Background on Nanotubes

Beginning with policy effective dates of November 15, 2008 and after, we will begin attaching a new coverage exclusion form and associated policyholder notice to all Business Auto, BOP, Garage, Motor Carrier, General Liability and Umbrella policies. The exclusion form is CW 33 69 – Nanotubes and Nanotechnology Exclusion (click here to view). The policyholder notice is PN 61 61 (click here to view).

The intent of this exclusion is to remove coverage for the, as of yet, unknown and unknowable
risks created by the products and processes that involve nanotubes. The exclusion is being added to make you and your customers explicitly aware of our intent not to cover injury and/or damage arising from nanotubes, as used in products or processes, so that you can pursue coverage as necessary through E&S markets.

We also want to provide you with some background regarding our decision, and nanotechnology itself, to assist you in discussions with your customers regarding their operations and their risk management options.

Definitions:

Nanotechnology – engineering at a molecular or atomic level.

Nanotubes – hollow cylinders of carbon atoms or carbon fibers; contain remarkable strength and electrical properties; limitless number of applications; far lighter but stronger than steel; long nanotubes appear to be more lethal than short or ball-shaped nanotubes; some scientist indicate nanotubes should be subject to the same rules as asbestos.

History and Exposure:

The brave new world of nanotechnology is pretty astounding, but a new study shows inhaling long, thin carbon nanotubes may result in asbestos-like health effects. Reports have raised concerns regarding health risks from workers that may be inhaling carbon nanotubes during the manufacture of certain products. The carbon nanotubes resemble asbestos fibers in appearance, raising the concern that they may cause illness similar to that linked to asbestos. Further analysis is needed to determine long term affects. Discovered nearly 20 years ago, carbon nanotubes have been described as the wonder material of the 21st century; light
as plastic but stronger than steel. But since their discovery, questions have been raised about whether some of these nanoscale materials may cause harm and undermine an emerging market for all types of nanotubes, including multi- and single-walled carbon nanotubes.

Leading forecasting firms say that sales for all nanotubes could reach $2 billion annually by 2015, according to an article in the U.S. publication Chemical and Engineering News.

New nanotechnology products are hitting the market at a rate of three to four per week, according to the nanotechnology consumer product inventory maintained by the Project on Emerging Technologies (PEN). The number of consumer products using nanotechnology has grown from 212 to 609 since PEN launched the world’s first online inventory of manufacturer-identified nanotech goods in March 2006. Health and fitness items represent 60% of inventory products. The searchable list of nanotechnology merchandise, which includes everything from nanotech diamonds to cooking oil, to golf clubs and iPhones is available at www.nanotechproject.org/consumerproducts.

Common products currently using nanotube technology include:

<table>
<thead>
<tr>
<th>Household Paint</th>
<th>Clothing</th>
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<tr>
<td>Food Storage Containers</td>
<td>Sports Equipment</td>
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<tr>
<td>Flat Panel Televisions</td>
<td>Car Exhaust Cleaners</td>
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**Our Decision to Exclude Coverage:**

It would not be prudent for us to knowingly provide coverage for risks that are, as of yet, unknown and unquantifiable. We are all too aware of what happened to companies involved
with asbestos-related exposures in the past, and see this as a very similar issue. By excluding coverage for bodily injury and property damage specifically caused by nanotubes and nanotechnology, we can continue to provide coverage for other exposures for the multitude of companies and products using nanotechnology now and in the future.

We hope this background provides you with the information you need to work with your clients to make the best overall risk management decisions possible. We appreciate your role and expertise in this process and thank you for your continued trust and partnership.