

U.S. NUCLEAR REGULATORY COMMISSION		Conversation Date: 3/10/05 & 5/6/05	
TELEPHONE CONVERSATION RECORD		Time: Afternoon EST	
Mail Control or Report No. N/A	License No. N/A	Docket No. N/A	
Licensee/Applicant Participant(s): Varti Vartanian Corporate Radiation Safety Officer Varian Medical Systems		Telephone No. Tel: (650) 424-6663 Fax: (650) 842-5051	
Organization: Varian Medical Systems, Corporate Radiation Safety Officer			
Subject: Notes from Telephone Conversations with Ms. Varti Vartanian, Corporate Radiation Safety Officer, Varian Medical Systems			
<p>Summary:</p> <p><u>Background Information</u> On February 28, 1977, in a letter from R. Lavine, General Manager of Varian's Radiation Division, to Dr. G. Wong, Radioactive Material Licensing, State of California, Varian submitted a request for a specific license to manufacture medical accelerators that used depleted uranium as shielding, in accordance with the requirements of 10 CFR 40.34. (ML 051310058)</p> <p>On January 4, 1983, the State of California issued Varian Amendment No. 32 to Radioactive Material License No. 1025-43 to distribute devices containing DU to the level of quality control specified in Varian's February 28, 1977 letter, and also specified specific labeling requirements regarding the presence of depleted uranium. (ML 051310053)</p> <p>10 CFR 40.25: General License for use of certain industrial products or devices.</p> <p>10 CFR 40.34: Special requirements for issuance of a specific license to permit manufacture and distribution of generally licensed devices: [Ensures manufacturer has appropriately trained and qualified personnel, appropriate testing, labeling, etc. to provide reasonable assurance that possession use or transfer will not likely cause any individual to exceed 10 percent of annual limits]</p> <p>10 CFR 40.51: Transfer of source or byproduct material.</p> <p><u>March 10, 2005</u> I asked Ms. Vartanian if the Varian accelerators that contain DU that were manufactured prior to Varian receiving authorization to manufacture in accordance with 10 CFR 40.34, were manufactured to the same standards as devices produced</p>			

after Varian received authorization to manufacture in accordance with 10 CFR 40.34. Ms. Vartanian responded by saying

"Yes, all Varian devices containing DU including those prior to 1983 were manufactured according to the standards outlined in the February 1977 application letter." [The letter is referenced above (ML 051310058)]

I asked Ms. Vartanian how Varian distributed accelerators containing DU? Ms. Vartanian responded by saying

"Varian's license condition 22, states that the DU distribution is pursuant to 17 California Code of Regulations CCR30192.6 or equivalent regulations of the 10CFR 40.25."

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Ms Vartanian stated that Varian Medical Systems no longer manufactures linear accelerators that contain DU. The Varian accelerators that contain DU that may have been manufactured prior to February 28, 1977, includes the Clinac 4, 4S, 6X, 6S, 4/100, and 6/100. Ms. Vartanian asserted that all of these units were manufactured with sufficient quality controls to provide reasonable assurance that possession, use, or transfer of the DU in the product or device would not likely cause any individual to receive in 1 year a radiation dose in excess of 10 percent of the limits specified in 10 CFR 20.1201(a), as intended by 10 CFR 40.34(a)(2). All of these units were labeled and marked to identify that the devices contained depleted uranium. Ms. Vartanian also asserted that the possession, use, handling, and transfer of Varian linear accelerators that contain DU and were manufactured prior to February 28, 1977, involve no greater radiological risk associated with DU than the Varian accelerators containing DU that were manufactured after receiving authorization to manufacture in accordance with 10 CFR 40.34.

Action Required/Taken: This information will be considered in a Technical Assistance Request to evaluate the acceptability of transfers of Varian accelerators containing DU that were manufactured prior to Varian receiving authorization to manufacture in accordance with 10 CFR 40.34

Prepared By: Randolph C. Ragland, Jr., NRC Region I, Sr. Health Physicist, 610-337-5083 Date: 6/6/05