



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

December 1, 2021

Jared Fenton  
Sigma Aldrich Co. LLC  
3050 Spruce Street  
St. Louis, MO 63103

SUBJECT: TERMINATION OF LICENSES FOR THE EXPORT OF DEUTERIUM FOR  
NON-NUCLEAR END USE

Dear Mr. Fenton:

The purpose of this letter is to notify you that, effective December 6, 2021, export licenses XMAT410/03, XMAT417/03, XMAT418/03, XMAT438, XMAT445, and XMAT446 are terminated.

On October 6, 2021, the U.S. Nuclear Regulatory Commission (NRC) and the U.S. Department of Commerce's Bureau of Industry and Security (DOC/BIS) each published final rules in the *Federal Register* to transfer licensing authority for exports of deuterium for non-nuclear end use from the NRC to DOC/BIS. These rules, published at 86 FR 55476 and 86 FR 55492, respectively, become effective on December 6, 2021. As of that date, the NRC will no longer have a role in licensing exports of deuterium for non-nuclear end use. Exports of deuterium for nuclear end use (i.e., intended for use in a nuclear reactor) remain subject to NRC export licensing requirements.

The NRC previously notified you on October 15, 2021, of this transfer of regulatory jurisdiction. As explained in the DOC/BIS final rule, exports of deuterium for non-nuclear end use are subject to DOC/BIS export control requirements as of December 6, 2021.

Notwithstanding the termination of export licenses XMAT410/03, XMAT417/03, XMAT418/03, XMAT438, XMAT445, and XMAT446, please note that the record-keeping and reporting requirements in 10 C.F.R. 110.53 and 110.54 remain effective for exports of deuterium made prior to December 6, 2021, under the terms of the license.

Any questions concerning the termination of these licenses should be addressed to Barry Miller, Senior International Policy Analyst, Export Controls and Nonproliferation Branch, who may be reached at (301) 287-9075 or [Barry.Miller@nrc.gov](mailto:Barry.Miller@nrc.gov).

You are not required to respond to this letter. However, should you choose to respond, your response should be sent to David Skeen, Deputy Director, Office of International Programs, U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001. In accordance with 10 CFR 2.390 of the NRC's "Agency Rules of Practice and Procedure," a copy of this letter, its enclosure(s), and your response, if you choose to submit one, will be made available electronically for public inspection in the NRC Public Document Room and from the NRC's Agencywide Document Access and Management System, accessible from the NRC Web site at <http://www.nrc.gov/reading-rm/adams.html>.

If you choose to respond to this letter, to the extent possible, your response should not include any personal privacy, proprietary, or safeguards information so that it can be made available to the public without redaction. If personal privacy or proprietary information is necessary to provide an acceptable response, please provide a bracketed copy of your response that identifies the information that should be protected and a redacted copy of your response that deletes such information. If you request withholding of such information, you must specifically identify the portions of your response that you seek to have withheld and provide in detail the bases for your claim of withholding (e.g., explain why the disclosure of information will create an unwarranted invasion of personal privacy or provide the information required by 10 CFR 2.390(b) to support a request for withholding confidential commercial or financial information). If safeguards information is necessary to provide an acceptable response, please provide the level of protection described in 10 CFR 73.21.

Sincerely,

A handwritten signature in cursive script that reads "David L. Skeen".

Signed by Skeen, David  
on 12/01/21

David L. Skeen, Deputy Director  
Office of International Programs

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NON-NUCLEAR END USE. DATED: DECEMBER 1, 2021

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**\*concurrence via e-mail****ADAMS Accession Nos.: ML21319A164**

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