U.S. Consumer Product Safety Commission

MEETING LOG

PRODUCT: Nanotechnology

SUBJECT: ISO/TC 229 Nanotechnologies Working Group 3 (Health Safety and the Environment) Virtual Meeting to Discuss Potential New Work Item Proposals (NWIPs)

LOCATION: Teleconference

DATE: January 18, 2022

ENTRY DATE: January 20, 2022

LOG ENTRY SOURCE: Joanna Matheson (HSTR)

COMMISSION ATTENDEES: Joanna Matheson (HSTR)

NON-COMMISSION ATTENDEES: Contact ANSI for a complete list.

MEETING SUMMARY:

ISO Technical Committee 229 (ISO TC/229) focuses on standardization in the field of nanotechnologies, understanding and control of matter and processes at the nanoscale where the onset of size-dependent phenomena usually enables novel applications, as well as use of nanoscale materials to create improved materials, devices, and systems that exploit these new properties. Specific working groups address the development of standards and guides for terminology and nomenclature; metrology and instrumentation; test methodologies; modelling and simulations; and science-based health, safety, and environmental practices.

ISO TC/229 encourages proposals for new projects. Presentations were given on three new work item proposals (NWIP): *Toxicity assessment of manufactured nanomaterials in soils using plant Arabidopsis thaliana*, *Monitoring of protein structural stability exposed to nanomaterials by MALDI-TOF mass spectrometry method*, and, *mRNA-containing nano-emulsions for medical application: characteristics and measurement methods*. The working group experts supported the advancement of these NWIPs to ISO/TC 229 for consideration and balloting.

The first and third presentations have foci, environmental toxicity and medical applications, respectively, that fall out of CPSC jurisdiction. The second proposed project aligns more with measurement applications and less with the evaluation of environmental health and safety, therefore it was suggested by working group experts that this project move forward as a joint project with ISO TC/229 Working Group 2. Staff will monitor the progress of this project since it assesses a potential toxicity pathway, denaturing of proteins, from exposure to nanomaterials.