



SEMI Questions for U.S. EPA to be Posed During June 1, 2017 Webcast

Regarding TSCA Reporting and Recordkeeping Requirements for Chemical Substances When Manufactured or Processed as Nanoscale Materials

Forwarded on May 30, 2017

- High Priority Question:** If you have discrete forms of a nanoscale material in a mixture and you are changing the properties of the mixture, but not changing the properties of the raw nanoscale material, does this constitute a new novel form of a nanoscale material.

Background: Changing pH of the mixture necessarily changes the zeta potential of the raw nanoscale material.
- High Priority Question:** Do we have to report the specific abrasive substances in CMP slurries if the nanoscale features of the substances are not the reason we use them? Does using smaller aggregates in a CMP slurry lead to a new novel form?

Background: CMP stands for Chemical Mechanical Planarization and is a process step in manufacturing of some types of semiconductors and related electronic devices. Some CMP slurries may contain nanoscale materials and some may not. There is no step function for abrasive materials that could be considered nanoscale materials used in CMP slurries. CMP slurries contain materials below 100nm and above 100nm. There is no novel size function at the 100nm threshold, but instead a linear function based on size.
- High Priority Question:** Assuming we have to report, how many times do we have to report?

Background: Starting with same raw nanoscale material that are used in a mixture and we routinely change the properties the mixture, this change in the mixture necessarily changes the raw substance, do we have to report for each occurrence of the change in the mixture?
- High Priority Question:** Does EPA envision having industry eventually apply for new PMNs for nanoscale forms of substances already existing on the TSCA Inventory that are identified in this reporting?
- Moderate Priority Question:** When reporting, do you mandate a CAS Registry Number or do we only need to provide one if one already exists? Do you require a unique CAS Registry Number of the nanoscale form of a substance that is different than the non-nanoscale form? If yes, will EPA provide guidance if CAS will not provide a new Registry Number for a nanoscale form of an existing material with an existing CAS Registry Number and name?
- Moderate Priority Question:** What happens if I made a nanoscale material four years ago and the rule specifies a three-year prior period for evaluation, would this materials from four years ago still be in scope of reporting? What is the time frame for defining new?

7. [Moderate Priority Question](#): Is the goal of the reporting rule for EPA to come up with a single volume of use of each unique form of nanoscale materials? If yes, how do you plan to do so without double counting volumes within a single supply chain?
[Background](#): You may double-count (or triple or quadruple count) volumes if you don't have a clear idea about links on a supply chain?
 8. [Low Priority Question](#): Is it correct that powders used in coatings on articles are considered part of the article and therefore, out of scope?
 9. [Low Priority Question](#): If a nanoscale material is used in manufacturing (example: in a CMP slurry), but not contained in the final product, and is contained in a waste stream, our understanding is that this is a use and not processing and is not reportable? But if that waste were sold as a product, then there would be a reportable obligation. Is this is correct?
-