

JAN 16 1997

Docket No. 030-32912

License No. 29-28783-01

Mr. Jeffrey C. Stickler
Director, Customer Support
Frank Barker Associates, Inc.
33 Jacksonville Road
Towaco, New Jersey 07082

SUBJECT: INSPECTION NO. 030-32912/95-001

Dear Mr. Stickler:

This letter refers to your October 25, 1995 correspondence, in response to our September 16, 1995 letter.

In your letter, you deny both violations identified during the July 18, 1995 inspection of the July 13, 1995 incident at York Hospital. With regard to Violation A, you state that personnel of Frank Barker Associates were not responsible for the violation since the hospital physicist failed to follow the manufacturer's procedures when he connected the clamping adapter with bronchial catheter to the wrong channel in the indexer. The installation of the HDR remote afterloading device on July 13, 1995, at York Hospital, is an activity authorized by your license. The NRC license issued to York Hospital only authorizes the use of the HDR for therapy treatment. The licensed activities performed on July 13, 1995 were performed under the supervision and in the physical presence of an individual named on your license. It is the responsibility of the authorized user to ensure that other individuals working under his supervision follow the conditions of your license, including the manufacturer's procedures which were tied to the license by Condition 17. Consequently, the failure of the hospital physicist to follow the manufacturer's procedures remains a violation of your license.

Regarding Violation B, you state that your Radiation Safety Officer (RSO) and hospital personnel exhausted all procedural means to retract the source prior to entering the treatment room. Further, they concluded that it was not reasonable or appropriate to enter the room to survey the HDR unit in order to keep doses as low as reasonably achievable (ALARA) since a survey to determine the precise location of the source would have taken 30 to 40 seconds. In addition, you state that the RSO knew the approximate location of the source (located between the well chamber and the indexer) prior to making the first entry into the treatment room.

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After reviewing your response to the Notice of Violation and the circumstances surrounding the incident, the NRC still concludes that a survey was necessary to determine the location of the source for the following reasons.

1. A physical survey of the catheter to determine the location of the source could be accomplished in significant less time than 30 to 40 seconds and probably less than the 16 seconds spent by the RSO in the treatment room during the first entry. The survey could have been performed with instruments other than hand-held meters to minimize doses. For example, survey meters with external probes attached to a pole or rod would have provided the necessary information.
2. The distance between the chamber and the indexer, combined with the uncertainty of the source location, could have resulted in a significantly higher dose to the RSO when he made the first entry in the treatment room to move the catheter into emergency shield. If the source was located further away from the indexer and closer to the calibration well, the RSO's effective dose would probably have been higher.
3. The inspectors noted in Section 6 of the report that the second entry in the treatment room that secured the source inside the unit was effectively evaluated and performed *once the location of the source was identified*.

NRC certainly recognizes that personnel present at the incident understood the importance to maintain doses ALARA during the incident. However, without knowing the location of the source in the catheter, actions taken by personnel to recover the source may result in doses greater than those received by performing a survey prior to taking action.

In your letter, you discussed a number of actions you have taken and lessons learned as a result of the incident. Thank you for informing us of the corrective and preventive actions documented in your letter. These actions will be examined during a future inspection of your licensed program. No reply to this letter is required.

Your cooperation with us is appreciated.

Sincerely,

ORIGINAL SIGNED BY:

Charles W. Hehl, Director
Division of Nuclear Materials Safety

Docket No. 030-32912
License No. 29-28783-01

cc:
Garry Nixon, Radiation Safety Officer
State of New Jersey

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J. C. Stickler
Frank Barker Associates, Inc.

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