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ARTICLES

The New Business of Nanotechnology: Exploring Commercial Opportunities and Risks

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commercial applications of nanotechnology in new, unsettled waters. This article

identifies some of these challenges and the non-conventional, innovative ways that lawyers, business managers, risk assessors, and others must embrace to manage risk and avoid liability effectively.

Notes

[1]National Nanotechnology Initiative, “What is Nanotechnology?.” http://www.nano.gov/html/facts/whatIsNano.html (accessed February 22, 2008).

[2]EPA, Nanotechnology White Paper (February 2007), 5. http://www.epa.gov/OSA/pdfs/nanotech/epa-nanotechnology-whitepaper-0207.pdf (accessed February 22, 2008).

[3] See Lux Research, The Nanotech Report™, 4th Ed. (2006), iii.

[4] Toxicology studies of certain ultrafine particles demonstrate that smaller particles have potential to induce oxidative stress and inflammation in the respiratory tract and cardiova ster. Nanotec articles. Environ.

[5] See EP http://w

[6]See FD d February 22, 2

[7] See Ni http://w

[8] See NT go/nanotech (last upd

[9] See Ur http://w

[10] See EPA, “Nanotechnology: Research Projects.” http://es.epa.gov/ncer/nano/research/index.html (last updated February 12, 2008).

[11] Project on Emerging Nanotechnologies, Woodrow Wilson Center for International Scholars, “Consumer Products: An Inventory of Nanotechnology-Based Consumer Products Currently on the Market.” http://www.nanotechproject.org/inventories/consumer/ (accessed February 22, 2008).

[12] Small Times Magazine (March 2005).

[13] These are accounting rules used to prepare and report on financial statements for public and private companies.

[14] Swiss Re, Nanotechnology—Small Matter, Many Unknowns (2004), 48. http://www.swissre.com/resources/31598080455c7a3fb154bb80a45d76a0-Publ04_Nano_en.pdf (accessed February 22, 2008).

[15] Robert Blaunstein, PhD. Unfamiliar exposure, Insurance Networking News 10(4) (Nov. 2006):13–14. http://www.insurancenetworking.com/issues/20061101/4372-1.html (accessed February 22, 2008).

[16] For another review of emerging risk from the insurer's perspective, see Lloyd's Nanotec
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[18]See 70 c meeting to discuss yielded a conse erials would have c work group on nano ntion and Toxics Ac advising OPPT on ter the Work Group ha s Overview Docume proach to a voluntar ry approach to new c us other

issues pertinent to engineered nanoscale materials. NPPTAC, Overview Document on Nanoscale Materials (November 22, 2005). http://www.epa.gov/opptintr/npptac/pubs/nanowgoverviewdocument20051125.pdf (accessed February 22, 2008).

[19]Letter from James B. Gulliford, Assistant Administrator for Prevention, Pesticides & Toxic Substances, to Stakeholders (October 18, 2006). According to the letter, the EPA's goal is “to implement TSCA in a way that enables responsible development of nanotechnology and realizes its potential environmental benefits, while applying sound science to assess and, where appropriate, manage potential risks to human health and the environment presented by nanoscale materials.” http://www.epa.gov/oppt/nano/nano-letter.pdf (accessed February 22, 2008).

[20] See 72 Federal Register 38079–38085 (July 12, 2007). All the notices and accompanying documents are available at http://www.epa.gov/opptintr/nano/nmspfr.htm (accessed February 22, 2008). The first notice solicited public comment on the EPA's proposed Information Collection Request under the Paperwork Reduction Act, including a draft form that NMSP participants could use to submit data to the EPA; the second announced a public meeting on the NMSP; and the third solicited public comment on two draft documents: (1) the “Concept Paper for the Nanoscale Materials Stewardship Program under TSCA”; and (2) the “TSCA Inventor

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2008).

[25]OECD, “About the OECD.” http://www.oecd.org/pages/0,3417,en_36734052_36734103_1_1_1_1_1,00.html (accessed February 22, 2008).

[26] A complete copy of the Framework and other related information are available at http://nanoriskframework.com/page.cfm?tagID=1095 (accessed February 22, 2008).

[27] Completed worksheets for the three DuPont demonstration projects—TiO_2, CNTs, and nano-Fe^0—are available at http://nanoriskframework.org/page.cfm?tagID=1326 (accessed February 22, 2008).

[28] Responsible NanoCode, “Background to the Responsible NanoCode.” http://www.responsiblenanocode.org/index.html (accessed February 22, 2008).

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