



CardinalHealth

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February 20, 2006

Deborah A. Piskura
U.S. NRC Region III
2443 Warrenville Road
Suite 210
Lisle, Illinois 60532-4352

RE: Response to Inspection Findings, Inspection Date February 9, 2006,
License #34-29200-01MD, Cardinal Health, Kansas City, MO.

Dear Ms. Piskura,

This letter is in response to the items noted during an inspection of the Cardinal Health Kansas City nuclear pharmacy conducted on February 9, 2006. The agency's findings are italicized and Cardinal Health's response follows each item.

1. *A Z-Badge (a dosimeter used to measure exposure to members of the public) had a high reading for December 2005. The Z-Badge located in the generator storage room read 1236 mrem for that month. Please document your investigation and corrective actions for this high reading.*

An investigation revealed that this reading was elevated due to an increased inventory of BMS generators. This pharmacy typically stores 3 Mallinckrodt generators (shielded by depleted uranium) at any given time, and their shielding apparatus has sufficient space for 6 generators. However, due to the MKDT generator shortage, they have been forced to store up to 12 BMS generators (higher activity and only lead-shielded). This increase, along with a lack of sufficient shielding, caused the increase in the Z-Badge reading.

The Z-Badge in question is located inside the generator storage room. This room is located on the outside wall of the building. The exterior wall is a solid concrete construction, 6 inches thick. Outside this wall is 23 linear feet of grassy space with no walkway separating it from the nearest building. This space is not used for pedestrian traffic or as a work area.

Based on the information above, Cardinal Health NPS Kansas City will apply an occupancy factor of 1/40th for this dosimeter. NCRP Report No. 147 (2004) prescribes this occupancy factor for "outdoor areas with only transient pedestrian or vehicular traffic." This will lower the dose of record to 30.9 mrem for December, and 45.1 for the entire year. This is less than the limit of 100 mrem specified in 10 CFR 20.1301.

We believe that we are now in compliance with this item.

RECEIVED FEB 22 2006

Should you have any further questions, please contact me at 614.757.3147.

Sincerely,

A handwritten signature in black ink that reads "Willie Regits". The signature is written in a cursive, flowing style with a long horizontal stroke at the end.

Willie Regits, PhD
Manager, Health Physics Compliance

/cw

CC: Jim Craig, PRSO, Loc 28
File Loc 28 (4)

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