Testimony of

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To the Joint Standing Committee on Environment and Natural Resources

In opposition to

LD 1129, An Act to Provide the Department of Environmental Protection Regulatory Flexibility Regarding Listing of Priority Chemicals

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Good afternoon, Senator Saviello, Representative Hamper and members of the Committee. My name is Andrea Lani; I am a resident of Whitefield. In the interest of full disclosure, I work for the DEP; in fact I am the staff person who has been responsible for implementing the Toxic Chemicals in Children's Products Law for the last year.

I am here today, on my personal time, to speak to you not as an Environmental Specialist, but as a mother. I have three children—a nine-year-old and two five-year-olds, all boys. One of my boys' favorite things to do is take our sofa apart and build forts with the cushions. This drives me crazy because, besides the fact that there's never anywhere to sit in our living room, down below the cushions, among the Lego's and Cheddar bunnies, there is dust.

And this dust probably contains brominated or chlorinated flame retardants, from the foam inside the cushions, and perfluorinated chemicals from the upholstery. Many of these chemicals are persistent, bioaccumulative and toxic to many systems in the body. But all I can do with this knowledge is cringe, and try to vacuum a little more often.

The bill before you, LD 1129 would make it impossible for mothers like myself to learn exactly what chemicals are in our couches before we buy them, because it is limited to product specifically intended for children younger than 12. Based on that definition, none of the toxic chemicals and products this august body has restricted over the last decade—PBDEs, mercury products, copper chromated arsenic treated wood, lead wheel weights—could be addressed.

That is just one reason that this is a bad bill that should not pass. In my written testimony, I lay out, section-by-section, how LD 1129, rather than providing the Department regulatory flexibility, it is in fact a backdoor repeal of the law.

The question I urge you to ask yourselves as you review this bill is, do these changes to the law protect children's health, or do they protect the chemical industry's bottom line? I think the answer is clear. Please vote "ought not to pass" on LD 1129.

Written Testimony of Andrea Lani in Opposition to LD 1129, An Act to Provide the Department of Environmental Protection with Regulatory Flexibility Regarding the Listing of Priority Chemicals

Section 1: Agenda listing required

Amending the Maine Administrative Procedures Act in order to treat rulemakings that proceed pursuant to 38 MRSA §16-D differently than all other rulemakings that take place in the state would be an extreme and unprecedented act; no other provision in the MAPA singles out rulemaking pursuant to any single statute. Furthermore, the Legislature, in passage of An Act to Protect Children's Health and the Environment from Toxic Chemicals in Toys and Children's Products (2007 PL Ch. 643), conferred on the Department authority to designate Priority Chemicals, but did not specify the process by which such designation would take place. The Department established rulemaking as the process in order to provide the general public and the regulated community the maximum opportunity for notice of the Department's intentions and opportunity for comment on its proposals. While the Department always provides the Legislature with a timely Regulatory Agenda, there frequently arise occasions when the decision-making process prior to proposing a rule does not align with the Agenda deadline. In such cases, as with both of the rules the Department has adopted to designate Priority Chemicals, the Department files an amendment to the Regulatory Agenda according to requirements and standard procedures, and copies of a proposed rule are submitted to the Legislative Council once the Board of Environmental Protection votes to give the Department permission to proceed with a public hearing. Furthermore, and more importantly, the proposal would subvert Maine citizens' opportunity to initiate rulemaking by petition, as provided at 5 MRSA §8055, Petition for adoption or modification of rules. This proposal demonstrates gross ignorance of and disregard for the Maine Administrative Procedures Act.

On the other hand, **Section 1, Candidates for designation as priority chemicals of the alternate bill, LD 1185,** would provide the Legislature and the regulatory community with the advance notice on potential designation of Priority Chemicals that this section purports to seek, while maintaining flexibility for the Department in its decision-making process and not subverting the MAPA process.

Section 2: Definition of Children's Product

Limiting the definition of "children's product" to only those products made for children younger than 12 assumes that young children exist in a bubble, and are only exposed to their onesies and sippy cups. In fact, children exist in the adult world, where the continually come into contact with chemicals in house paint, sofa cushions, lightbulbs and all manner of products that were not "made for, marketed for use by or marketed to children." Furthermore, children are not just small adults. Rather, on a pound-per-pound basis, they breathe more air and take in more food than their parents. In addition, their behaviors—crawling on the floor, licking, tasting and eating anything they can get their hands on—put them in contact with even more of the toxins that exist in

house dust and on the surfaces of consumer products. Finally, young children are growing and developing at a breakneck rate, with that growth and development orchestrated by hormones, and are therefore especially vulnerable to chemicals that either imitate or turn off those chemical conductors. Eliminating from consideration exposures to a fetus would further blatantly ignore the population most vulnerable to harm from chemicals.

Equally troubling, the cutoff of the definition of "child" at age 12 assumes 12-year-olds are fully-formed, if somewhat shorter adults, when in fact, at that age children are just beginning to embark on one of the most profound developmental stages of life—puberty—which is driven by chemical signals, or hormones. One of the things we're most concerned about with toxic chemicals are those known as endocrine disruptors—chemicals that imitate, block, or otherwise interfere with the normal functioning of those chemical signals. Even beyond puberty, young people's brains continue to develop, also driven by hormones, well into their 20s.

It is my understanding that a major impetus for conferring the authority to regulate chemicals on the DEP was to take the onus of chemical-by-chemical Legislation off of the Legislature and instead enable the DEP to act in a more comprehensive manner. The following statement from the testimony of Former Speaker of the House, Hannah Pingree, Representative of North Haven, before this committee (on the bill she sponsored, LD 2048) on February 28, 2008 supports this understanding:

"The great bi-partisan work that we have done as a legislature on issues like deca, mercury and lead is important to the current and future health of Mainers—especially Maine kids. This bill is modeled partially on the work we did with deca, but it addresses comments some of you made last year about concerns with a scattered policy that considers toxic chemicals in consumer products on a case by case basis. We believe, and the scientific evidence proves it, that there are numerous chemicals of concern on the market, being ingested by kids, rubbed on our skin, leaching into our environment and bodies. We need to take a more comprehensive approach—and that is the point of this bill."

It is not only ironic, but immensely discouraging that the proposed bill before you (LD 1129) would prevent the Department from addressing the chemical hazards the Legislature dealt with in the past, on that chemical-by-chemical basis; polybrominated diphenyl ethers (octa-, penta-, and deca-BDE flame retardants), lead wheel weights, mercury products and copper chromated arsenic treated wood would all be exempt from scrutiny under this bill's definition of "children's product."

Section 3 Credible Scientific Source and Good Laboratory Practice
These terms are basically code words for "Industry-Funded Studies" and would preclude government-funded academic research, which is held to much more rigorous standards than Good Laboratory Practice (GLP) through the competitive process for applying for grants (from, for example, the National Institutes of Health) and the peer-review process of scientific journals. GLP is basically a record-keeping requirement that

was established as a response to criminal fraud committed by large contract laboratories in the past. GLP has no requirement for study design, researcher capabilities or sensitivity of assays. GLP studies use less advanced assays and analysis methods and are not able to test for more sensitive endpoints. To limit acceptable data to only that from GLP studies, is to basically say that only data produced by the industry that makes huge profits from the production of these chemicals is acceptable. Part of the reason that the US Food and Drug Administration (FDA) and other federal agencies have not taken a stronger stance on chemicals such as BPA is that they use only a handful GLP studies in their analyses, meanwhile ignoring a huge body of higher-quality academic research that points to health effects at much lower doses. Please read the attached article, "Why Public Health Agencies Cannot Depend on Good Laboratory Practices as a Criterion for Selecting Data: The Case of Bisphenol A" by John Patterson Myers, et al and published in *Environmental Health Perspectives,* Volume 117 Number 3, March 2009.

Section 4: De Minimis Level

The existing law does not preclude the Department from instituting a de minimis, or threshold for reporting, on any individual chemical. In fact, the Department has indicated in multiple instances that it would be more than willing to consider implementing such a threshold on a chemical-by-chemical basis if a scientifically-valid level is able to be established. However, to establish an across-the-board level of 0.1% ignores the fact that different chemicals are toxic at different levels. Industry will argue that 0.1% is some kind of international standard de minimis, when it most assuredly is not. For instance, under the European law on toxic chemicals in electronics (RoHS), *there is a de minimis of 0.1% on five restricted chemicals, with a de minimis of 0.01%* for cadmium. This level is the maximum concentration allowed *by weight of homogenous material* (e.g. the plastic casing around electrical wiring) and not by the product or even component. The European Commission's Battery Directive, sets limits of 5 parts per million (ppm), or 0.0005% for mercury and 20 ppm (0.002%) for cadmium. Under the European Union's comprehensive chemical law (REACH), restricted substances have de minimis levels ranging from as low as 0.0001% to as high as 3%, and many chemicals have no de minimis. Under the US Consumer Product Safety Improvement Act, a de minimis level for lead was phased in over three years from 600 ppm (0.06%) down to 100 ppm (0.01%), with a level for lead paint of 90 ppm (0.009%). States that have restricted cadmium in children's jewelry have de minimis levels of 0.03%, 0.01%, and 0.0075%. Meanwhile, the Consumer Products Safety Commission has concluded through initial testing that the total content of cadmium in children's jewelry does not necessarily equate with the amount of cadmium that is leached from the jewelry through processes that mimic the human digestive system. In such cases a level of available toxin may be more appropriate than a de minimis for total content.

Section 5: Criteria

The substitution of "and" for "or" under 1(B) implies that, in order to be listed on the Chemicals of High Concern list, a substance must meet all three of the listed criteria. Such an alteration would indicate that, according to the Legislature, it's OK to expose our children to just a carcinogen, or just a reproductive toxicant, or even just an

endocrine disruptor that is also a PBT, but that before we really worry about a chemical, it must be a carcinogen and a PBT and very persistent and very bioaccumulative. As a mother, and a human being, I take extreme issue with this callous disregard for the health of my children, and all of the children in this state.

Section 6: Process for Removal

This process would tie Department staff up in responding to requests for chemicals to be removed from the CHC list, spurious or otherwise. With a concerted effort by the well-funded chemical industry, as many as 1750 requests could come in during the first week after the law goes into effect. The Department would need to dedicate multiple full-time staff just to research the validity of those requests.

The CHC list is a "list of lists"—every chemical on it has been named by a governmental entity as a hazard. Presence of a chemical on the CHC list poses no regulatory consequences. The purpose of establishing the list was to narrow the realm of possible 80,000-100,000 chemicals in commerce down to a manageable number. The approximately 1750 chemicals represent 2% of the chemicals in commerce. A chemical on this list must meet further criteria prior to being designated as a Priority Chemical.

The Toxic Chemicals in Children's Products Law, at 38 MRSA §1693(2), already allows for a process for removal of chemicals from the CHC list: "The department may periodically review and revise the list of chemicals of high concern.... The department may remove a chemical from the list of chemicals of high concern based on evidence that the chemical is not present in a children's product or otherwise would not be subject to the requirements of this chapter."

The Department has not yet undertaken such a revision, as the CHC list was published less than two years ago. At such time that it does commence such a review, it should be left to the Department, in concurrence with Maine CDC, to establish the procedure for both addition of new chemicals and removal of other chemicals, to ensure that such a process does not interfere with actually carrying out the law.

Section 7: Designation

The proposed revisions to this section of the law place unnecessary restrictions on the Department's ability to designate a Priority Chemical.

1. Designation. First, the requirement that the Department find "that there is exposure to the chemical from a children's product" is a circular requirement—it requires the Department to already have the information it would seek through designation of a Priority Chemical before it is permitted to designate a Priority Chemical—that subverts the purpose of the law. If information on the presence of chemicals in children's products and children's exposure to those chemicals were readily available, we would not need this law.

Second, while the two Priority Chemicals the Department has thus far designated have met all six (BPA), or five of the six (NP/NPE) criteria established at 38 MRSA §1694, and while the Department is likely to focus its regulatory scrutiny on chemicals of high concern that meet multiple criteria, the Legislature should preserve the Department's regulatory flexibility and rely on the Department's and Maine CDC's judgment in determining if a chemical that meets only one of the listed criteria is of significant enough concern based on other factors or information that it merits designation.

1(A) The United States Department of Health and Human Services, Centers for Disease Control conducts biomonitoring studies as part of the National Report on Human Exposure to Environmental Chemicals, which measures 219 chemicals in people's blood or urine. Otherwise, the US CDC only has analytical protocols for certain chemicals. While the Report is immensely valuable, to rely strictly on it would ignore vast amounts of peer-reviewed academic research on chemicals in other human tissues and bodily fluids such as umbilical blood, breast tissue, adipose tissue, and breast milk.

1(B) Please see comments on Section 3 relating to why "credible scientific evidence" is limits the research the Department and Maine CDC may use to that produced by the chemical industry.

1(C) Presence is fish, wildlife and the natural environment is not only a valuable indicator of the widespread nature of a chemical and its likelihood to persist and bioaccumulate and be subject to long-range transport, but it also is an important source of potential exposure for children. The fact that Maine's children and pregnant and nursing mothers are advised to not eat any freshwater fish from Maine's inland waters due to mercury contamination should be evidence enough of the importance of the natural environment as a source of exposure as well as for the importance of keeping chemicals out of that environment.

1(D) Again, this requirement expects the Department to already be in possession of the very information that it proposes to seek through designation of a substance as a Priority Chemical. Also, please see comment on Section 4 regarding why an across-the-board de minimis is not appropriate or scientifically-defensible.

1(E) A High Production Volume Chemical is a chemical with US production (manufacture plus imports less exports) of 1 million pounds or greater per year. While it would be unlikely for the Department to designate a Priority Chemical on this criteria alone, it is an important indicator that a chemical is used widely and thus is likely to pose increased exposure potential.

1(F) This is yet one more circular requirement. The intention of the Legislature conferring on the Department the authority to designate chemicals of high concern was to establish a more comprehensive approach to addressing toxic chemicals and to allow the agencies that have the scientific resources to conduct the research into these chemicals. Once the information on the chemical's use and the potential of children's exposure has been assessed, if those agencies (Maine DEP and CDC) concur that

such a move is warranted the Department may propose a sales prohibition, subject to approval by the Legislature through major-substantive rulemaking. To require the Legislature to ban a chemical prior to the Department designating it as Priority Chemical, reverts the whole process back to the piecemeal approach the Legislature has had to contend with for the last decade.

1(G) This is just one more circular requirement that again requires the Department to be already in possession of information to which it does not have access prior to being able to request that very information. The addition of "de minimis" and "credible scientific evidence" just throws in a couple of red herrings that help to ensure that this line in the Legislation means nothing and would do nothing, least of all provide the Department with "regulatory flexibility."

Section 8: Updates
Providing the commissioner the authority to revoke a designation of a priority chemical seems unnecessary; there is nothing in 38 MRSA §16-D that prevents such a move. However, because the Department established rulemaking as the process by which a chemical is designated a Priority Chemical through adoption of 06-096 CMR Chapter 880 Regulation of Toxic Chemicals in Children's Products, revocation of a priority chemical designation would necessarily need to proceed through repeal of Chapter 880 through the Maine Administrative Procedures Act rulemaking process.

Section 9
The Department has already adopted rules to implement the provision of 38 MRSA §1694, at 06-096 CMR Chapter 880, Regulation of Toxic Chemicals in Children's Product. That rule establishes rulemaking as the process by which the Department may designate Priority Chemicals. While the Legislature left the process for designation open-ended, the Department chose rulemaking to ensure that such designation would take place in an established, public forum that allows for notification of and comment by interested parties. Forcing the Department to go back through the process of re-adopting Chapter 880 as a major substantive rule would serve only to further delay and drag out the process of address toxic chemicals in Maine.

Section 10
Please see comment on Section 4 de minimis level.

Section 11
1 Authority. Please see comment on Section 4 de minimis level.

1(A) Indirect exposure should not be removed from the law. Is a child who is directly exposed to deca-BDE from licking the casing of a TV set any more at risk than a child who is indirectly exposed to deca-BDE from crawling through the dust behind the TV table? Furthermore, the addition of the language "and will result in harm to those children…" sets an impossibly high bar of scientific certainty that is not only impossible, it is not "sound science." If I am bitten by a bat and two months later show symptoms of rabies, it is clear what event resulted in the harm. However, if I am exposed to a

carcinogen from my television set and 20 years later develop cancerous tumors, can I or anyone say with any certainty that that exposure to that toxic chemical from that TV at that time caused my tumors? No. There is no scientifically valid way of establishing a direct link from a chemical exposure now and a chronic effect years down the road (acute responses to high-level chemical exposures are a different story). Even though it has been firmly established that smoking causes lung cancer (among many other cancers and diseases), there are still people who smoke their whole lives who do not develop cancer. There is no way of knowing before an exposure to a toxicant exactly what the outcome will be for an individual; however toxicological and epidemiological research shows us what likely outcomes may be, based on statistical analysis of the health outcomes in large populations of laboratory animals or humans. When we know that the likely outcome of exposure to an endocrine disruptor is early onset of puberty or misshapen reproductive organs, it is not conscionable to continue to permit exposure of a child to that chemical just because we don't know exactly what the outcome will be for that individual.

1(B) This requirement would force the Department to undertake a risk assessment prior to prohibiting sales of a Priority Chemical. Not only would the costs of such an undertaking (in the range of $300,000 per assessment, or more) make it prohibitive for the Department to ever move forward on such a ban, this provision would again turn one of the guiding intentions of the law on its ear—that is removing the financial burden of addressing toxic chemicals from the taxpayers and putting that burden where it belongs, on those who profit from the production of those chemicals. This requirement would prove prohibitively costly for the state and would serve the only purpose of ensuring that no product containing a toxic chemical is ever banned in Maine again.

Section 12
The presumptions the Board of Environmental Protection is permitted to make in determining the availability of safer alternatives are reasonable and give the Board and the Department flexibility in regulating priority chemicals.

Section 13. Regulatory Duplication
This section does not define what it intends to mean by a chemical being "regulated by a federal or state regulatory program." Does this mean that chemicals required to be reported to the Toxic Release Inventory would be exempt? Would all chemicals be exempt due to the fact that they have (minimal) reporting requirements under the Toxic Substances Control Act?

Where not specifically preempted under federal law, states have the authority, and indeed the duty, to implement more stringent environmental controls and consumer protections when those at the federal level prove inadequate to ensure safety. The state should make no such sweeping limitations on its ability to act in the best interests of its citizens.

Section 14. Certificate of Compliance
Forty-five days is far too long to allow a violation to continue.