

Statement of Dr. Peter L. deFur  
The Future of US Chemical Policy  
Environmental Working Group  
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October 6, 2009

There is ample evidence that the Toxic Substances Control Act that passed Congress and signed into law decades ago has not been effective in accomplishing public needs in 2009. We have chemicals in commerce that have accumulated and are accumulating in humans and wildlife, with various effects, and we are spending substantial sums of money to clean up the contamination left behind by sloppy and careless practices. After decades of practicing a policy of “What we don’t know can’t hurt us,” we need a policy based on the Precautionary Principle and “We’ve already had too much.”

I see several big challenges:

- The chemical by chemical approach does not work
- Past practice has already contaminated the environment and our bodies
- We have not learned from past knowledge of how chemicals behave
- The default can no longer be to dump anything on the market
- Risk assessment will not protect us when we have no information on exposures, effects or interactions with thousands of other chemicals

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The US approach of analyzing more than 80,000 chemicals in commerce one at a time is simply not an efficient way to protect human health or the environment. Consider the EPA track record in following congressional mandates to protect us and the environment from chemicals that interfere with hormonal systems- endocrine disruptors. Congressional action in October 1996 required EPA to develop a testing program that would identify endocrine disrupting chemicals so that necessary control measures could be put in place. Eleven years after a federal advisory committee reported to EPA on creating such a program, the Agency is only now piloting a screening and testing program with a few dozen chemicals.

Several programs at the federal and state level are spending hundreds of millions of dollars to clean contamination created by sloppy and careless manufacture and distribution of toxic chemicals. Thousands of sites and rivers are contaminated with PCBs as a result of irresponsible behaviors, carelessness, widespread use and ignoring the likelihood that PCBs would end up everywhere. Now we find PCBs everywhere in the world- everywhere.

We find that every effort, private or government, to investigate the body burden of chemicals in humans turns up with new and unsettling findings. The same pattern is true in wildlife, in our streams, our groundwater, in soil and in every medium we look.

We could require more information for all new chemicals that will enter commerce. The new information would have to include persistence, bioaccumulative ability and toxicity at several levels of biological organization and in multiple species. Of course, we do not need to ask these questions of some chemicals for which we have experience. We know, for example that every metal is persistent and that any metal that forms an organo-metal complex is a serious problem because we have already demonstrated the dreadful and dangerous consequences of widespread use with lead, mercury and tin. These are examples of chemicals that have no place in commerce.

Nor is the tool of risk assessment the answer to the questions we have to address. In my opinion, if the answer is risk assessment, then we are asking the wrong questions – a type III error if I have ever seen one. Risk assessment works when there is information on exposure, how the chemical behaves in the environment or in living systems - basically no major gaps in our knowledge or understanding. But if a new chemical is sufficiently novel, then there is will be only ignorance on which we have to base our decisions that will affect the next 7 generations and may mean life or death.

Finally, the toxicological rule of “no exposure- no harm” will not work in the present day either. Chemicals that are intended to remain away from human exposures will still end up in the environment by accident, or in small releases or

by negligence. Eventually, any chemical we can make will become bioavailable via an exposure pathway. This notion ignores the non-human world and assumes that either wildlife does not matter or that the world of animals and plants is the same as that of humans- it is not. A revision of the outdated TSCA is necessary to accommodate what we have learned the 30 years since it was passed in order to provide the highest level of protection to humans and wildlife.