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for the
125th Maine State Legislature
Committee on Environment and Natural Resources

LD 412: Resolve, Regarding Legislative Review of Portions of Chapter 882:

Designation of Bisphenol A as a Priority Chemical and Regulation of Bisphenol A in Children's Products, a Major Substantive Rule of the Department of Environmental Protection

Position: FAVORABLE

March 25, 2011

Consumers Union, the non-profit publisher of *Consumer Reports*®, magazine[1], writes in support of LD 412 and the final phase out of bisphenol A (BPA) from baby bottles, sippy cups, reusable food and drink containers.

My name is Urvashi Rangan. I am an environmental health scientist and toxicologist for Consumers Union. I received my doctorate in toxicology from Johns Hopkins University. As the Consumers Union Director of Technical Policy, I develop environmental health policy positions, consumer advice and messaging, and toxicological risk assessment for chemical and contaminant safety issues related to testing projects, magazine reports and external messaging. I also advise on hazard testing protocols, for a broad segment of product testing and reporting including hazardous chemicals, emerging hazards, pathogens and environmental claims across a wide range of product categories—including our most recent study of BPA in canned foods. I have delivered several federal and state testimonies urging the ban of BPA in food contact substances.

Consumers Union (CU) was founded in 1936 as an expert, independent, nonprofit organization whose mission is to work for a fair, just, and safe marketplace for all consumers and to empower consumers to protect themselves. To maintain its independence and impartiality, CU accepts no outside advertising or commercial dollars and no free samples.

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[1] Consumers Union of United States, Inc., publisher of *Consumer Reports*®, is a nonprofit membership organization chartered in 1936 to provide consumers with information, education, and counsel about goods, services, health and personal finance. Consumers Union's publications and services have a combined paid circulation of approximately 8.3 million. These publications regularly carry articles on Consumers Union's own product testing; on health, product safety, and marketplace economics; and on legislative, judicial, and regulatory actions that affect consumer welfare. Consumers Union's income is solely derived from the sale of Consumer Reports®, its other publications and services, fees, noncommercial contributions and grants. Consumers Union's publications and services carry no outside advertising and receive no commercial support.

BPA was originally introduced in the 1930's as an artificial estrogen[2]. It was also used as a pharmaceutical hormone for a period of time[3]. BPA's use gained popularity in the plastics industry in the United States and was eventually grandfathered as "generally recognized as safe" (GRAS) by the FDA in 1976, along with 62,000 other chemicals. Since then hundred of studies have been published showing a wide range of adverse effects in animals and in some cases humans at low doses --doses that approximate current levels circulating in the human population. In fact, the safety of BPA, at current exposure levels in the US population, has not been demonstrated. BPA has a fast clearance rate (people should excrete it within a few days) and yet it is found in the urine of more than 90% of the US population.

We are very concerned about the lack of a proper margin of safety between BPA levels we know to cause harm in animals and those levels found in people. The FDA NOAEL (no observable adverse effect level) of 5mg/kg/d, used as the basis for FDA's current safety limit is sorely outdated and primarily based only on a few large dose studies. These factors raise legitimate questions about the safety of BPA that warrant concern and government action.

Hundreds of independent, peer-reviewed studies in animals have linked BPA to a wide array of adverse effects.[4] In 2007, a meeting of 38 of the world's leading scientific experts on BPA was convened by the National Institutes of Health. (NIH).. They issued a consensus document stating 95 percent of Americans have BPA exposure within the range that is predicted to be biologically active based on animal studies. They cited several studies of adverse health effects in animals exposed to low doses of BPA --effects consistent with recent trends in human disease, such as increases in prostate and breast cancer, uro-genital abnormalities in male babies, a decline in semen quality in men, early onset of puberty in girls, metabolic disorders including insulin resistant (type 2) diabetes and obesity, and neurobehavioral problems such as attention deficit hyperactivity disorder (ADHD).[5] Many of these concerns are echoed by the US National Toxicology Program and the Endocrine Society.

The most recent (2008-2009) Annual Report from the President's Cancer Panel found the "true burden of environmentally induced cancer has been grossly underestimated. With nearly 80,000 chemicals on the market in the United States, many of which are used by millions of Americans in their daily lives and are understudied and largely unregulated, exposure to potential environmental carcinogens is widespread. One such ubiquitous chemical, bisphenol A, is still found in many consumer products and remains unregulated in the United States, despite the

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[2] Houlihan,J. Lunder, S. Jacob, Anila. (March 2011) Environmental Working Group. Timeline: BPA from Invention to Phase-out. http://www.ewg.org/reports/bpatimeline Retrieved 3/24/2011

[3] Dodds E. C. and Lawson W. *Proceedings of the Royal Society of London. Series B, Biological Sciences* Vol. 125, No. 839 (Apr. 27, 1938), pp. 222-232 http://www.jstor.org/stable/82191

[4] U.S. Department of Health and Human Services: 2008-2009 Annual Report of President's Cancer Panel. Reducing Environmental Cancer Risk: What We Can Do Now April 2010

[5] vom Saal Fs, Akingbemi BT, Belcher SM, Birnbaum LS, Crain DA, Eriksen M, et al. Chapel Hill bisphenol A expert panel consensus statement: integration of mechanisms, effects in animals and potential impart to human health at current levels of exposure. Reprod Toxicol. 2007 Aug-Sep; 24[2]: 131-8.

growing link between BPA and several diseases, including various cancers."[6]

Consumers Union has a long history on BPA. We were one of the first organizations to test consumer products for BPA and published our findings on BPA in baby bottles a decade ago. We warned consumers then about the potential risks.[7]

In recent years, we have tested canned goods for BPA, as well as the "BPA-free" claims on bottles[8] and have also published advice on how consumers can reduce their direct exposure to BPA.[9] [10] We have supported legislation proposed at the state and federal levels to ban BPA from children's products and food and beverage containers.[11] In fact, Consumers Union believes that BPA should not be used in any food contact substances and has made that position clear in our reporting and testimony to the FDA.

Consumer Reports testing of baby bottles confirmed that plastic bottles are already available on the market with negligible levels of BPA present. Glass containers also provide a safe way to store food and drinks.

Some have questioned whether plastics that don't contain BPA also have estrogenic activity. Recent research, published in *Environmental Health Perspectives* found that with good quality controls, manufacturers can definitely produce plastic products for food storage and for children's use that do not have BPA-type risks[12].

Children and families in Maine deserve reusable containers that are safe. Maine consumers should have the same health protections as those in other states, where restrictions of this harmful chemical already exist. LD 412 appropriately seeks to ban the chemical in the following kinds of products- baby bottles, sippy cups, and reusable food and drink containers.

We therefore urge its passage. Again, we thank you very much for the opportunity to offer our testimony in support of this important legislation.

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[6] U.S. Department of Health and Human Services: 2008-2009 Annual Report of President's Cancer Panel. Reducing Environmental Cancer Risk: What We Can Do Now April 2010

[7] Consumers Union. Baby alert: New findings about plastics. Consumer Reports, 1999.

[8] http://www.consumerreports.org/cro/consumer-protection/recalls-and-safety-alerts-10-08/update-on-bisphenol-a/recalls-update-on-bisphenol-a.htm

[9] Rangan, Urvashi. Plastic worries: What you need to know to keep your family safe. *Consumer Reports*, Shopsmart, 2008.

[10] http://blogs.consumerreports.org/baby/2008/03/qa-baby-bottles.html

[11] Consumers Union et al. Written testimony to Senate hearing on Phthalates and BPA, 2008.

[12] Yang CZ, Yaniger SI, Jordan VC, Klein DJ, Bittner GD, 2011 Most Plastic Products Release Estrogenic Chemicals: A Potential Health Problem That Can Be Solved. Environ Health Perspect doi: