

May 21, 2015

Deputy Director  
Office of International Programs  
U.S. Nuclear Regulatory Commission  
Washington, DC 20555-0001

RE: NRC Export license No. XMAT411/01 (NRC Docket No.11005831), XMAT417/03 (NRC Docket No.11005954), XMAT418/01 (NRC Docket No.11005977), XMAT410/02 (NRC Docket No.11005754), and XMAT416/01 (NRC Docket No.11005919)

Application for Approval of Indirect Transfer of Control for NRC Export Licenses of Sigma-Aldrich Co. LLC for consent of indirect change of control

Dear Deputy Director:

Sigma-Aldrich Co. LLC hereby requests a written approval by the U.S. Nuclear Regulatory Commission ("NRC") of a planned indirect transfer of control of the above-captioned licenses. This application is being submitted to the NRC with respect to Merck KGaA's indirect acquisition of Sigma-Aldrich Co. LLC. The indirect acquisition will occur by way of a merger of Mario II Finance Corp (a wholly owned subsidiary of Merck KGaA) and Sigma Aldrich Co. LLC. Sigma-Aldrich Co. LLC will be the surviving corporation in the merger, as a result of which its corporate existence – as well as that of its current subsidiaries – remains unaffected. As a result of the merger, Sigma-Aldrich Co. LLC and its direct and indirect subsidiaries will become indirect wholly-owned subsidiaries of Merck KGaA.

The Licensee, Sigma-Aldrich, is a leading Life Science and High Technology company focused on enhancing human health and safety, manufactures and distributes more than 230,000 chemicals, biochemicals and other essential products to more than 1.4 million customers globally in research and applied labs as well as in industrial and commercial markets. With three distinct business units – Research, Applied and SAFC Commercial – the Licensee is committed to enabling science to improve the quality of life. The Licensee possesses certain Export Licenses in order to manufacture and distribute the chemicals, biochemical, and other essential life science products to other countries.

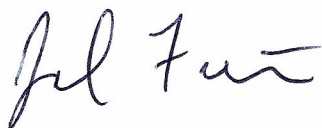
Specifically, the Licensee possesses five Export Licenses that allows it to export deuterium to five countries; Great Britain, India, China, Canada, and Japan. The Export Licenses are issued by NRC with the following License Numbers; XMAT411/01 (NRC Docket No.11005831), XMAT417/03 (NRC Docket No.11005954), XMAT418/01 (NRC Docket No.11005977), XMAT410/02 (NRC Docket No.11005754), and XMAT416/01 (NRC Docket No.11005919).

There will be no changes to Sigma-Aldrich Co. LLC's operations, entity name, key operating personnel or NRC licensed activities as a result of this planned acquisition. The two attachments describe the topics that the NRC requires our company to disclose for an indirect change of control.

The closing of the proposed transaction is expected to take place mid-year 2015. Accordingly, we respectfully request that this request for written consent be reviewed, and such consent provided, expeditiously, and in any event, no later than June 29, 2015 in order to allow the companies to take the necessary steps to close on schedule.

If you have any questions or comments please contact me directly at my contact information below.

Sincerely,

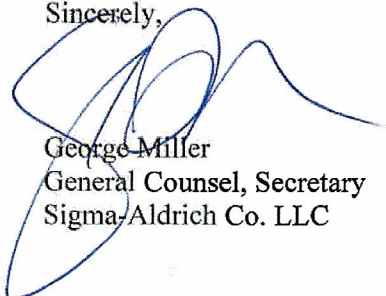
A handwritten signature in dark ink, appearing to read "Jared Fenton". The signature is fluid and cursive, with the first name "Jared" and last name "Fenton" clearly distinguishable.

Jared Fenton  
Director. Trade and Product Compliance  
Sigma-Aldrich Co. LLC  
545 South Ewing Ave.  
St. Louis, MO 63103  
Phone: 314-286-8326  
Cell: 314-740-2278  
[jared.fenton@sial.com](mailto:jared.fenton@sial.com)

Enclosures.

I declare under penalty of perjury under the laws of the United States of America that the foregoing is true and correct. Executed on May 18, 2015.

Sincerely,

A handwritten signature in blue ink, consisting of several loops and a long horizontal stroke extending to the right.

George Miller  
General Counsel, Secretary  
Sigma-Aldrich Co. LLC

I declare under penalty of perjury under the laws of the United States of America that the foregoing is true and correct. Executed on May 21, 2015.

Sincerely,

A handwritten signature in dark ink, appearing to read 'Karlheinz Schnaegelberger', with a long horizontal flourish extending to the right.

Karlheinz Schnaegelberger  
Vice President Export Control & Customs Regulations  
Merck KGaA

**ATTACHMENT 1**

**Application for Approval of  
Transfer of Control of Export License**

Because the Office of International Program does not have guidance on applying for license transfers, in preparing this application, the parties used NUREG-1556, Vol. 15, *Consolidated Guidance About Material Licenses: Program-Specific Guidance About Changes of Control and About Bankruptcy Involving Byproduct, Source, or Special Nuclear Materials Licenses* (November 2000), at Section 5.1 through 5.6

## **Section 5.1 DESCRIPTION OF TRANSACTION**

1. *A complete clear description of the transaction, including any transfer of stocks or assets, mergers, etc., so that legal counsel is able, when necessary, to differentiate between name changes and changes of ownership.*

Sigma-Aldrich Co. LLC has entered into an agreement to be acquired by Merck KGaA. The deal is expected to close by June 30, 2015.

More in particular, Merck KGaA will indirectly acquire all of the outstanding shares of Sigma. This will happen by means of a merger of Mario II Finance Corp. (a wholly-owned subsidiary of Merck) with and into Sigma-Aldrich Co. LLC. Sigma-Aldrich Co. LLC will be the surviving corporation in the merger, as a result of which its corporate existence – as well as that of its current subsidiaries – remains unaffected. As a result of the merger, Sigma-Aldrich Co. LLC and its direct and indirect subsidiaries will become indirect wholly-owned subsidiaries of Merck KGaA.

2. *The new name of the licensed organization. If there is no change, the licensee should so state.*

There will be no change in the name of the Licensee in connection with the proposed transaction.

3. *The new licensee contact and telephone number(s) to facilitate communications.*

The Licensee contact and telephone information will remain the same. The contact information is as follows:

Jared Fenton  
Sigma-Aldrich Co. LLC  
3050 Spruce Street  
St. Louis, MO 63103  
Phone: 314-286-8326  
Cell: 314-740-2278  
[jared.fenton@sial.com](mailto:jared.fenton@sial.com)

## **Section 5.2 CHANGES OF PERSONNEL**

1. *Any changes in personnel having control over licensed activities (e.g., officers of a corporation and any changes in personnel names in the license such as radiation safety officer, authorized users, or any other persons identified in previous license applications*



*as responsible for the use of licensed material). The licensee should include information concerning the qualifications, training, and responsibilities of new individuals.*

Following the proposed transaction, there are no planned changes in personnel having control over licensed activities.

- 2. An indication of whether the transferor will remain in non-licensed business without the license.*

After the transaction, the Licensee will remain in business as an indirect wholly owned subsidiary of Merck KGaA.

### **Section 5.3 CHANGE OF LOCATION, EQUIPMENT, AND PROCEDURES**

- 1. A complete description of any planned changes in organization, location, facility, equipment, or procedures (i.e., changes in operating or emergency procedures).*

There are no planned changes in the organization, location, facility, equipment, or procedures in connection with the transaction.

- 2. A detailed description of any changes in the use, possession, location or storage of the licensed materials.*

There are no planned changes in the use, possession, location or storage of the licensed materials to occur in connection with the transaction.

- 3. Any changes in organization, location, facilities, equipment, procedures, or personnel that would require a license amendment even without the change of ownership.*

There are no planned changes in the organization, facilities, equipment, procedures, or personnel that would require a license amendment even without the change of ownership.

### **Section 5.4 SURVEILLANCE RECORDS**

- 1. An indication of whether all surveillance items and records will be current at the time of transfer. A description of the status of all surveillance requirements and records should also be provided.*

To the extent that such records are required to be maintained under the Licenses, the transactions will have no effect on the surveillance records. All licensed activities and related records are current and will continue on an ongoing basis without interruption as required under the Export Licenses. However, the surveillance records requirements do not pertain to NRC License No. XMAT411/01, XMAT417/03, XMAT418/01, XMAT410/02, and XMAT416/01.

## **Section 5.5      DECOMMISSIONING AND RELATED RECORDS TRANSFERS**

1. *Confirmation that all records concerning the safe and effective decommissioning/closure of the facility have been transferred to the new licensee if licensed activities will continue at the same location.*

All of the records concerning the safe and effective decommissioning and closure of the facility in the US will remain in the same physical location.

2. *A description of the status of the facility. Specifically, the presence or absence of contamination should be documented. If contamination is present, will decontamination occur before transfer? If not, is the transferee knowledgeable of the extent and levels of contamination and applicable decommissioning requirement, and does the transferee agree to assume the full liability for the decontamination of the facility of site?*

The status of the facility will remain unchanged after the transaction closes, and the liability for any decommissioning or decontamination activities for the Licensee's facility in the US will remain with the Licensee.

3. *A description of any decontamination plans including financial surety arrangements of the transferee. This should include information about how the transferee and transferor propose to divide the transferor's assets and responsibility for any cleanup needed at the time of transfer.*

This transaction would have no effect on the Licensee's obligation to meet the requirement of its decommission responsibilities for its facility in the US.

## **Section 5.6      TRANSFEREE'S COMMITMENT TO ABIDE BY THE TRANSFEROR'S COMMITMENTS**

1. *Confirmation that the transferee agrees to abide by all commitments and representations previously made by the transferor. These include, but are not limited to: maintaining decommissioning records; implementing decontamination activities and decommissioning of the site; and completing corrective actions for open inspection items and enforcement actions.*

*With regard to contamination of facilities and equipment, the transferee should confirm, in writing, that it accepts full liability for the site, and should provide evidence of adequate resources to fund decommissioning; or the transferor should provide a commitment to decontaminate the facility before the change of control or ownership.*

*With regard to open inspection items, etc., the transferee should confirm, in writing, that it accepts full responsibility for open inspection items and/or any resulting enforcement actions; or the transferee proposes alternative measures for meeting the requirements; or the transferor provides a commitment to close out all such actions with NRC before license transfer.*



The indirect change in control resulting from the transaction would not create a new licensee and would not change the Licensee's existing commitments under the Licenses.

Following the proposed transaction, Sigma-Aldrich Co. LLC will abide by all constraints, conditions, requirements, representations, and commitments previously made to the NRC. The Licensee agrees to continue to accept full responsibility for open inspection items and any resulting enforcement action. The proposed change in the Licensee's parent company will not affect these commitments and responsibilities.

There are no unresolved issues Sigma-Aldrich LLC Co. has with the NRC existing under NRC License No. XMAT411/01, XMAT417/03, XMAT418/01, XMAT410/02, or XMAT416/01.

2. *Documentation that the transferor and transferee agree to the change in ownership or control of the licensed material and activity, and the conditions is the transfer; and the transferee is made aware of all open inspection items and its responsibility for possible resulting enforcement actions.*

The proposed transaction would not create a new licensee and would not change the Licensee's existing commitments under the Export License. The Licensee is aware of and will continue to be responsible for all open inspection items and the Licensee will remain responsible for any possible resulting enforcement actions.

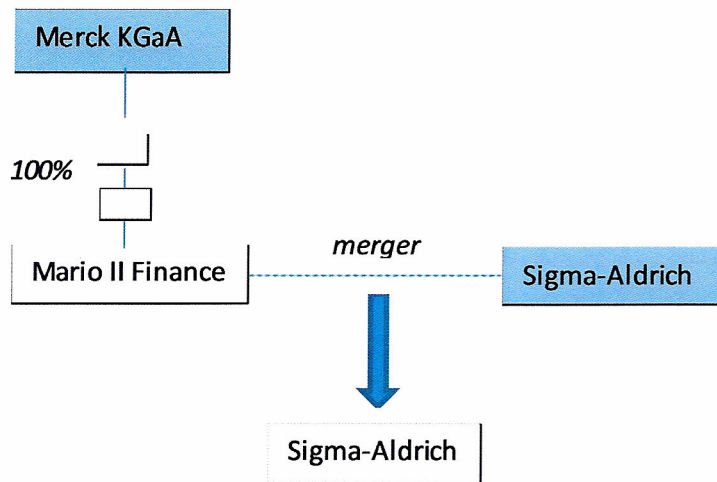
3. *A commitment by the transferee to abide by all constraints, conditions, requirements, representations. And commitments identified in the existing licenses. If not, the transferee must provide a description of its program to ensure compliance with the license and regulations.*

The indirect change in control resulting from the transaction would not create a new licensee and would not change the Licensee's existing commitments under the Export Licenses. Following the transaction, the Licensee agrees to continue to abide by all constraints, conditions, requirements, representations, and commitments identified in the Export Licenses.

## **ATTACHMENT 2**

### **Pre- and Post-Transaction Simplified Organization Chart**

*Pre Transaction*



*Post Transaction*

