



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 (XMAT438), dated December 20, 2016, received by the U.S. Nuclear Regulatory Commission (NRC), from Sigma-Aldrich Co., LLC., for the export of 2,000 kilograms of various deuterium compounds to H. Lundbeck A/S. Lumsas in Denmark 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.

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:

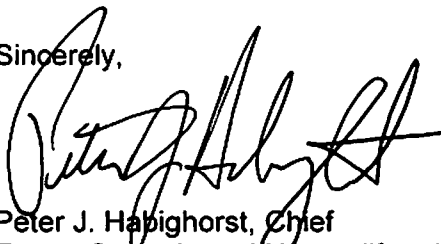
- The facts of the proposed export are consistent with non-nuclear end use;
- the Executive Branch does not see a need for assurances from the recipient government; and
- the proposed export would not be inimical to the common defense and security of the United States.

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. Hapighorst". The signature is fluid and cursive, with a large initial "P" and "H".

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

Enclosure:

Application dated December 20, 2016

XMAT438 – Denmark

Docket Number 11006253

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/MMSS

S. Tafazzoil, NRC/NMSS

O. Toigo, DHS/CBP

S. Clagett, DOC

E. Sauls, DTRA