

Executive Order No. 4
Sustainability and Green Procurement Advisory Council

Recommendation on a Green Procurement Chemical Avoidance List
September 25, 2009

WHEREAS, Executive Order No. 4 states that the Interagency Committee on Sustainability and Green Procurement (the "Interagency Committee") "shall focus on commodities, services and technologies that reasonably will: (a) reduce or eliminate the health and environmental risks from the use or release of toxic substances; (b) minimize risks of the discharge of pollutants into the environment...and (e) provide other environmental and health benefits"; and

WHEREAS, the framework for the proposed Criteria for the Identification of Priority Products and Services is "environmental and public health benefits" and a priority criterion is "opportunities for reduction of priority toxic substances, waste reduction and energy efficiency. . ."; and

WHEREAS, a Chemical Avoidance List would ensure that the Interagency Committee is implementing green procurement practices in a strategic way to address the most toxic chemicals first, rather than attempting to assess the thousands of chemicals found in products, and such a list also ensures that the term "green purchasing" has meaning and substance so procurement practices are systematically addressing the environmental and public health threats posing the greatest problems; and

WHEREAS, there are thousands of toxic chemicals which the Interagency Committee could assess for health and environmental risks, however it is more effective and appropriate for the Committee to create a Priority Chemical Avoidance List utilizing existing risk management decisions established in priority chemical lists or policies by the Environmental Protection Agency, National Toxicology Program, European Union and other institutions to select chemicals which pose serious health threats to New Yorkers;

NOW, THEREFORE, the Executive Order No. 4 Sustainability and Green Procurement Advisory Council (the "Advisory Council") recommends that the Interagency Committee adopt a Priority Chemical Avoidance List that includes the following approximately 94 substances:

- 1) Persistent, bioaccumulative toxic chemicals (PBTs) found in the U.S. Environmental Protection Agency's *Waste Minimization Priority List*.
- 2) Carcinogens found in the National Toxicology Program's *Biennial Report on Carcinogens* as substances "known or reasonably anticipated to be a human carcinogen."

3) Polybrominated diphenylethers (PBDEs) banned by New York State law (Octa and Penta) and classified as a possible human carcinogen by EPA (Deca).

4) Bisphenol A (BPA), as a growing number of governments and companies are taking action to phase out the use of BPA due to significant weight of evidence that shows environmental and health risks.

5) Perfluorinated Compounds, as a growing number of governments and companies are taking action to phase out the use of such compounds due to significant weight of evidence that shows environmental and health risks.

For more details on the Chemical Avoidance List, please see attached *Summary of Hazard Information* and *List of Chemicals*.

The Advisory Council recommends that the Interagency Committee provide for public comment opportunities on the proposed Chemical Avoidance List.

The Advisory Council recommends that the Interagency Committee encourage all state agencies and other affected entities to avoid the purchase of products, services and technologies that contain and/or use substances found on the Chemical Avoidance List. In the development of specifications, the Council recommends that the Committee rely on this list to identify those targeted chemicals to avoid purchasing. In addition, the Council recommends that the Committee encourage the use of safer alternate substances and products, services and technologies which, at a minimum, avoid the use of targeted chemicals.

The Advisory Council shall annually assess and make recommendations to the Interagency Committee to add any new chemicals to the list.

Summary of Hazard Information on Priority Chemicals

1) Persistent, bioaccumulative and toxic chemicals (PBTs)

A targeted list of priority PBT chemicals has been developed by the EPA and can be found at

<http://www.epa.gov/osw/hazard/wastemin/priority.htm><<http://www.epa.gov/osw/hazard/wastemin/priority.htm>.

All PBTs, such as mercury, are toxic in very small quantities and cause a wide range of health effects. Many are also carcinogenic. Their failure to degrade rapidly in the environment contributes to their ability to bioaccumulate to higher levels in the food chain, increasing total exposure to multiple PBTs and posing serious risks to human health. A growing number of governments have implemented health-protective green purchasing programs with a priority focus on PBT chemicals, including the European Union, U.S., EPA, Department of Health and Human Services, Massachusetts, Maine, New Jersey, Oregon, and Washington.

2) Carcinogens

A targeted list of substances "known or reasonably anticipated to be a human carcinogen" can be found in the National Toxicology Program's Biennial Report on Carcinogens at

<http://ntp.niehs.nih.gov/index.cfm?objectid=32BA9724-F1F6-975E-7FCE50709CB4C932><<http://ntp.niehs.nih.gov/index.cfm?objectid=32BA9724-F1F6-975E-7FCE50709CB4C932>.

Any exposure to a carcinogen causes an increased risk of cancer. We can help reduce exposures by selecting products without known or reasonably anticipated carcinogens, whenever safer alternatives are available. In the United States, men have slightly less than a 1 in 2 lifetime risk of developing cancer; and for women, the risk is a little more than 1 in 3 lifetime risk of developing cancer. (See *American Cancer Society Report* at <http://www.cancer.org/downloads/STT/2008CAFFfinalsecured.pdf><<http://www.cancer.org/downloads/STT/2008CAFFfinalsecured.pdf>.

3) Polybrominated diphenylethers (PBDEs)

PBDEs are a class of persistent toxic chemicals used for their fire retardant properties. Octa and penta have been banned by New York State law, and legislation to ban deca is pending. PBDEs can impact the developing brain and reproductive system. Liver tumors developed in mice and rats that ate extremely large amounts of Deca-PBDE throughout their lifetime. On the basis of cancer in animals, Deca is classified as a possible human carcinogen by EPA. (ATSDR) Minnesota's Pollution Control Agency concluded that Deca shows potential to accumulate and concentrate in the food chain, is toxic, and breaks down in the environment to more harmful forms. They also found that effective alternatives are available (Minnesota PCA 2008). The Canadian government echoes these findings (Canada 2006).

The national Environmental Working Group has issued important studies on PBDEs looking at the health risks and body burden levels of these chemicals in children and adults which can be found at

<http://www.ewg.org/node/26904><<http://www.ewg.org/node/26904>>

EWG's report on the Deca PBDE also summarized the international, national and state actions that have been taken to phase out this class of chemicals, which can be found at <http://www.ewg.org/node/26976><<http://www.ewg.org/node/26976>>

EWG also provides a list of studies on PBDEs at

<http://www.ewg.org/node/26906><<http://www.ewg.org/node/26906>>

4) Bisphenol A

Bisphenol A (BPA) is a chemical commonly used in the manufacture of clear polycarbonate plastic. Over 700 studies have shown that the adverse health effects of bisphenol A include diabetes, breast cancer, sperm defects, prostate disease and cancer, hyperactivity, early onset of puberty and other health problems. A growing number of state and national government agencies, as well as companies are taking action to phase out the use of BPA.

A summary of bisphenol A health effects can be found in Environment California's website, including a list of reference articles, at

<http://www.environmentcalifornia.org/environmental-health/stop-toxic-toys/bisphenol-a-overview><<http://www.environmentcalifornia.org/environmental-health/stop-toxic-toys/bisphenol-a-overview>>

5) Perfluorinated Compounds

Perfluorinated compounds (PFOS) are persistent, bioaccumulative, widespread in the environment, and toxic at doses close to the range already found in humans and wildlife. Norway issued an Action Plan in 2005 announcing that one of its objectives is to eliminate or substantially reduce emissions of certain PFOS related substances by 2010. (*Report to the Storting No. 21, 2004-2005*). Perfluorooctanoic acid (PFOA), a perfluorinated compound, is used to make architectural fabrics. It is used as a processing aid in the manufacture of fluoropolymers for use in non-stick surfaces such as Teflon coated cookware. In 2006, DuPont voluntarily agreed with a U.S. Environmental Protection Agency request to work toward eliminating emissions of PFOA, and to gradually cap the levels of PFOA in DuPont products. In 2006, the EPA's scientific advisory board, a panel of independent experts convened by the EPA, announced its determination that PFOA be declared a "likely human carcinogen." A study published in *Human Reproduction*, a European reproductive medicine journal, has found that pregnant women and women of child-bearing age in the United States are at greater risk than previously thought for infertility and reproductive problems as result of exposure to PFOA. Major retailers, such as Wal-Mart and McDonalds, have indicated intentions to reduce PFOA in products. DuPont's Teflon non-stick cookware products continue to receive media scrutiny.