



# Goshen Hospital

April 13, 2015

Nuclear Materials Licensing Section  
U.S. Nuclear Regulatory Commission  
Region III  
2443 Warrenville Road, Suite 210  
Lisle, Illinois 60532-4352

Re: License No. 13-18845-01

To whom it may concern:

In accordance with 10 CFR 20.2002, authorization is requested to dispose of five decayed radioactive sources as non-radioactive waste. We currently possess five cobalt-57 check sources that have decayed to background. The half-life is too long to permit disposal by decay-in-storage as authorized in 10 CFR 35.92. The calibration data for these sources is:

Co-57 marker, 1.85 MBq (50 uCi), 9/1/99, North American Scientific, S/N W10675-1-9,  
Co-57 marker, 1.85 MBq, (50 uCi), 9/1/99, North American Scientific, S/N W10675-1-10,  
Co-57 marker, 55 uCi, 5/1/02, North American Scientific, Model MED3503, S/N 18400,  
Co-57 marker, 55 uCi, 5/1/02, North American Scientific, Model MED3503, S/N 18401,  
Co-57 marker, 55 uCi, 5/1/02, North American Scientific, Model MED3503, S/N 18402.

Each source is a solid source embedded in a plastic disc. The dimensions of the discs are 25 mm diameter and 6 mm thickness. Each source was measured with a Bicron Surveyor 2000 survey meter (S/N I124A, calibrated 12/13/12) with a side window GM probe (beta shield open) on 3/20/13 by David Close, CHP. The readings from the sources were equal to background (0.02 mR/hr). The eternal exposure of an individual from these sources is immeasurable.

The current activity of each source is  $2.5 \times 10^{-5}$  uCi each for the W10675-1-9 and W10675-1-10 sources and  $3.2 \times 10^{-4}$  uCi for each of the MED3503 sources. The total activity of the 5 sources is less than  $1.0 \times 10^{-3}$  uCi. The ALI by ingestion for Co-57 is 8,000 uCi. Based on that value, should an individual ingest all five sources, the effective dose to the individual would be  $6.2 \times 10^{-4}$  mrem. That is an inconsequential value. Of course, that would require that the individual removes the material from the plastic discs and converts the material to a digestible form. All of this is an extremely implausible case. Therefore, there is no measurable risk to any individual or facility due to the disposal of these sources.



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200 High Park Ave.  
PO Box 139  
Goshen, IN 46527  
574.533.2141



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Radioactive material labels will be removed or defaced before disposal to normal trash.  
Records of the disposal will be maintained as required. If you have any questions, feel free to contact me.

Sincerely,

John Lowden, M.S.,  
RSO



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