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EXPERT PANEL RAISES RED FLAGS ON RISKS OF NANOMATERIALS

ICTA Calls on EPA to Heed Expert Panel Advice: *PUBLIC INTEREST GROUP QUESTIONS WHY EPA FAILS TO CONNECT THE DOTS*

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WASHINGTON, D.C. – The International Center for Technology Assessment (ICTA) welcomes the findings of a new [report](#) by an expert panel yesterday, which concluded that despite the surge of nanomaterials in the marketplace, not enough is known about their potential health and environmental risks. The panel was convened by the National Research Council (NRC), the research arm of the National Academy of Sciences, at the request of the Environmental Protection Agency (EPA).

“The NRC report is another indicator of the hazards posed by nanomaterials and the risk of Federal inaction on nanotechnology,” said Jaydee Hanson, Policy Director for ICTA. “The public interest community continues to raise these concerns and we hope that EPA and other Federal agencies will heed yesterday’s warnings.”

Nanotechnology is a powerful new set of technologies for observing, taking apart and reconstructing nature at the atomic and molecular level. With \$225 billion in sales in 2009, nanomaterials are used in countless other consumer products including sunscreens, face creams, baby bottles, toothbrushes, cutting boards and many others. Despite rise in products on the market, nano-enabled consumer products go unlabeled and largely untested for their human health and environmental effects. Yet as noted by the NRC’s report, much of the research raises red flags on nanomaterials’ ability to enter the body through contact with the skin and inhalation as well as their ability to inflict damage to the environment through multiple routes.

In December 2011, ICTA filed the first [lawsuit](#) over the health and environmental risks of nanotechnology and nanomaterials on behalf of consumer and environmental groups with the U.S. Food and Drug Administration. The lawsuit demanded FDA respond to a 2006 [petition](#) filed by ICTA requesting the FDA issue specific regulations for nanotechnology and properly regulate the use of nanoparticles in sunscreens.

In its report, the panel criticized the National Nanotechnology Initiative, the coordinator of nano-funding and priorities across Federal agencies, with failing to connect research and research findings with the creation of strategies to prevent and manage risk at the Federal level. The report also notes that, “today’s exposure scenarios may not resemble those of the future,” making the need for immediate action by Federal agencies all the more necessary. Mark R. Wiesner, an engineering professor at Duke University and a member of the panel, acknowledged points raised by ICTA and others that case-by-case examinations of

nanomaterials are nearly impossible given the immense backlog of engineered nanomaterials needing to be assessed and the dearth of funding and resources to do so.

In 2008, ICTA and the Center for Food Safety (CFS) filed a legal [petition](#) with the EPA on behalf of a coalition of 14 public interest organizations calling on EPA to regulate nanosilver and other nano-pesticide products pursuant to its authority under the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA).

In November 2009, the EPA convened a Scientific Advisory Panel (SAP) to assess and evaluate the hazards and exposure risks associated with nanosilver and other nanometal pesticide programs. The SAP concluded that data gaps on potential exposure and hazards related to nanoparticles are broad; most existing models are not appropriate for use with nanomaterials and are unable to predict accurately nanomaterial exposure scenarios; additionally, existing data on current exposure and toxicity studies vary greatly with respect to metrics, particle size, etc. Ultimately, the SAP concluded that nanoparticles are fundamentally different substances from their larger scale cousins and that nanomaterials can create new and unique health and environmental risks that need new forms of safety testing.

In November 2010, ICTA and CFS filed a similar petition with the EPA to use its FIFRA authority to halt the sale of untested nano-copper products, providing yet another blueprint for how EPA should be treating and regulating nanomaterials.

“The panel’s conclusions are clear,” added Hanson. “It’s about time we stop speculating about the risks and start addressing them. EPA can begin with publishing its much anticipated nano-pesticide rule.”

ICTA is a non-profit, non-partisan organization committed to providing the public with full assessments and analyses of technological impacts on society. ICTA works towards adequate oversight of nanotechnology through its Nanotechnology Project, NanoAction.