



UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
REGION I  
631 PARK AVENUE  
KING OF PRUSSIA, PENNSYLVANIA 19406

Docket No. 030-30159  
Control No. 107681

Immologic Pharmaceutical Corp.  
ATTN: Julian F. Bond, Ph.D.  
Radiation Safety Officer  
Building 200  
One Kendall Square  
Cambridge, MA 02139

Gentlemen:

This is in reference to your application dated August 10, 1987, for a byproduct material license. In order to continue our review, we need the following questions answered:

1. Your application should have been signed by the management of the company (not Julian F. Bond, Ph.D.). Submit a written statement, signed by management, indicating that (s)he has reviewed all written material connected with this license and concurs with all the statements and representations contained therein.
2. Regarding your ventilation/hood exhaust system(s), submit sample calculations based on your measured air flow rates of the hood exhaust combined with the maximum anticipated quantities of open-form H-3 and I-125 that will be under the hood, to demonstrate how you will ensure that air concentration levels for both restricted (10 CFR 20.103) and unrestricted (10 CFR 20.106) areas will not exceed MPC levels.
3. You mentioned performing tritium and I-125 bioassays. Submit your bioassay procedures. These procedures should include the method for determining baselines, action levels and frequencies of sampling (for I-125). In addition, include an outline of your counting procedures and a description of the counting instruments used. Enclosed are guides you may reference in formulating your response.
4. Your sample "Radioisotope Receipt and Delivery" sheet for recording the wipe results off of incoming packages of radioisotopes is incorrect. Confirm you will record wipe test results in units of disintegrations per minute (dpm). In addition, describe how you will convert instrument readings from cpm into units of dpm.
5. Your sample "LABORATORY SURVEY RECORD" sheet for recording the wipe test results of area surveys is incorrect. Confirm you will record such results in units of dpm/cm<sup>2</sup>.
6. We note that on page 36 of your application, you have specified

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daily sink disposal limits per sink. Submit the calculations that you have based these limits on. You should be able to demonstrate that these daily/per-sink limits will ensure that liquid radioactive effluent dumped into the sewer system will not exceed the limits specified in 10 CFR 20.303.

6. Describe your method for determining the total amounts of radioisotopes you have in your possession at any one time. Note that this possession limit must include what is on hand as stored radioactive waste.
7. We note your intention of employing consultants. Confirm you will maintain current copies of all records that your consultant(s) will make for your facility at your facility for inspection by the Commission.

We will continue our review of your application upon receipt of the above information. Please reply in duplicate, referencing Control No. 107681. If we do not receive a reply from you within 30 calendar days from the date of this letter, we shall assume that you do not wish to pursue your application.

Sincerely,

Original Signed By:

John E. Glenn

John E. Glenn, Ph.D., Chief  
Nuclear Materials Safety Section B  
Division of Radiation Safety and  
Safeguards

Enclosure:

1. 10 CFR 20
2. APPLICATIONS OF BIOASSAY FOR TRITIUM
3. Regulatory Guide 8.20

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*JEG* RI:DRSS  
Glenn

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