Each disc must be removed carefully to avoid jostling, and thereby shifting, the remaining discs. NOTE: Fuel from the top half of the core will be placed in one of the two shipping casks provided.
- h. After removal of all fuel discs in the upper half of the core, the peripheral reflector sections will be inspected for possible removal.
- The temporary Cd control rod will be removed, followed by removal of the Glory Hole tube.
- j. The core tank will now be removed from the reactor and lowered to floor

level.

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- k. The lower main reflector, together with fuel discs 1, 2, and 3 and the thermal fuse assembly will now be removed.
- 1. The lower half of the core will be disassembled by compressing the support spring recessed in the base of the lower main reflector. The thermal fuse assembly will then be exposed above fuel disc No. 2 and may be released by removing the clip ring. The fuel discs from the lower half of the core, and the thermal fuse will be wrapped for placement in the second shipping container.
 - M. All parts, components, etc., will be decontaminated to acceptable levels before the shipping containers are finally closed and secured.
 - n. Following removal of all of the fuel, the reactor reflector components will be reinserted, and the tank system reassembled for future disposition. Based on prior experience, it is expected that the tank system will contain no measurable radioactivity.
 - o. The Ra-Be startup source will be retained and will be stored according to applicable regulations by Georgia Tech.
- III. Criticality and Security Safeguards During Storage of of Fuel Awaiting Shipment
 - A. Storage Location of Fuel and Control Rods

As indicatd above, the fuel and fuel portions of the control and safety rods will be wrapped in polyethylene and placed in the two NRC, and DOT approved shipping containers which will ultimately be used to transport the Special Nuclear Material to Oak Ridge, Tennessee. The containers will be sealed and properly labeled. The containers will be stored in the vault of the GTRR until shipment.

B. Criticality Monitoring

With half of the fuel stored in each of the two shipping containers, inadvertent criticality is impossible. A remote

radiation monitoring instrument exists in the vault.

AGN-201

Emergency Procedures (Extracted from AGN-201 Health Physics Procedures)

Emergency procedures

18.1 General

It is impossible to predict the exact circumstance of an emergency situation in the reactor facility and, therefore, no detailed disaster plan can be outlined. However, lines of responsibility can be drawn and some general rules established to cope with most situations. These rules are based on the following objectives which are listed in the order of their importance or priority.

- A. Prevent injury to Georgia Tech staff and students, and to the general public.
- B. Prevent damage or contamination of facilities and equipment.
- C. Return facilities and equipment to service as rapidly as possible.

A distinction must be made as to whether or not the event occurs during normal working hours. If the staff of the School of Nuclear Engineering or the Nuclear Research Center is present when the emergency arises, decisions based on knowledge of the pertinent conditions can be immediately formulated. If the staff is not present, it is necessary that the person discovering the emergency and/or the Georgia Tech Police Office make proper notifications and prevent all unqualified persons from approaching the area.

18.2 Responsibilities

- A. Emergency Director. The Emergency Director is the director of the Nuclear Research Center. He will be responsible for directing whatever actions are necessary to combat the emergency and will coordinate the activities of the other groups. It is his duty to ensure the safety of Georgia Tech personnel and the public, to notify all appropriate university officials and governmental agencies, and to initiate contact with the Georgia Tech administration related to releases to the public news media.
- B. <u>Health Physics</u>. Members of the staff of the Office of Radiological Safety will be responsible for assessing any radiological hazards which may be involved and advising the Emergency Director concerning control of the hazards. They will provide monitoring for

emergency workers and all personnel and will direct any decontamination operations which may be required. 2

- C. Georgia Tech Police. The Campus Police will be responsible for the routine checking of the facility when Nuclear Engineering staff are not present. In the event of an emergency, this group will notify all appropriate persons on the duty roster and, if necessary, the Atlanta Police and/or Fire Department. they will control access to the area in order to ensure the safety of personnel until the Emergency Director arrives. One Georgia Tech policeman will be assigned to the Emergency Director at all times during the emergency in order to implement the instructions of the Emergency Director with regard to police and fire personnel.
 - D. Atlanta Police Department. The city police will be called in the event of a serious emergency to provide traffic control, prevent injury to spectators, and, if necessary, evacuate all persons from neighboring areas specified by the Emergency Director.
 - Atlanta Fire Department. This group will be called in case a fire is discovered which cannot be brought Ε. under control immediately. They shall respond to the alarm equipped with self-contained breathing apparatus and shall use it if requested by the Emergency Director. No fireman anter the Reactor Control Zone except at the direction of the Emergency Director; however, the firemen shall attempt to extinguish any fire outside of the Reactor Control Zone.

18.3 Duty Roster

The Georgia Tech Police Department will maintain at their headquarters the current duty roster for the emergency staff as contained in this paragraph. In the event of an emergency during off hours, the Police Department will call persons in order in each of the following groups until one person from each group has been notified.

EMERGENCY DIRECTOR

Phone

		Campus	Home
1.	R.A. Karam	3620/3719	455-8031
2.	John Kallfelz	3726	256-3756
3.	G.G. Eichholz	3722	874-8610
4.	R.M. Boyd	3605	284-2658

HEALTH PHYSICS

 R.M. Boyd S.N. Millspaugh Marcia Gerber 	3605/3621 3605/3621 3605/3621	284-2658 938-8092 321-6399
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EMERGENCY CALL

GEORGIA TECH POLICE: 894-2500 or 2501

GRADY MEMORIAL HOSPITAL: 588-4307

Dr. A.G. Yancey: 588-4261 Dr. J.W. Pinkston 588-4252

18.4 Action in the Event of an Emergency

A. <u>General</u>. The action which must be taken to control any emergency will depend on the specific conditions of the emergency and upon whether or not staff members of the Emerson Building are present. In case some hazard will rot permit qualified persons to obtain radiation survey equipment which is normally stored near or within the AGN-201 Reactor Control Zone, supplementary equipment is always available at the Georgia Tech Police Headquarters. Any person, who is not a staff member of the School of Nuclear Engineering, discovering an emergency condition shall not subject himself to a hazard but shall notify a staff nember, if one is present, or the Georgia Tech Police Office, if no staff member is present.

B. Fire on the Premises

(1) During working hours

(A) The person discovering the fire shall extinguish the fire if it is minor and he can do so without endangering himself or others. If radioactivity is involved, Health Physics shall be notified. In case further action is warranted, the person discovering the fire shall activate the building fire alarm signal and cause the campus emergency headquarters to be notified at phone 894-2500/2501. (NOTE: The building fire alarm signal is an internal alarm only. Its sound does NOT notify the Georgia Tech Police Office or the Atlanta Fire Department). (B) The Emergency Director will assume responsibility immediately and assure himself that, if necessary, the Atlanta Fire Department has been notified. He will alert other personnel in the Emerson Building as he deems necessary. He will cause parts of the building which he deems to be endangered to be evacuated. 4

(C) If the Emergency Director determines that a hazard of any type exists, any ventilation system, or any other equipment, he shall shut down all affected operations.

(D) Health Physics shall determine if radiological hazards are involved. If so, they will advise the Emergency Director of any precautions which must be taken by the firemen. They will advise the Emergency Director on methods of combating the fire with a minimum exposure to radiation and contamination the fire with a minimum exposure to radiation of specific areas if hazards and shall recommend the evaculation of specific areas if necessary.

(E) The Georgia Tech Police Staff and the Atlanta Police shall control vehicular and pedestrian traffic in the area in such a manner as to prohibit interference by unauthorized persons.

(F) In responding to the alarm, the Atlanta Fire Department shall be prepared to use their self-contained breathing apparatus, if so directed by the Emergency Director. They will follow the directions of the Emergency Director with regard to minimizing their exposure to radiological hazards.

(2) After working hours

(A) The person discovering the fire shall immediately call the emergency number 894-2503/2501.

(B) The Georgia Tech Police shall proceed to the main entrance of the building, unlock the door, and await the arrival of the Atlanta Fire Department. If the fire is outside of the Reactor Control Zone, the Georgia Tech Police staff member will allow the firemen to fight the fire using their normal procedures. If the fire is within the Reactor Control zone, the Georgia Tech Police shall advise the Atlanta firemen that they are prohibited from entering this zone until the Emergency Director has arrived on the premises and determined that undue hazard to Fire Department personnel does not exist.

- (C) Spread of Radioactive Contamination
 - The person discovering any uncontrolled spread of radioactive contamination shall notify the Emergency Director and Health Physics immediately.

- (2) Health Physics will assay the situation to determine the degree of hazard and will inform the Emergency Director.
- (3) The Emergency Director will direct evacuation of the building or other action based on recommendations by Health Physics. The immediate purpose will be to protect individuals and equipment and to prevent the spread of contaminant. The clean-up of the area will await the termination of the immediate emergency and will be accomplished based on recommendations by Health Physics.

d. <u>Criticality Accident</u>. All personnel, taking care to avoid the source of criticality, will evacuate the building with all possible haste and reassemble at the Nuclear Research Center.

e. Other Emergency Events. In case of other emergency events, all groups will follow the directions of the Emergency Director, who will be kept advised of all information regarding the event.

18.5 Emergency Medical Assistance

CALL: GEORGIA TECH POLICE DEPARTMENT (894-2500)

The primary consideration in an emergency is the prevention of injury and prompt medical assistance to anyone who requires it; the secondary consideration is prevention of damage or salvage of facilities and equipment. Persons discovering anyone who needs emergency medical assistance shall, as soon as possible, notify the Georgia Tech Police Department (894-2500) and stay in communication with the police department until they have all the necessary information. Police personnel, who have been trained to respond to such emergencies, shall proceed at once to the scene of the accident while at the same time the police dispatch office shall notify one of the following:

RADIOLOGICAL SAFETY OFFICER OR THE EMERGENCY ADMINISTRATOR

(See Emergency Notification List on Page 3)

The desired procedure is for the Police Dispatcher to be in communication simultaneously with the Radiological Safety Officer and the police summoned to the emergency. In this manner the police officer can be advised on matters of radiological safety as he approaches the accident.

If it is determined that a person has been exposed to high radiation levels and/or is contaminated with radioactive materials and is in emergency need of prompt professional medical assistance the following actions shall be taken:

- The person shall be administered first aid by the Georgia Tech Police or others as appropriate and prepared for transport to Grady Hospital.
- 2. The Georgia Tech Police shall call the Grady Hospital resident in charge of the Surgical Emergency Clinic (588-4307) and notify him of the extent of the emergency. They will then take the patient to Grady Hospital and/or follow instructions from the Emergency Clinic Team. They will assist the hospital staff as appropriate for the specific emergency.
- The Police Department will stay in radio and telephone communication with the Radiological Safety Officer or the Emergency Director if he is not already on the scene.

The Grady Hospital Disaster Plan includes provisions for handling emergencies involving radiation and radioactive contamination. It is the responsibility of the Georgia Tech Radiological Safety Officer to keep the campus radiation emergency response program current and all persons concerned properly informed.

19. Incidents

19.1 Reporting

All incidents or near incidents involving the exposure of personnel to radioactivity, or the uncontrolled spread of radioactive contamination, or the violation of Health Physics procedures, shall be reported to Health Physics immediately. Health Physics shall determine the extent of follow-up which will be necessary.

19.2 Investigation

If required by the Emergency Director or the Radiological Safety Officer, the Nuclear Safeguards Committee shall investigate an actual or potential incident in order to determine the cause and take whatever action is necessary to prevent a repetition.

19.3 Nuclear Regulatory Commission Notification

Under the provisions of 10 CFR, Part 20, Paragraph 20.402 and 20.403, Georgia Tech is required to notify the Nuclear Regulatory Commission within a specified time period of incidents of sufficient magnitude as defined in the regulations Health Physics Such. determine the need for this notification and make the required report as is necessary. The Nuclear Safeguards Committee shall convene as soon as possible to study the matter.

20. Compliance with Radiation Safety Procedures

20.1 Authority

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All Radiation Safety Procedures are authorized by the Nuclear Safeguards Committee, which is appointed by the President of Georgia Tech. The Procedures are based on applicable Federal Regulations, including Standards for Protection Against Radiation. Compliance by all persons with these procedures is mandatory. All questions concerning interpretation shall be brought to the attention of Health Physics and, if necessary, the Nuclear Safeguards Committee.

20.2 Noncompliance

Health Physics shall continually observe for compliance with these procedures. Wherever an off-standard condition is observed, Health Physics shall immediately institute action to correct the condition. Cases of persons who persist in noncompliance shall be referred to the Nuclear Safeguards Committee for action. This committee is authorized to refuse access to the Reactor Control Zone to any person.



Georgia Institute of Technology ENGINEERING EXPERIMENT STATION Atlanta, Georgia 30332

15 May 1984

Dr. R. A. Karam Director, Neely Nuclear Research Center Georgia Inst. of Technology Atlanta, Georgia 30332

Dear Dr. Karam:

The Nuclear Safeguards Committee has reviewed your Dismantling and Disposal Plan for the AGN-201 training reactor, License #R-111, and finds it an acceptable procedure for removing and storing the core and startup source materials. Please advise me if the committee can be of further service toward decommissioning the AGN-201.

Sincerely,

Dr. James A. Mahaffey Chairman - Nuclear Safeguards Committee

JAM: jd

cc: NSC Members