MAY 31 1984

FCML:PCV
(16075)
030-00462

Allegheny Health, Education and
Research Corporation
ATTN: Mr. John H. Westerman
President
320 East North Avenue
Pittsburgh, PA 15212

Gentlemen:

This is in reference to your March 20, 1984 letter that provides additional information in support of your October 11, 1983 request for licensing action. Unfortunately, we still need certain information before we can take final action on your request.

1. In support of your request to add Dr. Pocheng Cheng as an authorized user, you submitted a copy of his curriculum vitae. However, we need the correct spelling of his name (e.g., his first name has been spelled PHOCHENG and POCHENG) and we need a more detailed description of Dr. Cheng's training and experience.

   a. Please specify the correct spelling of Dr. Cheng's name.

   b. Please describe Dr. Cheng's training and experience using Supplement A of Form 313M, copy enclosed.

2. One of our principal concerns is how you will comply with the requirements in 10 CFR 20.203(c)(6). These requirements apply to areas in which very high radiation levels (i.e., greater than 500 RHM) can exist and are designed to make it virtually impossible for anyone to enter the area and receive an exposure. In Item 4 of our January 19, 1984 letter, we asked you to explain how you would comply with this section of NRC's regulations. Your reply did not demonstrate full compliance with the provisions of 10 CFR 20.203(c)(6).

   a. Most licensees subject to 10 CFR 20.203(c)(6) specify that entrance to the area will be controlled by a door that must be locked in order for the source to come to the "on" position. A locked door prevents inadvertent entry to the area. Please specify how you will prevent inadvertent entry into the area.

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b. You have described a flashing red light that would be turned on when doors have been closed and source can be brought to the "on" position. However, subparagraph (ii) requires that both visible and audible signals be generated to warn both the person entering the room of the hazard and at least one other individual about the failure of the entry control device. Please explain how you will comply with this aspect of the requirements of subparagraph (ii).

c. As indicated previously, you described a red flashing light that would warn that all conditions had been met to bring the source to the "on" position. However, subparagraph (iv) requires that visible and audible signals give personnel some advance warning (e.g., 30 seconds) that the source was about to be brought to the "on" position. Please describe how you will comply with this aspect of the requirements of subparagraph (iv).

d. Subparagraph (iv) implies the need for a mechanism whereby a person in the irradiation room, when warned of the impending use of the source, can prevent the source from being brought to the "on" position. You have mentioned an "emergency scram button" located on the south wall, presumably near one of the two doors to the facility. If a person were injured or disabled in the irradiation facility, the person may not be able to reach the "scram" button within the limited advance warning time. Many licensees subject to 10 CFR 20.203(c)(6) install wiring around the perimeter of the room, such that a pull on the wire is sufficient to prevent operation of the source. Please describe how you will comply with the requirements described above.

e. Although subparagraph (v) requires the use of administrative procedures and devices to assure that the irradiation room is cleared of personnel before each use of the source, you have not described how you will comply with this requirement. Please describe how you will comply with the requirements in subparagraph (v).

f. Subparagraph (vi) requires that physical radiation measurements be made before the first person enters the irradiation facility after each use of the source. Most licensees subject to 10 CFR 20.203(c)(6) have their staff make physical measurements using a portable survey instrument. You have not indicated that your staff will make physical measurements, but have stated that a radiation monitor would "be conspicuously installed so as to indicate to an individual entering this 'High Radiation Area' whether the radiation levels are safe." It is not clear: where this monitor would be located in view of the fact that there are two entrances to the room, that the instrument is sufficiently sensitive to detect a source that remains in the "on" or partially "on" position nor that annual sensitively/threshold checks of the monitor are sufficient to ensure its proper operation.

Please describe in detail how you will comply with the requirements of subparagraph (vi).

g. Subparagraph (vii) requires that the licensee make checks of the entry control devices before the source is used on any day of operation and that the licensee submit an acceptable schedule for more complete periodic tests of the entry control system and warning systems. In Item 4.a. of your letter you have indicated the door interlock system will be tested semiannually and in Item 4.b.vii you indicate that the doors will be checked prior to use on each day of operation. Your minimum frequency for checking the doors is not clear. You have not described the frequency and procedures used to check other aspects of the entry control devices and warning systems (e.g., lights) and, if you continue to rely on a radiation monitor in order to comply with subparagraph (vi), you should check it for proper operation at least before the first use of the unit on each day of use.

Please describe the frequency and procedures to be followed in testing entry control devices and warning systems described in your previous correspondence and in your responses to previous items in this letter.

Please reply in duplicate and refer to Control No. 16075.

As you know from previous discussions and correspondence, we had not made a final decision as to whether to authorize your use of the AECL Eldorado Super G teletherapy unit on License No. 37-01317-02 or on a separate license document. We have decided that, from the Nuclear Regulatory Commission's standpoint, it would be preferable to authorize use of the AECL Eldorado Super G teletherapy unit on a separate document. Concurrent with the issuance of that new license, we would amend License No. 37-01317-02 to delete the authorization to possess the AECL Eldorado Super G unit for storage only. However, because you have asked for other changes to License No. 37-0317-02 (e.g., addition and deletion of users), you will need to pay the $40 amendment fee required by 10 CFR 170.31(7A).

Sincerely,

Patricia C. Vacca
Material Licensing Branch
Division of Fuel Cycle and
Material Safety

Enclosures:
1. 10 CFR Parts 20, 170
2. Form NRC 313M

OFFICE	FCML	FCML					
SURNAME	PCVacca	VLMiller					
DATE	05/31/84	05/31/84					

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