

INDUSTRIAL REACTOR LABORATORIES, INC.



December 13, 1974

U. S. Atomic Energy Commission
Division of Materials Licensing
Washington, D. C. 20545

Attn: Dr. Jack Bell

Ref: License No. 29-03686-02 (IRL)
Permit No. 29-12944-01 (CNRC)

Gentlemen:

At the request of Mr. John Ciborski of NL Industries, Inc., we are hereby reporting the cessation of licensed operations of Cambridge Nuclear Radiopharmaceutical Corporation at the IRL site.

The last transfer of by-product material made by IRL to CNRC was on October 9th of this year. For approximately one month after this date, a skeleton crew of CNRC personnel remained at IRL to terminate their operation.

On October 24th, all of CNRC's licensed material was transferred officially to the IRL license as follows:

Cobalt-57	5.6 mCi (one sealed source)
Gadolinium-153	10.1 mCi (two sealed sources)
Germanium-68	0.08 mCi (two sealed sources)
Strontium-85	9.5 mCi
Xenon-133	2.5 Ci
Iodine-131	24.5 mCi
Molybdenum 99/Technetium-99m	23.9 Ci

Subsequently, all of the strontium-85 and the sealed sources were transferred to IRL waste. The short-lived xenon, iodine and molybdenum isotopes are being stored for decay.

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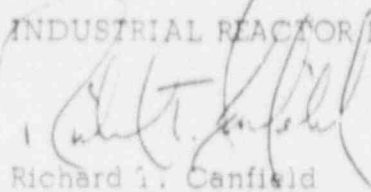
Contamination levels are presently less than 100 dpm/100cm² in all four laboratories used by CNRC except for the strontium-85 glove box (400 dpm/100cm²), and the technetium-99m production hood (3000 dpm/100cm²). The latter activity is due to niobium-95 (35 day half life), and two other unidentified isotopes. Both areas have been appropriately tagged to indicate these contamination levels, and will be decontaminated before further use.

In a letter to the Office of the General Counsel of the A.E.C. on November 26, 1974, the President of CNRC reported that molybdenum-99 contamination levels in the technetium-99m production hood were on that date less than 100 dpm/100cm². This report was based on our assumption that the 10,000 dpm/100cm² measured in this hood on October 27th was due entirely to molybdenum-99. As mentioned above, there is at least one longer lived component in this mixture of isotopes. CNRC has been notified of this correction.

As concluded from the above, the termination of CNRC has had only a minor impact on the IRL license. Should the Commission desire any further information on this matter, we will be happy to provide it.

Very truly yours,

INDUSTRIAL REACTOR LABORATORIES, INC.


Richard L. Canfield
President and General Manager

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RTC:j