



REPLY TO  
ATTENTION OF

**DEPARTMENT OF THE ARMY**  
BROOKE ARMY MEDICAL CENTER  
3851 ROGER BROOKE ROAD  
FORT SAM HOUSTON, TEXAS 78234-6200

February 8, 2010

Health Physics Service

U.S. Nuclear Regulatory Commission  
Nuclear Materials Licensing Section  
Attention: Mr. Larry Donovan  
611 Ryan Plaza Drive, Suite 400  
Arlington, TX 76011-8064

Reference: Nuclear Regulatory Commission Materials License No. 42-01368-01, Brooke Army Medical Center, Fort Sam Houston, Texas 78234 – Fetal Dose Assessment letter dated January 19, 2010

Dear Mr. Donovan and Mr. Ganes:

As we discussed this morning this letter is to clarify our position regarding a patient treated for metastatic thyroid cancer at Brooke Army Medical Center who became pregnant near the time of her thyroid ablation treatment on 4 November 2009.

We believe the patient became pregnant after her treatment, corresponding to a fetal dose of less than 1.1 rad.

The case was discussed telephonically (a conference call between the undersigned, Mr. Donovan and two or three other NRC staff members) near the time we discovered the patient's pregnancy, during the discussion the undersigned agreed to keep Mr. Donovan updated on the case. The letter dated January 19, 2010 was sent to honor that agreement and was not meant as a report of an overexposure.

My attention was directed to the comment "While it is likely that the pregnancy occurred after the treatment we are concerned about the possibility that it may have occurred prior." The intent of this comment and the text that followed was to show our concern for any patient's possible pregnancy prior to ablation therapy; it was not meant to say we believe this particular patient was pregnant prior to this particular treatment.

My attention was also directed to the one day discrepancy in the second estimated conception date between the letter dated January 19, 2010 and the attachment. As we stated medically this estimate is believed to have the most error associated with it since the variability in size of the fetus is based both on the date of conception and natural variability of the growth of the fetus. I addressed the minor date discrepancy in the email message sent to Mr. Donovan; however, for clarification the letter dated January 19, 2010 was written and staffed based on the earlier estimation from the OBGYN clinic that the estimated date of conception was November 3, 2009. After the letter was staffed and signed the official estimate was received from OBGYN with a date of November 4, 2009 (the day the patient was in the hospital). This conception date

estimation was only used in the worst case calculation and since we don't believe it is completely accurate, I didn't edit the letter and staff it a second time. I apologize if this caused any confusion.

Please contact COL Mark W. Bower, Radiation Safety Officer, at (210) 295-2411 or [mark.bower@us.army.mil](mailto:mark.bower@us.army.mil) if you have any questions.

Sincerely,

A handwritten signature in black ink, appearing to read "Mark W. Bower". The signature is fluid and cursive, with a large, sweeping flourish at the end.

MARK W. BOWER  
Colonel, Medical Service Corps  
Radiation Safety Officer