TESTIMONY OF

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AT HEARING ENTITLED:

ASSESSING THE EFFECTIVENESS OF U.S. CHEMICAL SAFETY LAWS

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Chairman Lautenberg, Ranking Member Inhofe and members of the Committee, thank you for inviting me to testify today on "Assessing the Effectiveness of U.S Chemical Safety Laws." My name is Frances Beinecke. I am the President of the Natural Resources Defense Council (NRDC). NRDC is a national, nonprofit organization of scientists, lawyers, and environmental specialists dedicated to protecting public health and the environment. Founded in 1970, NRDC has more than 1.3 million members and online activists nationwide, served from offices in New York, Washington, Los Angeles, San Francisco, Chicago, and Beijing.

We appreciate being included in today's discussion on the importance of reforming our chemical safety laws to protect the public from unsafe chemicals and promote innovation toward the production and use of safer chemicals. NRDC is a member of the Safer Chemicals, Healthy Families campaign a coalition of nearly 300 local, state-based and national organizations including environmental, health, consumer and justice groups that have united around a common platform for reforming the flawed and outdated Toxic Substances Control Act (TSCA). NRDC is also a member of the Blue Green Alliance, a national strategic partnership between ten labor unions and four environmental organizations dedicated to expanding the number and quality of jobs in the green economy. The Blue Green Alliance is a strong proponent of TSCA reform to increase health protections for workers and their families.

I am particularly pleased that this hearing is being held so early in the 112th Congress, signaling a continued commitment to address this issue, and seek workable legislative solutions to TSCA's long-standing problems. In the 111th Congress, both this Committee and the House Energy and Commerce Committee held a number of hearings on various aspects of TSCA reform, providing a range of views and opportunities for discussion and identification of key issues that need to be addressed. In addition, the Safe Chemicals Act introduced by Senator Lautenberg, as well as legislation introduced in the House, provided good frameworks for discussion and negotiation on the details of TSCA reform. I hope that we can build upon the momentum created in the last Congress and advance legislation in this Congress.

While much of the political discussion inside and outside Washington is about how the recent elections changed the Congressional landscape for addressing a range of problems, recent public opinion research clearly confirms that protecting the public from exposure to unsafe chemicals has strong, bi-partisan support with the public, and all will benefit from moving forward with strong, workable reforms, no matter who is in charge. Achieving meaningful reform of TSCA is a high priority for NRDC, and we look

forward to working with members of this committee, and the rest of the Congress, as well as individual companies – both chemical manufacturers and downstream users – and other key stakeholders – to establish an effective system for protection for public health and the environment.

The truth is, whether or not Congress is able to enact TSCA reform legislation, the landscape of chemical regulation is already changing dramatically, and it will continue to do so even in the face of Congressional inaction. Among the drivers of this change is adoption at the state and local level of controls on the use of specific chemicals (such as bisphenol A and some phthalates), classes of chemicals (brominated flame retardants), as well as broader reform initiatives. In the last 8 years, 18 states have adopted 71 such measures.[1] Significantly, virtually all of these measures commanded strong bi-partisan support from state legislatures, and were signed into law by Democrat, Republican, and Independent governors. That trend is likely to continue. Just last month, legislators in more than 30 states introduced or announced plans to introduce chemical safety legislation this year. Of course not all of these efforts will succeed in the current legislative year, but they reflect the broad and continuing widespread support for reform, and a recognition that the current federal system fails to adequately protect the public. Further evidence of the state-level support for reform, are the adopted resolutions calling for TSCA reform from the Environmental Council of States (ECOS), the National Conference of State Legislatures (NCSL), and the Association of State Drinking Water Administrators (ASDWA). Those calls for reform have been by echoed by medical, science, and public health organizations including the American Medical Association, the American Public Health Association, and the American Nurses Association.

The unprecedented state and local level activity in this area has also been reflected more directly in the marketplace. Numerous large retailers, including Walmart, Toys "R" Us, and Target have acted recently to drop from their shelves products containing chemicals for which there is growing concern, including bisphenol A, phthalates, lead and cadmium. Downstream users and formulators of chemicals are also developing their own chemical safety policies and practices, and are engaged in efforts to disclose more information to the public about the chemicals used in their products and to ensure that those chemicals are safe for all their uses. SC Johnson has been a leader in this regard. I have previously applauded SC Johnsons' efforts to eliminate certain toxic chemicals from their products and expand its disclosure of the chemicals used in its products, and its leadership in working to expand the public's right to know

[1] See "*Healthy States: Protecting Families From Toxic Chemicals While Congress Lags Behind*" by Mike Belliveau, November 2010, http://www.saferchemicals.org/PDF/reports/HealthyStates.pdf.

about chemicals to which they may be exposed. Downstream users of chemicals, as well as the public, will undoubtedly benefit from federal-level reform that will expand the information about chemicals available to the market as well as the public; provide consumers with the confidence that chemicals have been assessed for safety based on modern scientific methods; and ensure that EPA has the ability (and duty) to take action to protect the public from those chemicals that are unsafe, particularly from everyday products found in homes, schools and the workplace.

While we applaud the steps taken at the state level and in the marketplace to fill the vacuum left by the ineffectiveness of TSCA, we recognize that it is an imperfect alternative to strong reform at the national level. In the first place, state-by state protections cannot themselves meet the larger purpose of protecting all Americans from unsafe chemicals. Second, part of what is needed in national reform is a systematic review of the safety of chemicals in commerce, to ensure that eliminating the use of one unsafe chemical doesn't lead to substitution with another that is equally bad or worse. Third, we need a national chemical safety policy to keep pace with the rest of the developed world that is already pulling ahead in its efforts to strengthen health protections and promote innovation and development of safer chemicals. The most obvious example is the European Union, which just passed a significant milestone in its implementation of REACH: the deadline for submitting registration dossiers on the first set of chemicals to be manufactured or imported into the Union. But the EU isn't alone. Reform efforts are planned or already underway in a host of other countries including Japan, China, Canada, Taiwan, South Korea, and Israel. In short, our broken chemical safety system is getting passed up by our international competitors.

The Committee has heard in previous hearings from EPA and other experts about some of the fundamental problems with the current system under TSCA that have led to the explosion of activities at the state level and in the marketplace to address public concerns about toxic chemicals. These include:

- The absence of any systematic, prioritized, and deadline-driven review of the 62,000 chemicals grandfathered under the original Act to determine whether they meet a safety standard. As a result, the Government Accountability Office (GAO) estimates that fewer than 2% of those chemicals have been fully reviewed by EPA in 35 years;

- The inability to require upfront the information necessary for EPA to adequately review the safety of new chemicals. As a result, 85% of the notices EPA receives for new chemicals contain no health data, and 95% contain no ecotoxicity data. The U.S. is alone in the developed world in not requiring a minimum set of data for new chemicals to assess their safety;

- Severe constraints on EPA's ability and authority to obtain testing or other information from chemical manufacturers – such that fewer than 300 chemicals have been required to be tested under TSCA. As a result, we are still very much in the dark about the potential health or environmental effects of thousands of chemicals that are used in commerce;

- Even higher hurdles for EPA to clear before it can take action to protect the public from chemicals, even those well known to be unsafe and for which there is widespread human exposure (like asbestos). As a result, only 5 of the original 62,000 chemicals have been partially regulated by EPA under TSCA in 35 years. The one most extensively addressed has been PCBs, production of which was banned by Congress under TSCA in 1976. Yet, we still face widespread contamination by PCBs in the environment, in schools, and in our bodies. This is due in part to its persistence in the environment and its ability to build up in the food chain, but also because TSCA did not ban all uses of PCBs. The exemption of certain uses has resulted in continued releases to the environment and ongoing exposure;

- A lack of publicly available information about most chemicals – including their uses, their potential effects on human health or the environment, and likely sources of exposure. This is due in no small part due to TSCA's Confidential Business Information (CBI) provisions that, among other problems, allows companies to make nearly unlimited claims of CBI, without requiring any upfront justification or EPA review, and without any date of expiration or requirement for periodic renewal and justification of such claims;

- A failure to incorporate and act upon advances in our scientific understanding of how chemicals can affect health, and how to best assess the risk posed by chemicals.

Just a small sample of the areas where scientific understanding and technology have increased since TSCA was enacted in 1976 include: a greater recognition that some populations, including children, pregnant women, and the fetus are more vulnerable to the effects of exposure to toxic chemicals; that the timing of exposure to chemicals can be as important as the dose of exposure; expanded understanding of chemical exposures in our bodies through bio-monitoring -- some of which are inside nearly everyone in the population; the impacts some chemicals may have on our hormonal systems with potential implications for rising rates of infertility, learning and developmental problems, cancer, diabetes, obesity and other disorders; the potentially serious effects of exposure to even low doses of some chemicals; and the potential for the effects of chemical exposure to be passed down from one generation to the next.

I am particularly concerned about some communities across this country that are facing a legacy of environmental contamination on a daily basis. I have visited the community of St. Charles, Louisiana, downwind from major refineries and struggling with a long history of serious air quality problems and high rates of illness. In Dickson, Tennessee, a low-income African-American community unknowingly drank water laced with the known carcinogen, trichloroethylene (TCE), for years, even though the contamination was known to Federal agencies. Now people there are suffering from high rates of cancer and other illnesses. One of NRDC's top institutional priorities is to fight environmental injustice, and I feel strongly that it is unfair to allow continued disparities in exposure to toxic pollution that subject many of the poorest and most disenfranchised communities in this country to the greatest health burdens. Meaningful TSCA reform must identify and address these environmental injustices, and must also deal with the legacy pollutants that persist in our environment and pose threats across the generations. The old persistent, bioaccumulative toxicants (PBTs), such as the PCBs, must be cleaned up in communities, and new chemicals that otherwise would become the PBTs of the future should not be allowed on the market because they are simply too dangerous.

This expanded understanding about the potential of toxic chemicals to affect the human body comes as we are also learning, thanks to the science of biomonitoring, that all of us are routinely exposed to hundreds of toxic chemicals, chemicals to which our grandparents were never exposed. This rise in chemical exposures has occurred concurrently with a rise in incidence of certain serious chronic disease and illness, including prostate and breast cancer, asthma, Alzheimer's, and learning and developmental disabilities, including steep rises in ADD/ADHD and autism. Last year, this Committee received testimony summarizing some concerning trends regarding the reproductive health of the U.S.

population. These include a doubling in the percent of women reporting that they had difficulty in conceiving and maintaining a pregnancy; a more than 3-fold increase since the 1980s in the number of babies born prematurely, and a decline in birth weights over the past 25 years.[2] Other disturbing trends include declines in testosterone levels and sperm quality in the United States.[3]

The rise in incidence of these chronic illnesses cannot be solely attributed to genetic factors or improved surveillance and detection. Other factors are also involved, and there is legitimate reason for public concern that ongoing exposure to a mix of chemicals, some of which we already know to be carcinogenic, or neurotoxic, or endocrine disrupting, and others about which we frankly know very little, are playing a part. A growing body of laboratory studies and some epidemiology studies of people demonstrate that chemicals to which we are exposed can cause the very kinds of diseases and disorders that are rising in the human population, often at levels of exposure comparable to those found in people through biomonitoring.

The Committee has received expert testimony on many of these advances in scientific understanding and health trends in hearings over the past year.[4]

As Dr. Federica Perera of Columbia University noted in her testimony before this subcommittee last October, the CDC estimates that 5-17% of children in the United States have been diagnosed with a learning or attention disorder. Dr. Perera's work has focused on the relation between early life exposure to toxic substances and neurodevelopmental disorders. Dr. Perera and her colleagues at the Columbia University Center for Children's Environmental Health have identified widespread exposure to several endocrine-disrupting chemicals, including bisphenol A, phthalates and brominated flame retardtants (PBDEs), which pose serious concern because they can potentially effect hormonal systems and development at very low levels of exposure. In the Center's study of women from the NYC greater metropolitan area who were pregnant on September 11, 2001 and their children, they found that

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[2] Testimony of Tracey J. Woodruff, PhD, MPH before U.S. Senate Committee on Environment and Public Works on "Current Science on Public Exposures to Toxic Chemicals" February 4, 2010.

[3] See Safer Chemicals Healthy Families, *The Health Case for Reforming the Toxic Substances Control Act,* January 2010, http://www.saferchemicals.org/.

[4] Testimony of Frederica Perera, MPH, DrPH, before the Senate Field Hearing on Toxic Chemicals and Children's Health, October 26, 2010; Testimony of Ted Schettler MD, MPH, Hearing on EPA's Efforts to Protect Children's Health March 17, 2010; Testimony of Gina Solomon, MD, MPH, before the Senate EPW Hearing "Protecting Children From Environmental Threats" March 17, 2010; Testimony of Linda Birnbaum, Ph.D, DABT, ATS before the Senate EPW Subcommittee o Superfund, Toxics and Environmental Health "Oversight Hearing on the Federal Toxic Substances Control Act" December 2, 2009.

children exposed to higher levels of PBDEs had significantly impaired psychomotor and mental development as well as lowered IQ for virtually all neurodevelopment assessments conducted between 1-6 years of age.

In three recent reports, the National Academy of Sciences (NAS) has called upon EPA to revise the way it conducts safety assessments on chemicals. Some of the most significant recommendations by the NAS include abandoning the assumption that there are levels below which chemicals are presumed not to have effects other than cancer; recognizing and accounting for the range of potential vulnerabilities amongst the population in estimating the risks posed by chemicals; using scientifically-based default assumptions that will protect health when data gaps exist; and developing the tools to account for the aggregate exposures to a chemical, and the cumulative effects of exposure to multiple chemicals. EPA must incorporate these recommendations into its safety assessments of chemicals, if they are going to be recognized as credible and health-protective, and to provide the confidence in consumer products that the public wants and needs.

The rapidly growing body of science linking exposure to toxic chemicals to a host of chronic illnesses and disabilities, along with the advancement in our analysis of how to better assess the risks posed by exposure to hundreds or thousands of such chemicals in everyday life, comes at the same time as calls for reform are being made by independent science and policy observers. In 2009, EPA's chemicals management program under TSCA was one of only three federal programs added to the GAO's biennial list of "high risk" federal programs, due to its wholesale failure to protect the public from unsafe chemicals.[5] The designation came after years of reports by the GAO outlining the many problems with TSCA. Last year, for the first time in more than 40 years, the President's Cancer Panel addressed the role of environmental contamination in cancer incidence. The report opens with the observation that "…the true burden of environmentally induced cancer has been grossly underestimated." The panel called for a comprehensive agenda to address environmental contaminants and protection of human health. The report specifically identified the Toxic Substances Control Act (TSCA) as "the most egregious example of ineffective regulation of chemical contaminants" and called for the law to be strengthened so that EPA could take action to protect the public from cancer-causing chemicals.

[5]United States Government Accountability Office (GAO), Report to the Congress, "High-Risk Series: an Update" January 2009.

The statistics on cancer in America are shocking:

- The lifetime chance of a man developing an invasive cancer is about one in two, and approximately one in four men die from cancer. For women, the lifetime chance of developing an invasive cancer is one in three, and one in five will die.
- Cancer is the second most common cause of death in the U.S., exceeded only by heart disease. More than 1.5 million people were diagnosed with new cases of cancer in 2009.
- In 2009, cancer cost the nation $243.4 billion–$99 billion for direct medical costs, $19.6 billion for cost of lost productivity due to illness, and $124.8 billion for cost of lost productivity due to premature death.

But it doesn't take awareness of these national statistics to know that the personal and social costs of cancer are enormous. Millions of Americans are living with cancer, and millions more are affected by the devastating toll a cancer diagnosis takes on an individual and a family. As we continue our national efforts to reduce smoking, and educate the public about the health risks of obesity, including the links to cancer, we must also move quickly to address the threat posed by toxic chemicals.

Let's just stipulate that chemicals have thousands of important uses that are valuable to society, and that our lives have been improved in many ways by the use of chemicals. We can also agree that the production and use of industrial chemicals is so widespread that the chemical industry touches a large part of our economy. In fact, that is part of the reason it is so important that we have a regulatory structure in place to ensure that the chemicals people are exposed to day in and day out – in the home, at school, in the workplace, and the marketplace -- are safe. It is why we need to restructure our regulatory system of toxic chemicals to promote a shift away from the use of those chemicals that may cause cancer, or developmental disabilities, or harm our ability to reproduce, or that persist in the environment and bioaccumulate up the food chain, *and* to promote the innovation necessary to create safer substitutes for those chemicals.

Reforming TSCA is not simple. The truth is a significant mistake was made 35 years ago when all of the chemicals then in commerce were grandfathered under the law, with no requirement of meeting a health standard, or even being subject to further testing. Two generations later, we find ourselves with

hundreds of chemicals in our bodies, *even at birth*, some of which are known to be carcinogens, or neurotoxicants, and rising rates of multiple types of cancer, developmental and learning disabilities, reproductive problems and hormone-related disorders. We now face a tall order: we need to determine which chemicals that are used in commerce are safe (and under what conditions), and we need to break free of the legal restrictions and red tape that have prevented EPA from quickly reducing exposure to those chemicals for which we already have strong evidence of both harm and widespread exposure. States are and will continue to act in the face of inaction at the national level, while public trust in the safety of numerous products will continue to decline. That prospect should be enough to keep everyone at the table until a deal can be reached. I view this hearing as part of the effort to "tackle" TSCA reform, and I want to thank you again for being invited to testify and participate.