



North Kansas City Hospital

2800 Hospital Drive • North Kansas City, Mo. 64116-3281 • (816) 346-7000

March 19, 1986

U.S. Nuclear Regulatory Commission
Material Licensing Division
Region III-799 Roosevelt Road
Glen Ellyn, IL 60137

RE:License #24-18628-01

Please amend our NRC License #24-18628-01 to include the following:

- 1) Facility change in Nuclear Medicine Department (see accompanying layout). Please observe the current facility as outlined by the yellow boundary lines. The red boundary lines show the additional area to primarily house the bone densitometers (Room 3) and a file and storage room.

Room 3 will be locked at all times when not in use.

- 2) The option of storing the urine from I-131 thyroid therapy patients to decay, or of flushing it out to the sanitary sewer. The following are the calculations for the maximum disposal through our sanitary sewer.

From 10 CFR, Part 20, Appendix B, Table I, the maximum allowable daily release is 6×10^{-5} uCi/ml. Average daily water release from the hospital into the sanitary sewer is 8.27×10^4 gal/day, or 8.27×10^4 gal/day $\times 3.785 \times 10^3$ ml/gal = 3.13×10^8 ml/day.

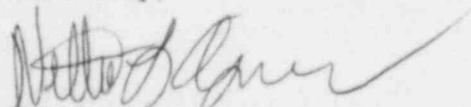
3.13×10^8 ml/day $\times 6 \times 10^{-5}$ uCi/ml = 1.88×10^4 uCi/day of 131-iodine.

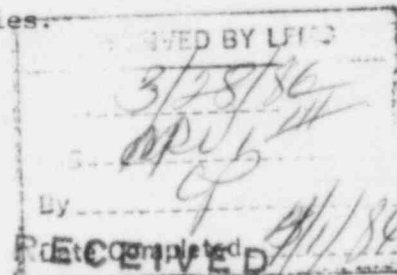
Therefore: The maximum amount of 131-iodine that may be released into the sanitary sewer based on the standard of 6×10^{-5} uCi/ml is 18,800 microcuries or 18.8 millicuries.

The maximum monthly disposal would be 564 millicuries.

Your consideration in this matter will be greatly appreciated.

Sincerely,


Nettie Agnew
Vice President, Clinical Services



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REG3 LIC30
24-18628-01 PDR

FEE EXEMPT
170.11(4)(9) #13
CONTROL NO. 80950

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NORTH KANSAS CITY HOSPITAL
Nuclear Medicine Department
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