

Comments of the
Semiconductor Industry Association (SIA)
On the
Proposed Significant New Use Rule (SNUR) for Two Alkylpyrrolidones

81 Fed. Reg. 85,472 (Nov. 28, 2016)
EPA-HQ-OPPT-2015-0387

Submitted January 26, 2017

The Semiconductor Industry Association (SIA) submits these comments to the U.S. Environmental Protection Agency (EPA) on the above-referenced proposal on Proposed Significant New Use Rule (SNUR) for Two Alkylpyrrolidones, 81 Fed. Reg. 85,472 (Nov. 28, 2016).

SIA is the trade association representing leading U.S. companies engaged in the design and manufacture of semiconductors. Semiconductors are the fundamental enabling technology of modern electronics that has transformed virtually all aspects of our economy, ranging from information technology, telecommunications, health care, transportation, energy, and national defense. The U.S. is the global leader in the semiconductor industry, and continued U.S. leadership in semiconductor technology is essential to America's continued global economic leadership. More information about SIA and the semiconductor industry is available at www.semiconductors.org.

The proposed SNUR applies to two alkylpyrrolidones: N-ethylpyrrolidone (NEP) and N-isopropylpyrrolidone (NiPP). SIA member companies do not use NiPP, and our comments focus solely on the ongoing use of NEP by the semiconductor industry.

Use of NEP in the Semiconductor Industry

EPA requests comments on ongoing uses of NEP. 81 Fed. Reg. at 85,473. After the publication of the proposed rule SIA conducted a survey of its member companies, and companies reported some limited uses of NEP since 2005 that continue through today. Semiconductor companies use NEP for resist stripping and wafer cleaning to remove organic residues. The use of NEP in the semiconductor industry is limited to certain applications, and in some cases, companies use NEP as a replacement for N-methylpyrrolidone (NMP). The semiconductor manufacturers who use NEP for these applications, as well as the chemical manufacturers and processors who supply NEP to them, intend to continue this ongoing use.

Semiconductor fabrication facilities (fabs) employ stringent risk management measures and safety practices to prevent chemical release into the manufacturing environment and thus prevent worker exposure. Automated chemical delivery systems are used that protect workers against chemical and physical hazards. Process chemistries, including NMP and NEP, are typically used in enclosed process tools which are equipped with local exhaust under alarm. This exhaust is typically abated using thermal oxidation. Waste NEP is collected and disposed via incineration or fuel blending. Contaminated solids are collected and disposed via incineration.

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Given the ongoing uses of NEP by the semiconductor industry, EPA cannot issue a SNUR for the industry's specific, ongoing uses of this chemical.

SIA appreciates the opportunity to comment. If additional information about these specific uses of NEP is needed, please contact David Isaacs at disaacs@semiconductors.org or 202-446-1709.