

PAG Consortium Comments on the Proposed “PAG” SNUR

Significant New Use Rules on Certain Chemical Substances (20–2.5e) EPA-OPPT-2020-0131; FRL–10011– 86]

85 Fed. Reg. 64280 (Oct. 9, 2020)

Submitted November 9, 2020

The Photoacid Generator (PAG) Consortium is pleased to submit the following comments to the US Environmental Protection Agency (EPA) concerning the proposed Significant New Use Rule (SNUR) [batch 20-2.5e]. 85 Fed. Reg. 64280 (Oct. 9, 2020). The proposed SNUR concerns 27 chemical substances that the preamble describes as having been reporting in various PMNs as having uses in photolithographic processes in the manufacture of semiconductors. The preamble to the proposed SNUR also notes that each of the PMNs were the subjects of TSCA Section 5(e) Consent Orders.

The PAG Consortium is comprised of manufacturers (and importers) and users of certain chemical substances that are intended for use in photolithographic applications in the manufacture of semiconductors.¹ The PAG consortium has already provided certain information to EPA and has undertaken certain new studies intended to provide data to the Agency to address certain data and information gaps that will enable a more robust evaluation of PAG substances generally, and the conditions of their use in semiconductor manufacturing.

The proposed SNURs for the 27 substances contain identical reporting requirements (SNUR “triggers”). The PAG Consortium encourages EPA to promptly issue the proposed SNURs in final form with certain corrections and clarifications discussed below.

EPA Should Correct and Clarify the SNUR Language

The proposed SNURs require corrections or clarifications as follows:

The term “water” that appears in each of the SNURs should be replaced with the word “wafer” when the final SNURs are promulgated. Specifically, paragraph (a)(1) of each proposed SNUR should be revised as follows:

(a)(1) The [PMN substance] is subject to reporting under this section for the significant new use described in paragraph (a)(2) of this section. The requirements of this section do not apply to quantities of the substance after they have been completely reacted or adhered (during the photolithographic process) onto

¹ The members of the PAG Consortium include: Brewer Science, DuPont, EMD, Fujifilm, GLOBALFOUNDRIES, IBM, Intel, JSR Micro, Micron Technology, ON Semiconductor, Samsung Semiconductor, Shin-Etsu MicroSi, Sumika (Sumitomo Chemical Co.), Texas Instruments, and Tokyo Ohka Kogyo Co., Ltd. (TOK).

a semiconductor ~~water~~wafer surface or similar manufactured article used in the production of semiconductor technologies.

The Consortium requests that EPA clarify the passage in the proposed SNURs related to certain limitations on importation and the physical state of the substances subject to the proposed SNUR. First, the PAG Consortium requests that in the Preamble to the final SNUR, the Agency articulate and reconsider the basis for the 5 kg sealed container limitation imposed on import shipments of the SNUR substances in a physical state other than in solution. It seems reasonable that if a shipment of a SNUR substance in a solid form is made in a sealed container, and the importer will be required to constrain its import shipments on an annual basis within the annual production volume limits imposed under the terms of the predicate Consent Order, then a per shipment quantity limitation is less critical as a regulatory matter, provided such shipments are limited in nature and are made in carefully and securely sealed containers. The PAG Consortium recommends EPA drop the 5 kg per container limitation for non-liquid imports or modify the limit by increasing the container capacity to 25 kg per container. Further, if a container size (capacity) limit is retained, then the Preamble to the final SNUR should make clear that the final SNUR permits shipment to be made which may be comprised of multiple small quantity containers within in each shipment, provided on a container-by-container basis each container does not exceed the capacity size specified. Otherwise, the Agency will be encouraging importers to make multiple and unnecessary shipments which is energy inefficient and cost prohibitive for entities seeking to comply with the regulation.

Moreover, the language in the proposed rules should be clarified as follows:

(a)(2)(iii) *Industrial, commercial, and consumer activities.* . . . It is a significant new use to import the PMN substance in any physical state other than in solution, unless imported in sealed containers weighing 5 kilograms² or less. It is a significant new use to process the PMN substance in any way that generates a dust, mist, or aerosol in a non-enclosed process. It is a significant new use to manufacture the PMN substance longer than 18 months.

The PAG Consortium also requests that EPA clarify in the preamble to the final SNUR that the provision above, which imposes an 18 month time limit on manufacture, pertains solely to manufacturers (importers) of the SNUR substance and not to processors or users of the substances. EPA should also confirm that this limitation is not applicable to entities that are manufacturing (importing) in compliance with a signed Section 5(e) Consent Order applicable to the SNUR substance.

The PAG Consortium would like EPA to note in the Preamble to the Final SNUR that the signatories to the predicate Consent Orders referenced in the SNUR are not themselves

² Or 25 kg/container if modified as recommended.

subject to reporting under the SNUR when the signatory's' activities are in conformance with the terms of its Consent Order.³

Finally, the PAG Consortium requests that the preamble to the final rule clarify that the Agency does not consider the use of the SNUR substances in photolithographic applications in the manufacturer of semiconductors or similar manufactured articles that are used in the production of semiconductor technologies to require notification under the Final SNUR. First, this interpretation is reasonable in light of the plain language in the proposal and should be readily confirmed for the record by the Agency. Second, the interpretation is consistent with and operationalizes the terms of the predicate Consent Orders and the limitations on distribution in such Consent Orders. Finally, the interpretation is consistent with the underlying law and regulations because the activities involved in the use of the substances in semiconductor manufacturing do not constitute "processing" as that term is defined for purposes of the SNUR regulations. Use of the SNUR substances in this manner involves operations in highly complex procedures that occur in enclosed conditions that ultimately result in the manufacture of complex articles, rather than chemical substances or mixtures. Thus, these activities do not involve the "preparation of a chemical substance or mixture" for "distribution in commerce."⁴ Accordingly, the Agency should make clear in the Preamble to the final SNUR that such activities are permitted under the final SNUR and are exempt from notification pursuant to the SNUR's requirements.

* * *

The PAG Consortium appreciates the opportunity to provide comments on the proposed SNURs discussed above. The Consortium would be pleased to meet with appropriate Agency personnel to discuss these comments and to clarify any questions or concerns of EPA personnel. For more information, please contact David Isaacs of the Semiconductor Industry Association (SIA) at disaacs@semiconductors.org.

³ See 40 CFR § 721.45(i).

⁴ See § 40 CFR 721.3 definition of *process for commercial purposes*.