

## Wenonah Hauter, Food & Water Watch

### Food & Water Watch Comment on Draft 2014 Strategic Plan

As the NNI formulates its strategic plan, we urge the initiative to take steps to move away from the pro-development, pro-industry pathway it has traveled since its inception. It is imperative that government research dollars be reoriented to prioritize investigating the risks associated with nanotechnology, which seems well in line with the initiative's purported mission to "protect(s) public health and the environment."<sup>(1)</sup>

NNI's focus on innovation without commensurate attention to the well-regarded risks associated with nanomaterials follows an unfortunate tradition in American policy and rulemaking. From lead paint to asbestos to Agent Orange to DDT, American industry has run roughshod over consumers and the environment for decades, while policy makers routinely base regulatory decisions on promises from the very industries responsible for the injury and damage.

We urge NNI to work with other federal agencies to focus on risk assessment of nanomaterials. The initiative's historic coordination of miserly research expenditures of environmental, health and safety research (EHS)—even misrepresenting EHS expenditures to the public, according to the Government Accountability Office (2) —has gone on long enough. There are crucial questions related to environmental, health and safety that must be answered before products should enter the ever-growing marketplace for nanomaterials. NNI must use its role as a coordinating agency to effect meaningful changes to the current, cavalier embrace of nanotechnology development by government agencies.

While we appreciate NNI's ongoing efforts to hold stakeholder meetings with scientists and members of the public and to take public comments on strategic plans, NNI's goals and priorities appear to have benefitted minimally from this outreach effort. NNI's goals for 2014 read almost verbatim as its goals from 2007, including its number one goal: "Advance a world-class nanotechnology research and development program" and "foster the transfer of new technologies into products for commercial and public benefit."<sup>(3)</sup>

This pro-development bias is unfortunate given that much research has emerged in the last decade confirming the potential risks associated with nanomaterials. As regulators fail to address these risks, NNI seems all too willing to look to industry for guidance. In 2013, the NNI invited a representative from DuPont to speak at a planning stakeholder workshop on the issue of Environmental, Health and Safety Considerations.<sup>(4)</sup> We feel that it is highly inappropriate for a developer, who has a financial interest in the regulatory and policy outcomes of nanomaterials, to lead a discussion at NNI on this critical subject.

This is all the more troubling given DuPont's long history of developing and commercializing products that have damaged human and environmental health, including its use of asbestos in manufacturing.<sup>(5)</sup> Fittingly, the scientific discourse on the safety of nanomaterials often makes direct comparisons to asbestos, once heralded as a miracle material and added to countless products but later found to be harmful to human health. A study in *Nature Nanotechnology* demonstrated "asbestos-like pathogenicity" in a study involving carbon nanotubes and mice.<sup>(6)</sup> A comparison between nanomaterials and asbestos seems wholly appropriate given their parallel paths of rapid commercialization and evident risks.

While NNI has trudged forward with its nearly decade-old focus on development, the number of consumer products containing these nano-materials has proliferated. The well-publicized consumer inventory of commercially available nano-products (organized by the Project on Emerging Technologies) surged 24 percent between 2010 and 2013, demonstrating the continued, widespread availability of these products.<sup>(7)</sup>

This commercialization has gone basically unchecked by regulators. In 2013, the 9th Circuit Court intervened in an EPA approval of nanosilver embedded clothing, potentially removing one manufacturer's products from the

## Wenonah Hauter, Food & Water Watch

market. This case, presented by public-interest groups, found that EPA treated the nanomaterial as it would a pesticide, but failed to properly scrutinize the risks, according to the court ruling.<sup>(8)</sup> This highlights the regulatory deficiencies that exist throughout government and underscores the need to develop a new regulatory approach to address the novel risks of nanomaterials.

(1) National Nanotechnology Initiative. 2011 Environmental, Health, and Safety Research Strategy October 2011 at x.

(2) Government Accountability Office. "Accuracy of Data on Federally Funded Environmental, Health, and Safety Research Could Be Improved." April 24, 2008 at "What GAO Found."

(3) National Nanotechnology Initiative. 2014 Draft Strategic Plan. 2013 at 4; National Nanotechnology Initiative. 2007 Strategic Plan. December 2007 at 3.

(4) National Nanotechnology Initiative. 2014 Draft Strategic Plan. 2013 at 61, 67.

(5) "Company News; Dupont Ordered to Pay Survivors of Asbestos Victims." New York Times. March 7, 2002.

(6) Poland, Craig et al. "Carbon nanotubes introduced into the abdominal cavity of mice show asbestos-like pathogenicity in a pilot study." Nature Nanotechnology. May 20, 2008 at 423.

(7) Project on Emerging Technologies. "Inventory Finds Increase in Consumer Products Containing Nanoscale Materials." October 29, 2013.

(8) Natural Resources Defense Council. "Court Ruling in NRDC's Favor Should Limit Pesticide Nanosilver in Textiles." November 7, 2013.