



UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
WASHINGTON, D.C. 20555-0001

February 6, 2017

Mr. Robin DeLaBarre  
Office of Nuclear Energy, Safety  
& Security, Room 3320 HST  
Bureau of International Security  
& Nonproliferation  
U.S. Department of State  
2201 C Street, NW  
Washington, DC 20520

Dear Mr. DeLaBarre:

Enclosed is an application (XMAT410/03), dated January 18, 2017, received by the U.S. Nuclear Regulatory Commission (NRC), from Sigma-Aldrich Co., LLC., for the export of 10,000 kilograms of various deuterium compounds to Sigma-Aldrich Japan KK Shinagawa, Sigma-Aldrich KK Ichikawa, and Taiyo Nippon Sanso Corporation in Japan for distribution into various research facilities for non-nuclear scientific research. The type of scientific research may include identification of chemicals in reaction pathways, metabolic studies, or environmental analysis.

The purpose of the amendment is to increase the quantity of materials being exported and extend the current date of expiration to December 31, 2021. In accordance with our mutual understandings documented in August 2016, "Processing applications for licenses for exports of deuterium", we would appreciate receiving your judgement as to whether:

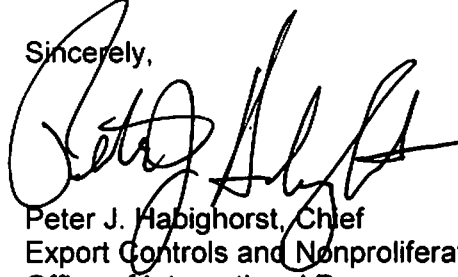
- The facts of the proposed export are consistent with non-nuclear end use;
- The Executive Branch does not see a need for assurances from the recipient government; and
- The proposed export would not be inimical to the common defense and security of the United States.

R. DeLaBarre

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Your assistance in providing Executive Branch judgement will be appreciated. Should you need further information, please do not hesitate to contact us.

Sincerely,

A handwritten signature in black ink, appearing to read "Peter J. Habighorst". The signature is fluid and cursive, with a large initial "P" and "H".

Peter J. Habighorst, Chief  
Export Controls and Nonproliferation Branch  
Office of International Programs

Enclosure:

Application dated January 18, 2017  
XMAT410/03 – Japan  
Docket Number 11005754

cc w/enclosure:

R. Goorevich, DOE

J. Norles, DOE/NNSA

H. Rodriguez, NRC/NMSS

R. Bennett, DHS/CBP

S. Aguilar, NRC/NMSS

J. Goodman, DOE/NNSA

P. Dessaulles, DOE/NMSS

S. Tafazzoil, NRC/NMSS

O. Toigo, DHS/CBP

S. Clagett, DOC

E. Sauls, DTRA