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Monsanto

ENGINEERED PRODUCTS

MONSANTO RESEARCH CORPORATION
Dayton Laboratory
1515 Nicholas Road
P. O. Box 8, Station B
Dayton, Ohio 45407
Phones: (513) 268-6769
(513) 268-3411
Telegraph: TWX 810-459-1681

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12 October 1978

Received U.S. NRC
International Program
Oct 13, 1978
4:30 P.M.

Dr. Michael A. Guhin
U.S. Nuclear Regulatory Commission
Office of International Programs
Export/Import and International
Safeguards Branch
Washington, D.C. 20555

Dear Dr. Guhin:

We hereby request that a Broad Export License be issued to Monsanto Research Corporation for the export of by-product materials of Californium-252, Curium-242 and Curium-244 radioisotopes as sealed radiation sources. The radioisotopes will be in the form of Pd-Cf_2O_3 cermet wire or pellets, or curium oxide which may or may not be combined with various target or binder materials and encapsulated in welded metal capsules as "special form".

Such license is requested to permit export of Cf-252, Cm-242 and Cm-244 to those countries listed in attachment "A" which, we feel, offer reasonable chances for sale of radiation sources either directly or through the auspices of the International Atomic Energy Agency under their scientific development programs.

We request that the Broad Export License be valid for a period of 5 years and allow the shipment of standard or custom-fabricated sealed sources for which MRC possesses an IAEA Special Form Certificate of Competent Authority. We further tender the following special conditions:

1. No single sealed source shall contain more than the maximum radioisotope content specified by the Engineering Design Analysis as submitted for Special Form Certification.

2. MRC will maintain a record of all exports of Cf-252, Cm-242 and Cm-244 sources showing the ultimate and any intermediate consignees in foreign countries, the indicated end use, the radioisotope quantities of and dates of each shipment and other data as may be required. Such records will be available for NRC review upon request.

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3. Not more than 10 curies of Cf-252 will be shipped to the same country in any one calendar year under this requested license.

4. Not more than 1000 curies of Curium-242 and/or 1000 curies of Curium-244 will be shipped to the same country in any one calendar year under this requested license.

The typical end uses to which Cf-252, Cm-242 and Cm-244 sources may be employed are listed and described in Attachment "B" to the best of our knowledge and experience.

Our purpose in requesting this Broad Export License is to improve our competitive position vis-a-vis overseas suppliers of encapsulated radiation sources, and to decrease both our and the governments' administrative costs involved in processing applications for export license on an individual order basis. In our past experience, issuance of an export license for such by-product materials has required 2 to 4 months after submittal of an application. These delays make it difficult for us to respond in a timely manner to our customers' delivery requests, and may have contributed to loss of sales to overseas competitors although we cannot document such losses.

This letter also withdraws the MRC request of 8 May 1978 for a similar broad license for export of Cf-252, Cm-242 and Cm-244.

We shall be pleased to discuss this application with you or supply any further information you may require. Your immediate attention to this request will be appreciated.

Sincerely,

ENGINEERED PRODUCTS DEPARTMENT

Robert R. Taylor
Manager
Operations

RRT:dgk

Enclosures
Application for License to Export
MRC Catalog
Attachment A - Countries to Which Neutron Sources Will be Exported
Attachment B - Typical Neutron Source End Uses

Cf-252
17 Countries X 10 curies = 170 curies/yr
X 5 yr / 850 curies/5 yr

Cm-242 + Cm-244
17 Countries X 1000 curies = 17,000 curies/yr per each isotope
X 3 = 15 ... curies

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