On March 4, 2020, the National Institute for Occupational Safety and Health (NIOSH) published a Federal Register notice announcing the availability of its Current Intelligence Bulletin 69: NIOSH Practices in Occupational Risk Assessment. 85 Fed. Reg. 12786. The Current Intelligence Bulletin (CIB) describes the process and logic NIOSH uses to conduct risk assessments, including the following steps:

- Determining what type of hazard is associated with a chemical or other agent;
- Collating the scientific evidence indicating whether the chemical or other agent causes illness or injury;
- Evaluating the scientific data and determining how much exposure to the
chemical or other agent would be harmful to workers; and

- Carefully considering all relevant evidence to make the best, scientifically supported decisions.

Appendix C of the CIB includes sections addressing nanomaterials risk assessment and alternative methods for nanomaterials. The CIB states that “[g]iven the large and growing number of engineered nanomaterials (ENMs) with limited data, as for other emerging and existing substances produced or used in the workplace, alternative test strategies (i.e., toxicological approaches other than primary animal testing) such as high-throughput screening and in vitro exposures may help to fill the gaps by providing data that could be used in validated hazard and risk assessment models.” The CIB section on nanomaterials risk assessment includes subsections on dose normalization in vitro and in vivo and correlation of in vitro and in vivo responses. The section on alternative methods for nanomaterials includes subsections on comparative potency estimation, hazard classification/clustering, and validation. The CIB notes that a key challenge to using alternative test strategies data is the development and application of validation criteria.

©2020 Bergeson & Campbell, P.C.