October 4, 2018 Workshop: Engineered Nanomaterials – No Small Issue

Summary of Discussion

Participants came from a variety of subject area backgrounds, with different levels of familiarity and knowledge about ENM. All agreed on the importance of finding out more about ENM and how ENM impact their respective programs and agencies. The small group discussion during lunch identified a large number of topics that need further discussion, listed below. Only a few of these could be discussed with the whole group after lunch.

Program needs and topics for further discussion

- data about nanomaterials regarding their toxicity, environmental fate, and exposures of workers and consumers
- robust epidemiological studies linking exposures and toxicity/health outcomes
- cumulative burden of exposures
- bioaccumulation in food chain
- options for consumer disclosure (goals of communication; mechanisms that trigger Prop 65 notification, Cal/OSHA involvement)
- risk communication to the public
- emergency response/responders; risk to communities near accidental releases
- identifying options for regulatory approaches (soft laws/code of conduct vs. rules and regulations)
- identifying thresholds for reporting
- options for incentivizing reporting
- emission inventories
- life-cycle-assessment in case studies
- the role of the insurance and financial industry

Next steps

Participants discussed potential next steps and needs, but no consensus emerged about one dominant action. The participants emphasized that nanomaterials and nanotechnology pertain to many agencies and programs, and involve many internal and external stakeholders. Participants discussed the need for risk communication methods that help increase public awareness and understanding of ENM issues. Participants noted that dedicated funding is needed to convene key state agencies and stakeholders on ENM issues. Several funding options were mentioned, including expiring end of year funds, funding through the state legislature. Participants expressed concern about the potential for unfunded mandates.

Several options were mentioned to institutionalize a mechanism to discuss, communicate, and assess environmental and human health impacts across multiple agencies and stakeholders:

- convening a joint multi-agency group or commission modeled after similar cross-cutting groups (Joint Multiple Authority Commission)

- public private partnerships that include academic institutions, such as those in the University of California system and other institutions, such as national laboratories

The challenge remains for state agencies and other stakeholders to encourage a public discourse of ENM and nanotechnology, build partnerships to protect public health, and work towards an informed risk-benefit analysis.

Contact information

CDPH
Gabriele Windgasse, DrPH (Gabriele.Windgasse@cdph.ca.gov)
Danny Kwon, MPH (Danny.Kwon@cdph.ca.gov)

OEHHA
John Budroe, PhD (John.Budroe@oehha.ca.gov)
Karen Riveles, PhD (Karen.Riveles@oehha.ca.gov)

ARB
Linda Smith, PhD (Linda.Smith@arb.ca.gov)

Cal/OSHA
Jim Seward, MD (James.Seward@ucsf.edu