



The Dow Chemical Company

Midland Michigan 48674

1803 BUILDING
April 30, 1991

John Jones
U.S. NRC Region III
799 Roosevelt road
Glen Ellyn, IL 60137

NRC License #21-00265-06 Control #91351

Dear Mr. Jones,

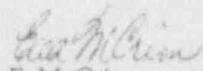
The additional information requested in your letter dated April 19, 1991, regarding our request to amend Dow's license to allow for decay-in-storage of radioisotopes with half-lives less than 90 days follows:

Item 2. The specific isotope with a half-life greater than 65 days but less than 90 days will be limited to S-35. All other radioisotopes for decay in storage have half-lives less than our current 65 day limit, and these will continue to be collected, stored, and disposed according to the procedures described in the license and approved by the NRC.

Item 3. All radioactive material approved for decay in storage shall be stored for a minimum of ten half-lives. Health Physics will continue to manage the tracking of inventory. At the conclusion of a decay period, calculations shall be performed to determine the level of radioactivity remaining in the drum. The drum shall then be surveyed using a Ludlum Model 3 survey meter with a Pancake detector Model 44-9. The areas surveyed shall include the inside and outside of the fiber drum to assure that the levels are at or below background. This method is currently in use and has been approved by the NRC for those radioisotopes with half-lives less than 65 days.

Several of the radioisotopes used have short half-lives (on the order of a few days), and therefore are managed according to this approved method. Radioisotopes such as I-125 and S-35 were not held for decay in storage due to space restrictions and license restrictions (S-35 specifically), and were managed by off-site disposal to a license disposal facility. Due to the situation in Michigan (e.g. denial of access to these disposal facilities), alternative waste management procedures are needed.

Please contact me (517) 636-1440 if you require additional information. Thank you.


E. M. Crim
Health Physicist
(517) 636-1440

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